1988

IC MASTER

1 Integrated Circuit Selection Guides, Indexes & Directories

Motorola M68000

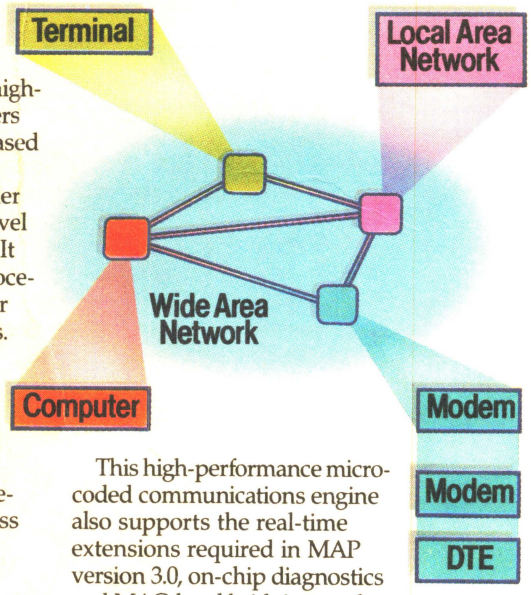
Your high-performance systems require a wide range of microprocessor and peripheral support. The versatile M68000 Family serves those needs with product that's well documented, easy to use, cost effective, easy to get and as varied as your applications.

Versatile solutions for the need to communicate data.

Motorola has developed a family of high-performance communications controllers called Serial Processing Units (SPUs) based on a modular design concept.

The MC68605 X.25 Protocol Controller (XPC) independently generates link-level commands for X.25 and X.75 networks. It expertly terminates the Link Access Procedure Balanced (LAPB) at the full 1.544 or 2.048 data rates provided by T1 facilities. It has passed rigorous Defense Data Network certification tests, and its global acceptance is suggested by use on packet networks all over Europe.

The MC68824 Token Bus Controller (TBC) is the only single-chip VLSI implementation of the IEEE 802.4 Media Access Control (MAC) sublayer defined in the Manufacturing Automation Protocol (MAP) specification.



This high-performance microcoded communications engine also supports the real-time extensions required in MAP version 3.0, on-chip diagnostics and MAC-level bridging, and implements the recommended standar MAC-to-physical serial interface.

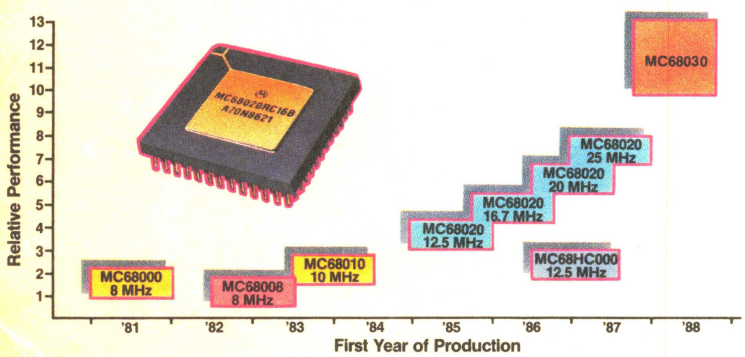
The MC68184 Broadband Interface Controller is, with RF circuitry, the bro band modem required for each node o a broadband MAP network.

In addition to the SPUs, M68000 con munications peripherals include the MC68661 Universal Synchronous Com munications Controller, the MC68652 Multi-Protocol Communications Controller, several DMA circuits and a varie of miscellaneous single- and multifunc tion devices.

The highest-performance 8/16/32-bit MPUs smooth the migration path for your products.

Common internal 32-bit architecture. Object-code software compatibility. Just two of the reasons M68000 Family microprocessors from the 8-bit MC68008 to the 32-bit industry standard MC68020 give your products both the highest performance and the smoothest migration path.

Operating speeds range from 8 MHz for low-cost applications to the industry's fastest general purpose MPUs at 25 MHz.



And, products based on M68000 Family MPUs are the standard for UNIX® operating systems, CAD/CAM workstations, next-generation office automation, multi-user/multi-tasking departmental computers, color graphics as well as for real-time factory automation.

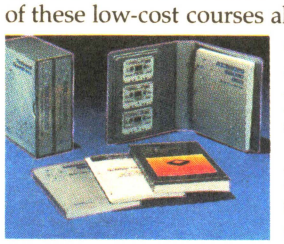
M68000 MPUs are also preferred engines for high-performance artificial intelligence with large linear addressing requirements.

Large, flexible 32-bit register set, large linear address space, powerful yet simple instruction set and flexible addressing modes all add up to the competitive advantage for your M68000 MPU-based product.

UNIX is a registered trademark of AT&T.
HDS-300 is a trademark of Motorola Inc.

Heralded Motorola M68000 Family training courses now available on audio cassettes.

Two Motorola-developed training courses for the MC68000 and MC68020 are now available on audio cassettes. Bo of these low-cost courses also include



course note and appro-priate tech cal literatur

Course MTTA1 is a overview o the MC680 microprocessor: pins and bus operatio addressing modes, instruction set and exception processing including interrup Course completion offers you basic fam iarity with the MC68000.

Course MTTA2 is an introduction to t MC68020: internal architecture, progra ming model, pins and bus operation, addressing modes, instruction set and exception processing.

MTTA1 is $60. MTTA2 is $95. The pri for both courses together is $140.

A new course on the MC68030, MTT is available in mid-September at $95.

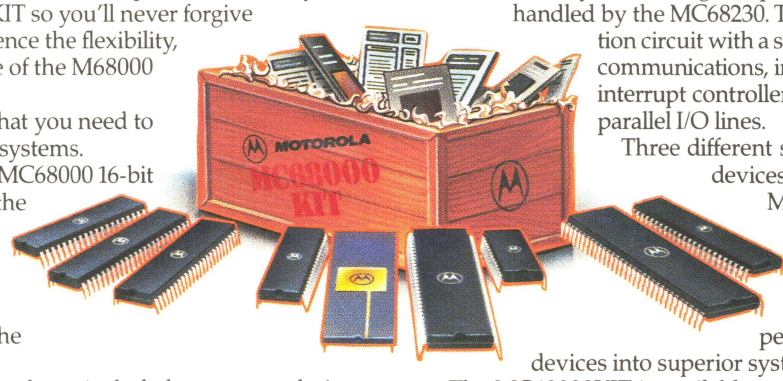
Peripherals Today

Create three different high-performance systems with our $98 design kit.

It's worth a lot more, of course, but we put the irresistibly low $98 price on our MC68000KIT so you'll never forgive yourself if you don't experience the flexibility, versatility and performance of the M68000 Family.

The design kit has just what you need to create three M68000-based systems.

Three MPUs include the MC68000 16-bit general-purpose standard, the high-performance 16-bit virtual memory MC68010 and the cost-effective 8-bit MC68008 with the 32-bit internal architecture of the MC68000.



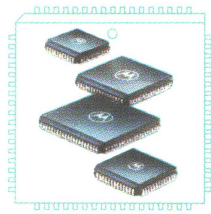
Six flexible family peripherals are included so you can design for your specific applications.

The MC68440 with dual independent DMA channels provides DMA control. System timing and parallel I/O requirements are handled by the MC68230. The MC68901 is a multifunction circuit with a single-channel UART for data communications, in addition to an 8-source interrupt controller, four 8-bit timers and eight parallel I/O lines.

Three different serial communications devices, MC68681, MC68661 and MC68652, complete the parts complement, and the kit also contains the documentation you'll want for converting these high-performance M68000 Family devices into superior systems of your own design.

The MC68000KIT is available only through authorized Motorola distributors. Contact your Motorola distributor to take advantage of this great $98 value.

M68000 Family now offers surface-mount packaging.



As customers develop the ability to utilize surface-mount packages, Motorola is putting the M68000 Family in "J"-leaded, Plastic Leaded Chip Carriers. Several MPUs and over a half-dozen varied peripherals are already available now or later this year. The MC68000, MC68HC000 (HCMOS) and MC68010 are available now in the 68-lead package. The MC68008 is available now in the 52-lead version.

PLCC-packaged family peripherals include the MC68824 and MC68605 SPUs (84-lead), MC68440 and MC68442 DMA devices (68-lead), MC68681/2681 DUART (44-lead), MC68230 Programmable Interface/Timer (52-lead) and the MC68901 Multifunction circuit (52-lead). And this is only the beginning.

Emulate in real time, debug in record time, with the most powerful M68000 Family development system.

Motorola's HDS-300™ hardware/software development station can give you an important edge in slashing development time and moving your product to market when you design in one of the industry's leading M68000 family MPUs.

It simplifies and speeds up debugging and testing of your MPU hardware and software, and in the appropriate configuration can also provide source-level debug for even greater development-time reduction.

Labor-saving features include real-time no wait-state emulation to 25 MHz, system performance analysis and "C" language source-level debugging. Cost efficiency is achieved with a modular approach that permits operation with any of the available emulator modules, including MC68020, MC68010, MC68000 and MC68008.

There are so many more reasons why the HDS-300 development station is the ultimate emulation and analysis tool for systems based on MC68000 Family processors. Discover them.

Literature Packs supply M68000 Family device and application information.

M68000 Family product literature has been assembled into three special, distinct assortments for differing interests. They include brochures, technical summaries and data sheets, benchmark reports, application notes, technical article reprints and other useful pieces.

The M68KPAK is the M68000 Family overview, from chips and software to board- and system-level products.

The M32BITPAK focuses on our top-o'-the-industry 32-bit products, featuring the MC68020, of course.

The M68KCOMPAK is oriented to the extensive M68000 Family communications capabilities.

One-on-one design-in help.

Get engineer-to-engineer insight on designing-in the M68000 Family.

1-800-521-6274

Call toll-free any weekday, 8:00 a.m. to 4:30 p.m., MST. If the call can't cover your needs, we'll have our local applications engineer contact you.

We're on your design-in team.

MOTOROLA

NU HORIZONS

ATMEL
E-PROM, E²PROM, High Speed Memory
Erasable Programmable logic, Programmable
Analog IC's, Military Memory

BIT Bipolar Integrated Technology, Inc.
Fixed-Point Multiplier, Fixed-Point
Multiplier-Accumulator, Register File,
Floating Point Chip Set

CATALYST SEMICONDUCTOR INC.
CMOS Non Volatile Memory, CMOS
Static RAMs, Smart Card Circuits

CDI COMPENSATED DEVICES INCORPORATED
Zener and Temperature
Compensated Diodes, Military
Products

élantec
High Performance Analog
Integrated Circuits, Military Products

EXAR EXEL
Telecom/Datacom IC's, Analog IC's
Surface Mount IC's, Military IC's
CMOS Data Communications Products
E² Memory/VLSI Logic Products, Erasic™ Logic

General Semiconductor Industries, Inc.
SQUARE D COMPANY
Transient Protection Devices
Power Products, Military Products

GOULD AMI Semiconductors
Communication & Consumer Products
Memory Products-Microcomputer Products
Microprocessors
Programmable Electrically Erasable Logic

ISOCOM
Isolators/Couplers
VDE and Military Approved

IXYS SEMICONDUCTOR
High Voltage Power Mosfets, Power
IC's, High Voltage Smart Power with
CMOS Logic, Power MOSIGTs, Motion
Control Products, Military Products

KNOX SEMICONDUCTOR INC.
Zener Diodes, Varacter Diodes,
Current Regulators, Transient
Suppressors, Military Products

MICREL
Custom IC's, Telecom IC's
High Speed CMOS

MICRO POWER SYSTEMS
A/D Converters-Analog Switches
D/A Converters-Flash Converters
Precision Voltage References
Precision OP Amps
Monolithic Dual PNP & NPN & N
Channel J-Fets

National Semiconductor
Transistors, Digital Bipolar and
CMOS Logic Interface IC's, Linear
IC's, Linear Hybrids, PROMs,
E-PROMs, PALS, Micro Computer
and Microprocessor Products,
Telecom and Datacom ICs, MOS and
CMOS RAMs, Power IC's, Audio and
Consumer IC's, Board Level Products,
Development Systems, Speech
Products, Filters, Military Products

FAIRCHILD
FAST Logic, FACT Logic, ECL Logic,
Bipolar RAMs and PROMs, C/MOS
Static RAMs, Power MOSFETS,
Diodes and Transistors, Linear
Integrated Circuits, Digital Integrated
Circuits, Modem IC's, Charged
Coupled Device Memory, MPU,
Mil-STD 1750A MPU, Military
Products

PERFORMANCE SEMICONDUCTOR CORPORATION
MIL Standard 1750A CMOS
Microprocessor, Very High Speed
CMOS Static RAMs, Very High
Speed, High Drive (64 ma) CMOS
Advanced Logic, Military Products

PMI
A/D Converters-Analog Switches
D/A Converters
Instrumentation Amplifiers-OP Amps
Voltage Followers/Buffers
Voltage Comparators
Voltage References, Military Products

Semicon Components INC.
Rectifiers, Zeners, Transient
Protection Diodes, Military Products

SGS THOMSON COMPONENTS MOSTEK
High Power Monolithic Switching
Regulators,-Linear IC's-CMOS
Low Power Schottky-MOS Memories,EPROMs
Microprocessors-Surface mount IC's
Discrete, Power and Small Signal
Transistors, Erasable Programmable Logic
Memories
Microcomputers/Microprocessors
Datacom/Telecom IC's
Analog IC's. Military IC's
Discrete Components

SILICON GENERAL
Interface Circuits-OP Amps
Protection Circuits, Power Drivers
Pulse Width Modulators
Voltage Regulators, Military Products

STANDARD MICROSYSTEMS CORPORATION
Datacom/Telecom IC's, Local Area
IC's and Boards (ARCNET)
Floppy and Hard Disk Controller IC's,
CRT Controller Chips, UARTS,
USARTS, Baud-Rate Generators,
Keyboard Encoders, Mil STD 1553
Communications IC

Supertex inc.
DMOS FETS
NMOS/PMOS FETS
H.V. IC Drivers
C/MOS Interface IC's

THREE-FIVE SEMICONDUCTOR, INC.
Light Emitting Diodes, Visible Lamps,
Single and Multiple Digit Displays,
Integrated Displays, Liquid Crystal
Displays, Infrared Emitters and
Detectors, Optocouplers

TOPAZ SEMICONDUCTOR
CMOS/D-MOS Analog Switches,
D-MOS FETS

UNITRODE
Linear IC's
Monolithic Ceramic Capacitors
Power Supply Supervisory Circuits
Power Hybrids & Modules
Pulse Width Modulators
Precision Fixed Voltage Regulators
Military Products

VALPEY-FISHER
Oscillators, Quartz Crystals

VITELIC
CMOS Dynamic and Static Rams,
Video RAMs, Dual Port RAMs,
Intelligent Memories,

VTC Incorporated
Linear Signal Processing, Advanced
High Speed CMOS Interface Logic
Radiation Hardened, Static RAMs, Digital
Signal Processing IC's, Military IC's

XCOM INC.
Modem Components, Datacom/
Telecom Components, Smartsocket,
Smartwatch

XILINX
Logic Cell Array (LCA), The First
User-Programmable Gate Array,
Development Systems

6000 New Horizons Blvd.
Amityville, New York 11701
(516) 226-6000
FAX 516-226-6262

258 Route 46
Fairfield, New Jersey 07006
(201) 882-8300
FAX 201-882-8398

151 Andover Street
Danvers, Massachusetts 01923
(617) 777-8800
FAX 617-777-8806

International
258 Route 46
Fairfield, New Jersey 07006
(201) 882-4290
FAX 201-882-4292

NU HORIZONS ELECTRONICS CORP.

1988 IC MASTER

CONTENTS

Volume 1

Contents 1
IC MASTER Staff 2
How to use the IC Master 2
Abbreviations of Company Names 6
Master Selection Guide Index 9
Part Number Index 51
Part Number Guide 301
Application Note Directory 401
Military Parts Directory 501
  Testing 502
  Cross Ref. (Comm. to MIL) 504
  Cross Ref. (MIL to Comm.) 512
  Cross Ref. (DESC Draw. to MIL) 519
  QPL Selection Guide 522
Digital Selection Guide 601
Microprocessors 801
  Selection Tables 802
  System Components 860
Interface Selection Guide 901
Linear Selection Guide 1101
Memory Selection Guide 1301
Alternate Source Directory 1401

Volume 2

Contents 1
IC MASTER STAFF 2
How to use the IC Master 2
Advertisers Directory 8
Mfrs/Distributors Directory 10
Advertisers Product Index 93
Advertisers Data Pages 183
  Analog Devices 1002
  Apex Microtechnology 1060
  AT&T 1061
  Burr Brown Corp 1134
  California Micro Dev/GTE 1148
  Calmos Systems 1155
  Circuit Technology 1156
  Commodore Semiconductor 1157
  Cypress Semiconductor 1163
  Datel 1173
  Dense-Pac Microsystems 1180
  Digital RF Solution 1188
  EG&G Reticon 1192
  Elantec 1193
  Exar Corp & Exel Micro 1203
  Fujitsu Microelectronics 1216
  GE Solid State 1230
  Gennum Corp 1288
  Gigabit Logic 1291
  Goldstar Semiconductor 1293
  Harris Semiconductor 1304
  Holt, Inc. 1371
  Hyundai 1372
  Inmos 1374
  Inova Microelectronics 1399
  Intech 1401
  Integrated Device Tchnlgy 1402
  Integrated Power Semi 1456
  Intel 1460
  Intl CMOS Technology 1466
  LSI Computer Systems 1469
  LSI Logic 1470
  Marconi Electronic Devices 1475
  Motorola Semiconductor 1495
  Peps (Performance Semiconductor) 1564
  Precision Monolithics 1565
  Raytheon 1581
  Rockwell International 1589
  Seeq Technology 1593
  Sharp Electronics 1595
  Signal Processing Tchnlgy 1599
  Signetics 1605
  Silicon Systems 1800
  S-MOS Systems 1803
  Sprague Electric 1805
  Stanford Telecommunications 1808
  Texas Instruments 1816
  Thomson Comps/Mostek 1863
  Topaz Semiconductor 1903
  Toshiba America 1904
  Triquint Semiconductor 1911
  United Microelectronics 1912
  Unitrode 1925
  VLSI Technology 1931
  VTC, Inc. 1970
  Waferscale Integration 1978
  Western Digital 1982
  Xicor 1988
  Zilog 2018

Volume 3

Contents 1
IC MASTER STAFF 2
How to use the IC Master 2
Advertisers Index to Volume 3 8
ASIC/Custom/Semicustom ICs 4009
  Advanced Micro Devices 4201
  Analog Devices 4203
  AT&T 4207
  California Micro Dev 4214
  Cypress Semiconductor 4217
  Exar Corp & Exel Micro 4222
  Fujitsu Microelectronics 4229
  GE Solid State 4235
  Gennum Corp 4239
  Gigabit Logic 4240
  Goldstar Semiconductor 4242
  Gould/AMI 4244
  Harris Semiconductor 4246
  Holt 4253
  Integrated Circuit Systems 4256
  Intel 4257
  Intl CMOS Technology 4259
  LSI Computer Systems 4267
  LSI Logic 4268
  Micrel 4276
  Micro-Rel 4280
  Motorola Semiconductor 4282
  National Semiconductor 4294
  Raytheon 4296
  Signetics 4300
  S-MOS Systems 4305
  Standard Microsystems 4310
  Texas Instruments 4314
  Thomson Comps/Mostek 4321
  Toshiba America 4327
  Triquint Semiconductor 4328
  United Microelectronics 4329
  United Technology 4331
  VTC, Inc. 4332
  Xilinx 4344
Design Automation 4401
  Futurenet Data I/O 4651
  Hilevel Technology 4652
  LSI Logic 4653
  Tektronix/CAE Systems 4658
  Valid Logic Systems 4660
  VLSI Technology 4665
  Wintek 4674
MPU Development Systems 4701
  American Automation 4751
  Hilevel Technology 4752
  Intl CMOS Technology 4753
  Motorola Semiconductor 4754
  Orion Instruments 4760
Microcomputer Boards 4801
  Sensoray 4901
  Signetics 4902
  Western Digital 4910
  Wintek 4913

© Copyright 1988. Hearst Business Communications, Inc.
All rights reserved.

1988 IC MASTER

editor-in-chief
DAVID HOWELL

senior editor
MICHAEL I. BLOOM

associate editor
THOMAS MAYS

editorial assistant
GERRI PALANCIA

group publisher
ARMAND VILLIGER

associate publisher
RICHARD CALILLI

sales administrator
JANET LAWRENCE

production services manager
LYNN GIARDINA

production services
LAURA GIRMSCHEID

manager/catalog production
CHARLOTTE NEWMAN

catalog art director
MICHELLE ARNOLD

assistant catalog art director
WILLIAM HENNESSEY

art staff
CINDY DELLIGATTI
DOT MILLER
ESTELLE ZAGARIA

book sales marketing manager
GEORGEANN AMSLER

book sales manager
MARIE BOTTA

book sales assistant
STEPHANIE GIBBONS

sales billing supervisor
ALINE LEWIN

director of operations
WILLIAM F. MULLIN

director of circulation
BARRY GREEN

director of research
DONALD R. SENTER

Hearst Business Communications, Inc./
UTP Division

vice president and general manager
RICHARD C. MARSHALL

Hearst Business Communications, Inc.

president
GORDON JONES

vice president
PHILIP D. SHALALA

treasurer
NELSON J. MAIONE

---

published annually by
HEARST BUSINESS COMMUNICATIONS, INC.

645 Stewart Avenue
Garden City, NY 11530
Tel: (516) 227-1300, FAX (516) 227-1367

IMPORTANT NOTICE

Considerable effort has been expended to make the IC MASTER accurate and complete. The IC MASTER cannot, however, assume responsibility for inaccuracies, omissions, manufacturers' claims or their representations. No portion of the IC MASTER may be reproduced in any manner without the written permission of the publisher. © IC MASTER 1988. Copyright 1988 by Hearst Business Communications, Inc. All rights reserved.

HOW TO USE THE IC MASTER

The 1988 edition of the IC MASTER is arranged in three volumes. Each volume serves a specific purpose to help you find the integrated circuit or related product you need. The table of contents on page 1 describes what is in each volume. The table also includes the starting page number for each advertiser.

The IC MASTER is a functional work. You know what you need. The MASTER helps you find it.

Here are typical problems.

Q. What kinds of functions does the MASTER cover?

A. Turn to page 8 in **Volume One.** Here is a complete list of the devices covered. The page and line numbers refer you to the beginning of the Section in which a particular function appears.

Q. Who makes a 16384 x 1 static RAM with an access time of 70ns or faster? What are my technology choices?

A. Pick up Volume 1. Turn to the MEMORY section. The first page of the section tells you where the listings of your device begin. See this under:

RAMs
Bubble
Dynamic
Static

Turn to the first page of static RAMs. In the first column you see the **Organization.** Browse through the pages until you reach the **16384 x 1** listings. Now look through the listings until you find the access time and characteristics you need. Device numbers are shown by manufacturer. The device numbers of advertisers in the 1988 IC MASTER appear in **bold face.** The page number following the device number is where additional information may be found in **Volume Two.** At the extreme right you will see line numbers. These are the specific lines where a device appears.

Q. Which microprocessors are listed in the MASTER? How do I find the microprocessor I need?

A. All commercially available microprocessors are listed in the MASTER. Start with the **microprocessor** listing in the **Master Selection Guide Index** (starts on page 8). Here you will find the various kinds of products you will need listed according to function and bit size. Turn to the various pages shown and then to the advertiser's page where more detail may be available.

Q. Who makes a Dual, Low Offset Voltage OpAmp?

A. This is a **LINEAR** device. Turn to the LINEAR section in Volume One. The first page of the section shows the starting page for each type of device. Turn to the page where **Dual Units** appear. Look down the list for the device you need. Advertisers' devices are listed in **bold face.** Turn to the page in Volume Two where more information may be available.

Q. I need an IC with Music capability. Which Master Selection Guide should I use?

A. Turn to the **Master Selection Guide Index** starting on page 8. Look through the list until you find **Music.** The page numbers for each kind of device are shown.

Q. I plan to use a digital gate array or some other semicustom ASIC in my next project. Where do I find it in the MASTER? Who makes these things?

A. Turn to Volume Three. Turn to the first page of **ASICs/Custom.** Find Gate Arrays and all of the other devices listed here. Now you can find the device you need. After you find the type of device you need, turn to the proper page and find the manufacturer. Advertisers' pages follow the selection guides in Volume Three.

Q. I know the digital IC I need is available. Is it available in a surface mount package?

A. There are two ways to solve this problem. If you know the manufacturer's device number, turn to the Part Number Index in Volume One. Find the basic number and the page number and line where that device is listed in the MASTER. Turn to that page. If the device is available for surface mounting, an open diamond symbol will appear. You can also turn directly to the DIGITAL section and turn to the function of the device you want. The symbol will indicate an SMD is available.

Q. I am looking for an application note on a specific device. Where can I find out if one is currently available?

A. Pick up Volume One. Turn to the Application Note Directory. Here you will find app notes arranged by **function.** Find the function involved and turn to the page where the app note is listed.

Q. We need a device that meets MIL standards. Where do I look in the Master?

A. Turn to the MILITARY Section in Volume One. The Military Device Testing table shows which manufacturers do what kinds of MIL work. Read the instructions on the first page. The cross reference on the following pages tells you which commercial parts have MIL equivalents. This is followed by the MIL to commercial listing. This is followed by a cross reference of DESC drawing numbers to QPL-38510 parts. The next list is a QPL listing based on the latest Defense Electronics Supply Center (DESC) Qualified Product Listing. Additional information is often supplied by the advertisers' pages in Volume Two.

Q. I know the basic part number is 2502 and that's all I know. Where do I look?

A. That's easy in the MASTER. Turn to the Part Number Index. All prefixes and suffixes have been stripped away. Turn to the page where 2502 appears. All manufacturers with that kind of number appear in order along with the page and line number where the device is described.

Q. How many manufacturers claim to make a pin-for-pin and function-for-function equivalent to Motorola MC68000?

A. Turn to the Alternate Source Directory in the back of Volume One. Turn to Motorola. Those manufacturers who claim to be equivalent are listed in order. If you have an MS-DOS computer with a hard drive, you can get the 1988 IC MASTER Alternate Source Directory on a disk. The disk is Clipper compiled from dBaseIII + and is delivered compressed by PKARC. This is the complete list of alternate sources and allows you to add notes such as your own part numbers, prices, sources and the like. Call Hearst (516) 227-1300 and ask for Book Sales for further information.

Q. I looked in the Alternate Source Directory. The part I want an alternate source for isn't listed. Why not?

A. Are you sure you looked through the entire listing for the original manufacturer? Some devices may be listed in odd ways depending on how the MASTER's editors receive the information. Then there is the probability that no other manufacturer makes an exact replacement for your part. It is important for you to understand how the Alternate Source Directory is compiled. Manufacturers supply the information that **their** part is an exact replacement for **another** part. The original manufacturer does **not** tell us his part can be replaced by those listed.

Q. I need an 8/16-bit microcomputer board with an 8MHz clock frequency and a multibus support system. Can I find this in the MASTER?

A. Yes! Pick up Volume Three. Turn to the MICROCOMPUTER BOARD Section. Continue to turn pages until the 8/16 appears in the first column. Then look at all of the available boards to find the boards you can use.

© IC MASTER 1988

Q. I have Valid Logic's "Summary" workstation. Which front end tools are compatible? Can I get one with circuit simulation? What capabilities does it have? Who makes it?

A. Pick up Volume Three. Turn to the Design Automation Section. Check the first page. You will see what is available in the Section. Under Design Tools you will find Front End Tools and Circuit Simulators. Read down for your parameters and across for the vendor.

Q. What do the manufacturers' part numbers mean? I have a Signetics N8X02N. What do all the letters and numbers mean?

A. Look in Volume One for the Part Number Guide. Turn to the Signetics portion. Now you know the **N** prefix means, zero to plus seventy degrees Centigrade. The **N** suffix indicates the package style. The numbers and letters in the middle are the device type. Each manufacturer has a different code system. Understanding the system is a great help in comparing devices.

Q. I found the device I want in the MASTER. What are the pinouts? Where can I get more details? Where can I get a price? What is the delivery time?

A. You have just defined exactly what the IC MASTER does. The MASTER is a guide to tell you which devices are available on a commercial basis. After you know this, the next step is to contact the manufacturer, a local sales office or a distributor.

Q. Where can I find the addresses and telephone numbers of manufacturers, local sales offices and distributors?

A. Pick up Volume Two. Turn to the Manufacturers and Distributors Directory. Read the first page. The information on this page will help you understand why the information in the Directory is so important. It will save time and aggravation.

Q. I just saw a new device advertised in Electronic Products magazine. It isn't listed in the MASTER. Why not? When will it be listed?

A. Preparing the information for the annual IC MASTER is a tremendous undertaking. It requires the cooperation of every single manufacturer. All of the material must be organized, cross referenced and placed in the data base. This data base must be closed off in November in order to meet the publishing date of late January. That is why some devices are not listed. They came on the market too late for the deadline. There are two updates to the annual MASTER. They are called the **IC MASTER UPDATE.** One is issued in the late Spring and the other in early Fall. Be sure to sign up for copies when you get your new IC MASTER. If you are not sure whether or not you have requested the updates, please write to the Circulation Department at the address shown on page 2 of this MASTER. Be sure to indicate which edition of the MASTER you are using.

© IC MASTER 1988

ABBREVIATIONS OF COMPANY NAMES

AB Assoc	AB Associates
Abionics	Abionics
ACASI	American Computer Automated Systems
ACE	Action Computer Enterprise
Acotech	Acotech
AD	Analog Devices
AdvControl	Advanced Control Systems Corp.
AdvDigital	Advanced Digital Corp.
AdvEngSol	Advanced Engineering Solutions
AdvLinear	Advanced Linear Devices
AdvMicroSys	Advanced Micro Systems
AlArchitects	A. I. Architects Inc.
Aida	Aida
AjidaTech	Ajida Technologies
Alcyon	Alcyon Corp.
Aldec	Aldec
AllenSys	Allen Systems
Alloy	Alloy Computer Products
Alphatron	Alphatron
Altera	Altera
AMA	American Automation
AMCC	Applied Micro Circuits
AMD	Advanced Micro Devices
Amperex	Amperex Electronic Corp.
Ampro	Ampro Computers Inc.
Amtelco	Amtelco
Anadigics	Anadigics
AnalDesTools	Analog Design Tools
AnalogSys	Analog Systems
Analogic	Analogic
ANALOGY	Analogy
Anasco	Anasco Corp.
Antona	Antona Corp.
Apex	Apex Microtechnology
Applicon	Applicon
AppBusComp	Applied Business Computer
AppMicroSys	Applied Microsystems Corp.
ApplSys	Applied Systems Corp.
Aptek	Aptek Microsystems
Aptos	Aptos Systems
Argus	Argus Software
ArrayTech	Array Technology
ASEA-HAFO	ASEA-HAFO
Astro	Astrosystems Inc.
Atec	Atec
ATITech	ATI Technologies Inc.
Atlanta	Atlanta Signal Processors
Atmel	Atmel Corp.
AT&T	AT&T
Augat	Augat, Inc. Systems Div.
AutoDesk	AutoDesk
AutoSys	Automated Systems Inc.
Babcock	Babcock Material Handling Group
Barvon	Barvon BiCMOS Technolgy Inc.
Basicon	Basicon Inc.
B&C Micro	B&C Microsystems
Bedford	Bedford Control Systems Inc.
Berne	Berne Electronics
Bicc-Vero	Bicc-Vero Electronics
BinaryTech	Binary Technology
Bipolar	Bipolar Integrated Tech
Bishop	Bishop Graphics
Bit3Comp	Bit 3 Computer Corp
Brainpower	Brainpower
Brooktree	Brooktree
Buckminster	Buckminster Corp
Bummer	Bummer Electronics
Burr-Brown	Burr-Brown Corporation
Cadam	Cadam
CAD Group	CAD Group
Cadic	Cadic, Inc.
Cadnetix	Cadnetix
CAECO	CAECO
Caedent	Caedent
Calay	Calay Systems
CalDevices	California Devices
Calma	Calma
Calmos	Calmos Systems
Calos	Calos
Cambridge	Cambridge Digital Systems
CAN-TRON	CAN-TRON
CaseTech	Case Technology
Catalyst	Catalyst, Semiconductors
CentData	Central Data Corp.
Cermetek	Cermetek
CharlesRiver	Charles River Data
Cherry	Cherry Semiconductor
Chips&Tech	Chips & Technology
Chrislin	Chrislin Industries
CIC	Custom Integrated Circuits
Cirrus	Cirrus
Clarity	Clarity Systems
Clearpoint	Clearpoint Inc.
CMA	Custom MOS Arrays
CMCIntl	CMC International
CMD ASIC	CMD ASIC Division
CMD Micro	CMD Microcircuits Division
Codar	Codar Technology Inc.
Comark	Comark Corp.
Comlinear	Comlinear Corporation
Commodore	Commodore Semiconductor Group
Compact	Compact Software
CompAuto	Computer Automation
CompDyn	Computer Dynamics
CompModules	Computer Modules Inc.
Computrol	Computrol Inc.
CompVision	Computervision
ConnMicro	Connecticut MicroComputer
Contemporary	Contemporary Control Systems
Context	Context Corp.
ControlData	Control Data
Controlex	Controlex Corp.
Conway	Conway
CreMicro	Creative Micro Systems
Crystal	Crystal Semiconductor
CTI	Circuit Technology Inc.
Cubit	Cubit Inc.
CustomArrays	Custom Arrays Corp.
Cyberchron	Cyberchron Corp.
Cybernetic	Cybernetic Micro Systems
Cypress	Cypress Semiconductor
Daisy	Daisy Systems
Dallas	Dallas Semiconductor
Dasoft	Dasoft Design Systems
DataGen	Data General
Datal/O	Data I/O
DASystems	Data Systems
dataCon	dataCon Inc.
Datacube	Datacube Inc.
Dataram	Dataram Corporation
DataTrans	Data Translation
Datel	Datel
Datricon	Datricon Corporation
Davidge	Davidge Corp.
DEC	Digital Equipment Corp.
Den/Pas	Densan/Pascot
Dense-Pac	Dense-Pac
Devtek	Devtek Systems
Dexter	Dexter Research Center
Digital RF	Digital RF Solutions Corp.
Digitronics	Digitronics Sixnet
Dionics	Dionics Inc.
DistComp	Distributed Computer Systems
DiversTech	Diversified Technology
DraftingDyn	Drafting Dynamics
DSB Systems	DSB Systems
DSP-Systems	DSP-Systems Corp.
DUAL	Dual Systems Corp.
ECAD	ECAD
ECISemi	ECI Semiconductor
EDI	Electronic Designs Inc.
EdsunLabs	Edsun Laboratories, Inc.
EES	Electrical Engineering Software
EEsof	EEsof Inc.
EG&G-Reticon	EG&G-Reticon
Elantec	Elantec
Electrologic	Electrologic Inc.
ElecConServ	Electronics Consulting Service
Elfab	Elfab Test Systems
Elxsi	Elxsi
Emulogic	Emulogic
ENDOT	ENDOT Inc.
Enterprise	Enterprise Systems
ESP	Electronic Software Products
European	European Silicon Structures
Exar	Exar Corporation
EXEL	EXEL Microelectronics
Excelan	Excelan Inc.
Factron	Factron-EDA
Fairchild	Fairchild
Faraday	Faraday
Ferranti	Ferranti Electric
Force	Force Computers
Ford	Ford Microelectronics
FujitsuA	Fujitsu America
Fujitsu	Fujitsu Microelectronics, Inc.
FutureNet	FutureNet

© IC MASTER 1988

GainElec	Gain Electronics
Galil	Galil Motion Control
Gateway	Gateway Design Automation
GE/Intersil	GE/Intersil
GE/RCA	GE/RCA Solid State
GE Semi	GE Semiconductor
GenMicro	General Microsystems
Gennum	Gennum Corporation
GenRad	GenRad
GENROCO	GENROCO
Gerber	Gerber Scientific Instrument
GigaBit	GigaBit Logic
GIM	General Instrument Microelectronics
GoldStar	GoldStar Semiconductor
Golden	Golden Electronics
Gordos	Gordos Arkansas
Gould	Gould Inc.
GTSys	GT Systems
GW-Three	GW Three Inc.
Harris	Harris Semiconductor
HEI	HEI Corporation
Hercules	Hercules Computer Technology
Heurikon	Heurikon Corp.
HHB-Sys	HHB Systems
HiLevel	Hi-Level Technology
Hitachi	Hitachi America, Ltd.
HiTech	HiTech Equipment Corporation
Holt	Holt Inc.
Honeywell	Honeywell
HoneywellSPT	Honeywell Signal Processing Technologies
HP	Hewlett-Packard
Hughes	Hughes Aircraft, Solid State Products
HybridSys	Hybrid Systems
HyComp	HyComp
Hytek	Hytek Microsystems
Hyundai	Hyundai Electronics America
IBM	IBM
ICC	International Cybernetics
ICDC	Integrated Circuit Design Centre
ICI	Integrated Circuits Inc.
IC Options	IC Options, Inc.
ICSensors	IC Sensors, Inc.
ICT	International CMOS Technology
ICT Comp	ICT Computer Drafting
IDT	Integrated Device Technology
IKON	Ikon Corp.
IKOS	IKOS Systems
ILC-DDC	ILC Data Device Corporation
iLSi	Integrated Logic Systems
IMI	International Microcircuits, Inc.
IMP	International Microelectronic Products
Imaging	Imaging Technology Inc.
IndComp	Industrial Computer Designs
IndTech	IndTech Inc.
Inmos	Inmos Corporation
InnovRes	Innovative Research
Inova	Inova Microelectronics
InrVision	Inner Vision
IntCirSys	Integrated Circuit Systems
IntMeasSys	Integrated Measurement Systems
IntSolutions	Integrated Solutions
IntTech	Integrated Technology
Intech	Intech Advanced Analog
Intel	Intel
Intelicom	Intelicom Systems Ltd.
IntelComp	Intelligent Computer Integration
Interactive	Interactive Circuits and Systems, Ltd.
Interconics	Interconics
InterconMicro	Intercontinental Micro Systems
Interdesign	Interdesign/Ferranti
Intergraph	Intergraph
Interphase	Interphase Corp.
Intronics	Intronics
Intusoft	Intusoft
Inventive	Inventive Systems Inc.
Ioinc	Io Incorporated
IPS	Integrated Power Semiconductors
Ironics	Ironics Inc.
Isocom	Isocom, Inc.
ITT	ITT Semiconductors
IXYS	IXYS Corp.
KSystems	K-Systems Inc.
Kern	Kern Systems
Kontron	Kontron Electronics
Lambda	Lambda Semiconductors
Laserpath	Laserpath
Lattice	Lattice Semiconductor
LitMach	Little Machines, Inc.
LinearTech	Linear Technology Corp.
LMS	LMS Electronics
LogicAuto	Logic Automation
LogicDev	Logic Devices Inc.
LogicalDes	Logical Design Group
Logicraft	Logicraft Inc.
Lomas	Lomas Data Products, Inc.
LPKF-Pacific	LPKF-Pacific
LSIComp	LSI Computer Systems
LSI Logic	LSI Logic
LupiData	Lupi Data, Inc.
M2M	M2M Robotics
Magnum	Magnum Opus
Marconi	Marconi Electronic Devices Inc.
Marinco	Marinco Computer Products
MasterLogic	Master Logic Corporation
Matra	Matra Design Systems
Matra-Harris	Matra-Harris Semiconductors
Matrix	Matrix Corp.
Matrox	Matrox Electronics Systems
Maxim	Maxim Integrated Products
MCE	MCE Semiconductor
Mentor	Mentor Graphics
MTC	Mesa Technology Corp.
MetaSoft	Meta Software
Metatek	Metatek Inc.
Micom Int	Micom-Interlan
Micra	Micra Corp.
Micrel	Micrel
MicroAide	Micro Aide Corp.
Microbar	Microbar Systems, Inc.
MicroCompSys	Microcomputer Systems
Microcosm	Microcosm
MicroDesigns	Microdesigns
MicroInds	Micro Industries Corp.
MicroLinear	Micro Linear
MicroNet	Micro Networks
MicronTech	Micron Technology
Micropac	Micropac Industries
MicroPwr	Micro Power Systems
Micro-Link	Micro-Link Corporation
Micro-Rel	Micro-Rel
Microsim	Microsim
MicroSys	Micro/sys
Microvoice	Microvoice
Mikros	Mikros Systems Corp.
MilerTron	MilerTronics
Miller	Miller Technology
Mimic	Mimic, Inc.
MiniCompTech	Mini Computer Technology
Minntronics	Minntronics Corp.
Mitchell	Mitchell Electronics
Mitel	Mitel Semiconductor
Mitsubishi	Mitsubishi Electronics America, Inc.
MMI	Monolithic Memories, Inc.
Modula	Modula
MonSys	Monolithic Systems Corp.
Morrow	Morrow Technologies
Mosaid	Mosaid
Motorola	Motorola Semiconductor Products
Multiwire	Multiwire, Div. Kollmorgen
Mylex	Mylex Corp.
NationalInst	National Instruments
National	National Semiconductor
NCAI	North Coast Automation, Inc.
NCM	NCM Corporation
NCR	NCR Microelectronics
NEC	NEC Electronics
NMB	NMB Semiconductor Corporation
Northern	Northern Precision Labs
Novix	Novix
NthGraphics	Nth Graphics
NTI Group	NTI Group
Octagon	Octagon Systems Corp.
Octal	Octal
OEI	Optical Electronics Inc.
OKI	OKI Semiconductor
Omation	Omation
Omnibyte	Omnibyte Corp.
Omnicad	OMNICAD
Onset	Onset Computer Corp.
Optima	Optima Technology
Origin	Origin, Inc.
Orion	Orion Instruments
OwlComp	Owl Computers

CONT.

PacificM	Pacific Microcomputers, Inc.
Pacific	Pacific Microcircuits
Panasonic	Panasonic
Panatech	Panatech Semiconductor
PC-Office	PC-Office
PCAD	PCAD
PEP-Modular	PEP Modular Computers
Performance	Performance Semiconductor Corp.
PlesseyMicro	Plessey Microsystems
Plessey	Plessey Semiconductors
PLXTechnology	PLX Technology
PMI	Precision Monolithics Inc.
Polycore	Polycore Electronics
Praxis	Praxis Systems
Pro-Log	Pro-Log Corp.
Proximity	Proximity
Quadtree	Quadtree
Qualogy	Qualogy Corporation
Quantic	Quantic Laboratories, Inc.
RACAL	RACAL-REDAC
RanchoTech	Rancho Technology
RapidSys	Rapid Systems, Inc.
Raytheon	Raytheon Semiconductor
RCIData	RCI Data
Recognition	Recognition Technology
RELMS	Relational Memory Systems
Renaissance	Renaissance GRX
Ricoh	Ricoh Company Ltd.
RIFA	RIFA
RLCEnterprise	R.L.C.Enterprises
Robotrol	Robotrol Corp.
Rockwell	Rockwell Semiconductor Products
RTC	Riehl Time Corporation
S-MOS	S MOS Systems
Samsung	Samsung Semiconductor
Sanyo	Sanyo Semiconductor
SBE	SBE, Inc.
SDA-Systems	SDA Systems
SciCalc	Scientific Calculations
SDA-Systems	SDA Systems
SeattleSi	Seattle Silicon Tech.
SEEQ	SEEQ Technology, Inc.
Semicon	Semicon, Inc.
Sensoray	Sensoray Co.
SerialLab	Serial Lab Products Inc.
Sertek	Sertek Inc.
SGS	SGS Semiconductor
SharedRes	Shared Resources
Sharp	Sharp
Siemens	Siemens
Sierra	Sierra Semiconductor
Sigma Info	Sigma Information Systems
Signetics	Signetics
SiCompilers	Silicon Compilers
SilControls	Silicon Controls
SiliconG	Silicon General
SiliconSys	Silicon Systems Inc.
Siliconix	Siliconix
Siltronics	Siltronics
Silvaco	Silvaco Data Systems
SilvarLisco	Silvar Lisco
Simucad	Simucad
Simulog	Simulog
SingleBoard	Single Board Solutions
Slicer	Slicer Computers Inc.
SMC	Standard Microsystems Corporation
SMS	Scientific Microsystems
Softwestern	Softwestern Company, Great
Solarcom	Solarcom Technology Inc.
Solarise	Solarise Enterprises Inc.
Solitron	Solitron Devices
Sony	Sony Corporation of America
Sophia	Sophia Computer Systems
SpaceResearch	Space Research Technology, Inc.
Spectrum	Spectrum Software
Sprague	Sprague Electric Company
SSM	Solid State Micro Technology for Music
Stantel-STC	Stantel-STC
STD	STD Microsystems
STI	Stanford Telecommunications
Stynetic	Stynetic Systems
Sunshine	Sunshine Semiconductor
Supertex	Supertex Inc.
Synergy	Synergy Microsystems
Syscon	Syscon Corp.
Systech	Systech
Systek	Systek
SysCalc	Systems Calculations
SysDatar	Systems Datar
TLIndustries	TL Industries Inc.
TLSI	TLSI, Inc.
TRW-LSI	TRW LSI Products
Tangent	Tangent Systems Corp.
Tatum	Tatum Labs
Technitrol	Technitrol
Techno	Techno Inc.
Tech80	Technology 80
TechModl	Technology Modeling
Tektronix	Tektronix
Tek/CAE	Tektronix/CAE Systems
Tek/ICO	Tektronix/Integrated Circuit Operations
TeledyneC	Teledyne Crystalonics
TeledyneP	Teledyne Philbrick
TeledyneS	Teledyne Semiconductor
Telefunken	Telefunken
Teletek	Teletek Enterprises
Teltone	Teltone Corporation
Teradyne	Teradyne
TI	Texas Instruments
Destek	The Destek Group
ThirdDomain	Third Domain
Thomson	Thomson Components-Mostek
Titan/SESCO	Titan/SESCO
Toko	Toko America
TopazSemi	Topaz Semiconductor
Toshiba	Toshiba America
Transmag	Transmagnetics Inc.
TriQuint	TriQuint
Trimarchi	Trimarchi and Associates
Trimeter	Trimeter Technologies
UMC	United Microelectronics (UMC)
Unicorn	Unicorn Microelectronics
Unitrode	Unitrode
Universal	Universal Semiconductor, Inc.
United	United Silicon Structures
USDesign	US Design Corp.
UTMC	United Technologies Microelectronics Center
Valid	Valid Systems
Validyne	Validyne Engineering
VAMP	VAMP
VDA	VLSI Design Associates
Vectron	Vectron Graphics Systems
VersaLogic	Versalogic Corp.
Vesta	Vesta Technology
VIA-Systems	VIA Systems
ViewLogic	View Logic Systems
Visionics	Visionics
VisionsUnlim	Visions Un-limited
Vitelic	Vitelic Corp.
Vitesse	Vitesse Electronics
VLSI Tech	VLSI Technology (San Jose)
VME-Microsys	VME Microsystems Int'l Corp.
VMI	VLSI Microsystems, Inc.
Votrax	Votrax
VTC	VTC
Vutek	Vutek Systems, Inc.
Waferscale	Waferscale Integration Inc.
WDC	Western Design Center
Webster	Webster Computer Co.
Weitek	Weitek Corporation
Western	Western Digital
WinSystems	WinSystems Inc.
Wintek	Wintek Corp.
XCAT	XCAT
Xerox	Xerox
Xicor	Xicor
Xilinx	Xilinx
Xycom	Xycom
Xylogics	Xylogics, Inc.
ZAX	ZAX Corp.
Zapco	Zeff Advanced Product Co.
Zecom	Zecom Inc.
Zendex	Zendex Corp.
Ziatech	Ziatech Corporation
Zilog	Zilog
Ziltek	Ziltek Corp.
Zitel	Zitel
Microcosm	Zuckerboard
Zuken	Zuken America
ZyMOS	ZyMOS

© IC MASTER 1988

MASTER SELECTION GUIDE INDEX

(Guide to Product Categories)

When you know the desired function and need specific devices that perform this function, use this Index first. It is organized by functions and by key words. It leads to the beginning of the section containing not only the specified topic but also related devices. The Master Selection Guides that follow in volumes One and Three provide sufficient information to help you make an initial product selection, or to lead you to a group of device numbers and their manufacturers. They enable you to find the products most likely to satisfy your needs for a particular application.

All devices that appear in a selection guide are included in the **Part Number Index.** If you know the part number for a device, by referring to the Part Number Index, you can see the page and line number for data on that device. If the manufacturer of the device has included a data sheet in IC MASTER, the location of this data sheet is also shown in **boldface** type.

©IC MASTER 1988

Function			Page-Line
A			
A/D	See ADC listings		
A Law			1192-1
Accelerators	See Design Automation		
Accompaniment	Music		1119-103
Accumulator	See Arithmetic Function listings		
ACIA	Interface		
	Transmitters-Receivers		1009-1
Adapter	Manchester		
	See Manchester listings		
ADC	Binary		916-1
	Companding		1192-1
	Consumer		1116-1
	Data Acquisition System		1219-1
	Decimal		939-1
	DSP		644-133
	Microprocessor		
	6500		866-6
	Quantizer		1219-1
	Video		916-1
ADCCP	Interface		
	Transmitters-Receivers		1009-1
Adder	Digital	CMOS	602-1
		DSP	644-1
		ECL 10K	647-1
		ECL 100K	649-123
		TTL	656-1
ADLC	Interface		
	Transmitters-Receivers		1009-1
ADPCM			1122-102
AFT	TV		1123-71
AGC	Amplifier		1102-1
	FM		1120-118
	Recorder		1123-22
	TV		1123-71
Air Flow Sensor			1219-1
Alarm Circuits			
	General		1219-1
	Intrusion		1127-31
Alarm Clock			
	See Clock listings		1119-24
ALC	Recorder		1123-22
Alternate Sources	See Alternate Source Directory		
Alternator Voltage Regulator			
	Automotive		1118-100
ALU	Digital	CMOS	602-1
		ECL 10K	647-1
		ECL 100K	649-123

(Continued)

Function			Page-Line
ALU	Digital		(Cont'd)
		TTL	656-1
Amplifiers			
	AC		1102-1
	AGC		1102-1
	Antilog		1102-1
	Audio		1102-1
			1116-1
	Cascode		1102-1
	Cassette Recorder		1123-22
	CATV		1123-71
	Current		1102-1
		Followers	1128-1
	Darlington		1106-1
	Differential		1106-1
			1102-1
	Disk Memory		1102-1
	Fiber Optic		1102-1
	Floppy Disk		1102-1
	Followers		1128-1
	Head	Video Recorder	1123-64
	Headphone		1116-1
	Hearing Aid		1116-1
	IF	AM	1119-136
		AM/FM	1120-44
		FM	1120-118
		General	1102-1
		TV	1123-71
	Instrumentation		1102-1
			1169-28
			1182-21
			1137-1
	IR		1122-5
	Isolation		1102-1
	Log		1102-1
	Magnetic Tape		1102-1
	MATV		1123-71
	Microphone		1102-1
			1123-22
			1192-1
	Mixer		1102-1
	Operational		
		See Operational Amplifier listings	
	Power		1102-1
			1116-1
		Auto	1118-100
	Preamplifier		1102-1
			1116-1
	Programmable Gain		1102-1
	Read		1102-1

(Continued)

© IC MASTER 1988

Function	Page-Line
A	**(Cont'd)**
Amplifiers	(Cont'd)
Recorder	1116-1
Remote Control	1102-1
	1122-5
RF	1102-1
Sense	1008-1
Single Ended	1102-1
Special Purpose	1102-1
Switched Input	1102-1
Telephone	1192-1
Temperature Controlled	1102-1
Thermocouple	1102-1
Transconductance	1102-1
	1169-28
	1181-46
Transimpedance	1102-1
TV Synthesizer	1102-1
Video	1102-1
Voltage Controlled	1102-1
Consumer	1119-103
Voltage Variable Gain	1219-1
Wideband	1102-1
Winchester	1102-1
with Comparator	1102-1
with Photodiode	1102-1
Analog Shift Register	1219-1
Analog Signal Processor	1219-1
Analog Switches	
See Switches	
Analog to Digital Converters	
Binary	916-1
Decimal	939-1
See ADC	
AND Gate	
See Gate listings	
Appliance Timer	
Consumer	1127-31
ARI-DK	1219-1
ARINC 429	
Digital CMOS	636-92
Interface	
Line Drivers	987-42
Receiver/Transmitter	1009-1
Arithmetic	
Floating Point	
DSP	644-1
General	888-20
Microprocessor, 16000	878-110
	880-35
Microprocessor, 32	881-5

(Continued)

Function	Page-Line
Arithmetic	
Floating Point	(Cont'd)
Microprocessor, 32000	880-37
Microprocessor, 6800	866-119
Microprocessor, 68000	878-124
Microprocessor, 8080	870-82
Microprocessor, 9440	878-103
Microprocessor	
8000	877-106
8086	875-107
8088	875-107
Arithmetic Functions	
CMOS	602-1
DSP	644-1
ECL 10K	647-1
ECL 100K	649-123
HNIL/HTL	654-1
Special	691-1
TTL	656-1
Arithmetic Game	888-20
Arithmetic Logic Unit	
See ALU	
Arithmetic Processor	
General See Processor, Arithmetic listings	
Arrays Diode	1108-53
GaAs	652-67
Gate	4041-1
Linear	4065-1
Linear/Digital	4065-1
Programmable Logic	4070-1
Special Purpose	1108-53
Standard Cells	4082-1
Switched Capacitor	1219-1
Transistor	1106-1
ASCII Code Converters	1303-1
ASTRO Interface	
Transmitters-Receivers	1009-1
Asynchronous Communications	1009-1
Attenuators	
Digital Consumer	1116-1
Digital Control	1219-1
Electronic	
Consumer	1119-103
Audio See Consumer Circuits	
Automotive Circuits	1118-100
B	
Balanced	
Mixer	1219-1
Modulator/Demodulator	1219-1
Bar Code Processor	888-20
Bargraph Display Drivers	977-1

(Continued)

Function			Page-Line
B			**(Cont'd)**
Bargraph Display Drivers			(Cont'd)
	TV		1123-71
Barrel Shifter			
	Digital	DSP	644-1
		TTL	656-1
BASIC, Tiny			868-119
Battery Backup Circuit			888-20
Battery Charger			
	Automotive		1118-100
Battery Indicator			
	Low Level		1219-1
Baud Rate Generator			
	Digital	Special	691-1
	Interface		1009-1
Bell 103	Linear	Telecom	1192-1
Bell 108	Linear	Telecom	1192-1
Bell 113	Linear	Telecom	1192-1
Bell 201	Linear	Telecom	1192-1
Bell 202	Linear	Telecom	1192-1
Bell 208	Linear	Telecom	1192-1
Bell 209	Linear	Telecom	1192-1
Bell 212	Linear	Telecom	1192-1
Bi-Phase	Interface		
		Transmitters-Receivers	1009-1
Bilingual Processor			
	TV		1123-71
Binary	Code Converters		1303-1
BiSync	Microprocessor		
		2650	865-73
		8080	870-82
		9900	877-40
Bit Bus	Support Boards		4846-13
Bit Rate Generator			
	Digital	CMOS	636-92
Bit Slice			645-70
Boards	Microcomputer		4803-1
	Support	See Microcomputer Board listings	
BOART	Interface		
		Transmitters-Receivers	1009-1
Boosters	Current	Amplifiers	1102-1
		Followers	1128-1
Bounce Eliminator			
	Digital	CMOS	636-92
Bubble Memory			
	Control Circuits		999-1
	Controller		881-52
	Driver		999-1
	Interface Circuits		999-1
	Storage Devices		1337-1
Bucket Brigade			
	Analog		1219-1
Buffers	CMOS		605-37
	Digital	Double Row	881-52
		See Gate listings	
	ECL 10K		647-39
	ECL 100K		650-1
	GaAs		652-3
	High Current		
		See Driver listings	
	High Power		1001-1
	HNIL/HTL		654-3
	Linear		1128-1
	TTL		658-57
	Various	See Driver listings	
Burst Error Processor			
	General		982-1
			888-20
	Microprocessor, 8000		877-106
Bus	Arbitration Module		881-52
	Extender	TTL	688-18
	IEEE-488		881-52
	See line Circuit listings		
	Transfer Switch		
		TTL	688-18
Buscon			878-124
C			
C-bus			4846-23
C-44 Bus			4846-16
Calculator Circuits			1119-2
CAM	See Memory listings		
Camera	Circuits		1119-12
	Traffic		1123-71
	TV		1123-71
Carrier Current			1219-1
Cassette	See Tape Deck Circuits		
Cassette Controller			
	See Controllers		
CATV			1123-71
CB Radio			1119-16
			1190-1
CCITT Protocol Controller			881-52
CCITT R2B			1192-1
CCITT R2F			1192-1
CCITT V.21			
	Linear	Telecom	1192-1
CCITT V.22			
	Linear	Telecom	1192-1
CCITT V.23			
	Linear	Telecom	1192-1
CCITT V.24			
	Interface		
		Line Drivers	985-1

© IC MASTER 1988

Function	Page-Line
C	**(Cont'd)**
CCITT V.26	
Interface	
Line Drivers	985-1
Linear Telecom	1192-1
CCITT V.27	
Linear Telecom	1192-1
CCITT V.28	
Interface	
Line Drivers	985-1
CCITT V.29	
Linear Telecom	1192-1
CCITT X.25	
Interface	
Transmitters-Receivers	1009-1
Cell Library	
Standard Cells	4082-1
VLSI/LSI Macrocells	4097-1
Cellular Radio	
Receivers	1120-118
Channel Circuits	
TV	1123-71
Channel Selector	
CB Radio	1119-16
Character Generators	1302-1
Chimes	1127-31
Chroma Circuits	
TV	1123-71
CIMbus	4846-21
Ciphering	
See Data Encryption listings	
Click Suppressor	
Telephone	1192-1
Clock Alarm	1119-24
Automotive	1118-100
	1119-24
General	1119-24
Melody Circuits	1119-24
Microcomputer	888-20
Microprocessor	
Real-Time	888-20
	864-82
6800	866-119
Oscillators/Dividers	633-70
Code Converters	1303-1
Code Identification System	
Digital CMOS	636-92
Codecs DSP	646-69
Telecom	1192-1
Color Processor	
TV	1127-19
Communications	
Two-Wire Bidirectional	1219-1

Function	Page-Line
Communications Processor	
Microprocessor	
TMS380	880-13
Compact Disk	
Audio	1116-1
Companding ADC	1192-1
Companding DAC	940-1
	1192-1
Compandor	
Tape Recorder	
Audio	1123-22
Video	1123-64
Telephone	1192-1
Comparator/Multiplexer	
Digital Special	691-1
Comparators	
Address	602-1
Cache Address	678-45
	1219-1
Chain Data	1219-1
Data	1219-1
Digital ECL 10K	647-1
ECL 100K	649-123
	650-111
HNIL/HTL	654-1
TTL	656-1
Equal to Microprocessor, 2900	860-46
Microprocessor, 8000	877-106
Equality	602-1
Hi/Low	1219-1
Identity TTL	656-1
Linear Dual	1111-6
PLLs	1190-1
Quad	1113-34
Single	1109-1
Linear-Digital	688-18
Magnitude	
CMOS	602-1
TTL	656-1
Opto-coupled	1102-1
Phase Digital, CMOS	636-92
Linear	1190-1
Programmable	1219-1
String Proximity	646-69
	881-52
Window	1219-1
Computer	
String Proximity	646-69
	881-52
Computer Board	
See Microcomputer Board listings	

Function			Page-Line
C			(Cont'd)
Conditioner			
	LVDT Signals		1219-1
Constant Current Source			1219-1
Consumer Circuits			
	Audio		1116-1
	Automotive		1118-100
	Calculator		1119-2
	Camera		1119-12
	CATV		1123-71
	CB Radio		1119-16
	Clock		1119-24
	Game		1127-19
	Miscellaneous		1127-31
	Music		1119-103
	Organ		1119-103
	Radio	AM	1119-136
		AM/FM	1120-44
		FM	1120-118
	Remote Control		1122-5
	Speech		1122-102
	Tape Recorder		
		Audio	1116-1
			1123-22
		Video	1123-64
	Television		1123-71
	Video Game		1127-19
	Watch		1119-24
Contact Bounce Eliminator			688-18
Controller			
	ACIA	Microprocessor, 6500	866-6
		Microprocessor, 6800	866-119
	ADLC	Microprocessor, 6800	866-119
	Bubble Memory		881-52
	Cassette	General	881-52
		Microprocessor, 8080	870-82
		Microprocessor, 8085	871-146
	CCITT		881-52
	Color Generator		
		Microprocessor, 1800	864-82
	CRT	See CRT listings	881-52
	Data Acquisition		1219-1
	Disk	Microprocessor, 68000	878-124
	Display	General	881-52
		Microprocessor, COP400	862-91
		Microprocessor, 1800	864-82
		Microprocessor, 2650	865-73
		Microprocessor, 8080	870-82
		Microprocessor, 8085	871-146
	Dynamic RAM		999-1

(Continued)

Function			Page-Line
Controller			(Cont'd)
	Fiber Optic Link		1219-1
	Floppy Disk		
		General	881-52
		Microprocessor, 1600	875-72
		Microprocessor, 6800	866-119
		Microprocessor, 8X300	873-106
		Microprocessor, 8000	877-106
		Microprocessor, 8048	868-119
		Microprocessor, 8080	870-82
		Microprocessor, 8085	871-146
		Microprocessor, 9900	877-40
	GPIB		881-52
	Keyboard		
		Microprocessor, 2650	865-73
		Microprocessor, 8080	870-82
	LAN	See LAN	
	LCD/Console		881-52
	Local Network		636-92
	Mini-Floppy Disk		881-52
		Microprocessor, 6500	866-6
	Power Supply		1219-1
			1215-102
	Printer	General	881-52
		Microprocessor, 6500	866-6
	Priority Interrupt		888-20
	PWM	Current Mode	1219-1
	See also Detector and Sensor listings		
	Servo		1219-1
	SMD		881-52
	Stepper Motor		1219-1
	Temperature		1219-1
	Traffic Light		1127-31
	Video	General	881-52
		Microprocessor, 68000	878-124
		Microprocessor, 8048	868-119
		Microprocessor, 8086/88	875-107
		Microprocessor, 9900	877-40
	Video Attributes		
		Microprocessor, 2650	865-73
	Winchester		881-52
Controls	Consumer		1116-1
	Motor Speed		
		General	1219-1
		Recorders	1123-22
	Remote		1122-5
	SCR		1219-1
	TRIAC		1219-1
Converter			
	ADC, See ADC listings		
	BCD to Binary		688-18

(Continued)

© IC MASTER 1988

Function			Page-Line
C			**(Cont'd)**
Converter			(Cont'd)
	Code		1303-1
	Coordinate		1219-1
	DAC, See DAC listings		
	DC to DC		1219-1
	Flash		916-1
	Flyback		1219-1
	Frequency to Voltage		1219-1
	Multifunction (XY/Z) exp M		1219-1
	RMS to DC		1219-1
	Thermal		1219-1
	Two-Wire to Four-Wire		1192-1
	Voltage to Frequency		1219-1
	Voltage to Voltage		1219-1
Coolant	Automotive		1118-100
Coordinate Converter			1219-1
Coprocessor			
	Text	Microprocessor, 8086/88	875-107
Core Memory Sense			
	Amplifiers		1008-1
Correlator			
	Digital	DSP	644-1
		Special	691-1
		TTL	656-1
Count Extender			
	for Prescalers		1190-1
Counter Logic Control			1190-1
Counters			
	Bi-Quinary		
		ECL 10K	647-59
	Binary	CMOS	608-107
		ECL III/Misc.	651-1
		ECL 10K	647-47
		ECL 100K	650-5
		GaAs	652-8
		HNIL/HTL	654-13
		Special	691-1
		TTL	660-78
			661-91
	Counter/Driver		691-1
	Counter/NV Storage		691-1
	Counter/Timer		691-1
	Decade	CMOS	611-92
		ECL 10K	647-59
		HNIL/HTL	654-17
		Special	691-1
		TTL	662-58
			663-40
	Miscellaneous		
		CMOS	613-114
			(Continued)

Function			Page-Line
Counters			
	Miscellaneous		(Cont'd)
		Special	691-1
		TTL	663-149
	Revolution		1127-31
CPUs			803-1
CQUAM			1119-136
CRC	ECC Circuits		982-1
	Generator		
		Microprocessor, Macrologic	860-1
	TTL		688-18
	Winchester		881-52
Crosspoint			
	See Switches		
CRT Circuits			881-52
CRT Controller			
	General		881-52
	Microprocessor		
		16000	880-35
		3870	865-105
		6500	866-6
		6800	866-119
		8000	877-106
		8048	868-119
		8080	870-82
		8085	871-146
		9900	877-40
CRT Geometry Correction			1219-1
CRT Interface			
	General		881-52
CRT Vertical Countdown			1219-1
CRT Videotext			881-52
CTCSS	Linear		1192-1
Current Boosters			
	Amplifiers		1102-1
	Followers		1128-1
Current Limiter			
	Telephone		1192-1
Current Mirror			1219-1
Current Sensing Gate			688-18
Current Sensing Latch			1219-1
Current Source			
	Constant		1219-1
	Programmable		1219-1
Custom	See Semicustom listings		
D			
D/A	See DAC listings		
DAC	Companding		1192-1
	Consumer		1116-1
	DSP		644-133
	General		940-1
			(Continued)

Function			Page-Line
D			**(Cont'd)**
DAC			(Cont'd)
	Microprocessor		
		General	888-20
	RGB		881-52
	Video	DSP	644-133
		General	940-1
Darlington			1001-1
			1106-1
DART	Microprocessor, Z80		874-53
Data Access Register			
	Macrologic		
		Arithmetic	860-1
Data Acquisition			
	Controller		1001-1
	Microprocessor		
		General	888-20
		8080	870-82
		8085	871-146
	Systems		1219-1
Data Encryption			
	Digital	Special	691-1
	Microprocessor		
		General	888-20
		Macrologic	860-1
		6800	866-119
		8000	877-106
		8080	870-82
		9900	877-40
Data Path Switch			602-1
	Macrologic		860-8
Data Selector			
	See Multiplexer listings		
Data Separator			
	Floppy Disk		881-52
Data Set	Telephone		1192-1
DC to DC Converter			1219-1
Decoders			
	Address, Programmable		4070-1
	CMOS		614-36
			616-106
	Consumer		1122-5
	Display Drivers		977-1
	ECL 10K		647-65
	ECL 100K		650-11
	FM Stereo		1120-118
	HNIL/HTL		654-24
			654-22
	Keyboard		984-1
	Manchester		
		See Manchester listings	(Continued)

Function			Page-Line
Decoders			(Cont'd)
	RC		1192-1
	See also Drivers, Digital		
	Tone	PLL Circuits	1190-1
		Telephone	1192-1
		Traffic Signals	1219-1
	Traffic Information		1118-100
	TTL		664-25
Deflection Circuit			
	TV		1123-71
Deglitcher			
	for DAC		1219-1
Degree-Sine			
	Code Converters		1303-1
Delay	Element		688-18
	Serial Analog		1219-1
	Video	CCD	1219-1
Delta Modulation			
	Consumer		1122-102
	Telecom		1192-1
Delta Sigma Modem			1192-1
Demodulator			
	Balanced		1219-1
	Telecom		1192-1
Demultiplexer			
	Analog	CMOS	636-92
		Switches	911-49
	Digital	CMOS	614-36
		TTL	664-25
Design Automation			
	Design Tool Interfaces		4622
	Front End Design Tools		
		Circuit Simulators	4468
		Fault Simulators	4506
		Logic Simulators	4483
		Schematic Capture	4452
		Timing Verifiers	4483
	Gate Arrays		4536
	Hardware/Software		
		Computing Platforms for DA Software	4638
	Hardware Tools		
		Circuit Simulation Accelerators	4580
		Fault Simulation Accelerators	4588
		I C Prototype Test Systems	4592
		Logic Simulation Accelerators	4581
		Physical Modeling using Reference ICs	4574
	Layout Verification		4566
	Physical Layout Tools		
		Full Custom	4549
		Gate Arrays	4536

(Continued)

© IC MASTER 1988

Function			Page-Line
D			**(Cont'd)**
Design Automation			
	Physical Layout Tools		(Cont'd)
		Printed Circuit Boards	4518
		Programmable Logic Devices	4555
		Standard Cells	4541
	Silicon Compilers		4561
	Workstations		4410
Design Automation Tools			
	Gate Arrays		4088-1
	Linear Arrays		4092-1
	Programmable Logic		4093-1
	See Design Automation listings		
	Standard Cells		4094-1
Deskew Register			982-1
Detector	AC		1219-1
	Fiber Optic		1219-1
	Fluid		1219-1
	Frequency		
		Telecom	1192-1
	Level		1219-1
	Light		1219-1
	Peak		1219-1
	Phase-Frequency		688-18
			1190-1
	Proximity		1219-1
	See Sensor listings		
	Smoke		1127-31
	SSB		1119-136
	Voltage		1219-1
Development Systems			4703-1
Device	Identification		
		See Part Number Guide	
	Numbers		
		See Part Number Index and Advertisers Product Index	
	Prefixes	See Part Number Guide	
	Suffixes	See Part Number Guide	
Dialer	Telephone		1192-1
Digital	Arrays	Gate Arrays	4041-1
	CMOS	Arithmetic Functions	602-1
		Buffers	605-37
		Counters, Binary	608-107
		Counters, Decade	611-92
		Counters, Misc.	613-114
		Decoders	614-36
		Dividers	633-70
		Drivers	616-106
		Flip-Flops, D	617-58
		Flip-Flops, J-K	620-132
		Gates, AND	621-147

(Continued)

Function			Page-Line
Digital	CMOS		(Cont'd)
		Gates, AND-OR	624-1
		Gates, AOI	624-24
		Gates, Ex. NOR	626-75
		Gates, Ex. OR	626-5
		Gates, Misc.	626-108
		Gates, NAND	622-105
		Gates, NOR	624-169
		Gates, OR	624-63
		Inverters	607-116
		Latches	626-128
		Memories, See Memory listings	629-133
		Miscellaneous	636-92
		Multiplexers	630-96
		Multivibrators	632-141
		Oscillators	633-70
		Shift Registers	633-112
		Translators	636-72
	DSP	Arithmetic Functions	644-1
		Converters, A/D	644-133
		Converters, D/A	644-133
		Miscellaneous	646-69
		Processors	645-70
		Registers	646-55
	ECL III/Misc.		
		Counters	651-1
		Flip-Flops, D	651-18
		Flip-Flops, R-S	651-23
		Gates, Ex. NOR	651-33
		Gates, Ex. OR	651-32
		Gates, NOR	651-25
		Gates, OR	651-24
		Gates, OR/NOR	651-26
		Latches	651-34
		Miscellaneous	651-38
		Multivibrators	651-35
		Shift Registers	651-37
	ECL 10K	Arithmetic Functions	647-1
		Buffers	647-39
		Counters, Binary	647-47
		Counters, Decade	647-59
		Decoders	647-65
		Drivers	647-85
		Flip-Flops, D	647-92
		Flip-Flops, J-K	647-111
		Gates, AND	647-115
		Gates, Ex. OR	648-81
		Gates, Ex. OR/NOR	648-89
		Gates, NOR	648-8
		Gates, OR	647-125

(Continued)

Function			Page-Line
D			**(Cont'd)**
Digital	ECL 10K		(Cont'd)
		Gates, OR/NOR	648-37
		Gates, OR-AND	648-57
		Gates, OR-AND/Invert	648-69
		Inverters	647-42
		Latches	648-95
		Memories, See Memory Listings	648-126
		Miscellaneous	649-68
		Multiplexers	649-18
		Multivibrators	649-39
		Shift Registers	649-40
		Translators	649-46
	ECL 100K		
		Arithmetic Functions	649-123
		Buffers	650-1
		Counters	650-5
		Decoders	650-11
		Drivers	650-14
		Flip-Flops, D	650-24
		Gates, Ex. OR/NOR	650-44
		Gates, OR/NOR	650-32
		Latches	650-47
		Memories, See Memory listings	650-52
		Miscellaneous	650-111
		Multiplexers	650-81
		Shift Registers	650-93
		Translators	650-99
	GaAs	Buffers	652-3
		Counters, Binary	652-8
		Dividers	652-8
		Drivers	652-31
		Flip-Flops, D	652-33
		Gates, AND/NAND	652-41
		Gates, Ex OR	652-49
		Gates, NOR	652-44
		Gates, OR/NOR	652-48
		Memories	
		Miscellaneous	652-67
		Multiplexers	652-51
		Shift Registers	652-64
	HNIL/HTL		
		Arithmetic Functions	654-1
		Buffers	654-3
		Counters, Binary	654-13
		Counters, Decade	654-17
		Decoders	654-22
		Decoders/Drivers	654-24
		Drivers	654-24
			654-31
			(Continued)

Function			Page-Line
Digital	HNIL/HTL		(Cont'd)
		Flip-Flops, D	654-35
		Flip-Flops, J-K	654-37
		Flip-Flops, R-S	654-45
		Gates, AND	654-46
		Gates, AOI	654-72
		Gates, Ex. OR	654-81
		Gates, Misc.	654-82
		Gates, NAND	654-48
		Gates, NOR	654-78
		Gates, OR	654-77
		Inverters	654-3
		Latches	654-87
		Miscellaneous	655-3
		Multiplexers	654-88
		Multivibrators	654-90
		Shift Registers	654-95
		Translators	654-98
	Special		691-1
	TTL	Arithmetic Functions	656-1
		Buffers	658-57
		Counters, Binary Count Up	660-78
		Counters, Binary Count Up/Down	661-91
		Counters, Decade Count Up	662-58
		Counters, Decade Count Up/Down	663-40
		Counters, Miscellaneous	663-149
		Decoders	664-25
		Drivers	665-125
		Flip-Flops, D	666-112
		Flip-Flops, J-K	669-38
		Gates, AND	670-60
		Gates, AND-OR	674-3
		Gates, AOI	674-4
		Gates, Ex. NOR	676-78
		Gates, Ex. OR	676-4
		Gates, NAND	671-85
		Gates, NOR	675-7
		Gates, OR	674-105
		Gates, OR/NOR	675-170
		Inverters	659-60
		Latches	676-111
		Memories, See Memory listings	678-45
		Miscellaneous	688-18
		Multiplexers	679-5
		Multivibrators	681-157
		Shift Registors	682-70
		Transceivers, See also Line Circuits	684-70
		Translators	687-163
Digital Bus Circuits	ECL III		651-38
			(Continued)

© IC MASTER 1988

Function			Page-Line
D			**(Cont'd)**
Digital Bus Circuits			(Cont'd)
	ECL 10K		649-68
	ECL 100K		650-111
Digital Disk			1116-1
Digital Gain Set			
	for Op-Amps		1219-1
Digital Signal Processing			644-1
Digital to Analog Converters			
	See DAC listings		
Diode Arrays			1108-53
Diode Matrix			
	Programmable		
		Digital, Special	691-1
Direction Indicator			
	Automotive		1118-100
Discriminator			
	Direction		636-92
	Window		1219-1
Disk	Digital, Consumer		1116-1
	Drivers		999-1
	Hard Disk Circuits		881-52
	Phase Locked Loop		
		Microprocessor, 68000	878-124
	Video		1123-71
	Winchester Disk Circuits		881-52
Display Controller			881-52
Display Drivers			
	Digital, CMOS		616-106
	Electroluminescent		977-1
	Gas Discharge		977-1
	General		977-1
	Lamp		977-1
	LCD		977-1
	LED		977-1
	Microprocessor		
		COP400	862-91
		OLMS40	863-55
	TV Channel		1123-71
	with Memory		
		Digital, Special	691-1
Distributors			
	See Manufacturers and Distributors Directory		
Divider Extender			
	Digital	Special	691-1
Dividers	Consumer		1119-103
	Extender	Digital, Special	691-1
	Fixed	Digital, CMOS	633-70
		Digital, ECL III	651-1
		Digital, ECL 10K	649-68
		Digital, ECL 100K	650-5
		Digital, GaAs	652-8

(Continued)

Function			Page-Line
Dividers	Fixed		(Cont'd)
		Digital, Special	691-1
		Digital, TTL	663-149
	Linear	See also Multipliers	1219-1
	PLL Circuits		1190-1
	Programmable		
		Digital, CMOS	636-92
		Digital, GaAs	652-8
		Digital, Special	691-1
		Digital, TTL	663-149
	See Counter listings		
Dolby			1116-1
Doubler	Voltage		1219-1
DPDT			902-1
DPST			902-1
DRAM	See Memory listings		
DRC			1219-1
Drivers	Analog Switch		911-33
	BCD to Display		977-1
	Bridge		1001-1
	Bubble Memory		999-1
	Bus	See Line Drivers	
	CCD		999-1
	CMOS		616-106
			636-92
	Disk		999-1
	Display	Digital CMOS	616-106
		General	977-1
		Radio	1120-44
		See Display Driver listings	
	ECL 10K		647-85
	ECL 100K		650-14
	Electro-Optic		1219-1
	Fluorescent		977-1
	GaAs		652-31
	Hammer		1001-1
	High Current		1001-1
		Digital, TTL	665-125
	High Voltage		1001-1
		Digital, CMOS	616-106
	HNIL/HTL		654-24
			654-31
	Lamp		977-1
			1001-1
	Latch/Decoder/Drivers		616-106
			664-25
	LCD		977-1
	LED		977-1
	Line	Also see Line Circuits	987-42
			985-1

(Continued)

Function			Page-Line
D			**(Cont'd)**
Drivers			(Cont'd)
	Memory		999-1
	Meter	Air Core	1219-1
		HiFi	1127-31
	MOS Clock		999-1
	MOS Memory		999-1
	Motor	Amplifiers	1102-1
		General	1001-1
			1219-1
		HiFi	1127-31
	Peripheral		1001-1
	PIN Diode		691-1
			1001-1
			1219-1
	Plasma		977-1
	Power Amplifier		1116-1
	Printer		1001-1
	Relay		1001-1
		Telecom	1192-1
	Solenoid		1001-1
	Stepper Motors		1001-1
			1219-1
	Thermal Print Head		1001-1
	Transistor		1219-1
	TTL		665-125
	Various	See Buffer listings	
DSP			644-1
DTMF	Telecom		1192-1
DUART	Transmitters-Receivers		1009-1
DVM	Circuits		939-1
	Logic	Digital, Special	691-1
Dynamic RAM Controller			999-1
Dynatex			1116-1
E			
EAROMs			1308-1
EBCDIC	Code Converters		1303-1
E^2 Logic			4070-1
E^2 PROMs			
	See Memory listings		1308-1
ECC	ECL 10K		649-68
	ECL 100K		650-111
	General		982-1
	Microprocessor		
		2650	865-73
		2900	860-46
		68000	878-124
		8000	877-106
		8080	870-82

(Continued)

Function			Page-Line
ECC			(Cont'd)
	Telecom		1192-1
	TTL		688-18
ECC Transceiver			
	Interface		
		Line Transceivers	994-1
EDC	See ECC listings		
Electro-Optic Driver			1219-1
Electro-Optics			1219-1
Electroluminescent Drivers			
	See Display Driver listings		
Eliminator			
	Contact Bounce		688-18
Encoder	Consumer		1122-5
	Encoder	See Priority listings	
	Keyboard		
		General	984-1
		Microprocessor, 1800	864-82
	Manchester		
		See Manchester listings	
	Pulse DTMF		
		Microprocessor, 9900	877-40
	RC		1192-1
	Telephone Keyboard		1192-1
Encryption			
	See Data Encryption		
Energy Saver			
	Motor		1219-1
Engine RPM			
	Automotive		1118-100
EPCI	Transmitters-Receivers		1009-1
EPROMs	See Memory listings		
Equalizer			1116-1
Erasable Logic			4070-1
Error Correction			
	See ECC		
Ethernet			4846-41
Ethernet Circuits			
	General		881-52
	Microprocessor		
		68000	878-124
EXORbus			4846-42
EXORciser Bus			4847-46
Exposure			
	Camera		1119-12
F			
Facsimile			1127-31
Fast Fourier Transform			646-69
			888-20
FFT	See Fast Fourier Transform		
Fiber Optics			
	Amplifiers		1102-1

(Continued)

© IC MASTER 1988

Function			Page-Line
F			**(Cont'd)**
Fiber Optics			(Cont'd)
	Circuits		1219-1
Field Programmable Logic			4070-1
FIFOs	Microprocessor		
		Macrologic	860-8
		8000	877-106
	RAM Controller		
		Microprocessor, 8X300	873-106
	See Memory listings		1304-1
Filters	Active		1219-1
	Bandpass		1192-1
	Bandsplit		1192-1
	Codec		1192-1
	Hearing Aid		1116-1
	Impulse Response		
		Digital, Special	691-1
	Impulse Response, Finite		646-69
			688-18
	Low Pass		1192-1
	Modem		1192-1
	Music		1127-31
	PCM		1192-1
	Speech		1192-1
	Switched Capacitor Array		1219-1
	Time-based		1219-1
	Touchtone		1192-1
	Transversal		646-69
			1219-1
	Tunable		1192-1
	TV		1123-71
Flash Converter			916-1
Flasher			977-1
			1219-1
Flip-Flops			
	D-Type	CMOS	617-58
		ECL III/Misc.	651-18
		ECL 10K	647-92
		ECL 100K	650-24
		GaAs	652-33
		HNIL/HTL	654-35
		TTL	666-112
	J-K Type	CMOS	620-132
		ECL 10K	647-111
		HNIL/HTL	654-37
		TTL	669-38
	R-S Type	ECL III/Misc.	651-23
		HNIL/HTL	654-45
Floating Point			
	See Arithmetic listings		

Function			Page-Line
Floating Point Processor			645-70
			888-20
Floppy Disk			
	Amplifiers		1102-1
	Circuits		881-52
	Controllers		
		See Controller listings	
Fluid Detector			1219-1
Fluorescent Display Driver			977-1
Flyback Converter			1219-1
Followers			1128-1
Fourier	See Fast Fourier Transform		
Frequency Detector			
	Telecom		1192-1
Front End Design Tools			
	See Design Automation listings		
FSK	PLL Circuits		1190-1
	Telecom		1192-1
Function Generators			1219-1
			1190-1
G			
GaAs			652-3
Gain Set	for op amps		691-1
Gallium Arsenide			652-3
Game	Arithmetic Game		888-20
	Circuits		1127-19
Gate Arrays			
	Field Programmable		4070-1
	General		4041-1
	See Array listings		
	See Design Automation listings		
Gate Delay			
	Gate Arrays		4041-1
Gates	AND	CMOS	621-147
		Drivers	1001-1
		ECL 10K	647-115
		HNIL/HTL	654-46
		TTL	670-60
	AND/NAND		
		GaAs	652-41
	AND-OR	CMOS	624-1
		TTL	674-3
	AND-OR-Invert		
		CMOS	624-24
		HNIL/HTL	654-72
		TTL	674-4
	Exclusive NOR		
		CMOS	626-75
		ECL III/Misc.	651-33

(Continued)

Function			Page-Line
G			**(Cont'd)**
Gates	Exclusive NOR		(Cont'd)
		TTL	676-78
	Exclusive OR		
		CMOS	626-5
		ECL III/Misc.	651-32
		ECL 10K	648-81
		GaAs	652-49
		HNIL/HTL	654-81
		TTL	676-4
	Exclusive OR/NOR		
		ECL 10K	648-89
		ECL 100K	650-44
	High Current		
		See Driver listings	665-125
	Miscellaneous		
		CMOS	626-108
		HNIL/HTL	654-82
	Multifunction		
		CMOS	626-108
	NAND	CMOS	622-105
		Drivers	1001-1
		HNIL/HTL	654-48
		TTL	671-85
	NOR	CMOS	624-169
		Drivers	1001-1
		ECL III/Misc.	651-25
		ECL 10K	648-8
		GaAs	652-44
		HNIL/HTL	654-78
		TTL	675-7
	OR	CMOS	624-63
		Drivers	1001-1
		ECL III/Misc.	651-24
		ECL 10K	647-125
		HNIL/HTL	654-77
		TTL	674-105
	OR/NOR		
		ECL III/Misc.	651-26
		ECL 10K	648-37
		ECL 100K	650-32
		GaAs	652-48
		TTL	675-170
	OR-AND	ECL 10K	648-57
			648-69
	OR-AND-Invert		
		ECL 100K	650-38
Gates with Latches			
	See latch listings		

Function			Page-Line
Generator			
	Baud Rate		
		Digital	691-1
		Interface	1009-1
	Bit Rate		636-92
	Character		1302-1
	Color Bar		1123-71
	Function		1190-1
	Music	Accompaniment	1119-103
		Noise	1119-103
		Octave	1119-103
	Parity	See Parity listings	
	Polynomial		982-1
	Random Noise		1219-1
	Rythm		1119-103
	Sound	See Sound Generator listings	
	Tone	Microprocessor, 1800	864-82
		Telecom	1192-1
	TV Test Pattern		1123-71
	Video Display		
		Microprocessor, 6800	866-119
	Waveform		1190-1
GFI			1127-31
GPIB	General		881-52
	Microprocessor		
		General	881-52
		16000	878-110
			880-35
		6800	866-119
		8048	868-119
		8080	870-82
		8085	871-146
		8086/88	875-107
		9900	877-40
	Transceiver		
		Line Transceivers	994-1
	TTL		688-18
Graphic Equalizer			1116-1
Graphics Circuits			881-52
Ground Fault Interrupter			1127-31
Guard	Polarity		1192-1
Gyrator			1192-1
H			
HAL			4070-1
Hall Effect Devices			
	Digital		691-1
	Interface		1001-1
	Linear		1219-1
Hamming Code ECC			982-1
Hard Array Logic			4070-1

© IC MASTER 1988

Function	Page-Line
H	**(Cont'd)**
Hard Disk Circuits	881-52
Hardware Tools	
See Design Automation listings	
HDB3/AMI	
Linear Telecom	1192-1
HDLC Interface	
Transmitters-Receivers	1009-1
Microprocessor	
8048	868-119
8080	870-82
Heart Rate Monitor	636-92
Hollerith Code Converters	1303-1
I	
I/O Channel	4852-23
IBM PC Bus	4847-50
IBM 3270	
Interface	
Transmitters-Receivers	1009-1
IBM 3274	
Interface	
Transmitters-Receivers	1009-1
IBM 3276	
Interface	
Transmitters-Receivers	1009-1
IBM 360 Interface	
Line Drivers	985-1
Line Receivers	990-1
IBM 370 Interface	
Line Drivers	985-1
Line Receivers	990-1
IBM 3740	
Microprocessor	881-52
IEEE-488	
Microprocessor	881-52
See GPIB listings	
IF See Radio Circuits listings	
Ignition Automotive	1118-100
IIOC	4851-30
Image Rotator	1219-1
Image Sensors	1219-1
Indicator Automotive Direction	1118-100
Low Battery	1219-1
Infrared Circuits	1122-5
	1192-1
Injector Drive	
Automotive	1118-100
Integrating ADC	939-1
Interface	
Analog Switches	902-1
Analog to Digital Converters	
Binary	916-1
	(Continued)

Function	Page-Line
Interface	
Analog to Digital Converters	(Cont'd)
Decimal	939-1
Digital to Analog Converters	940-1
Display	881-52
Display Drivers	977-1
Error Checking Circuits	982-1
Keyboard	881-52
Keyboard Encoders-Decoders	984-1
Line Drivers	985-1
Line Receivers	990-1
Line Transceivers	994-1
Memory Drivers	999-1
Multiprocessor	888-20
Peripheral Drivers	1001-1
Sense Amplifiers	1008-1
Telephone	1192-1
Transmitters-Receivers	
Serial	1009-1
Interpolation	
Pulse Generator	881-52
Intrusion	1127-31
Inverters CMOS	607-116
ECL 10K	647-42
High Current	
See Driver listings	
High Power	1001-1
HNIL/HTL	654-3
PMOS	691-1
See also Buffers	
TTL	659-60
Voltage	1219-1
iSBC Bus	4852-27
iSBX Bus	4854-2
Isolator	1219-1
K	
Keyboard	
Decoders	984-1
Encoders	984-1
Interface	691-1
Capacitive	1219-1
Keyboard Controller	
See Controllers	
Keyed Access EPROM	1219-1
L	
LAC See Look Ahead Carry listings	
Lamp Monitor	
Automotive	1118-100
LAN Circuits	881-52
Microprocessor, 68000	878-124
	(Continued)

Function			Page-Line
L			**(Cont'd)**
LAN			(Cont'd)
	Ethernet		881-52
	Receiver	Microprocessor, 16000	880-35
	Token Passing		881-52
LANCE			881-52
Latch/Decoder/Driver			
	Digital	CMOS	616-106
		TTL	664-25
	Display		977-1
Latches	Addressable		626-128
	CMOS		626-128
	Current Sensing		1219-1
	ECL III/Misc.		651-34
	ECL 10K		648-95
	ECL 100K		650-47
	HNIL/HTL		654-87
	Microprocessor		
		1800	864-82
	TTL		676-111
Layout	See Design Automation listings		
LCD Drivers			
	See Display Driver listings		
LED Drivers			
	See Display Driver listings		
Level Detector			1219-1
	Audio		1116-1
Level Meter			1219-1
Level Shifters			
	See Translators		
Library	See Cell Library listings		
LIFOs	See Memory listings		1307-52
Light Activated Circuits			1219-1
Limiter	Current	Telephone	1192-1
	Voltage	Telephone	1192-1
Line Circuits			
	Digital Bus Circuits		636-92
			684-70
	General		985-1
Line Drivers			
	Differential		987-42
	Single Ended		985-1
Line Interface Circuits			
	Telephone		1192-1
Line Receivers			
	Differential		991-13
	Single Ended		990-1
Line Transceivers			
	Differential		997-44
	Single Ended		994-1
Linear	Amplifiers		
		Special Purpose	1102-1
			(Continued)

Function			Page-Line
Linear			(Cont'd)
	Arrays	Diode	1108-53
		Gate Arrays	4065-1
		Semicustom	4065-1
		Special Purpose	1108-53
		Transistor	1106-1
	Comparators		1109-1
	Consumer Circuits		
		See Consumer Circuits	
	Followers		1128-1
	Operational Amplifiers		
		See Operational Amplifiers	
	Other Linear Devices		1219-1
	Phase Locked Loops/Synthesizers		1190-1
	Prescalers		1190-1
	Telecommunication Circuits		1192-1
	Voltage Regulators		
		See Voltage Regulators	
Linear/Digital Arrays			4065-1
Liquid Crystal Display Driver			977-1
Local Area Network Circuits			
	See LAN		
Lock	Digital	Consumer	1127-31
Logic	Hard Array		4070-1
	Majority		626-108
	Programmable		4070-1
	See Digital listings		
Logic Unit			
	Digital	CMOS	602-1
		ECL 10K	647-1
		ECL 100K	649-123
		TTL	656-1
Look Ahead Carry			
	Digital	CMOS	602-1
		ECL 10K	647-1
		ECL 100K	649-123
		TTL	656-1
Loop Disconnect Dialer			1192-1
Low Battery Indicator			1219-1
LRCC			982-1
LSI-11			4856-3
LVDT Signal Conditioner			1219-1
M			
Macrocells			4097-1
Majority Logic			
	Digital	CMOS	626-108
Manchester Adapter			
	Digital	CMOS	636-92
Manchester Decoder			
	Digital	CMOS	636-92
			(Continued)

© IC MASTER 1988

Function			Page-Line
M			**(Cont'd)**
Manchester Decoder			(Cont'd)
	Interface		
		Transmitters-Receivers	1009-1
	Microprocessors		881-52
Manchester Encoder			
	Digital	CMOS	636-92
	Interface		
		Transmitters-Receivers	1009-1
	Microprocessors		881-52
Manufacturers			
	See Manufacturers and Distributors Directory		
MATV			1123-71
Melody Circuit			
	Clock		1119-24
Memory	Active Element		
		Digital, TTL	678-45
	Analog		1219-1
	Bubble		1337-1
	Bubble, Circuits		
		See Bubble Memory	
	CAM	ECL 10K	648-126
		ECL 100K	650-52
	CCD		
	Character Generators		1302-1
	Code Converters		1303-1
	Controllers		999-1
	Drivers		999-1
	Dualport		629-133
	EAROMs		1308-1
	E^2PROMs		1308-1
		Keyed Access	1219-1
	EPROMs		1316-1
	FIFOs		1304-1
		CMOS, Special Purpose	629-133
		TTL, Special	678-45
	LIFOs		629-133
			1307-52
		Microprocessor, 8X300	873-106
	Management		999-1
	Multiport Register		629-133
			678-45
	NVRAMs		1308-1
	PROMs		1316-1
		as logic	4070-1
		EBPROMs	1308-1
		ECL 10K	648-126
		ECL 100K	650-52
		Electrically Erasable	1308-1
		UV Erasable	1316-1
	RAMs	CMOS, Special Purpose	629-133
			(Continued)

Function			Page-Line
Memory	RAMs		(Cont'd)
		Dynamic	1337-6
		ECL 10K	648-126
		ECL 100K	650-52
		GaAs	
		Non-volatile	1308-1
		Static	1346-57
		TLL, Special Purpose	678-45
		Video DAC	940-1
		with Batteries	1308-1
	ROMs	EBPROMs	1308-1
		General	1389-1
		Speech	1122-102
	Shift Registers		
		Dynamic	1393-1
		Static	1393-23
		TTL	678-45
			682-70
	Simultaneous Read/Write		
		Digital, TTL	678-45
	Triport	Telephone	1192-1
	TV		1123-71
Memory Drivers			999-1
Meter	Level		1219-1
	Peak Power		1127-31
Meter Driver			
	Air Core		1219-1
	HiFi		1127-31
Micro Bus			4856-23
Microcomputer Boards			
	Processor		4803-1
		BitBus	4846-13
		C-bus	4846-23
		C-44 Bus	4846-16
		CIMbus	4846-21
		Ethernet Bus	4846-41
		EXORbus	4846-42
		EXORciser Bus	4847-46
		I/O Channel	4852-23
		IBM PC Bus	4847-50
		IIOC	4851-30
		iSBC Bus	4852-27
		iSBX Bus	4854-2
		LSI-11	4856-3
		Micro Bus	4856-23
		Micromodule	4856-26
		MS DOS Bus	4856-30
		Multibus 1	4857-1
		Multibus 2	4864-1
		Multimodule Bus	4865-22
			(Continued)

Function	Page-Line
M	**(Cont'd)**
Microcomputer Boards	
Support Boards	(Cont'd)
Proprietary Bus	4865-24
Q-Bus	4866-5
RM-65 Bus	4868-20
S-100 Bus	4868-23
SCSI	4869-22
Special	4893-4
STDbus	4870-14
TM990 Bus	4879-30
UNIBUS	4880-8
Vax	4880-32
VERSAbus	4892-17
VMEbus	4881-24
Microcomputer Development Systems	4703-1
Microcomputers	803-1
See Microprocessor listings	
Microcontroller	
See Microprocessor, System Components	803-1
Micromodule	4856-26
Microprocessor	
CPU Boards	4803-1
CPUs	803-1
DSP	645-70
General Purpose Circuits	888-20
Peripheral Controllers	881-52
General Purpose	888-20
Peripheral Controllers	881-52
1 Bit	862-15
12 Bit	877-75
16 Bit	877-106
16/32 Bit	880-35
2 Bit Slice	860-42
32 Bit	881-5
4 Bit	862-44
4 Bit Slice	860-46
8 Bit	864-82
8 Bit Slice	861-128
8/16 Bit	875-72
MIL-M-38510	
See Military Pages	
MIL-STD-1553	
Encoder/Decoder	
Microprocessor, General	888-20
Interface	
Transmitters-Receivers	1009-1
MIL-STD-1750A	878-108
MIL-STD-188	
Interface	
Line Drivers	987-42
	(Continued)

Function	Page-Line
MIL-STD-188	
Interface	
Line Drivers	(Cont'd)
	985-1
Line Receivers	991-13
	990-1
MIL-STD-883	
See Military Pages	
Military See Military pages	
Miscellaneous	
Digital CMOS	636-92
DSP	646-69
ECL III/Misc.	651-38
ECL 10K	649-68
ECL 100K	650-111
GaAs	652-67
HNIL/HTL	655-3
Special	691-1
TTL	688-18
Linear Other Linear Devices	1219-1
Microprocessor	
General Purpose	888-20
Mixer Amplifiers	1102-1
Balanced	1219-1
	1190-1
Radios	1119-136
	1120-118
Modem Microprocessor	
PPS-4/8	
6800	866-119
9900	877-40
PLL Circuits	1190-1
Telecom	1192-1
Transmitters-Receivers	1009-1
Modulator	
Pulse-Width	1219-1
	1215-102
Telecom	1192-1
TV	1123-71
TV Games	1127-19
Modulator/Demodulator	
Balanced	1219-1
Telecom See also Modem	1192-1
Moisture Sensor	1219-1
Monitor Automotive Lamp	1118-100
Heart Rate	636-92
See Protection listings	
MOS Memory Drivers	999-1
Motor Circuits	
Interface	
Peripheral Drivers	1001-1
Linear Consumer	1127-31

© IC MASTER 1988

Function	Page-Line
M	**(Cont'd)**
Motor Driver	
Amplifiers	1102-1
General	1001-1
Hi-Fi	1127-31
Motor Speed Control	1116-1
General	1001-1
Recorders	1123-22
MPCC Interface	
Transmitters-Receivers	1009-1
Microprocessor	
System Components	881-52
MS DOS Bus	4856-30
Multi-Protocol Communications	
See MPCC	
Multibus	4857-1
Multibus 2	4864-1
Multifunction Converter	1219-1
Multimodule Bus	4865-22
Multiplexer/Comparator	
Digital Special	691-1
Multiplexer/Demultiplexer	
Digital Special	691-1
Multiplexers	
Analog Analog Switches	911-49
CMOS	636-92
Digital CMOS	630-96
ECL 10K	649-18
ECL 100K	650-81
GaAs	652-51
HNIL/HTL	654-88
Special	691-1
TTL	679-5
Multiplexing	
Time Division	1192-1
Time Slot	1192-1
Multipliers	
Analog	1219-1
Complex Numbers	602-1
Digital CMOS	602-1
DSP	644-1
ECL 10K	647-1
Special	691-1
TTL	656-1
Microprocessor	
EPIC	861-134
1800	864-82
2900	860-46
Rate CMOS	636-92
TTL	688-18

Function	Page-Line
Multipliers/Dividers	
Analog	1219-1
Multiprocessor Interface	888-20
Multivibrators	
CMOS	632-141
ECL III/Misc.	651-35
ECL 10K	649-39
HNIL/HTL	654-90
TTL	681-157
Music Chimes	1127-31
Clock Melody Circuits	1119-24
General	1119-103
VCO	1127-31
Muting Circuit	
Consumer	1116-1
MUX See Multiplexer listings	
M38510 See Military Pages	
N	
NAND Gate	
See Gate listings	
Network LAN See LAN	
Nines Complementor	
Digital CMOS	602-1
Noise Random Generator	1219-1
Reduction, Consumer	1116-1
Reduction, FM	1120-118
Source	1116-1
NOR Gate	
See Gate listings	
NTDS	985-1
	991-13
NTSC TV	1123-71
NVRAMs	1308-1
O	
OCTART Transmitters-Receivers	1009-1
Octave Generator	
Music	1119-103
Operational Amplifiers	
Buffers	1128-1
Characteristics	
Duals	1169-28
Quads	1182-21
Singles	1137-1
Triples	1181-46
Chopper Stabilized	1137-1
Digital Gain Set	691-1
General Purpose	1130-1
High Output Current	1130-37
High Speed	1131-1
High Voltage	1131-60

(Continued)

Function	Page-Line
O	**(Cont'd)**
Operational Amplifiers	(Cont'd)
Instrumentation	1137-1
Low Bias Current	1132-1
Low Drift	1132-43
Low Power	
Non-Adjustable	1133-1
Programmable	1133-39
Programmable	1133-96
Single Supply	
Duals	1134-75
Quads	1135-1
Singles	1134-46
Special with Comparators	1102-1
	1113-34
Unity Gain	1128-1
Wide Band	1135-57
Opto Electronics	1219-1
OR Gate See Gate listings	
Organ Circuits	1119-103
Oscillators	
Analog	1219-1
Clock Driver	
TTL	688-18
CMOS	633-70
Crystal	1219-1
	1190-1
Fixed	1219-1
Quadrature	1219-1
Overcurrent Protection	1127-31
Overvoltage Protector	1219-1
P	
Packet Switching	
Microprocessor	
16000	880-35
PAL Logic	4070-1
TV	1123-71
Parity Generator	
CMOS	602-1
ECL 10K	649-68
ECL 100K	650-111
Interface	
ECC	982-1
TTL	688-18
Parity Tree	
CMOS	636-92
TTL	688-18
PCI Transmitters-Receivers	1009-1
PCM Filter	1192-1
	(Continued)

Function	Page-Line
PCM	(Cont'd)
Receiver	1192-1
Repeator	1192-1
Peak Detector	1219-1
Peripheral Drivers	1001-1
Phase Comparators	1190-1
Phase Control	
AC	1219-1
Phase Locked Loop Circuits	
Digital CMOS	636-92
TTL	688-18
Linear	1190-1
Radio	1120-118
Photodetector	
See Sensor, Image	
PIA General	888-20
	881-52
6800	866-119
Pin Cushion Correction	1123-71
PIN Diode Driver	
Digital Special	691-1
Interface	1001-1
Linear Other Linear Devices	1219-1
PLA	4070-1
Plasma Display Driver	977-1
PLCC Package	
See Surface Mount Directory	
PLE	4070-1
PLL See Phase Locked Loop listings	
Polarity Guard	1192-1
Polynomial ECC	
See also ECC	982-1
Polynomial Generator	982-1
	1192-1
Potentiometer	1219-1
Power Strobe	688-18
Power Supply	
ac-dc regulator	1219-1
See Voltage Regulator listings	
Power Supply Controller	1219-1
	1215-102
Preamplifiers	
Cassette Recorder	1123-22
Consumer	1116-1
Disk	1102-1
Linear	1102-1
Remote Control	1102-1
	1122-5
See also Amplifiers	
Prefixes See Part Number Guide	
Prescalers	
AM/FM	1120-118
	(Continued)

© IC MASTER 1988

Function			Page-Line
P			**(Cont'd)**
Prescalers			
	AM/FM		(Cont'd)
			1190-1
	Count Extender		1190-1
	Digital		691-1
		ECL III	651-1
		ECL 10K	649-68
		GaAs	652-8
	FM		1120-118
	General		1190-1
	TV		1190-1
Pressure Transducers			1219-1
Priority Encoder			
	Digital	CMOS	636-92
		ECL 10K	649-68
		ECL100K	650-111
		TTL	688-18
	Microprocessor		
		2900	860-46
Priority Interrupt Controller			888-20
Processor			
	Analog Real Time		645-70
	Analog Signal		1219-1
	Arithmetic		
		Digital, Special	691-1
		DSP	645-70
		Microprocessor, TMS1000	863-119
		Microprocessor, 16000	878-110
			880-35
		Microprocessor, 32	881-5
		Microprocessor, 68000	878-124
		Microprocessor, 8000	877-106
		Microprocessor, 8080	870-82
		Microprocessor, 8086	875-80
		Microprocessor, 8088	875-80
		Microprocessor, 9440	878-103
	Bilingual TV		1123-71
	Burst Error		
		General	888-20
		Microprocessor, 8000	877-106
	Color TV		1127-19
	DSP		645-70
	Floating Point		645-70
			888-20
	See also Microprocessor		
	Text	Microprocessor, 8086/8088	875-107
	TV		1123-71
Programmable Diodes			691-1
Programmable Logic			
	General		4070-1
			(Continued)

Function			Page-Line
Programmable Logic			(Cont'd)
	Sequencer		4070-1
PROMs	as logic		4070-1
	See also Memory listings		1316-1
	See Microprocessor, System Components		
Proprietary Bus			4865-24
Protection			
	Overcurrent		1127-31
	Overvoltage		1219-1
	Telephone		1192-1
	Undervoltage		1219-1
Proximity Detector			
	Electromagnetic		1219-1
PSAR	Transmitters-Receivers		1009-1
PSART	Transmitters-Receivers		1009-1
PSAT	Transmitters-Receivers		1009-1
PSK	Telecom		1192-1
Pulse Synchronizer			688-18
Pulse-Width Modulator			1219-1
			1215-102
Q			
Q-Bus			4866-5
QPL	See Military Pages		
Quantizer			1219-1
R			
Radio Circuits			
	AM		1119-136
	AM/FM		1120-44
	FM		1120-118
	Radio Control		1122-5
	SSB		1119-136
	TV		1123-71
RAMs	See also Memory listings		1337-1
Rate Multiplier			
	Digital	CMOS	636-92
		TTL	688-18
RC Decoder			1192-1
RC Encoder			1192-1
Receivers			
	CB Radio		1119-16
	Fiber Optic		1219-1
	FSK		1192-1
	IR		1122-5
			1192-1
	Line	ECL 10K	649-68
		See also Line Circuits	991-13
			990-1
	PCM		1192-1
			(Continued)

Function	Page-Line
R	**(Cont'd)**
Receivers	(Cont'd)
Remote Control	
Consumer	1122-5
Serial	1009-1
Sonar	1219-1
Recorder	
Video Tape	1123-64
Reference Voltage	1219-1
Registers	
CRT	881-52
DSP	646-55
See Flip-Flop listings	
See Memory listings	
See Shift Register listings	
Successive Approximation	
CMOS	636-92
TTL	688-18
Regulators	
Motor Speed	1001-1
	1127-31
	1219-1
See Voltage Regulators	
Switching	1215-102
Relay Driver	
See Drivers	
Remote Control Circuits	
Amplifiers	1102-1
Consumer	1122-5
Digital CMOS	636-92
Resolver Systems	646-69
	1219-1
Revolution Counter	
Consumer	1127-31
Rhythm Circuit	
Music	1119-103
Ringer Telecom	1192-1
RM-65 Bus	4868-20
RMS to DC Converter	1219-1
ROMs See also Memory listings	1389-1
Rotator Image	1219-1
RS232 Line Drivers	985-1
Line Receivers	991-13
	990-1
RS422 Line Drivers	987-42
	985-1
Line Receivers	991-13
RS423 Line Drivers	987-42
	985-1
Line Receivers	991-13
RS449 Transmitters-Receivers	1009-1
RS485 Line Transceivers	997-44
S	
S-100 Bus	4868-23
Sales Offices	
See Manufacturers and Distributors Directory	
Sample and Hold Circuits	1219-1
See also Data Acquisition listings	
SAR See Successive Approximation listings	
Schmitt Trigger	
Digital CMOS	607-116
	636-92
HNIL/HTL	654-31
	655-3
	654-48
Special	691-1
TTL	688-18
	684-70
SCIC	881-52
SCR Arrays	1106-1
Control	1219-1
Screening	
See Military Pages	
SCSI	4869-22
	881-52
SDLC Interface	
Transmitters-Receivers	1009-1
Microprocessor	
General	881-52
2650	865-73
8048	868-119
8080	870-82
8085	871-146
9900	877-40
Security EPROM	1219-1
Semicustom	
Gate Arrays	4041-1
Design Automation Tools	4088-1
Hard Array Logic	4070-1
Linear Arrays	4065-1
Design Automation Tools	4092-1
Programmable Logic	4070-1
Design Automation Tools	4093-1
Standard Cells	4082-1
Design Automation Tools	4094-1
Sense Amplifiers	1008-1
Sensor Air Flow	1219-1
Image	1219-1
Liquid Level	1219-1
Moisture	1219-1
Relative Humidity	1219-1
See Detector listings	(Continued)

© IC MASTER 1988

Function	Page-Line
S (Cont'd)	
Sensor (Cont'd)	
Temperature	1219-1
Ultra Sonic Detector	1219-1
Sequencer	
ECL	649-68
Programmable Logic	4070-1
Timer	1201-1
TTL	688-18
Serial Analog Delay	1219-1
Serial Receivers	1009-1
Serial Transmitters	1009-1
Servo Circuits	1219-1
Driver, Consumer	1127-31
Servomechanism	881-52
Shift Registers	
Analog	1219-1
Bucket Brigade	1219-1
CCD	1219-1
CMOS	633-112
Dynamic	1393-1
ECL III/Misc.	651-37
ECL 10K	649-40
ECL 100K	650-93
GaAs	652-64
HNIL/HTL	654-95
Static	1393-23
TTL	678-45
	682-70
Shifter Digital TTL	688-18
Level See Translators	
Microprocessor	
EPIC	861-134
Multibit Microprocessor, 10800	861-121
Signal Processor	
Analog Real Time	1219-1
DSP	645-70
Slash Numbers	
See Military Pages	
SMD Controller	881-52
Smoke Detector	1127-31
SO Packages	
See Surface Mount Directory	
Software See Design Automation listings	
Sonar	1219-1
Sound Circuits	
TV	1123-71
Sound Generator	
Consumer	
Audio	1116-1
Games	1127-19
Microprocessor	881-52
SPCC Transmitters-Receivers	1009-1
SPDT	902-1
Speaker Protection	
Peak Power	1127-31
Special Bus	4893-4
Speech Circuits	
Consumer	1122-102
Telephone	1192-1
Speed Control	
Automotive	1118-100
Speedometer	
Automotive	1118-100
SPST	902-1
SRAM See Memory listings	
SSB Detector	
Radio	1119-136
SSDA Microprocessor	
6800	866-119
Standard Cells	4082-1
State Machine	888-20
Programmable Logic	4070-1
STDbus	4870-14
Stepper Motor Controller	1001-1
Stereo AM	1119-136
FM	1120-118
TV	1123-71
Stopwatch	1119-24
String Proximity Computer	646-69
	881-52
Strobe Light	
Camera	1119-12
Subscriber Line Interface	1192-1
Successive Approximation Register	
CMOS	636-92
TTL	688-18
Suffixes See Part Number Guide	
Support See Microcomputer Board listings	
Surface Mount	
See Surface Mount Directory	
Switch Byte-Synchronous	
Microprocessor, 6800	866-119
Switched Capacitor Array	1219-1
Switches Analog Drivers	911-33
with Drivers	902-1
without Drivers	910-11
Bridge Transducer	1219-1
Bus	688-18

(Continued)

Function	Page-Line
S (Cont'd)	
Switches (Cont'd)	
Cassette	1123-22
Crosspoint	911-49
Digital Time/Space	1192-1
Digital Time/Space 6800	866-119
Telecom	1192-1
Darlington	1001-1
	1106-1
Data Path	602-1
Macrologic	860-8
DC Controlled	
Consumer	1127-31
Frequency	1219-1
Hall Effect	
Digital, Special	691-1
Linear	1219-1
Light Activated	1219-1
Multiplexers	911-49
Proximity	1127-31
Threshold	1219-1
Touch Digital, CMOS	636-92
Linear	1127-31
TV	1123-71
Video	1127-31
Switching Regulator Circuits	1215-102
Synchro Systems	646-69
	1219-1
Synchronizer	
Pulse	688-18
Synchronous Communications	1009-1
Synchronous Serial Data	
Adapter	888-20
Synthesizers	
AM	1119-136
AM/FM	1190-1
CB Radio	1119-16
Divider	1190-1
FM	1120-44
General	1190-1
Mobile Radio	1190-1
Music	1119-103
Speech	1122-102
TV	1123-71
Systems Data Acquisition	1219-1
Microcomputer Development	4703-1
Microprocessor Components	
See Microprocessor, System Components	
Resolver	1219-1

Function	Page-Line
T	
Tachometer Circuit	1127-31
Tape Deck Circuits	1123-22
Tape Recorder Circuits	
Audio	1123-22
Video	1123-64
Telecom	1192-1
Telecommunication Circuits	1192-1
Telephone Circuits	1192-1
Teleset	1192-1
Teletex	1192-1
Teletext Circuits	1123-71
Television Circuits	1123-71
Temperature	
Alarm Circuits	1219-1
Controlled Transistors	1219-1
Set Point Controller	1219-1
Transducers	1219-1
Terminator	
Digital CMOS	636-92
ECL 10K	649-68
Test Pattern Generator	
TV	1123-71
Text Processor	
Microprocessor	
General	881-52
8086/8088	875-107
Thermal Converter	1219-1
Print Head Driver	1001-1
Threshold Switch	1219-1
Timers Analog	1201-1
Counter/Timer	691-1
Delayed	1201-1
Digital Delay	636-92
Extended Time	1201-1
Microprocessor	
6800	866-119
Microwave Oven	1201-1
TM990 Bus	4879-30
Toggle Frequency	
Gate Arrays	
Design Automation Tools	4041-1
Tone Decoders	
PLL Circuits	1190-1
Telecom	1192-1
Traffic Signals	1219-1
Tone Detector	
Call Progress	1192-1
Tone Generator	
Microprocessor	
1800	864-82
Music	1119-103

(Continued)

© IC MASTER 1988

Function	Page-Line
T	**(Cont'd)**
Tone Generator	(Cont'd)
Telecom	1192-1
Tone Ringer	1192-1
Tools See Design Automation listings	
Top Octave Generator	1119-103
Touch Input	
Microprocessor	
TMS1000	863-119
Touch Switches	
See Switch listings	
Track and Hold Circuits	1219-1
Traffic Camera	
TV	1123-71
Traffic Information	
Automotive	1118-100
Control System	1219-1
Traffic Light Controller	1127-31
Traffic Signal	
Tone Decoder	1219-1
Transceivers	
Addressable	636-92
Backplane	688-18
Bus CMOS	636-92
ECL 10K	649-68
ECL 100K	650-111
See also Line Circuits	636-92
	684-70
TTL	684-70
Carrier Current	1219-1
ECC	994-1
Line See Line Circuits	997-44
	994-1
Microprocessor	
NSC800	873-81
10800	861-121
8000	877-106
Optical	1127-31
Serial	1009-1
Telecom	1192-1
Ultrasonic	1122-5
Transducers	
Pressure	1219-1
Temperature	1219-1
Transistor	
Arrays	1106-1
Blowout Resistant	1219-1
Matched	1106-1
Temperature Controlled	1219-1
Translators	
CMOS	636-72
	(Continued)

Function	Page-Line
Translators	(Cont'd)
ECL 10K	649-46
ECL 100K	650-99
HNIL/HTL	654-98
TTL	687-163
Various	1001-1
Transmitters	
Fiber Optic	1219-1
IR	1122-5
	1192-1
Modem	1192-1
Remote Control	1122-5
Digital, CMOS	636-92
Serial	1009-1
Two Wire	1102-1
Transversal	646-69
	1219-1
Tree Wallace DSP	644-1
ECL 100K	649-123
TTL	656-1
TRIAC Control	1219-1
Trigger See Schmitt Trigger listings	
Zero Crossing	1219-1
Tuner AM	1119-136
AM/FM	1120-44
FM	1120-118
TV	1123-71
Voltage Stabilizer	1127-31
TV Circuits	1123-71
T1	1192-1
T1-D2	1192-1
T1-D3	1192-1
U	
UART Microprocessor	
NSC800	873-81
1800	864-82
2650	865-73
6100	877-82
68000	878-124
8000	877-106
8080	870-82
8085	871-146
8086/88	875-107
9900	877-40
Transmitters-Receivers	1009-1
Ultrasonic Circuits	1122-5
UNIBUS	4880-8
Universal	
Transmitters-Receivers	1009-1
UPC/EAN Scanner	888-20

Function			Page-Line
U			**(Cont'd)**
UPI Circuits			
	Microprocessor		
		General	881-52
		8048	868-119
		8080	870-82
	See Microprocessor System Components		
USRT	Transmitters-Receivers		1009-1
USYNRT	Transmitters-Receivers		1009-1
μ255 Law			
	Linear		1192-1
V			
V.21			1192-1
V.22			1192-1
V.23			1192-1
V.24			985-1
V.26			985-1
			1192-1
V.27			1192-1
V.28			985-1
V.29			1192-1
Vacuum Fluorescent Driver			
	See Display Driver listings		
VAX			4880-32
VCO	Consumer		1119-103
	ECL III		651-38
	Generators		
		Function	1190-1
		Waveform	1190-1
	PLL Circuits		1190-1
	TTL		688-18
	V to F		1219-1
VERSAbus			4892-17
Video ADC			916-1
Video Amplifiers			
	See also Amplifier listings		1102-1
Video Circuits			
	CRT		881-52
	TV		1123-71
Video DAC			940-1
Video Disk			
	TV		1123-71
Video Game Circuits			1127-19
Video Tape Recorder			1123-64
Videotex			1192-1
Videotext Circuits			881-52
Viterbi			1192-1
VMEbus	Boards		4881-24
	Controller		
		Microprocessor, 68000	878-124
Vocabulary			1122-102
Voltage Alarm			1219-1
Voltage Doubler			1219-1
Voltage Inverter			1219-1
Voltage Limiter			
	Telecom		1192-1
Voltage Monitor			1219-1
Voltage Reference			1219-1
Voltage Regulators			
	ac-dc		1219-1
	Adjustable		
		Dual	1215-86
		Negative	1214-112
		Positive	1213-9
	Automotive		1118-100
	Fixed	Dual	1212-105
		Negative	1209-52
		Positive	1202-1
	Switching Regulator Circuits		1215-102
VTR	See Video Tape Recorder		
W			
Wallace Tree			
	DSP		644-1
	ECL 100K		649-123
	TTL		656-1
Watch	Consumer		1119-24
	Digital	CMOS	633-70
Waveform Generators			1190-1
Winchester			
	Amplifiers		1102-1
Winchester Circuits			881-52
Window Discriminator			1219-1
Workstations			
	See Design Automation listings		
X			
X.25			1009-1
Z			
Zero Crossing Triggers			1219-1

 © IC MASTER 1988

PART NUMBER INDEX

This Index shows the page and line where each device appears in the Master Selection Guide.

The Index is arranged in alphanumeric sequence, ignoring the manufacturers' prefixes and suffixes and using the basic part numbers.

The numbers are sequenced by reading the digits from left to right, assuming that letters come before numbers. (As an example, these numbers would appear in the following order: 5301, 531, 54LS01, 54139, 555.)

After each base number, manufacturers' names and full part numbers are listed. This arrangement allows you to find a device whether or not you know the name of the manufacturer or the manufacturer's prefixes. The page references in **BOLD FACE** lead to manufacturers' data pages in Volumes Two and Three.

This is an Index of all parts with identical basic part numbers, regardless of their function. **It is not an Alternate Source Directory.**

©IC MASTER 1988

Base Number	Source	Device	Page-Line
0	Atec	710-0	4876-21
		771-0	4872-17
	WinSystems	LPM-AI0	4872-34
		LPM-SPI0A	4874-31
		MCM-AI0	4872-31
0S100	Elantec	EH0S100AH	1129-11
		EH0S100SH	1129-4
0S200	Elantec	EH0S200SH	1129-2
00	Matrix	MS-CPU00	4835-34
		MS-CPU00B	4835-35
	Wintek	**MGP00**	⋆ **4913**
			4865-29
		MPB00	⋆ **4913**
			4865-42
000	GIM	SPR000	1122-118
	HiTech	RP000	4894-36
0002	**Elantec**	**ELH0002**	⋆ **2592**
			1102-40
		ELH0002C	⋆ **2592**
			1102-41
	Micra	MC0002	1102-43
		MC0002C	1102-44
	National	LH0002	1102-45
		LH0002C	1102-46
	TeledyneC	CLH0002	1102-47
0003	Micra	MC0003	1156-32
	National	LH0003	1130-114
			1156-30
		LH0003C	1156-31
0004	Micra	MC0004	1149-36
	National	LH0004	1131-82
			1149-35
		LH0004C	1131-83
			1150-14
0006	**Elantec**	**EDH0006**	⋆ **2593**
			1007-22
	Micra	MC0006	1007-23
0008	**Elantec**	**EDH0008**	⋆ **2593**
			1007-24
	Micra	MC0008	1007-25
	OEI	AH0008	1168-33
001	Anasco	44-001	4809-21
	Calmos	**DFS001-PC**	⋆ **2553**
			4851-16
	GE/RCA	GP001AD	861-134
			¶ 410-23
			¶ 412-23
			¶ 414-1
	HiTech	RP001	4868-18
	OEI	AH001-D	1128-38
	Solitron	CHHY001	1003-93
		CJCA001	1214-89
		CJSE001	1207-85
0010	AD	HTS0010	1229-74
	OEI	AH0010C	1129-5
		AH0010F	1129-6
00103	Bummer	BE00103	4855-36
			4863-12
0013	OEI	AH0013CA	1104-2
		AH0013CB	1104-3
		AH0013MA	1104-4
0014	OEI	AH0014	1168-46
0017	MicroAide	80-0017	4877-25
0018	MicroAide	80-0018	4821-16
0019	MicroAide	80-0019	4871-19
002	Anasco	44-002	4809-6
	FujitsuA	FBMA002	4894-25
	Solitron	CHHY002	1003-91
		CJCA002	1215-75
		CJSE002	1212-20
0020	MicroAide	80-0020	4821-17
	National	LH0020	1130-128
			1154-20
		LH0020C	1130-129
			1163-22
0021	**Elantec**	**ELH0021**	⋆ **2593**
			1130-81
			1156-24
		ELH0021C	⋆ **2593**
			1130-85
			1163-25
	Micra	MC0021	1130-71
			1156-25
		MC0021C	1130-86
			1163-26
	MicroAide	80-0021	4876-10
			(Continued)

Base Number	Source	Device	Page-Line
0021			(Cont'd)
	National	LH0021	1130-72
			1156-26
		LH0021C	1130-87
			1163-27
0022	MicroAide	80-0022	4874-6
	National	LH0022	1156-40
		LH0022C	1161-50
0023	MicroAide	80-0023	4874-34
	National	LH0023	1228-64
		LH0023C	1228-65
0024	Micra	MC0024	1131-23
			1135-100
			1157-31
		MC0024C	1131-44
			1135-101
			1164-43
	MicroAide	80-0024	4874-39
	National	LH0024	1131-24
			1135-104
			1157-32
		LH0024C	1131-45
			1135-105
			1164-44
0025	AD	HTS0025	1227-124
	MicroAide	80-0025	4874-38
	National	DS0025	999-102
		DS0025C	999-103
0026	Fairchild	0026	999-101
	MicroAide	80-0026	4821-18
	National	DS0026	999-104
		DS0026C	999-105
0027	MicroAide	80-0027	4821-19
0029	MicroAide	80-0029	4873-35
003	FujitsuA	FBMA003	4894-26
	Solitron	CHHY003	1003-89
		CJSE003	1207-86
	VTC	**VA003J**	⋆ **3373**
			1104-60
		VA003S	⋆ **3373**
			1104-61
0030	MicroAide	80-0030	4874-37
	Sanyo	STK0030	1116-144
00300	ILC-DDC	ADC00300	933-39
			¶ 420-33
			¶ 423-8
0031	MicroAide	80-0031	4877-32
0032	AD	ADLH0032	1131-17
			1135-90
			1159-11
		ADLH0032C	1131-18
			1135-91
			1167-43
	EG&G-Reticon		
		RT0032A	1228-109
	Elantec	**ELH0032**	⋆ **2593**
			1131-26
			1135-97
			1159-12
		ELH0032C	⋆ **2593**
			1131-27
			1135-98
			1159-13
	Micra	MC0032	1131-29
			1135-102
			1159-14
		MC0032C	1131-30
			1135-103
			1167-44
	MicroAide	80-0032	4876-5
	National	LH0032A	1136-1
		LH0032AC	1161-49
		LH0032C	1131-31
			1136-2
			1167-45
	TeledyneC	CLH0032	1159-25
	TeledyneP	TP0032	1159-2
		TP0032-HR	1159-3
0033	AD	ADLH0033	1128-3
			1131-4
		ADLH0033C	1128-11
			1131-6
	Elantec	**ELH0033**	⋆ **2593**
			1128-4
		ELH0033C	⋆ **2593**
			1128-12
			(Continued)

Base Number	Source	Device	Page-Line
0033			(Cont'd)
	Maxim	LH0033	1128-9
		LH0033/HR	1128-24
		LH0033A	1128-1
		LH0033A/HR	1128-28
		LH0033AC	1128-18
		LH0033C	1128-21
	Micra	MC0033	1128-5
		MC0033C	1128-13
	MicroAide	80-0033	4821-33
	MicroPwr	MP0033	1128-6
	National	LH0033	1128-7
		LH0033C	1128-14
	TeledyneC	CLH0033	1128-2
	TeledyneP	TP0033	1128-15
		TP0033-HR	1128-8
0034	Micra	MC0034	688-5
		MC0034C	688-6
	MicroAide	80-0034	4873-56
	National	DH0034	688-7
		DH0034C	688-8
0035	National	DH0035	692-104
			1224-49
		DH0035C	692-105
			1224-50
0036	MicroAide	80-0036	4821-20
	National	LH0036	1103-6
		LH0036C	1103-7
0037	MicroAide	80-0037	4819-34
0038	National	LH0038	1103-8
		LH0038C	1103-9
004	Anasco	44-004	4825-16
	Inmos	**IMSC004**	⋆ **2772**
			889-74
	Solitron	CHHY004	1003-87
		CJSE004	1212-21
0040	Sanyo	STK0040	1116-145
00403	ILC-DDC	ADC00403-103	933-40
			¶ 419-3
			¶ 421-5
		ADC00403-203	933-41
			¶ 419-3
			¶ 421-5
00404	ILC-DDC	ADC00404-102	929-14
		ADC00404-103	933-42
		ADC00404-203	933-43
0041	**Elantec**	**ELH0041**	⋆ **2593**
			1130-98
			1156-19
		ELH0041C	⋆ **2593**
			1130-99
			1163-21
	Micra	MC0041	1130-100
			1156-20
		MC0041C	1130-101
			1163-16
	National	LH0041	1130-102
			1156-21
		LH0041C	1130-103
			1163-17
0042	AD	AD0042C	1168-27
	GE/Intersil	LH0042	1168-25
		LH0042C	1168-28
	National	LH0042	1168-26
		LH0042C	1168-29
0043	National	LH0043	1228-66
		LH0043C	1228-67
0044	National	LH0044	1132-99
			1139-33
		LH0044A	1132-25
			1138-16
		LH0044AC	1132-26
			1138-17
		LH0044B	1132-53
			1139-32
		LH0044C	1132-100
			1141-8
005	Anasco	44-005	4825-17
	Motorola	**HDC005**	⋆ **4286**
			4056-11
	Solitron	CHHY005	1003-92
		CJSE005	1207-87
0050	Fairchild	FGE0050	4044-15
	Sanyo	STK0050	1116-146

Base Number	Source	Device	Page-Line
0052	National	LH0052	1132-33
			1144-51
		LH0052C	1148-8
0053	National	LH0053	1228-68
		LH0053C	1228-69
0055	Sanyo	STK0055	1116-147
0056	National	DS0056	999-106
		DS0056C	999-107
0059	Sanyo	STK0059	1116-148
006	Anasco	44-006	4825-18
	Sierra	SCII006	1195-98
	Solitron	CHHY006	1003-90
		CJSE006	1212-22
0060	Sanyo	STK0060	1116-149
00600	Harris	HGAC00600RH	4049-4
			4049-5
0061	National	LH0061	1130-89
			1157-16
		LH0061C	1130-90
			1166-43
0062	National	LH0062	1158-4
		LH0062C	1167-36
0063	Maxim	LH0063	1128-41
		LH0063C	1128-47
	Micra	MC0063	1128-40
	National	LH0063	1128-42
		LH0063C	1128-48
0064	EG&G-Reticon		
		RL0064A	1222-20
007	Solitron	CHHY007	1003-88
		CJCA007	1214-90
0070	LinearTech	LH0070	1226-140
	National	LH0070	1226-165
	Sanyo	STK0070	1116-150
0071	National	LH0071	1227-11
		LH0071-0	1227-12
		LH0071-1	1227-13
		LH0071-2	1227-14
0075	National	LH0075	1205-52
			1213-21
		LH0075C	1213-22
0076	National	LH0076	1214-118
		LH0076C	1214-119
008	Anasco	42-008	4858-3
	Motorola	**HDC008**	⋆ **4286**
			4056-17
	Solitron	CHHY008	1003-86
		CJCA008	1215-76
	TRW-LSI	MPY008	644-54
		MPY008H	657-118
		MPY008H-1	657-119
	VTC	**VC008J**	⋆ **3373**
			645-3
		VC008S	⋆ **3373**
			645-4
0080	Sanyo	STK0080	1116-151
	Sharp	LH0080	837-35
			874-60
		LH0080A	837-36
			874-61
		LH0080E	837-37
0081	Sharp	LH0081	875-3
		LH0081B	875-4
		LH0081E	875-5
0082	GIM	ER0082	1308-44
			¶ 444-19
	National	LH0082	1102-78
		LH0082C	1102-79
	Sharp	LH0082	874-97
		LH0082A	874-98
		LH0082B	874-99
		LH0082E	874-100
0083	Sharp	LH0083	874-118
		LH0083A	874-119
		LH0083B	874-120
0084	National	LH0084	1103-21
		LH0084C	1103-22
	Sharp	LH0084	875-29
		LH0084A	875-30
		LH0084E	875-31
0085	Sharp	LH0085	875-32
		LH0085A	875-33
		LH0085E	875-34
0086	National	LH0086	1103-23
		LH0086C	1103-24
	Sharp	LH0086	875-35
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
0086	Sharp		(Cont'd)
		LH0086A	875-36
		LH0086E	875-37
0087	Sharp	LH0087	875-38
		LH0087A	875-39
		LH0087B	875-40
009	Anasco	42-009	4857-35
	Solitron	CJSE009	1208-84
0091	National	LH0091	1227-105
		LH0091C	1227-106
0094	National	LH0094	1223-3
		LH0094C	1223-4
01	**Apex**	**PA01**	⋆ **2458**
			1130-54
			1167-10
		WA01	⋆ **2458**
			1166-6
		WA01A	⋆ **2458**
			1159-30
	AT&T	HT01OP	1003-12
	GenMicro	GMSV01	4886-3
	HybridSys	HSREF01	1226-120
	IPS	IPSP01	1215-110
	Intel	iSBC MM01	4862-12
	LinearTech	REF01	1226-142
		REF01A	1226-143
		REF01C	1226-144
		REF01E	1226-145
		REF01H	1226-146
	Maxim	REF01	1226-157
		REF01A	1226-158
		REF01C	1226-159
		REF01D	1226-160
		REF01E	1226-161
		REF01H	1226-162
	MicroPwr	DAC01	941-13
		DAC01B	941-14
		DAC01C	941-15
		DAC01D	941-16
		DAC01F	941-17
		DAC01H	941-18
		MPOP01	1152-52
		MPOP01A	1147-24
		MPOP01C	1160-14
		MPOP01E	1152-53
		MPOP01F	1152-54
		MPOP01G	1160-15
		MPOP01H	1147-25
		MPT01A	1106-100
		MPT01G	1106-101
	MicroCompSys		
		MSI-VS01	4850-14
	PMI	**AMP01**	⋆ **2975**
			1102-98
			1130-126
		AMP01A	⋆ **2975**
			1139-24
		AMP01B	⋆ **2975**
			1141-2
		AMP01E	⋆ **2975**
			1139-25
		AMP01F	⋆ **2975**
			1141-3
		CMP01	⋆ **2975**
			1109-22
		CMP01C	⋆ **2975**
			1109-47
		CMP01E	⋆ **2975**
			1109-23
		DAC01	941-25
		DAC01A	941-12
		DAC01B	941-26
		DAC01C	941-27
		DAC01D	941-35
		DAC01F	941-28
		DAC01H	941-29
		GAP01A	1219-67
		GAP01B	1219-68
		GAP01E	1219-69
		GAP01F	1219-70
		LIU01	⋆ **2975**
			889-46
		MAT01	⋆ **2975**
			1106-93
		MAT01A	⋆ **2975**
			1106-94
			(Continued)

Base Number	Source	Device	Page-Line
01	**PMI**		**(Cont'd)**
		MAT01G	⋆ **2975**
			1106-95
		OP01	⋆ **2971**
			1147-28
		OP01C	⋆ **2971**
			1160-18
		OP01G	⋆ **2971**
			1160-19
		OP01H	⋆ **2971**
			1147-29
		PKD01	⋆ **2975**
			1224-39
		PKD01A	⋆ **2975**
			1224-40
		PKD01B	⋆ **2975**
			1224-41
		REF01	⋆ **2975**
			1226-169
		REF01A	⋆ **2975**
			1226-170
		REF01C	⋆ **2975**
			1226-171
		REF01E	⋆ **2975**
			1226-172
		REF01H	⋆ **2975**
			1226-173
		SW01B	⋆ **2975**
			905-84
		SW01F	⋆ **2975**
			905-85
	Raytheon	REF01	1227-2
		REF01A	1227-3
		REF01C	1227-4
		REF01D	1227-5
		REF01E	1227-6
		REF01H	1227-7
	Solitron	OP01	1147-30
		OP01C	1160-20
		OP01E	1154-10
		OP01F	1154-11
		OP01G	1160-21
		OP01H	1147-31
	Supertex	HV01	977-73
		VC01	1006-124
		VF01	1004-77
	Votrax	SC01	1122-130
	WinSystems	LPM-PI01A	4876-44
		MCM-PI01	4874-47
01C50	**Calmos**	**CA01C50**	⋆ **2553**
			870-136
			870-81
			872-29
			873-58
			880-8
010	Anasco	41-010	4859-41
	HiTech	RP010	4893-52
	Intel	iSBC010CX	4853-14
		iSBC010EX	4853-15
	Solitron	CJSE010	1212-71
	TI	TL010	1220-15
	Xycom	XVME010	4891-6
	Zitel	ZBC010P	4861-40
		ZBC010PX	4861-44
0100	EG&G-Reticon		
		RA0100A	1222-4
01000	Thomson	TSGB01000	4061-25
		TSGC01000	⋆ **4322**
			4061-31
0101	**Elantec**	**ELH0101**	⋆ **2593**
			1130-73
			1165-46
		ELH0101A	⋆ **2593**
			1130-74
			1155-38
		ELH0101AC	⋆ **2593**
			1130-75
			1155-39
		ELH0101C	⋆ **2593**
			1130-76
			1165-47
	Maxim	LH0101	1130-66
			1165-48
		LH0101/HR	1165-45
		LH0101A	1130-67
			1155-41
			(Continued)

Base Number	Source	Device	Page-Line
0101	Maxim		(Cont'd)
		LH0101A/HR	1155-40
		LH0101AC	1130-68
			1155-42
		LH0101ACK	1155-36
		LH0101AK	1155-37
		LH0101C	1130-69
			1165-49
	National	LH0101	1130-77
			1166-1
		LH0101A	1130-78
			1155-34
		LH0101AC	1130-79
			1155-35
		LH0101C	1130-80
			1166-2
01024	EG&G-Reticon		
		RL01024SAX	1222-52
0103	AT&T	AN0103NA	1108-74
0107	Hughes	HCTR0107	691-32
	SMS	SMS0107	4866-19
011	Anasco	41-011	4859-47
	HiTech	RP011	4893-53
	Inmos	**IMSC011**	⋆ **2773**
			880-23
	Solitron	CJSE011	1208-85
0110	TopazSemi	AN0110N	1108-64
012	Anasco	41-012	4860-6
	Inmos	**IMSC012**	⋆ **2773**
			880-24
	Intel	iSBC012B	4853-36
		iSBC012C	4853-35
		iSBC012CX	4853-11
		iSBC012EX	4853-34
	IMI	MPY012-1	602-78
		MPY012-5	602-79
	MicroInds	mSBC012C	4861-30
	Motorola	**HDC012**	⋆ **4286**
			4056-20
	Plessey	PME012D	4890-42
	Solitron	CJSE012	1212-72
	TRW-LSI	MPY012	644-61
		MPY012H	657-121
	Zendex	ZX012QA	4861-51
	Zitel	ZBC012E	4861-53
		ZBC012P	4861-41
		ZBC012PX	4861-45
0120	TopazSemi	AN0120N	1108-65
		AP0120N	1108-77
01200	Harris	HGAC01200RH	4049-7
			4049-8
0128	EG&G-Reticon		
		RA0128A	1222-5
		RL0128E	1222-21
		RL0128G	1222-22
		RL0128L	1222-23
		RL0128S	1222-24
		RL0128SAF	1222-25
		RL0128SAX	1222-53
	MicroInds	mBLC0128A	4862-40
013	Solitron	CJSE013	1208-86
0130	**AT&T**	**AN0130**	⋆ **2502**
			1108-75
		AP0130NA	⋆ **2503**
			1108-76
	ElecConServ		
		CIM0130	4846-33
	TopazSemi	AN0130N	1108-66
		AP0130N	1108-78
0131	Thomson	TDB0131	1230-81
0132	National	LH0132	1159-24
		LH0132C	1166-4
0134	Thomson	TDC0134	1229-66
0135	Thomson	TDB0135	1229-65
0136	Thomson	TDB0136	1225-149
		TDC0136	1225-150
014	Anasco	41-014	4860-8
	Solitron	CJSE014	1212-73
0140	TopazSemi	AN0140N	1108-67
0149	Thomson	TDB0149	1187-6
		TDC0149	1185-41
015	Anasco	41-015	4860-37
0150	Sanyo	STK0150	1116-152
0159	Thomson	TDA0159	1127-90

Base Number	Source	Device	Page-Line
016	GIM	SPR016	1389-31
	MicroInds	mBLC016A	4862-22
	Motorola	**HDC016**	⋆ **4286**
			4056-21
	TRW-LSI	MPY016	644-82
		MPY016H	657-126
		MPY016K	657-127
		MPY016K-1	657-128
0161	Thomson	TDA0161	1127-91
0162	Thomson	TDA0162	1127-92
017	Solitron	CJSE017	1204-44
018	Solitron	CJSE018	1210-47
019	Solitron	CJSE019	1204-45
02	**Apex**	**PA02**	⋆ **2458**
			1165-37
		PA02A	⋆ **2458**
			1155-8
		PA02M	⋆ **2458**
			1165-36
		PA02Q	⋆ **2458**
			1165-35
	Datricon	SER02B	4875-12
		VIA02B	4876-32
	Intel	iSBC MM02	4862-13
	LinearTech	REF02	1226-8
		REF02A	1226-9
		REF02C	1226-10
		REF02D	1226-11
		REF02E	1226-12
		REF02H	1226-13
	Maxim	REF02	1226-14
		REF02A	1226-15
		REF02C	1226-16
		REF02D	1226-17
		REF02E	1226-18
		REF02H	1226-19
	MicroPwr	MPOP02	1153-1
		MPOP02A	1146-50
		MPOP02B	1160-23
		MPOP02C	1153-2
		MPOP02D	1160-24
		MPOP02E	1146-51
		MPT02A	1106-102
		MPT02B	1106-103
		MPT02E	1106-104
		MPT02F	1106-105
	PMI	**CMP02**	⋆ **2975**
			1109-20
		CMP02C	⋆ **2975**
			1109-46
		CMP02E	⋆ **2975**
			1109-21
		DAC02AC	955-24
		DAC02BC	955-25
		DAC02CC	955-27
		DAC02DD	955-31
		MAT02A	⋆ **2975**
			1106-121
		MAT02B	⋆ **2975**
			1106-122
		MAT02E	⋆ **2975**
			1106-123
		MAT02F	⋆ **2975**
			1106-124
		OP02	1153-4
		OP02A	1146-55
		OP02B	1160-27
		OP02C	1153-5
		OP02D	1160-28
		OP02E	1146-56
		REF02	⋆ **2975**
			1226-36
			1229-56
		REF02A	⋆ **2975**
			1226-37
			1229-57
		REF02C	⋆ **2975**
			1226-38
			1229-58
		REF02D	⋆ **2975**
			1226-39
			1229-59
		REF02E	⋆ **2975**
			1226-40
			1229-60
			(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
02	**PMI**		**(Cont'd)**
		REF02H	⋆ **2975**
			1226-41
			1229-61
		SW02B	⋆ **2975**
			905-86
		SW02F	⋆ **2975**
			905-87
	Raytheon	REF02	1226-44
		REF02A	1226-45
		REF02C	1226-46
		REF02D	1226-47
		REF02E	1226-48
		REF02H	1226-49
	Supertex	HV02	977-74
		VC02	1006-125
		VF02	1004-78
	Universal	IS02A	4063-25
		IS02B	4063-28
		IS02C	4063-31
		IS02D	4063-34
		IS02E	4063-37
		IS02F	4063-40
		IS02G	4063-43
		IS02H	4063-46
		IS02I	4063-23
		IS02J	4063-21
	Votrax	SC02	1123-12
	WinSystems	LPM-PI02A	4876-43
		MCM-PI02	4874-41
		MCM-SI02	4875-20
020	Anasco	41-020	4860-30
		44-020	4825-14
	Den/Pas	DSB020	4862-7
		DSB020EL	4862-5
		DSB020PL	4862-6
	HiTech	RP020	4894-43
	Intel	iSBC020CX	4853-17
		iSBC020EX	4853-18
	Iolnc	D020	4851-15
	Solitron	CJSE020	1210-48
	Synergy	M020	4841-21
		V020	4845-15
	Zitel	ZBC020P	4861-42
		ZBC020PX	4861-46
0200	Hughes	HCTR0200	612-57
02000	Thomson	TSGB02000	4061-26
		TSGC02000	⋆ **4322**
			4061-32
0202	Zitel	ZBC0202	4861-24
0204	Motorola	MWA0204	1104-31
021	Anasco	44-021	4825-15
	Solitron	CJSE021	1204-46
0211	Motorola	MWA0211	1104-32
022	Anasco	41-022	4860-31
	AT&T	LBR022BS	1202-1
	TI	TL022C	1177-29
		TL022M	1177-17
023	Anasco	41-023	4860-35
02310	ILC-DDC	DAC02310-102	972-42
			¶ 420-15
		DAC02310-103	972-27
			¶ 420-15
		DAC02310-302	972-43
			¶ 420-15
		DAC02310-303	972-28
			¶ 420-15
024EAD9			
	TI	**TM024EAD9-10**	
			⋆ **3260**
			1346-24
		TM024EAD9-15	
			⋆ **3260**
			1346-42
024GAD8			
	TI	**TM024GAD8-10**	
			⋆ **3260**
			1345-59
		TM024GAD8-12	
			⋆ **3260**
			1346-4
		TM024GAD8-15	
			⋆ **3260**
			1346-11

Base Number	Source	Device	Page-Line
024GAL8			
	TI	TM024GAL8-10	
			1345-60
024HAC4			
	TI	**TM024HAC4-10**	
			⋆ **3260**
			1345-36
		TM024HAC4-12	
			⋆ **3260**
			1345-39
		TM024HAC4-15	
			⋆ **3260**
			1345-41
0246	Telefunken	TDD0246	1103-98
025	Anasco	41-025	4860-28
	Ferranti	ZNREF025	1225-151
	Motorola	**HDC025**	⋆ **4286**
			4056-22
		MVME025	4882-44
	SGS	LS025	1219-86
0250	Matra	MA0250	4054-5
	Matra-Harris		
		MA0250	4054-13
02500	Harris	HGAC02500RH	4049-10
			4049-11
0256	EG&G-Reticon		
		RL0256C	1222-26
		RL0256CEQ	1222-54
		RL0256D	1222-10
		RL0256E	1222-27
		RL0256G	1222-28
	GIM	SP0256A	1118-75
			1122-126
			¶ 408-21
			¶ 408-32
		SP0256A-AL2	1118-77
			¶ 408-21
			¶ 408-32
	MicroInds	mBLC0256B	4862-46
026	TI	TL026C	1104-65
0264	GIM	SP0264	1118-76
			1122-127
027	TI	TL027C	1104-66
		TL027M	1104-67
02701	ILC-DDC	DAC02701	964-37
028	Intel	iSBC028A	4853-32
		iSBC028C	4853-31
		iSBC028CX	4853-9
	MicroInds	mSBC028A	4861-29
		mSBC028CX	4862-41
0286	LogicalDes	VME0286AT	4831-13
			4891-15
02900	ILC-DDC	DAC02900	973-22
03	**Apex**	**PA03**	⋆ **2458**
			1130-37
			1131-68
		PA03A	⋆ **2458**
			1145-19
	Interdesign	ULA03G	4066-21
	MicroPwr	MPOP03	1174-27
		MPOP03A	1172-42
		MPOP03B	1177-15
		MPOP03C	1174-28
		MPOP03D	1177-16
		MPOP03E	1172-37
	PMI	**BUF03A**	⋆ **2975**
			1128-20
		BUF03B	⋆ **2975**
			1128-23
		BUF03E	⋆ **2975**
			1128-19
		BUF03F	⋆ **2975**
			1128-22
		DAC03AD	⋆ **2974**
			954-12
		DAC03BD	⋆ **2974**
			954-13
		DAC03CD	⋆ **2974**
			955-6
		DAC03DD	⋆ **2974**
			955-15
		MAT03	⋆ **2975**
			1106-37
		REF03G	⋆ **2975**
			1225-139
	Raytheon	REF03	1225-142
			(Continued)

Base Number	Source	Device	Page-Line
03	Raytheon		(Cont'd)
		REF03C	1225-143
		REF03D	1225-144
	Siliconix	IS03A	4060-50
		IS03B	4061-2
		IS03C	4061-4
		IS03D	4061-7
		IS03E	4061-10
		IS03F	4061-13
		IS03G	4061-16
		IS03H	4061-19
	Supertex	HV03	977-77
			¶ 425-8
		VF03	1004-79
	Universal	IS03A	4063-26
		IS03B	4063-29
		IS03C	4063-32
		IS03D	4063-35
		IS03E	4063-38
		IS03F	4063-41
		IS03G	4063-44
		IS03H	4063-47
		IS03I	4063-24
		IS03J	4063-22
	WinSystems	LPM-PI03	4874-11
030	HiTech	RP030	4893-48
	ILC-DDC	ADH030II-10	968-41
		ADH030II-12	957-18
0300	**AD**	**HTC0300**	⋆ **2423**
			1227-122
	MicroNet	MN0300A	1229-78
03000	Thomson	TSGB03000	4061-27
		TSGC03000	⋆ **4322**
			4061-33
031	HiTech	RP031	4893-46
	Motorola	**HDC031**	⋆ **4286**
			4056-23
032	Intel	iSBC032A	4853-25
	MicroInds	mBLC032	4862-25
		mBLC032A	4862-26
		mBLC032B	4862-2
		mSBC032	4861-35
		mSBC032A/064A	
			4862-28
0320	Hughes	HCTR0320	1191-14
0321	Hughes	HSSR0321	633-145
033	**VTC**	**VA033**	⋆ **3373**
			1128-51
0330	Signetics	SCC0330M	4060-19
0347	Hughes	HCTR0347	1190-118
	Thomson	TDB0347	1189-3
		TDB0347A	1183-40
		TDB0347B	1185-38
0351	Hughes	HSSR0351	633-146
036	Anasco	41-036	4860-29
0384	MicroInds	mBLC0384B	4862-49
04	**Apex**	**PA04**	⋆ **2458**
			1155-13
	CompAuto	NM4/04	4833-13
	Datricon	SER04	4875-13
		VIA04	4876-38
	GenMicro	GMSV04	4883-19
			4887-20
	GoldStar	HCU04	660-2
	Intel	iSBC MM04	4862-14
	MicroPwr	MPOP04	1174-24
		MPOP04A	1172-38
		MPOP04B	1177-11
		MPOP04C	1174-25
		MPOP04D	1177-12
		MPOP04E	1172-39
	PMI	**CMP04B**	⋆ **2975**
			1113-34
		CMP04F	⋆ **2975**
			1113-35
		MAT04	⋆ **2975**
			1107-1
		OP04	⋆ **2972**
			1174-29
		OP04A	⋆ **2972**
			1172-33
		OP04B	⋆ **2972**
			1177-8
		OP04C	⋆ **2972**
			1174-30
			(Continued)

Base Number	Source	Device	Page-Line
04	**PMI**		**(Cont'd)**
		OP04D	⋆ **2972**
			1177-9
		OP04E	⋆ **2972**
			1172-34
	Supertex	HV04	977-75
			¶ 425-8
	TI	TLC04	1228-138
	Thomson	TSGF04	1221-61
	WinSystems	LPM-SI04	4875-56
	Wintek	**ABP04**	⋆ **4913**
			4865-40
		MAI04	⋆ **4913**
			4865-26
		MFC04	⋆ **4913**
			4865-24
040	Ferranti	ZNREF040	1226-4
	HiTech	RP040	4868-19
	Intel	iSBC040EX	4853-20
	TI	TL040C	1104-123
	UTMC	**UT040B**	⋆ **4331**
			4063-7
		UT040BR	⋆ **4331**
			4063-8
	Zitel	ZBC040PX	4861-47
0400	Matra	MA0400	4054-6
	Matra-Harris		
		MA0400	4054-14
04000	Thomson	TSGB04000	4061-28
		TSGC04000	⋆ **4322**
			4061-34
0405	AD	HDG0405	645-28
			940-29
	Datel	**DAC0405**	⋆ **2576**
			645-29
			940-28
	Intech	**VDAC0405H**	⋆ **2799**
			940-25
		0405	645-32
		0405H	940-30
0407	AD	HDG0407	940-24
041	Siemens	S041	1121-52
042	Siemens	S042	1103-110
			1219-87
		TBB042	1120-78
0437	Hughes	HLCD0437	616-150
0438	GIM	AY0438I	981-53
	Hughes	HLCD0438A	616-155
044	TI	TL044C	1186-5
		TL044M	1185-47
045	**Motorola**	**HDC045**	⋆ **4286**
			4056-24
	SGS	LS045	1166-47
0450	Signetics	SCC0450M	4060-20
046	AT&T	LBR046AS	1202-6
048	MicroInds	mBLC048	4862-29
		mBLC048A	4862-30
	Plessey	PME048D	4890-35
0488	Hughes	HLCD0488	616-106
			977-109
05	LinearTech	OP05	1132-107
		OP05A	1132-52
		OP05C	1149-52
		OP05E	1132-71
	MicroPwr	MPOP05	1146-31
		MPOP05A	1142-37
		MPOP05C	1149-53
		MPOP05E	1146-34
	PMI	**AMP05**	⋆ **2975**
			1103-13
		AMP05A	⋆ **2975**
			1167-17
		AMP05B	⋆ **2975**
			1168-43
		AMP05E	⋆ **2975**
			1167-18
		AMP05F	⋆ **2975**
			1168-42
		CMP05B	⋆ **2975**
			1109-18
		CMP05C	⋆ **2975**
			1109-5
		CMP05F	⋆ **2975**
			1109-19
		DAC05A	955-28
		DAC05C	955-29
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
05	PMI		(Cont'd)
		DAC05E	955-18
		DAC05G	955-30
		OP05	* **2970**
			1132-104
			1146-33
		OP05A	* **2970**
			1132-54
			1142-39
		OP05C	* **2970**
			1149-55
		OP05E	* **2970**
			1132-81
			1146-36
		REF05A	* **2975**
			1226-42
			1229-62
		REF05B	* **2975**
			1226-43
			1229-63
		SW05B	903-85
		SW05F	904-1
		SW05G	904-2
	Siliconix	IS05A	4060-51
		IS05B	4061-3
		IS05C	4061-5
		IS05D	4061-8
		IS05E	4061-11
		IS05F	4061-14
		IS05G	4061-17
		IS05H	4061-20
	Supertex	HV05	977-78
			¶ 425-8
	Universal	IS05A	4063-27
		IS05B	4063-30
		IS05C	4063-33
		IS05D	4063-36
		IS05E	4063-39
		IS05F	4063-42
		IS05G	4063-45
		IS05H	4063-48
050	AD	HOS050	1131-32
			1136-5
		HOS050A	1131-33
		HOS050C	1131-34
			1136-6
	AT&T	LBR050AB	1202-10
		LBR050AC	1202-11
		LBR050AK	1202-12
		LBR050AS	1202-13
	Ferranti	ZNREF050	1226-51
	HiTech	RP050	4893-12
	MicroNet	MN050	1229-79
	Sanyo	STK050	1116-153
0500	AD	HTC0500	1227-123
	Fairchild	FGC0500	4044-16
		FGE0500	4044-17
	IntCirSys	**VGC0500**	* **4256**
			4051-15
	VLSI Tech	**VGC0500**	* **4665**
			4064-3
051	AT&T	LBR051AB	1203-117
	HiTech	RP051	4893-13
05100	Elantec	EH05100AH	1129-12
			1169-22
0512	EG&G-Reticon		
		RL0512C	1222-29
		RL0512D	1222-11
		RL0512E	1222-30
		RL0512G	1222-31
		RL0512R	1222-12
		RL0512S	1222-32
		RL0512SAX	1222-55
	MicroInds	mBLC0512B	4862-55
0515	Hughes	HLCD0515	977-110
052	AT&T	LBR052AS	1203-118
05203	ILC-DDC	THA05203	1229-75
			¶ 419-3
05210	ILC-DDC	THA05210	1229-76
05310	STDMicro	05310	4815-21
05320	STDMicro	05320	4815-22
05321	STDMicro	05321	4815-24
05322	STDMicro	05322	4815-25
05323	STDMicro	05323	4815-23
05324	STDMicro	05324-01	4815-19
		05324-02/3	4815-27
			(Continued)

Base Number	Source	Device	Page-Line
05324	STDMicro		(Cont'd)
		05324-11A	4815-20
		05324-12/13A	4815-28
05326	STDMicro	05326	4815-26
0533	Hughes	HLSS0533	637-8
05340	STDMicro	05340	4872-18
05350	STDMicro	05350	4878-37
05352	STDMicro	05352	4879-23
05360	STDMicro	05360	4870-37
05364	STDMicro	05364	4871-2
05370	STDMicro	05370	4875-40
05373	STDMicro	05373	4875-41
05374	STDMicro	05374	4875-7
0538	Hughes	HLCD0538A	616-107
			977-111
05380	STDMicro	05380	4875-38
05382	STDMicro	05382	4873-59
05386	STDMicro	05386	4875-9
05388	STDMicro	05388	4873-52
0539	Hughes	HLCD0539A	616-108
			977-112
054	SGS	M054	1124-122
0540	Hughes	HLCD0540	616-109
			977-113
0541	Hughes	HLCD0541	616-110
0542	Hughes	HLCD0542	616-111
0548	Hughes	HLCD0548	616-112
			977-114
055	SGS	M055	1124-123
0550	Hughes	HLCD0550	616-113
			977-115
0551	Hughes	HLCD0551	616-114
			977-116
056	Intel	iSBC056A	4853-22
		iSBC056C	4853-33
		iSBC056CX	4853-10
	MicroInds	mSBC056A	4861-34
		mSBC056CX	4862-47
	Zendex	ZX056N	4861-50
058	Sanyo	STK058	1116-154
05809	STDMicro	05809	4878-6
05822	STDMicro	05822	4873-28
05823	STDMicro	05823	4874-51
05824	STDMicro	05824	4875-39
05825	STDMicro	05825	4873-44
05826	STDMicro	05826	4873-43
05827	STDMicro	05827	4878-36
05828	STDMicro	05828	4873-53
06	GenMicro	GMSV06	4837-15
	NationalInst	NB-A06	4846-5
	PMI	**DAC06B**	* **2974**
			955-12
		DAC06C	* **2974**
			955-16
		DAC06E	* **2974**
			954-11
		DAC06F	* **2974**
			955-5
		DAC06G	* **2974**
			955-14
		OP06A	* **2970**
			1141-17
		OP06B	* **2970**
			1147-6
		OP06F	* **2970**
			1147-7
		OP06G	* **2970**
			1149-56
		SW06B	* **2975**
			905-79
		SW06F	* **2975**
			905-80
		SW06G	* **2975**
			905-81
	Supertex	HV06	977-76
			¶ 425-8
060	AD	HDS060	1169-4
		HOS060	1149-20
		HOS060/883	1149-21
		HOS060S	1130-107
			1131-35
			1136-7
	HiTech	RP060	4893-22
	TI	TL060AC	1162-12
		TL060BC	1155-31
		TL060C	1167-53
			(Continued)

Base Number	Source	Device	Page-Line
060	TI		(Cont'd)
		TL060I	1162-7
0600	**Harris**	**HSG0600RH**	* **2721**
			4049-3
	Siemens	SAB0600	1127-62
06000	Thomson	TSGB06000	4061-29
		TSGC06000	* **4322**
			4061-35
0601	Siemens	SAB0601	1127-63
0602	Siemens	SAB0602	1127-64
0605	AD	HDG0605	645-38
			941-46
	Datel	**DAC0605**	* **2576**
			645-39
			941-45
	Intech	**VDAC0605H**	* **2799**
			941-44
		0605	645-40
		0605H	942-1
	OEI	AH0605	1159-15
0607	Hughes	HLCD0607	616-115
			977-117
061	HiTech	RP061	4893-23
	Motorola	**TL061AC**	* **2920**
			* **2960**
			1162-13
		TL061BC	* **2920**
			* **2960**
			1155-32
		TL061C	* **2920**
			* **2960**
			1167-42
		TL061M	* **2920**
			* **2960**
			1162-14
	TI	TL061 Series	1133-13
		TL061AC	1162-8
		TL061BC	1155-29
		TL061C	1167-51
		TL061I	1162-6
		TL061M	1162-9
062	Ferranti	ZNREF062	1226-61
	HiTech	RP062	4895-14
	Motorola	**HDC062**	* **4286**
			4056-25
		TL062AC	* **2922**
			* **2960**
			1178-19
		TL062BC	* **2922**
			* **2960**
			1175-12
		TL062C	* **2922**
			* **2960**
			1181-19
		TL062M	* **2922**
			* **2960**
			1178-20
	TI	TL062AC	1178-17
		TL062BC	1175-11
		TL062C	1181-21
		TL062I	1178-16
		TL062M	1178-18
	Thomson	TL062C	1181-22
064	Intel	iSBC064A	4853-27
	MicroInds	mBLC064	4862-34
		mBLC064A	4862-3
			4862-35
		mBLC064B	4862-4
		mSBC064	4861-36
	Motorola	**TL064AC**	* **2923**
			* **2960**
			1186-37
		TL064BC	* **2923**
			* **2960**
			1184-25
		TL064C	* **2923**
			* **2960**
			1189-20
		TL064M	* **2923**
			* **2960**
			1186-38
		TL064V	* **2923**
			* **2960**
			1188-5
	TI	TL064AC	1186-36
		TL064BC	1184-24
			(Continued)

Base Number	Source	Device	Page-Line
064	TI		(Cont'd)
		TL064C	1189-21
		TL064I	1186-35
		TL064M	1188-4
	Thomson	TL064C	1189-22
064EC5	Performance		
		PEP064EC5-150	
			1339-31
064EL9	Performance		
		PEP064EL9-150	
			1339-47
066	TI	TL066AC	1162-22
		TL066BC	1155-30
		TL066C	1167-52
		TL066I	1162-5
068	**UTMC**	**UT068B**	* **4331**
			4063-9
		UT068BR	* **4331**
			4063-10
07	AD	ADOP07	1132-12
			1140-26
		ADOP07A	1138-9
		ADOP07C	1142-45
		ADOP07D	1143-1
		ADOP07E	1140-38
	Apex	**PA07**	* **2458**
			1130-48
			1131-70
			1151-27
		PA07A	* **2458**
			1145-18
		PA07M	* **2458**
			1151-26
		PA07Q	* **2458**
			1151-25
	HybridSys	HSOP07	1140-25
		HSOP07A	1138-8
		HSOP07C	1142-42
		HSOP07D	1142-52
		HSOP07E	1147-37
	ITT	ZSY07	1192-30
	LinearTech	OP07	1140-24
		OP07A	1132-72
		OP07C	1142-43
		OP07E	1140-37
	LogicDev	LRF07C	646-65
	Maxim	OP07	1140-28
		OP07A	1138-5
		OP07C	1142-46
		OP07D	1143-3
		OP07E	1140-41
	MicroPwr	MPOP07	1140-29
		MPOP07A	1138-10
		MPOP07C	1142-47
		MPOP07D	1143-2
		MPOP07E	1140-39
		OP07E	1140-43
	PMI	**OP07**	* **2970**
			1140-31
		OP07A	* **2970**
			1132-82
			1138-12
		OP07C	* **2970**
			1170-39
		OP07D	* **2970**
			1143-5
		OP07E	* **2970**
			1140-44
	Raytheon	**OP07**	* **2979**
			1147-33
		OP07A	* **2979**
			1138-7
		OP07C	* **2979**
			1142-44
		OP07D	* **2979**
			1142-51
		OP07E	* **2979**
			1147-34
	Solitron	OP07	1140-35
		OP07A	1138-4
		OP07C	1142-48
		OP07D	1143-6
		OP07E	1140-45
	TI	OP07C	1142-41
		OP07D	1142-21
		OP07E	1140-36
			(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
07			(Cont'd)
	Wintek	**ABP07**	★ 4913
			4865-41
070	HiTech	RP070	4894-50
	Sanyo	STK070	1117-1
	TI	TL070AC	1165-26
		TL070C	1165-27
		TL070I	1162-45
0700	Siemens	SAE0700	1116-54
	Signetics	SCC0700M	4060-24
071	**Motorola**	**TL071**	★ 2920
			★ 2960
			1165-25
		TL071AC	★ 2920
			★ 2960
			1162-1
		TL071BC	★ 2920
			★ 2960
			1155-15
		TL071M	★ 2920
			★ 2960
			1161-53
	TI	TL071AC	1162-2
		TL071BC	1155-16
		TL071C	1165-28
		TL071I	1162-16
		TL071M	1161-52
	Toshiba	TC071	1165-29
072	**Motorola**	**TL072AC**	★ 2922
			★ 2960
			1178-14
		TL072BC	★ 2922
			★ 2960
			1175-10
		TL072C	★ 2922
			★ 2960
			1180-40
		TL072M	★ 2922
			★ 2960
			1178-13
	TI	TL072AC	1178-15
		TL072BC	1180-44
		TL072C	1180-41
		TL072I	1178-23
		TL072M	1178-12
	Thomson	TL072C	1180-42
	Toshiba	TC072	1180-43
074	**Motorola**	**TL074AC**	★ 2923
			★ 2960
			1186-33
		TL074BC	★ 2923
			★ 2960
			1186-31
		TL074C	★ 2923
			★ 2960
			1188-34
		TL074M	★ 2923
			★ 2960
			1188-3
	TI	TL074AC	1186-30
		TL074BC	1184-23
		TL074C	1188-35
		TL074I	1186-41
		TL074M	1186-29
	Thomson	TL074AC	1186-34
		TL074BC	1186-32
075	Sanyo	STK075	1117-2
	TI	TL075C	1165-39
			1188-36
	Toshiba	TC075	1165-40
			1188-37
077	Sanyo	STK077	1117-3
078	Sanyo	STK078	1117-4
08	AMD	DAC08	944-30
		DAC08A	942-39
		DAC08C	947-36
		DAC08E	944-47
	AD	ADDAC08	944-31
		ADDAC08A	942-40
		ADDAC08C	947-37
		ADDAC08E	944-48
		ADDAC08H	942-41
	Apex	**PA08**	★ 2458
			1130-96
			1131-60
			1151-24
			(Continued)

Base Number	Source	Device	Page-Line
08	**Apex**		(Cont'd)
		PA08A	★ 2458
			1145-17
		PA08M	★ 2458
			1151-28
		PA08Q	★ 2458
			1151-29
		PA08V	★ 2458
			1151-30
	Datel	**DAC08BC**	★ 2576
			944-45
		DAC08BM	★ 2576
			944-46
	Datricon	SER08	4875-43
	DistComp	DCS/SI08	4809-23
		DCSSI08	4809-16
	Fairchild	DAC08C	947-38
		DAC08EC	944-49
		DAC08M	944-32
	Intel	iSBC MM08	4862-15
	LogicDev	LMU08	644-42
		LMU08C	604-7
		LMU08M	604-22
		LRF08	646-66
			¶ 406-22
		LRF08C	630-35
			¶ 406-22
		LRF08M	630-34
			¶ 406-22
	MicroPwr	MPOP08A	1142-35
		MPOP08B	1144-25
		MPOP08C	1149-25
		MPOP08E	1142-36
		MPOP08F	1144-26
		MPOP08G	1149-26
	Motorola	**DAC08**	★ 2938
			★ 2958
			944-33
		DAC08A	★ 2938
			★ 2958
			942-42
		DAC08C	★ 2938
			★ 2958
			947-39
		DAC08E	★ 2938
			★ 2958
			945-1
		DAC08H	★ 2938
			★ 2958
			942-43
	PMI	**CMP08B**	★ 2975
			1109-50
		CMP08F	★ 2975
			1109-44
		DAC08	★ 2973
			944-34
		DAC08A	★ 2973
			942-46
		DAC08C	★ 2973
			947-41
		DAC08E	★ 2973
			945-3
		DAC08H	★ 2973
			943-1
		MUX08A	★ 2975
			914-24
		MUX08B	★ 2975
			914-30
		MUX08E	★ 2975
			914-22
		MUX08F	★ 2975
			914-27
		OP08	★ 2970
			1133-33
		OP08A	★ 2970
			1142-33
		OP08C	★ 2970
			1149-27
		OP08E	★ 2970
			1142-34
		OP08G	★ 2970
			1149-28
		REF08A	★ 2975
			1225-20
		REF08G	★ 2975
			1225-21
			(Continued)

Base Number	Source	Device	Page-Line
08	**PMI**		(Cont'd)
		REF08H	★ 2975
			1225-22
	Raytheon	DAC08	944-35
		DAC08A	943-2
		DAC08C	947-42
		DAC08E	945-4
		DAC08H	943-3
	Signetics	DAC08	944-36
		DAC08A	943-4
		DAC08C	947-43
		DAC08E	945-5
		DAC08H	943-5
	Thomson	TSGF08	1221-62
	TRW-LSI	MPY08	644-55
		MPY08HU	657-116
	Wintek	**MDS08**	★ 4913
			4866-1
		MPI08	★ 4913
			4865-32
		MSI08	★ 4913
			4865-31
08L00	USDesign	B08L00	4868-2
08M00	USDesign	B08M00	4868-3
08V00	USDesign	B08V00	4868-4
080	AMD	DAC080QF	942-37
	HiTech	RP080	4868-17
	Motorola	**HDC080**	★ 4286
			4056-26
	Sanyo	STK080	1117-5
	TI	TL080AC	1162-18
		TL080C	1168-3
		TL080I	1162-47
0800	Matra	MA0800	4054-7
	Matra-Harris		
		MA0800	4054-15
	National	ADC0800P	925-16
		ADC0800PC	925-17
	Sharp	LH0800B	837-38
			874-62
08000	Thomson	TSGB08000	4061-30
		TSGC08000	★ 4322
			4061-36
0801	AD	MAH0801	916-11
	National	ADC0801	917-19
		ADC0801C	917-20
		DAC0801C	947-40
	Sharp	LH0801	837-39
		LH0801A	837-40
	Signetics	ADC0801	917-21
		ADC0801C	917-22
0802	AD	HAS0802	918-28
		HDH0802	943-22
		HDH0802M	943-23
	Fairchild	μA0802AC	944-28
		μA0802BC	947-34
		μA0802CC	947-35
		μA0802M	944-29
	GE/Intersil	**ADC0802**	★ 2667
			921-24
		ADC0802C	★ 2667
			921-25
	National	ADC0802	921-28
		ADC0802C	921-29
		DAC0802	942-44
		DAC0802C	942-45
	Sharp	LH0802	837-41
	Signetics	ADC0802	921-41
		ADC0802C	921-42
0803	**GE/Intersil**	**ADC0803**	★ 2667
			921-26
		ADC0803C	★ 2667
			921-27
	National	ADC0803C	921-30
	Sharp	LH0803	837-42
	Signetics	ADC0803C	921-43
	TI	ADC0803C	921-44
		ADC0803M	921-33
0804	**GE/Intersil**	**ADC0804**	★ 2667
			924-32
		ADC0804C	★ 2667
			924-33
	National	ADC0804C	924-34
	Signetics	ADC0804C	924-35
	TI	ADC0804C	924-45

Base Number	Source	Device	Page-Line
0805	AD	HDG0805	645-55
			949-33
	Datel	**DAC0805**	★ 2576
			645-56
			949-31
	Intech	**VDAC0805H**	★ 2799
			944-8
		0805	645-57
			950-1
	National	ADC0805	645-58
		ADC0805C	924-42
	Signetics	ADC0805C	924-43
	TI	ADC0805C	924-39
0806	National	DAC0806C	948-26
0807	AD	HDG0807	949-20
	National	DAC0807C	947-52
0808	National	ADC0808	921-31
			1220-98
		DAC0808	945-6
		DAC0808C	945-7
	Siemens	SDA0808A	920-20
		SDA0808B	920-21
	TI	ADC0808	923-1
		ADC0808M	922-33
		TL0808	922-44
0809	National	ADC0809	1220-99
		ADC0809C	924-36
	TI	ADC0809	925-7
		TL0809	925-6
081	**GE/RCA**	**CA081**	★ 2645
			1167-19
		CA081A	★ 2645
			1161-51
	Motorola	**TL081**	★ 2920
			★ 2960
			1167-47
		TL081A	★ 2920
			★ 2960
			1162-3
		TL081B	★ 2920
			★ 2960
			1155-27
		TL081C	★ 2920
			★ 2960
			1168-4
		TL081M	★ 2920
			★ 2960
			1162-20
	National	TL081C	1167-41
	TI	TL081	1167-48
		TL081AC	1162-4
		TL081BC	1155-28
		TL081I	1162-15
		TL081M	1162-19
	Thomson	TL081C	1167-49
	Toshiba	TC081	1167-50
0810	AD	HDD0810	949-26
		HDD0810C	949-28
		HDD0810CM	949-29
		HDD0810M	949-27
		HDS0810E	942-29
		HDS0810EM	942-30
	Siemens	SDA0810A	926-30
		SDA0810B	926-31
0811	National	ADC0811	920-48
		ADC0811BC	920-50
		ADC0811BJ	920-51
		ADC0811CC	924-29
		ADC0811CJ	924-30
	Sharp	LH0811	837-43
0812	Sharp	LH0812	839-1
0813	Sharp	LH0813	839-2
0816	National	ADC0816	921-34
		ADC0816C	870-94
			921-32
			1220-131
0817	National	ADC0817	924-37
		ADC0817C	1220-132
082	Exar	XR082	1178-24
		XR082C	1181-25
		XR082M	1178-25
	GE/RCA	**CA082**	★ 2645
			1181-12
		CA082A	★ 2645
			1178-11
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
082			(Cont'd)
	Motorola	**TL082A**	⋆ **2922**
			⋆ **2960**
			1178-28
		TL082B	⋆ **2922**
			⋆ **2960**
			1175-14
		TL082C	⋆ **2922**
			⋆ **2960**
			1181-31
		TL082M	⋆ **2922**
			⋆ **2960**
			1178-34
	National	TL082C	1181-37
	Sanyo	STK082	1117-6
	SGS	M082	1119-125
		M082AA	1119-126
		TL082	1181-32
		TL082A	1178-33
		TL082B	1175-13
	TI	TL082AC	1178-29
		TL082BC	1175-15
		TL082C	1181-33
		TL082I	1178-21
		TL082M	1178-30
	Thomson	TL082AC	1178-32
		TL082BC	1175-17
		TL082C	1181-35
	Toshiba	TC082	1181-36
0820	AD	HDS0820	943-44
		HDS0820M	943-45
	Maxim	ADC0820BCD	918-36
		ADC0820BCN	918-37
		ADC0820BD	918-38
		ADC0820CCD	923-29
		ADC0820CCN	923-30
		ADC0820CD	923-31
	National	ADC0820B	919-10
		ADC0820C	923-21
	PMI	**PM0820A**	⋆ **2973**
			918-30
		PM0820B	⋆ **2973**
			923-22
		PM0820E	⋆ **2973**
			918-31
		PM0820F	⋆ **2973**
			923-23
		PM0820G	⋆ **2973**
			918-32
		PM0820H	⋆ **2973**
			923-24
	TI	TLC0820	645-5
		TLC0820A	923-20
		TLC0820AC	924-1
		TLC0820AM	924-2
		TLC0820BC	919-11
		TLC0820BM	919-12
0829	National	ADC0829	922-2
083	Exar	XR083	1178-26
		XR083C	1181-26
		XR083M	1178-27
	Sanyo	STK083	1117-7
	SGS	M083	1119-127
		M083AA	1119-128
	TI	TL083AC	1178-31
		TL083C	1181-34
		TL083I	1178-22
0830	National	DAC0830	942-27
0831	National	ADC0831B	921-17
		ADC0831C	924-24
		DAC0831	943-39
	TI	ADC0831AC	923-18
		ADC0831BC	918-14
0832	**GoldStar**	**ADC0832**	⋆ **2700**
			921-16
	National	ADC0832B	921-18
		ADC0832C	924-25
		DAC0832	946-4
	TI	ADC0832AC	923-19
		ADC0832B	921-22
		ADC0832BC	918-15
0833	National	ADC0833B	921-19
		ADC0833C	924-26
0834	National	ADC0834B	921-20
		ADC0834C	924-27
	TI	ADC0834A	924-22
			(Continued)

Base Number	Source	Device	Page-Line
0834	TI		(Cont'd)
		ADC0834B	921-23
0838	National	ADC0838B	921-21
		ADC0838C	924-28
	TI	ADC0838A	924-23
		ADC0838B	920-49
084	Exar	XR084	1186-42
			¶ 439-4
		XR084C	1189-24
			¶ 439-4
		XR084M	1186-43
			¶ 439-4
	GE/RCA	**CA084**	⋆ **2645**
			1189-18
	Motorola	**TL084**	⋆ **2923**
			⋆ **2960**
			1189-26
		TL084A	⋆ **2923**
			⋆ **2960**
			1186-45
		TL084C	⋆ **2923**
			⋆ **2960**
			1189-33
		TL084M	⋆ **2923**
			⋆ **2960**
			1188-6
	Sanyo	STK084	1117-8
	SGS	TL084	1189-27
		TL084A	1186-46
		TL084B	1184-26
	TI	TL084AC	1186-47
		TL084BC	1184-27
		TL084C	1189-28
		TL084I	1186-40
		TL084M	1186-48
	Thomson	TL084AC	1187-3
		TL084BC	1184-28
		TL084C	1189-34
	UTMC	**UT084B**	⋆ **4331**
			4063-11
		UT084BR	⋆ **4331**
			4063-12
0841	National	ADC0841B	921-10
0844	National	ADC0844B	921-2
			924-31
0848	National	ADC0848B	921-3
		ADC0848C	921-4
085	TI	TL085C	1189-29
086	NEC	MD086FD-10	4713-19
	Sanyo	STK086	1117-9
	SGS	M086	1119-129
		M086AA	1119-130
0864	LogicalDes	VAT0864P/EGA	4886-1
087	TI	TL087C	1146-11
		TL087I	1146-6
	Xycom	XVME087	4891-23
088	TI	TL088C	1155-33
		TL088I	1149-50
0881	Sharp	LH0881	839-3
		LH0881A	839-4
089	SGS	M089	1193-28
09	**Apex**	**PA09**	⋆ **2458**
			1130-62
			1155-9
		PA09A	⋆ **2458**
			1145-24
		PA09M	⋆ **2458**
			1155-11
		PA09Q	⋆ **2458**
			1155-10
	Datricon	ACS09	4817-36
	MicroPwr	MPOP09A	1183-9
		MPOP09B	1184-11
		MPOP09E	1183-10
		MPOP09F	1184-12
	PMI	**OP09A**	⋆ **2972**
			1183-18
		OP09B	⋆ **2972**
			1184-15
		OP09E	⋆ **2972**
			1183-19
		OP09F	⋆ **2972**
			1184-16
	Sys Datar	CPU09	4821-35
	Thomson	TSK09 Series	4069-19

Base Number	Source	Device	Page-Line
090	Xycom	XVME090	4891-27
0900	Fairchild	FGC0900	4044-18
	IntCirSys	**VGC0900**	⋆ **4256**
			4051-13
	VLSI Tech	**VGC0900**	⋆ **4665**
			4064-1
091	Zendex	ZX091	4861-23
094	Exar	XR094	1186-51
		XR094C	1189-31
		XR094M	1186-52
	MicroInds	mSBC094	4861-22
095	Exar	XR095	1186-53
		XR095C	1189-32
		XR095M	1186-54
096	Exar	XR096	1186-49
		XR096C	1189-30
		XR096M	1186-50
099	SGS	M099	1193-29
1	AdvMicroSys		
		TLK-1	4878-30
	Ampro	1AX	4870-1
	AT&T	DS-1 Chip Set	1194-99
	Atec	710-1	4876-22
	Basicon	MC-1N	4823-5
		MC-1Z	4803-10
	Bedford	BCS1	4811-12
	Burr-Brown	PWR1XX	1221-1
	Calmos	DMC1.6	4082-22
	CAN-TRON	CNT1XXX	4893-5
		SBC1	4813-25
	CharlesRiver		
		CC-1	4892-18
		NC-1	4892-22
		VCC-1	4882-38
		VNC-1	4883-17
	Clearpoint	QED1	4867-42
	Computrol	LM-1	4858-8
	CIC	MSA1	4065-34
		MSB1	4065-35
	Datel	FLJ-ACR1	692-109
		FLJ-D1	692-66
		VFQ1	⋆ **2577**
			1230-62
	Datricon	MS-1DR	4877-42
	Davidge	DAVID1K	4869-33
	Devtek	LM-1 Linker	4874-3
	Fairchild	FS1	4705-9
		Microflame 1	4705-10
	Ferranti	ZNPCM1	1192-143
			¶ 426-9
	Force	AGC1	4882-13
		AGC1X	4881-27
		CPU1	4839-23
		ILANC1	4881-16
		ISCSI1	4882-25
		ISIO1/2	4886-23
		PIO-1	4887-25
		RR-1	4890-32
		SIO-1	4887-26
		WFC-1	4881-36
	GE/RCA	SOS-1 Library	4085-29
	GIM	STBC1	1118-89
			1123-16
			1123-61
	GigaBit	SC1	4083-8
	HiTech	RPPARO1	4870-25
		RPSERO1	4870-26
		STDMFDC1	4870-39
	Hyundai	HMDS1	4707-12
	Intelicom	STD-SVC1	4871-23
		STDCAM1	4873-27
	IntelComp	DLP1	4856-23
		DMM1	4856-25
		DMT1	4856-24
	Interdesign	ULA 1P	4066-32
		ULA1G	4066-22
		ULA1RA	4044-29
		ULA1RB	4044-30
		ULA1RC	4044-31
		ULA1RD	4044-32
	ICT	PDS-1PEEL	4894-42
	KSystems	AITGMB1	4863-24
	Lomas	LDPCOLOR 1	4868-25
	Matrox	MTX-A1	883-63
			(Continued)

Base Number	Source	Device	Page-Line
1	Matrox		(Cont'd)
		MTX-B1	883-64
	Octagon	SYS1Z	4811-10
	PEP-Modular		
		ADI-1A	4852-2
		DAI-1A	4852-4
		RLM1	4851-35
	PlesseyMicro		
		PME BB1	4889-11
	Plessey	PME1EA	4890-30
		PSM-1VP	4892-32
		PSM1VA	4892-33
	Signetics	EPL1	4086-6
	Slicer	SEAT 1MEG	4865-37
	Thomson	MD-SBC1	4803-11
		MDX-CPU1	4819-31
	TLSI	TA1	4061-49
	Trimarchi	TE1	4825-34
	VersaLogic	AIN-1A	4873-8
		AIN-1B	4873-9
		IPI-1	4874-19
		Z80-1	4815-8
	ZyMOS	ZyATB1	4851-5
		ZyAT1	4851-3
		ZyXTB1	4851-8
		ZyXT1	4851-7
1D03	**IPS**	**IP1D03**	⋆ **2855**
			1216-58
1D10	IPS	IP1D10	1004-67
1L1	Matrix	CP1L1	4821-22
1MBX8	Dense-Pac	DPE1MBX8	1315-28
			1315-30
1MX16	**Performance**		
		PEP1MX16-100	
			⋆ **2962**
			1346-44
		PEP1MX16-120	
			⋆ **2962**
			1346-45
		PEP1MX16-80	
			⋆ **2962**
			1346-43
1MX4	**Performance**		
		PEP1MX4-100	
			⋆ **2962**
			1345-35
		PEP1MX4-120	
			⋆ **2962**
			1345-38
		PEP1MX4-80	⋆ **2962**
			1345-33
		PEP1MX4Z	⋆ **2962**
			1345-37
		PEP1MX4Z-120	
			⋆ **2962**
			1345-40
1MX5	**Performance**		
		PEP1MX5-100	
			⋆ **2962**
			1345-43
		PEP1MX5-120	
			⋆ **2962**
			1345-44
		PEP1MX5-80	⋆ **2962**
			1345-42
1MX8	Dense-Pac	DPE1MX8	1315-29
			1315-31
	Performance		
		PEP1MX8-100	
			⋆ **2962**
			1345-65
		PEP1MX8-120	
			⋆ **2962**
			1346-7
		PEP1MX8-80	⋆ **2962**
			1345-54
1MX9	**Performance**		
		PEP1MX9-100	
			⋆ **2962**
			1346-27
		PEP1MX9-120	
			⋆ **2962**
			1346-37
		PEP1MX9-80	⋆ **2962**
			1346-19
1M08	Mitsubishi	MH1M08-12	1346-2
		MH1M08-15	1346-9
			(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
1M08	Mitsubishi		(Cont'd)
		MH1M08A-100	1345-61
		MH1M08A-12	1346-3
		MH1M08A-15	1346-10
		MH1M08A-80	1345-50
1M08A1			
	Mitsubishi	MH1M08A1-10	1345-62
		MH1M08A1-12	1346-5
		MH1M08A1-8	1345-51
1M08A2			
	Mitsubishi	MH1M08A2-10	1345-63
		MH1M08A2-12	1346-6
		MH1M08A2-8	1345-52
1M09	Mitsubishi	MH1M09-12	1346-33
		MH1M09-15	1346-40
		MH1M09A-10	1345-64
		MH1M09A-12	1346-34
		MH1M09A-15	1346-41
		MH1M09A-80	1345-53
1M09A1			
	Mitsubishi	MH1M09A1-10	1346-25
		MH1M09A1-12	1346-35
		MH1M09A1-8	1346-17
1M09A2			
	Mitsubishi	MH1M09A2-10	1346-26
		MH1M09A2-12	1346-36
		MH1M09A2-8	1346-18
1M10	**IPS**	**IP1M10**	★ **2854**
			1003-72
1M20	**IPS**	**IP1M20**	★ **2854**
			1003-73
1M8	**Dense-Pac**	**DPD1M8**	★ **2581**
			1345-45
1M9	Dense-Pac	DPD1M9	1346-16
1O2	Force	S102	4888-5
1P00	**IPS**	**IP1P00**	★ **2854**
			★ **2856**
			1215-111
1P01	**IPS**	**IP1P01**	★ **2854**
			★ **2856**
			1215-112
1P12	IPS	IP1P12	1215-105
1P125	**IPS**	**IP1P125**	★ **2854**
			★ **2856**
			1215-106
1R07	**IPS**	**IP1R07A**	★ **2854**
			1214-40
1R17	**IPS**	**IP1R17A-05**	★ **2854**
			★ **2857**
			1209-59
		IP1R17A-12	★ **2854**
			★ **2857**
			1210-96
		IP1R17A-15	★ **2854**
			★ **2857**
			1211-58
		IP1R17A-5.2	★ **2854**
			★ **2857**
			1210-17
1R18	**IPS**	**IP1R18A-05**	★ **2854**
			★ **2857**
			1202-7
		IP1R18A-12	★ **2854**
			★ **2857**
			1205-73
		IP1R18A-15	★ **2854**
			★ **2857**
			1206-103
1R19	**IPS**	**IP1R19A-05**	★ **2854**
			★ **2857**
			1209-62
		IP1R19A-12	★ **2854**
			★ **2857**
			1210-99
		IP1R19A-15	★ **2854**
			★ **2857**
			1211-61
		IP1R19A-5.2	★ **2854**
			★ **2857**
			1210-20
1S14	AD	1S14	1227-39
1S20	AD	1S20	1227-40
1S24	AD	1S24	1227-41
1S40	AD	1S40	1227-42
1S44	AD	1S44	1227-43

Base Number	Source	Device	Page-Line
1S60	AD	1S60	1227-44
			¶ 422-3
1S61	AD	1S61	1227-45
1S64	AD	1S64	1227-46
			¶ 423-4
1S74	AD	1S74	1227-47
			¶ 420-29
			¶ 423-4
10	**Apex**	**PA10**	★ **2458**
			1130-50
			1131-73
			1162-36
		PA10A	★ **2458**
			1130-49
			1131-71
			1156-7
		PA10M	★ **2458**
			1130-51
			1162-37
		PA10Q	★ **2458**
			1162-35
	Burr-Brown	**ADC10HT**	★ **2541**
			932-49
		DAC10HT	957-36
		REF10	★ **2540**
			1226-118
	CompAuto	NM4/10	4827-12
	Datel	**ADCEK10B**	★ **2575**
			927-9
		ADCET10BC	927-12
		DACHA10BC	★ **2576**
			951-36
		DACHA10BC-1	
			★ **2576**
			952-11
		DACHA10BM	★ **2576**
			951-37
		DACHA10BM-1	
			★ **2576**
			952-12
		DACHF10	★ **2576**
			645-62
		DACHF10BMC	
			★ **2576**
			951-15
		DACHF10BMM	
			★ **2574**
			★ **2576**
			951-16
		DACIC10B	★ **2576**
			951-29
		DACIC10BC	★ **2576**
			953-21
		DACUP10B	★ **2576**
			954-14
		VFV10K	1230-90
	Datricon	ANA10	4876-25
	ILC-DDC	HRDC10	1227-54
		HXDC10	1227-68
		SDAC10	971-40
	LinearTech	LM10	1152-42
		LM10B	1152-43
		LM10BL	1152-40
		LM10C	1157-1
		LM10CL	1156-51
		MCELM10	1152-44
	Matrix	DSC10K	4871-39
		MS-CPU10	4835-41
		MS-CPU10B	4837-1
		SSC10K	4871-37
	Maxim	MF10	1219-39
	MCE	MCELM10	1152-45
	MicroPwr	MPOP10	1172-8
		MPOP10A	1172-9
		MPOP10C	1173-24
		MPOP10E	1172-10
	Miller	MTI-10XX	4878-28
	Motorola	VME/10	4713-7
	National	LM10	1152-46
		LM10B	1152-47
		LM10BL	1152-41
		LM10C	1157-2
		LM10CL	1156-52
		MF10A	1228-144
		MF10C	1228-145

(Continued)

Base Number	Source	Device	Page-Line
10			(Cont'd)
	PEP-Modular		
		MPM10	4807-7
	PlesseyMicro		
		CS/10	4715-9
	PMI	**DAC10B**	★ **2974**
			951-19
		DAC10C	★ **2974**
			951-20
		DAC10F	★ **2974**
			951-21
		DAC10G	★ **2974**
			951-22
			955-13
		OP10	★ **2972**
			1172-11
		OP10A	★ **2972**
			1172-12
		OP10C	★ **2972**
			1172-16
		OP10E	★ **2972**
			1172-13
		REF10A	★ **2975**
			1226-174
		REF10B	★ **2975**
			1227-1
		SMP10A	★ **2975**
			1228-74
		SMP10B	★ **2975**
			1228-75
		SMP10E	★ **2975**
			1228-76
		SMP10F	★ **2975**
			1228-77
	RanchoTech		
		RT10-AT	4869-44
		RT10-XT	4869-42
	Raytheon	DAC10B	951-17
		DAC10C	951-18
		RF10	688-89
		RVG10	★ **4296**
			4059-7
	Tektronix	TKCP10P	1110-21
		TKDA10A	941-40
		TKDA10B	941-11
		TKDD10P	1102-38
	TeledyneC	CAG10	902-56
		CAG10A	902-52
		CAG10B	902-57
		CAG10C	902-54
		CAG10D	902-55
	TI	TLC10	1228-142
	WinSystems	MCM-DS10	4875-46
		MCM-P10	4875-28
		MCM-SP10	4875-45
	Wintek	**MCL10**	★ **4913**
			4805-5
		MCT10	★ **4913**
			4865-43
	Zitel	ZBC10E	4861-54
10C00	Western	WD10C00	887-15
10C20	Western	WD10C20	887-30
		WD10C20B	887-101
10C21	Western	WD10C21A	887-102
10C23	LogicDev	L10C23	644-15
		L10C23M	644-16
10G000	**GigaBit**	**10G000A**	★ **2689**
			652-46
		10G000A-4	★ **2689**
			652-47
10G001	**GigaBit**	**10G001**	★ **2689**
			652-44
		10G001-4	★ **2689**
			652-45
10G002	**GigaBit**	**10G002**	★ **2689**
			653-7
		10G002M	★ **2689**
			652-50
10G003	**GigaBit**	**10G003**	★ **2689**
			652-42
		10G003M	★ **2689**
			652-41
10G004	**GigaBit**	**10G004-2**	★ **2689**
			652-54
		10G004-3	★ **2689**
			652-53

Base Number	Source	Device	Page-Line
10G010	**GigaBit**	**10G010-2**	★ **2689**
			652-3
			¶ 404-27
		10G010-3	★ **2689**
			652-4
			¶ 404-27
		10G010M-2	★ **2689**
			652-5
			¶ 404-27
		10G010M-3	★ **2689**
			652-6
			¶ 404-27
10G011	**GigaBit**	**10G011**	★ **2689**
			652-7
10G012	**GigaBit**	**10G012B**	★ **2689**
			652-32
			653-4
		10G012B-3	★ **2689**
			652-31
10G013	**GigaBit**	**10G013**	★ **2689**
			653-5
10G021	**GigaBit**	**10G021A**	★ **2689**
			652-35
		10G021A-2	★ **2689**
			652-36
		10G021A-3	★ **2689**
			652-34
10G022	**GigaBit**	**10G022**	★ **2689**
			652-64
10G023	**GigaBit**	**10G023-2**	★ **2689**
			652-40
		10G023-3	★ **2689**
			652-39
10G024	**GigaBit**	**10G024-2**	★ **2689**
			652-38
			¶ 404-31
		10G024-3	★ **2689**
			652-37
			¶ 404-31
10G030	**GigaBit**	**10G030**	★ **2689**
			652-66
10G040	**GigaBit**	**10G040A**	★ **2689**
			652-52
10G041	**GigaBit**	**10G041A**	★ **2689**
			652-51
10G044	**GigaBit**	**10G044**	★ **2689**
			652-22
		10G044-2	★ **2689**
			1224-46
10G045	**GigaBit**	**10G045**	★ **2689**
			653-6
10G046	**GigaBit**	**10G046**	★ **2689**
			652-55
10G060	**GigaBit**	**10G060**	★ **2689**
			652-16
10G061	**GigaBit**	**10G061**	★ **2689**
			652-17
			¶ 404-17
10G065	**GigaBit**	**10G065**	★ **2689**
			652-8
10G070	**GigaBit**	**10G070**	★ **2689**
			652-14
10G100	**GigaBit**	**10G100**	★ **2689**
			652-2
10G101	**GigaBit**	**10G101**	★ **2689**
			652-1
10G181	**GigaBit**	**10G181**	★ **2689**
			653-11
10H016			
	MMI	MC10H016	647-49
	Motorola	MC10H016	647-50
10H100			
	MMI	MC10H100	648-32
	Motorola	MC10H100	648-33
10H101			
	MMI	MC10H101	648-52
	Motorola	MC10H101	648-53
10H102			
	MMI	MC10H102	648-27
	Motorola	MC10H102	648-28
10H103			
	MMI	MC10H103	648-3
	Motorola	MC10H103	648-4
10H104			
	MMI	MC10H104	647-118
	Motorola	MC10H104	647-119

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
10H105			
	MMI	MC10H105	648-45
	Motorola	MC10H105	648-46
10H106			
	MMI	MC10H106	648-21
	Motorola	MC10H106	648-22
10H107			
	MMI	MC10H107	648-90
	Motorola	MC10H107	648-91
10H109			
	MMI	MC10H109	648-39
	Motorola	MC10H109	648-40
10H113			
	Motorola	MC10H113	648-81
10H115			
	MMI	MC10H115	649-105
	Motorola	MC10H115	649-106
10H116			
	MMI	MC10H116	649-89
	Motorola	MC10H116	649-90
10H117			
	MMI	MC10H117	648-70
	Motorola	MC10H117	648-71
10H118			
	MMI	MC10H118	648-58
	Motorola	MC10H118	648-59
10H119			
	MMI	MC10H119	648-64
	Motorola	MC10H119	648-65
10H121			
	MMI	MC10H121	648-76
	Motorola	MC10H121	648-77
10H123			
	Motorola	MC10H123	647-87
10H124			
	MMI	MC10H124	649-58
	Motorola	MC10H124	649-59
10H125			
	MMI	MC10H125	649-51
	Motorola	MC10H125	649-52
10H130			
	MMI	MC10H130	648-103
	Motorola	MC10H130	648-104
10H131			
	MMI	MC10H131	647-95
	Motorola	MC10H131	647-96
10H135			
	Motorola	MC10H135	647-111
10H136			
	MMI	MC10H136	647-55
	Motorola	MC10H136	647-56
10H141			
	MMI	MC10H141	649-41
	Motorola	MC10H141	649-42
10H145			
	MMI	MC10H145	648-132
	Motorola	**MC10H145**	*** 2918**
			648-134
			1347-45
10H158			
	MMI	MC10H158	649-28
	Motorola	MC10H158	649-29
10H159			
	MMI	MC10H159	649-24
	Motorola	MC10H159	649-25
10H16P8			
	TI	**TIEPAL10H16P8-6**	
			*** 4320**
			4078-5
10H160			
	MMI	MC10H160	649-117
	Motorola	MC10H160	649-118
10H161			
	MMI	MC10H161	647-72
	Motorola	MC10H161	647-73
10H162			
	MMI	MC10H162	647-66
	Motorola	MC10H162	647-67
10H164			
	MMI	MC10H164	649-34
	Motorola	MC10H164	649-35
10H165			
	Motorola	MC10H165	649-111
10H166			
	MMI	MC10H166	647-31
	Motorola	MC10H166	647-32
10H171			
	Motorola	MC10H171	647-81

Base Number	Source	Device	Page-Line
10H172			
	Motorola	MC10H172	647-77
10H173			
	MMI	MC10H173	648-122
	Motorola	MC10H173	648-123
10H174			
	MMI	MC10H174	649-19
	Motorola	MC10H174	649-20
10H175			
	MMI	MC10H175	648-96
	Motorola	MC10H175	648-97
10H176			
	MMI	MC10H176	647-103
	Motorola	MC10H176	647-104
10H179			
	Motorola	MC10H179	647-5
10H180			
	Motorola	MC10H180	647-16
10H181			
	Motorola	MC10H181	647-26
10H186			
	Motorola	MC10H186	647-108
10H188			
	Motorola	MC10H188	647-39
10H189			
	Motorola	MC10H189	647-42
10H20G8			
	MMI	PAL10H20G8	4078-28
10H20P8			
	MMI	PAL10H20P8	4071-41
10H209			
	Motorola	MC10H209	651-30
10H210			
	MMI	MC10H210	647-127
	Motorola	MC10H210	647-128
10H211			
	MMI	MC10H211	648-10
	Motorola	MC10H211	648-11
10H301			
	Motorola	MC10H301	648-87
10H302			
	Motorola	MC10H302	648-86
10H303			
	Motorola	MC10H303	648-88
10H304			
	Motorola	MC10H304	648-85
10H330			
	Motorola	MC10H330	649-102
10H332			
	Motorola	MC10H332	649-86
10H334			
	Motorola	MC10H334	649-101
10H350			
	Motorola	MC10H350	649-49
10H423			
	Motorola	MC10H423	647-86
10H424			
	Motorola	MC10H424	649-56
10H8	MMI	HAL10H8-2C	4081-7
		HAL10H8-2M	4081-20
		HAL10H8C	4080-48
		HAL10H8M	4080-100
		PAL10H8-2C	4076-14
		PAL10H8-2M	4076-36
		PAL10H8C	4074-68
		PAL10H8M	4075-56
		ZHAL10H8AC	4080-64
	National	PAL10H8AC	4073-17
		PAL10H8AM	4074-22
		PAL10H8C	4074-96
		PAL10H8M	4075-73
10H8A2			
	National	PAL10H8A2C	4073-18
		PAL10H8A2M	4073-19
10H888			
	TI	**TIE10H888**	*** 3226**
			647-36
10H890			
	TI	**TIE10H890**	*** 3226**
			647-10
10H897			
	TI	**TIE10H897**	*** 3226**
			647-1
10L20EV8			
	AMD	AMPAL10L20EV8	
			4071-49
10L8	MMI	HAL10L8-2C	4081-8
		HAL10L8-2M	4081-21

(Continued)

Base Number	Source	Device	Page-Line
10L8	MMI		(Cont'd)
		HAL10L8C	4080-49
		HAL10L8M	4080-101
		PAL10L8-2C	4076-15
		PAL10L8-2M	4076-37
		PAL10L8C	4074-69
		PAL10L8M	4075-57
		ZHAL10L8AC	4080-65
	National	PAL10L8AC	4073-20
		PAL10L8AM	4074-23
		PAL10L8C	4074-97
		PAL10L8M	4075-74
10L8A2	National	PAL10L8A2C	4073-21
		PAL10L8A2M	4073-22
10L951	Motorola	MC10L951	647-11
10P4	MMI	PLE10P4C	4079-38
		PLE10P4M	4079-40
10P8	MMI	PLE10P8C	4079-37
		PLE10P8M	4079-39
	Panatech	10P8	4077-29
		10P8AP-55	4076-8
		10P8BP-35	4074-109
	VLSI Tech	VP10P8	4080-5
10R20EV8			
	AMD	AMPAL10R20EV8	
			4071-50
10R8	MMI	PLE10R8C	4079-35
		PLE10R8M	4079-36
10V24	Dense-Pac	DPD10V24	1339-50
		DPO10V24	*** 2581**
			1337-56
100	AD	ADDAC100J	953-23
		ADDAC100K	951-31
		ADDAC100L	951-32
		ADDAC100S	953-24
		ADDAC100T	951-33
		HOS100A	1128-49
			1131-7
		HOS100AH	1102-57
		HOS100S	1128-50
			1131-5
	Anasco	43-100	4861-15
	Burr-Brown	**DIV100**	*** 2540**
			1221-36
		ISO100AP	*** 2538**
			1103-36
			¶ 428-16
		LOG100	*** 2540**
			1103-63
		MPY100	*** 2539**
			1223-44
		MPY100A	*** 2539**
			1223-45
		MPY100S	*** 2539**
			1223-46
		PGA100AG	*** 2537**
			1103-14
		PGA100BG	*** 2537**
			1103-15
		SPV100	4884-10
		VFC100	*** 2542**
			1230-59
		XTR100AM	*** 2538**
			1105-13
		XTR100AP	*** 2538**
			1105-14
		XTR100BM	*** 2538**
			1105-15
		XTR100BP	*** 2538**
			1105-16
	Comlinear	CLC100	1104-68
	Datel	VFV100K	1230-91
	Elantec	EHOS100AH	1129-10
		EHOS100SH	1129-3
	Exar	BETA100	4066-14
		XR-A100	4066-3
		XR-B100	4066-4
		XR-C100	4066-1
		XR-D100	4066-2
		XR-E100	4066-5
		XR-F100	4066-12
		XR-G100	4066-8
		XR-H100	4066-9
		XR-J100	4066-7
		XR-L100	4066-11
		XR-M100	4066-16

(Continued)

Base Number	Source	Device	Page-Line
100	Exar		(Cont'd)
		XR-U100	4066-10
		XR-V100	4066-15
		XR-W100	4066-18
		XR-X100	4066-6
	Fairchild	FSP100	646-83
	Ferranti	ZNP100	1222-97
		ZNREF100	1226-96
	GE/Intersil	LM100	1213-23
	Imaging	Series 100	4849-21
			4859-24
			4867-1
			4884-35
	IndComp	CCA-100	4869-19
		CCT-100	4869-20
	Inmos	**IMSA100**	*** 2778**
			646-39
	Interconics	Interchip 100	4051-29
	KSystems	KTL100	4856-19
			4868-12
		STD100	4878-40
		TFL100	4856-22
			4868-14
		VME100	4891-32
	Kontron	KPS100	4711-2
	LSIComp	**RED100/120**	*** 2867**
			633-74
			692-40
	Marconi	DVS100	1200-14
	Micom Int	NP100	4880-4
	Motorola	**HDC100**	*** 4286**
			4056-27
	National	AF100	1219-40
		CIM100	4846-34
	PMI	**DAC100A**	*** 2974**
			951-34
		DAC100B	*** 2974**
			953-22
		DAC100C	*** 2974**
			954-22
		DAC100D	*** 2974**
			955-11
	RanchoTech		
		RT100XT	4869-43
	Raytheon	RF100	669-49
		RG100	674-106
	Sharp	SM100	813-28
			862-22
	Signetics	**PLS100**	*** 3155**
			*** 3167**
			4079-8
	SilControls	MB100	4863-15
	Techno	CPU100	4817-26
	Destek	NIB100/01	4868-21
		NIB100/02	4857-3
	ThirdDomain		
		RSS100A	1127-11
		RSS100C	1127-12
		RSS100M	1127-13
	Western	ADST100	4869-34
	Xycom	XVME100	4889-5
100L20EV8			
	AMD	AMPAL100L20EV8	
			4071-47
100R20EV8			
	AMD	AMPAL100R20EV8	
			4071-48
100Z416			
	Fairchild	F100Z416	650-54
			1316-58
1000	ArrayTech	HCD1000	4041-37
	AT&T	N1000AC	1194-111
		TE1000	*** 4211**
			4064-12
	Dallas	DS1000	636-123
	Datacube	DSP1000	4884-7
	Emulogic	DE1000	4705-4
	GIM	SP1000	1118-88
	Gould	GA1000D	4048-36
		GB1000D	*** 4244**
			4048-35
	HiLevel	**EC1000**	*** 4752**
			4707-10
	Honeywell	HGF1000	652-79
		HM1000R	4049-42
	IndComp	INFOCAP1000	4849-44

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
1000			(Cont'd)
	Lambda	LAS1000	1214-71
	LinearTech	LTZ1000	1226-78
		LT1000X	1143-12
	Matrox	GXB1000A	4858-39
	Micro-Link	STD1000	4711-8
		VME1000	4711-9
	Miller	MTI1000	4711-25
	MMI	MLA1000	4055-4
	National	AM1000	910-18
		DAC1000	952-7
		DAC1000C	952-8
		DT1000	1122-128
	Octagon	SBS1000	4811-2
	Plessey	BAA1000	4068-49
	SerialLab	SL1000	4823-4
	Siliconix	SI1000	1104-11
			¶ 428-5
		VQ1000	1006-115
	Supertex	VQ1000	1006-127
	TI	SE1000P	815-33
			864-5
		TMS1000	817-2
			863-119
			¶ 416-19
	Thomson	GB1000D	4055-14
		MKGA1000D	4055-16
		MKGB1000D	4055-15
	TLSI	TA1000	4061-55
		TA1000D	4061-56
	VTC	**VL1000**	***4340**
			4087-12
			¶ 452-11
	Western	ADS1000	887-14
	Zendex	ZX1000	4859-19
10000	CalDevices	DLM10000	4042-50
	Fairchild	F10000C	649-40
			1393-109
	Gould	**GB10000D**	***4244**
			4048-45
		GC10000	***4244**
			4048-48
	Motorola	**MCA10000ECL**	
			***4287**
			***4290**
			4056-19
	Thomson	GB10000D	4055-30
		MKGB10000D	4055-31
		TSGB10000	4061-38
		TSGC10000	***4322**
			4061-37
100000	Fujitsu	C100000AU	4047-17
1001	AdvDigital	HDC1001	4869-5
	AD	MAH1001	917-7
	Exar	**XR1001**	***2602**
			1195-49
			1196-91
	LinearTech	LT1001AC	1132-65
			1138-6
			¶ 428-29
		LT1001AM	1132-66
			1137-46
			¶ 428-29
		LT1001C	1139-38
			¶ 428-29
		LT1001M	1139-39
			¶ 428-29
		LT1001X	1143-10
			¶ 428-29
		LT1001X/883B	1143-11
			¶ 428-29
	National	ADC1001C	927-34
		AM1001	910-19
		DAC1001	953-40
		DAC1001C	953-41
	Sharp	LH1001	977-83
	Siemens	TFA1001W	1102-26
	Signetics	TDA1001B	1121-85
	Siliconix	VQ1001	1006-116
	Thomson	TEA1001	1217-119
			¶ 440-16
			¶ 440-32
	TRW-LSI	TDC1001	918-16
10010	Fairchild	F10010C	647-63
		F10010M	647-64

Base Number	Source	Device	Page-Line
100101	Fairchild	F100101	650-35
	Hitachi	HD100101	650-36
	Signetics	**100101**	***3020**
			650-37
100102	Fairchild	F100102	650-32
	Hitachi	HD100102	650-33
	Signetics	**100102**	***3020**
			650-34
100104	Fairchild	F100104	650-31
100107	Fairchild	F100107	650-44
	Hitachi	HD100107	650-45
	Signetics	**100107**	***3020**
			650-46
100112	Fairchild	F100112	650-18
	Hitachi	HD100112	650-19
	Signetics	**100112**	***3020**
			650-20
100113	Fairchild	F100113	650-16
	Signetics	**100113**	***3020**
			650-17
100114	Fairchild	F100114	650-120
	Hitachi	HD100114	650-121
	Signetics	**100114**	***3020**
			650-122
100117	Fairchild	F100117	650-38
	Hitachi	HD100117	650-39
	Signetics	**100117**	***3020**
			650-40
100118	Fairchild	F100118	650-41
	Hitachi	HD100118	650-42
	Signetics	**100118**	***3020**
			650-43
10012	**Fujitsu**	**C10012UM**	***4229**
			***4232**
			4047-7
100121	Fairchild	F100121	650-4
100122	Fairchild	F100122	650-1
	Hitachi	HD100122	650-2
	Signetics	**100122**	***3020**
			650-3
100123	Fairchild	F100123	650-21
	Hitachi	HD100123	650-22
	Signetics	**100123**	***3020**
			650-23
100124	Fairchild	F100124	650-100
	Signetics	**100124**	***3020**
			650-101
100125	Fairchild	F100125	650-104
	Hitachi	HD100125	650-105
	Signetics	**100125**	***3020**
			650-106
100126	Fairchild	F100126	650-14
	Signetics	**100126**	***3020**
			650-15
100128	Fairchild	F100128	650-103
			650-99
100130	Fairchild	F100130	650-47
	Hitachi	HD100130	650-48
100131	Fairchild	F100131	650-24
	Hitachi	HD100131	650-25
	Signetics	**100131**	***3020**
			650-26
100135	Fairchild	F100135	650-30
100136	Fairchild	F100136	650-6
	Hitachi	HD100136	650-7
	Signetics	**100136**	***3020**
			650-8
100139	Fairchild	F100139	650-9
10014	Fairchild	F10014C	649-68
		F10014M	649-69
100140	Fairchild	F100140	650-10
100141	Fairchild	F100141	650-96
	Hitachi	HD100141	650-97
	Signetics	**100141**	***3020**
			650-98
100142	Fairchild	F100142	650-52
	Hitachi	HD100142	650-53
100145	Fairchild	F100145	650-57
			1347-46
	Hitachi	HD100145	650-58
	Signetics	**100145**	***3020**
			1347-47

Base Number	Source	Device	Page-Line
100149	**Signetics**	**100149**	***3020**
			650-55
			1316-60
		100149A	***3020**
			1316-56
100150	Fairchild	F100150	650-49
	Hitachi	HD100150	650-50
	Signetics	**100150**	***3020**
			650-51
100151	Fairchild	F100151	650-27
	Hitachi	HD100151	650-28
	Signetics	**100151**	***3020**
			650-29
100155	Fairchild	F100155	650-87
	Hitachi	HD100155	650-88
	Signetics	**100155**	***3020**
			650-89
100156	Fairchild	F100156	650-93
	Hitachi	HD100156	650-94
100158	Fairchild	F100158	644-117
	Hitachi	HD100158	650-95
	Signetics	**100158**	***3020**
			644-118
10016	Fairchild	F10016C	647-47
		F10016M	647-48
10016LC4			
	National	PAL10016LC4	4077-65
10016LC8			
	National	PAL10016LC8	4077-73
10016LD4			
	National	PAL10016LD4	4077-67
10016LD8			
	National	PAL10016LD8	4077-75
10016RC4			
	National	PAL10016RC4	4077-69
10016RC8			
	National	PAL10016RC8	4078-2
10016RD4			
	National	PAL10016RD4	4077-71
10016RD8			
	National	PAL10016RD8	4078-4
100160	Fairchild	F100160	650-117
	Hitachi	HD100160	650-118
	Signetics	**100160**	***3020**
			650-119
100163	Fairchild	F100163	650-81
	Hitachi	HD100163	650-82
	Signetics	**100163**	***3020**
			650-83
100164	Fairchild	F100164	650-90
	Hitachi	HD100164	650-91
	Signetics	**100164**	***3020**
			650-92
100165	Fairchild	F100165	650-114
	Hitachi	HD100165	650-115
	Signetics	**100165**	***3020**
			650-116
100166	Fairchild	F100166	649-132
	Hitachi	HD100166	649-133
	Signetics	**100166**	***3020**
			649-134
100170	Fairchild	F100170	650-11
	Hitachi	HD100170	650-12
	Signetics	**100170**	***3020**
			650-13
100171	Fairchild	F100171	650-84
	Hitachi	HD100171	650-85
	Signetics	**100171**	***3020**
			650-86
100175	Fairchild	F100175	650-110
	Signetics	**100175**	***3020**
			650-108
100179	Fairchild	F100179	649-125
	Hitachi	HD100179	649-126
	Signetics	**100179**	***3020**
			649-127
100180	Fairchild	F100180	644-6
	Signetics	**100180**	***3020**
			644-7
100181	Fairchild	F100181	645-70
	Hitachi	HD100181	649-130
	Signetics	**100181**	***3020**
			645-71
100182	Fairchild	F100182	644-8
	Hitachi	HD100182	649-135

Base Number	Source	Device	Page-Line
100183	Fairchild	F100183	644-32
	Hitachi	HD100183	649-129
1002	AMD	MK1002	1396-28
	AD	HAS1002	926-13
	Exar	XR1002	1195-54
	Fujitsu	C1002AVM	4046-2
	LinearTech	LT1002A	1132-50
			¶ 428-29
		LT1002AC	1132-51
			1169-35
			¶ 428-29
		LT1002AM	1169-36
			¶ 428-29
		LT1002C	1170-18
			¶ 428-29
		LT1002M	1170-19
			¶ 428-29
	National	AM1002	910-24
		DAC1002	954-37
		DAC1002C	954-38
	Western	WD1002-WXE	4869-35
		WD1002-27X	4848-24
		WD1002A-WX1	4848-22
		WD1002S-SHD	4893-10
		WD1002S-WX2A	4848-26
	Zapco	STD1002	4877-39
100250	Fairchild	F100250	650-123
100255	Fairchild	F100255	650-109
	Signetics	**100255**	***3020**
			650-107
10026	**LSI Logic**	**LCA10026**	***4270**
			4053-29
		LRH10026	4052-26
1003	AD	HDH1003	951-7
		HDH1003M	951-30
	Exar	XR1003	1195-50
	ITT	TCA1003	1116-36
		UAA1003	1122-116
	LinearTech	LT1003C	1203-103
		LT1003M	1203-104
	Western	WD1003A-WA2	4848-20
		WD1003S-WAH	4848-25
	Zapco	STD1003	4871-8
10038	**LSI Logic**	**LCA10038**	***4270**
			4053-32
		LRH10038	4052-27
1004	AT&T	LB1004AC	1199-112
	Exar	XR1004	1195-51
	ITT	TCA1004	1116-37
	LinearTech	LT1004C	1225-60
		LT1004C-2	1225-108
		LT1004M	1225-61
		LT1004M-2	1225-109
	Morrow	MT1004	4863-19
	SGS	LB1004	1199-138
	Siliconix	VQ1004	1006-117
100402	Fairchild	F100402	650-56
			1347-44
10041	Fairchild	F10041	1395-56
100415	AMD	AM100415A	1351-28
	Fairchild	F100415	650-63
		F100415C	1351-27
	Hitachi	HM100415	1351-23
100422	Fairchild	F100422	650-59
			1349-26
	Fujitsu	MBM100422A-5	650-60
			1349-16
		MBM100422A-7	650-61
			1349-19
	Hitachi	HM100422	1349-27
	National	DM100422	1349-44
	NEC	μPB100422-10	1349-28
		μPB100422-7	1349-20
100423	Fujitsu	MBM100423LL-6	650-62
100470	AMD	AM100470	1359-48
		AM100470A	1359-34
		AM100470SA	1359-20
	Fujitsu	MBM100470A-10	650-71
			1359-16

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
100470	Fujitsu		(Cont'd)
		MBM100470A-15	650-72
			1359-21
		MBM100470A-20	650-73
		MBM100470A-7	650-74
	Hitachi	HM100470	1359-35
	National	DM100470	650-75
		DM100470A	650-76
	NEC	μPB100470-10	1359-15
		μPB100470-15	1359-22
100474	AMD	AM100474	1352-31
		AM100474A	1352-14
	Fairchild	F100474	650-64
			1352-36
	Fujitsu	MBM100474A-10	650-65
			1352-8
		MBM100474A-15	650-66
			1352-15
		MBM100474A-5	650-67
			1351-92
		MBM100474A-7	650-68
			1352-2
	Hitachi	HM100474	1352-32
		HM100474-10	1352-9
	NEC	μPB100474-10	1352-10
		μPB100474-15	1352-16
		μPB100474-4	1351-91
		μPB100474-6	1352-1
		μPB100474-8	1352-4
	Signetics	100474	650-69
		100474A	650-70
100480	AMD	AM100480	1370-79
		AM100480A	1370-55
	Fujitsu	MBM100480-15	1370-53
		MBM100480-25	1370-80
		MBM100480A-10	1370-46
	Hitachi	HM100480	1370-81
		HM100480-15	650-80
			1370-56
100484	Fujitsu	MBM100484-15	650-77
			1361-27
		MBM100484A-10	650-78
			1360-82
		MBM100484A-8	650-79
	NEC	μPB100484-10	1360-83
		μPB100484-15	1361-28
100490	**Fujitsu**	**MBM100490-15**	⋆ **2618**
			1381-28
		MBM100490-25	⋆ **2618**
			1381-54
	IDT	**IDT100490-15**	⋆ **2802**
			⋆ **2812**
			1381-20
1005	**AT&T**	**LB1005AB**	⋆ **2504**
			1199-113
		LB1005BB	⋆ **2504**
			1199-114
		LB1005CB	⋆ **2504**
			1199-115
	LinearTech	LT1005C	1212-107
			¶ 441-37
		LT1005M	1212-108
			¶ 441-37
	National	ADC1005	927-4
	SGS	LB1005	1199-135
	Thomson	UAB1005	644-135
			916-5
		UAC1005	916-6
		UA1005	868-88
	TRW-LSI	TDC1005	1396-11
			1396-12
			(Continued)

Base Number	Source	Device	Page-Line
1005			(Cont'd)
	Western	WD1005-WAH	4848-21
10051	**LSI Logic**	**LCA10051**	⋆ **4270**
			4053-33
		LRH10051	4052-28
1006	**AT&T**	**LB1006AB**	⋆ **2505**
			1197-100
	National	DAC1006	952-9
		DAC1006C	952-10
	SGS	LB1006	1197-97
	Siliconix	VQ1006	1006-118
	TRW-LSI	TDC1006	1396-35
			1396-36
	Western	WD1006-WAH	4848-23
	Zapco	STD1006	4875-19
1007	Exar	XR1007	1195-52
	LinearTech	LT1007AC	1132-67
		LT1007AM	1132-68
		LT1007X/883B	1143-13
	Miller	MTI1007	4872-26
	National	DAC1007	953-42
		DAC1007C	953-43
	Telefunken	TEA1007	1219-4
	TI	LT1007AC	1138-21
		LT1007AM	1132-83
		LT1007C	1139-41
		LT1007M	1132-84
	TRW-LSI	TDC1007	645-7
			917-31
			917-32
		1007PIC	4893-27
10075	**LSI Logic**	**LCA10075**	⋆ **4270**
			4053-34
		LRH10075	4052-29
10077	IKON	10077	4860-17
		10077NSC	4863-23
1008	AD	ADSP1008	644-92
		ADSP1008A	⋆ **2450**
			604-77
		ADSP1008AJ	604-78
		ADSP1008AK	604-79
		ADSP1008AS	604-80
		ADSP1008AT	604-81
	AT&T	**LB1008AE**	⋆ **2506**
			1194-66
	Exar	**XR1008**	⋆ **2602**
			1195-53
	LinearTech	LT1008C	1142-14
		LT1008M	1142-15
	National	DAC1008	954-39
		DAC1008C	954-40
	PMI	**PM1008A**	⋆ **2970**
			1142-16
		PM1008G	⋆ **2970**
			1142-17
	Sharp	LZ1008AD	1108-49
		LZ1008AM	1106-55
	TRW-LSI	TDC1008	644-93
10083	IKON	10083	4892-36
10084	IKON	10084	4885-47
10085	IKON	10085	4857-37
10087	IKON	10087	4860-21
10088	IKON	10088	4882-16
100888	**TI**	**TIE100888**	⋆ **3226**
			649-131
10089	IKON	10089	4891-26
100890	**TI**	**TIE100890**	⋆ **3226**
			650-111
100897	**TI**	**TIE100897**	⋆ **3226**
			649-124
1009	AD	ADSP1009	644-95
		ADSP1009A	⋆ **2450**
			604-82
		ADSP1009AJ	603-130
		ADSP1009AK	603-131
		ADSP1009AS	603-132
		ADSP1009AT	603-133
	AT&T	lb1009be	1200-15
		LB1009AE	1200-16
		LB1009BE	1200-17
	ITT	TEA1009	1122-100
		UAA1009	1118-126
	LinearTech	LT1009C-2	1225-110
		LT1009M-2	1225-111
	LogicDev	LMA1009	644-96
		LMA1009C	603-136
			(Continued)

Base Number	Source	Device	Page-Line
1009	LogicDev		(Cont'd)
		LMA1009M	603-137
	SGS	LB1009	1198-93
	TI	LT1009	1227-21
		LT1009M	1225-148
	TRW-LSI	TDC1009	644-97
10090	IKON	10090	4886-26
10091	IKON	10091	4860-20
10092	IKON	10092	4848-1
100951	Motorola	MC100951	649-128
101	AD	AD101A	1130-13
			1153-25
	Brooktree	BT101	882-85
			949-13
	Burr-Brown	**INA101**	⋆ **2537**
			⋆ **2545**
			1102-107
		OPA101AM	⋆ **2533**
			1145-21
		OPA101BM	⋆ **2533**
			1143-44
		REF101	⋆ **2540**
			1226-119
		REF101J	⋆ **2540**
			1226-94
		REF101S	⋆ **2540**
			1226-95
		XTR101	⋆ **2538**
			1105-17
		XTR101 DIE	⋆ **2538**
			1199-147
	Cherry	CS101A	999-28
	Fairchild	μA101AM	1153-27
		μA101M	1161-11
		FVG101	949-14
		SSI101A	887-76
	GE/RCA	**CA101**	⋆ **2645**
			1158-34
	IntSolutions	RL101	4856-17
	IoInc	IoVME 101	4837-12
	LinearTech	LM101A	1130-14
			1153-29
		LM101X	1156-12
		LM101X/883B	1156-13
	MicroPwr	MPINA101A	1139-34
		MPINA101S	1144-14
	Motorola	**LM101A**	⋆ **2919**
			1130-15
			1153-30
	National	LM101	1161-12
		LM101A	1130-16
			1153-32
	Raytheon	LM101A	1130-17
			1153-34
	SGS	LM101A	1153-13
	Siemens	HKZ101	1221-93
	SiliconG	SG101A	1130-18
			1153-35
	TeledyneC	CSH101A	1228-93
	Thomson	LM101A	1153-15
	VTC	**VM101**	⋆ **3375**
			887-95
	WinSystems	MCM-P101	4877-1
101KC30			
	Brooktree	BT101KC30	882-86
1010	**AD**	**ADSP1010A**	⋆ **2450**
			604-83
		ADSP1010AJ	604-84
		ADSP1010AK	604-85
		ADSP1010AS	604-86
		ADSP1010AT	604-87
		ASDP1010	644-102
	Dallas	DS1010	691-75
	Exar	**XR1010**	⋆ **2602**
			1195-44
			1228-140
	HybridSys	HS1010	603-149
	LinearTech	LT1010C	1102-48
			¶ 430-12
			¶ 430-5
		LT1010M	1102-49
			¶ 430-12
			¶ 430-5
	LogicDev	LMA1010	644-104
			¶ 406-22
			(Continued)

Base Number	Source	Device	Page-Line
1010	LogicDev		(Cont'd)
		LMA1010C	604-99
			¶ 406-22
		LMA1010M	604-100
			¶ 406-22
	Micom Int	NI1010A	4880-7
	MicroPwr	MP1010	644-105
		MP1010C	657-131
	SBE	1010	4813-2
	Signetics	TDA1010A	1117-111
	Siliconix	SI1010	1104-12
	TI	**TACT1010-65**	⋆ **3226**
			603-145
		THCT1010-100	⋆ **3226**
			603-152
		THCT1010-140	603-146
	TRW-LSI	TDC1010	644-106
	Weitek	WTL1010C	692-102
		WTL1010M	692-103
	Western	WD1010A	887-7
10100	**LSI Logic**	**LCA10100**	⋆ **4270**
			4053-35
		LRH10100	4052-30
	Motorola	MC10100	648-34
	Signetics	**10100**	⋆ **3021**
			648-36
10101	Hitachi	HD10101	648-51
	Motorola	MC10101	648-54
	Signetics	**10101**	⋆ **3021**
			648-56
10102	Hitachi	HD10102	648-26
	Motorola	MC10102	648-29
	Signetics	**10102**	⋆ **3021**
			648-31
10103	Motorola	MC10103	648-5
	Signetics	**10103**	⋆ **3021**
			648-7
10104	Fairchild	HD10104	647-116
	Hitachi	HD10104	647-117
	Motorola	MC10104	647-120
	Signetics	**10104**	⋆ **3021**
			647-122
10105	Hitachi	HD10105	648-44
	Motorola	MC10105	648-47
	National	DM10105	648-49
	Signetics	**10105**	⋆ **3021**
			648-50
10106	Hitachi	HD10106	648-20
	Motorola	MC10106	648-23
	Signetics	**10106**	⋆ **3021**
			648-25
10107	Hitachi	HD10107	648-89
	Motorola	MC10107	648-92
	Signetics	**10107**	⋆ **3021**
			648-94
10108	**Signetics**	**10108**	⋆ **3021**
			647-115
10109	Hitachi	HD10109	648-37
	Motorola	MC10109	648-41
	Signetics	**10109**	⋆ **3021**
			648-43
1011	**AT&T**	**LB1011AB**	⋆ **2508**
			1192-11
	LinearTech	LT1011AC	1109-14
		LT1011AM	1109-15
		LT1011C	1109-27
		LT1011M	1109-28
	National	LM1011	1127-40
	SGS	LB1011	1198-89
	Signetics	TDA1011	1117-62
	TI	LT1011AC	1109-13
		LT1011AM	1109-29
		LT1011C	1109-26
		LT1011M	1109-30
	TRW-LSI	TDC1011	646-68
			1395-96
10110	Hitachi	HD10110	647-125
	Motorola	MC10110	647-129
	Signetics	**10110**	⋆ **3021**
			648-2
10111	Hitachi	HD10111	648-8
	Motorola	MC10111	648-12
			¶ 423-26
	Signetics	**10111**	⋆ **3021**
			648-15

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
10113	Motorola	MC10113	648-82
	Signetics	**10113**	★ **3021**
			648-84
10114	Motorola	MC10114	649-91
	Signetics	**10114**	★ **3021**
			649-98
10115	Motorola	MC10115	649-107
			¶ 405-12
	Signetics	**10115**	★ **3021**
			649-109
10116	Hitachi	HD10116	649-88
	Motorola	MC10116	649-92
			¶ 405-12
	National	DM10116	649-97
	Signetics	**10116**	★ **3021**
			649-99
10117	Hitachi	HD10117	648-69
	Motorola	MC10117	648-72
	Signetics	**10117**	★ **3021**
			648-74
10118	Hitachi	HD10118	648-57
	Motorola	MC10118	648-60
	Signetics	**10118**	★ **3021**
			648-62
10119	Hitachi	HD10119	648-63
	Motorola	MC10119	648-66
	Signetics	**10119**	★ **3021**
			648-68
1012	AD	ADSP1012	644-56
		ADSP1012A	★ **2450**
			602-117
		ADSP1012AJ	604-30
		ADSP1012AK	604-31
		ADSP1012AS	604-32
		ADSP1012AT	604-33
	AT&T	**LB1012AD**	★ **2510**
			1192-12
	LinearTech	LT1012C	1139-14
		LT1012M	1139-37
	PMI	**PM1012A**	★ **2970**
			1139-13
		PM1012G	★ **2970**
			1139-21
	TRW-LSI	TDC1012	645-66
10121	Hitachi	HD10121	648-75
	Motorola	MC10121	648-78
	Signetics	**10121**	★ **3021**
			648-80
10123	Motorola	MC10123	647-88
			¶ 423-26
	Signetics	**10123**	★ **3021**
			647-89
10124	Hitachi	HD10124	649-57
	Motorola	MC10124	649-60
			¶ 405-12
	Signetics	**10124**	★ **3021**
			649-62
10125	Hitachi	HD10125	649-50
	Motorola	MC10125	649-53
			¶ 405-12
	Signetics	**10125**	★ **3021**
			649-55
10128	Motorola	MC10128	647-85
			¶ 405-12
10129	**LSI Logic**	**LCA10129**	★ **4270**
			4053-36
		LRH10129	4052-31
	Motorola	MC10129	649-103
			¶ 405-12
	Signetics	10129	649-104
1013	AT&T	LB1013AD	1131-67
	Dallas	DS1013	691-74
	LinearTech	LT1013AC	1170-42
		LT1013AM	1170-43
		LT1013C	1171-30
		LT1013M	1171-31
	Signetics	TDA1013A	1117-63
	Thomson	TEB1013	1006-10
10130	Hitachi	HD10130	648-101
	Motorola	MC10130	648-105
	Signetics	**10130**	★ **3021**
			648-107
10131	Hitachi	HD10131	647-93
	Motorola	MC10131	647-97
	Signetics	**10131**	★ **3021**
			647-101
10132	Hitachi	HD10132	648-111
	Motorola	MC10132	648-112
	Signetics	**10132**	★ **3021**
			648-113
10133	Hitachi	HD10133	648-116
	Motorola	MC10133	648-117
	Signetics	**10133**	★ **3021**
			648-121
10134	Hitachi	HD10134	648-108
	Motorola	MC10134	648-109
	Signetics	**10134**	★ **3021**
			648-110
10135	Motorola	MC10135	647-112
	Signetics	**10135**	★ **3021**
			647-114
10136	Hitachi	HD10136	647-54
	Motorola	MC10136	647-57
	Signetics	**10136**	★ **3021**
			647-58
10137	Motorola	MC10137	647-61
	Signetics	**10137**	★ **3021**
			647-62
10138	Motorola	MC10138	647-59
10139	**Motorola**	**MCM10139**	★ **2918**
			648-127
			1316-16
1014	AT&T	LS1014AB	1197-74
	Fairchild	LM1014	1004-1
		LM1014A	1004-2
	LinearTech	LT1014AC	1182-27
		LT1014AM	1182-28
		LT1014C	1182-35
		LT1014M	1182-36
	National	LM1014-2	1004-13
	Supertex	HV1014	911-76
	TRW-LSI	TDC1014	644-141
			916-22
			916-23
		1014PIC	4893-25
	Western	WD1014	887-108
			887-109
			982-18
10141	Motorola	MC10141	649-43
			1393-110
	Signetics	**10141**	★ **3021**
			649-45
			1394-2
10143	**Motorola**	**MCM10143**	★ **2918**
			648-130
			1347-33
			¶ 405-5
10144	**Motorola**	**MCM10144**	★ **2918**
			648-139
			1348-74
10145	Hitachi	HD10145	648-131
			1347-48
	Motorola	**MCM10145**	★ **2918**
			648-133
			1347-50
	Signetics	10145	648-135
			1347-51
10146	**Motorola**	**MCM10146**	★ **2918**
			648-148
			1351-39
10147	Hitachi	HD10147	648-137
			1348-54
	Motorola	**MCM10147**	★ **2918**
			648-138
			1348-55
10148	Hitachi	HD10148	648-136
			1348-43
	Motorola	**MCM10148**	★ **2918**
			1348-42
10149	**Motorola**	**MCM10149**	★ **2918**
			648-128
			1316-62
		MCM10149-10	
			★ **2918**
			1316-55
		MCM10149-25	
			★ **2918**
			1316-63
		MCM10149A	★ **2918**
			1316-59
10149			(Cont'd)
	Signetics	**10149**	★ **3021**
			★ **3185**
			648-129
			1316-61
		10149A	★ **3021**
			★ **3185**
			1316-57
1015	AD	HDD1015	645-60
			955-32
		HDD1015C	955-33
		HDD1015M	955-34
		HDS1015E	951-12
		HDS1015EM	951-13
	Exar	**XR1015**	★ **2601**
			1195-57
			1221-51
			¶ 438-3
	GIM	AY3-1015D	1011-35
	Signetics	TDA1015	1117-64
10152	Motorola	MCM10152	648-140
			1348-73
10153	Motorola	MC10153	648-118
10154	Motorola	MC10154	647-51
10155	Signetics	10155	648-126
			1347-32
10158	Motorola	MC10158	649-30
	Signetics	**10158**	★ **3021**
			649-32
10159	Motorola	MC10159	649-26
	Signetics	**10159**	★ **3021**
			649-27
1016	AD	ADSP1016	644-67
		ADSP1016A	★ **2450**
			602-118
		ADSP1016AJ	604-46
		ADSP1016AK	604-47
		ADSP1016AS	604-48
		ADSP1016AT	604-49
	Exar	**XR1016**	★ **2601**
			1195-58
			1221-52
	LinearTech	LT1016C	1110-11
		LT1016M	1110-10
	Motorola	**UAA1016B**	★ **2933**
			1230-124
	NationalInst	NB-M1016	4846-8
	Sharp	LZ1016AD	1108-60
		LZ1016AM	1107-51
	Supertex	HV1016	911-78
	TRW-LSI	TDC1016	645-50
			645-59
			645-61
		TDC1016-10	951-11
		TDC1016-8	954-21
		TDC1016-9	953-18
	Weitek	WTL1016	644-83
1016LC4			
	National	PAL1016LC4	4077-64
1016LC8			
	National	PAL1016LC8	4077-72
1016LD4			
	National	PAL1016LD4	4077-66
1016LD8			
	National	PAL1016LD8	4077-74
1016P8	National	PL1016P8C	4071-46
1016RC4			
	National	PAL1016RC4	4077-68
1016RC8			
	National	PAL1016RC8	4078-1
1016RD4			
	National	PAL1016RD4	4077-70
1016RD8			
	National	PAL1016RD8	4078-3
10160	Hitachi	HD10160	649-116
	Motorola	MC10160	649-119
	Signetics	**10160**	★ **3021**
			649-121
10161	Hitachi	HD10161	647-71
	Motorola	MC10161	647-74
	Signetics	**10161**	★ **3021**
			647-76
10162	Hitachi	HD10162	647-65
	Motorola	MC10162	647-68
	Signetics	**10162**	★ **3021**
			647-70
10163	Motorola	MC10163	649-71
			982-25
10164	Hitachi	HD10164	649-33
	Motorola	MC10164	649-36
	Signetics	**10164**	★ **3021**
			649-38
10165	Motorola	MC10165	649-112
	Signetics	**10165**	★ **3021**
			649-114
10166	Motorola	MC10166	647-33
10168	Motorola	MC10168	648-114
1017	AT&T	LB1017AC	902-65
	Basicon	1017	4895-13
	Burr-Brown	PWR1017	1221-6
	LinearTech	LT1017C	1111-10
		LT1017M	1111-11
	National	LM1017	978-109
			1124-36
	Signetics	**TEA1017**	★ **3128**
			1001-16
10170	Motorola	MC10170	649-115
10171	Motorola	MC10171	647-82
	Signetics	**10171**	★ **3021**
			647-84
10172	Motorola	MC10172	647-78
	Signetics	**10172**	★ **3021**
			647-80
10173	Motorola	MC10173	648-124
	Signetics	**10173**	★ **3021**
			648-125
10174	Hitachi	HD10174	649-18
	Motorola	MC10174	649-21
	Signetics	**10174**	★ **3021**
			649-23
10175	Hitachi	HD10175	648-95
	Motorola	MC10175	648-98
	Signetics	**10175**	★ **3021**
			648-100
10176	Motorola	MC10176	647-105
	Signetics	**10176**	★ **3021**
			647-107
10177	Motorola	MC10177	649-46
10178	Motorola	MC10178	647-52
10179	Hitachi	HD10179	647-4
	Motorola	MC10179	647-6
	Signetics	**10179**	★ **3021**
			647-8
1018	IndComp	1018PC	4850-17
	LinearTech	LT1018C	1111-12
		LT1018M	1111-13
	TRW-LSI	TDC1018	645-48
			949-32
			¶ 422-35
		TDC1018-1	947-22
			¶ 422-35
10180	Hitachi	HD10180	647-15
	HoneywellSPT		
		HDAC10180A	★ **2997**
			★ **2999**
			645-52
			950-12
		HDAC10180B	
			★ **2997**
			★ **2999**
			950-10
	Motorola	MC10180	647-17
	Signetics	**10180**	★ **3021**
			647-19
10181	Hitachi	HD10181	647-25
	HoneywellSPT		
		HDAC10181A	★ **2997**
			645-53
			950-13
		HDAC10181B	
			★ **2997**
			645-49
			950-11
	Motorola	MC10181	647-27
	Signetics	**10181**	★ **3021**
			647-29
10182	Motorola	MC10182	647-20
10183	Motorola	MC10183	647-30
10186	Motorola	MC10186	647-109
10188	Motorola	MC10188	647-40
	Signetics	**10188**	★ **3021**
			647-41

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
10189	Motorola	MC10189	647-43
	Signetics	**10189**	⋆ **3021**
			647-44
1019	AT&T	LB1019AB	1193-47
	LinearTech	LT1019C-10	1227-9
		LT1019C-2	1225-112
		LT1019C-5	1226-53
		LT1019M-10	1227-10
		LT1019M-2	1225-113
		LT1019M-5	1226-54
	National	LM1019	1124-125
	TRW-LSI	TDC1019	645-11
			925-33
			¶ 421-2
		TDC1019-1	645-12
			925-34
			¶ 421-2
1019E1	TRW-LSI	TDC1019E1C	4893-18
10190	Motorola	MC10190	649-47
10191	Motorola	MC10191	649-63
10192	Motorola	MC10192	647-90
	Signetics	**10192**	⋆ **3021**
			647-91
10193	Motorola	MC10193	649-72
10195	Motorola	MC10195	647-45
10197	Motorola	MC10197	647-123
10198	Motorola	MC10198	649-39
102	Amperex	BGD102	1123-84
		BGD102E	1123-85
	Anasco	44-102	4862-44
	Brooktree	BT102	882-87
			940-9
	Burr-Brown	**INA102**	⋆ **2537**
			1102-89
		ISO102	⋆ **2538**
			1102-28
		OPA102AM	⋆ **2533**
			1145-22
		OPA102BM	⋆ **2533**
			1143-45
		PGA102	⋆ **2537**
			1103-16
		PGA102A	⋆ **2537**
			1143-23
		PGA102B	⋆ **2537**
			1141-14
		PGA102S	⋆ **2537**
			1141-15
	Cherry	CS102	692-114
			1119-12
	Codar	102	4868-1
			4868-11
	Comlinear	CLC102	1104-69
	Ferranti	ZNP102	1222-98
	MilerTron	PDC102	4813-16
	Motorola	MMBTS102	1229-43
	National	LM102	1128-36
	Siemens	TBB102	1190-95
	TI	TC102	1222-56
	ThirdDomain		
		RSS102	1124-121
			¶ 436-12
		RSS102C	1127-14
			¶ 436-12
		RSS102M	1127-15
			¶ 436-12
	WinSystems	LPM102	4815-15
		MCM-P102	4876-59
		MCM-S102	4875-37
		MCM102	4815-12
	Xycom	XVME102	4889-23
1020	**AT&T**	**LB1020AF**	⋆ **2512**
			1198-13
	Basicon	1020	4893-28
	Exar	**XR1020**	⋆ **2601**
			1195-45
	ITT	SAA1020	1126-34
	LinearTech	LT1020C	1222-119
		LT1020M	1222-120
	National	DAC1020	953-16
		DAC1020C	953-17
	SBE	1020	4811-33
	SGS	LB1020	1198-8
	Signetics	TDA1020	1117-112
	Siliconix	SI1020	1104-13
	TRW-LSI	TDC1020	925-39

Base Number	Source	Device	Page-Line
10200	Samsung	KG10200	4059-49
10209	Hitachi	HD10209	648-38
1021	**AT&T**	**LB1021AD**	⋆ **2512**
			1198-14
	LinearTech	LT1021-10	1226-83
		LT1021-5	1226-7
		LT1021-7	1226-79
	National	ADC1021C	927-35
		DAC1021	954-19
		DAC1021C	954-20
	TRW-LSI	TDC1021	644-134
			916-2
			916-3
10210	Hitachi	HD10210	647-126
	Motorola	MC10210	647-130
	Signetics	**10210**	⋆ **3021**
			648-16
10211	Hitachi	HD10211	648-9
	Motorola	MC10211	648-13
	Signetics	**10211**	⋆ **3021**
			648-17
10212	Motorola	MC10212	648-18
10216	Motorola	MC10216	649-93
			¶ 405-12
	Signetics	**10216**	⋆ **3021**
			649-100
1022	AT&T	LB1022AC	992-30
		LB1022BK	993-6
	LinearTech	LT1022AC	1144-8
		LT1022AM	1144-9
		LT1022C	1147-20
		LT1022M	1147-21
	National	DAC1022	955-9
		DAC1022C	955-10
	TRW-LSI	TDC1022	644-13
			¶ 402-3
1023	AT&T	LB1023AC	988-53
	LogicDev	L1023C	644-17
	NEC	μPC1023	1117-194
	Signetics	TDA1023	1230-126
	STI	**STEL1023**	⋆ **3209**
			888-86
	TRW-LSI	TDC1023	644-19
10230	Hitachi	HD10230	648-102
10231	Hitachi	HD10231	647-94
	Motorola	MC10231	647-98
	Signetics	**10231**	⋆ **3021**
			647-102
1024	AD	ADSP1024	644-86
		ADSP1024A	⋆ **2450**
			602-119
		ADSP1024AJ	604-71
		ADSP1024AK	604-72
		ADSP1024AS	604-73
			644-87
		ADSP1024AT	604-74
			644-88
	CharlesRiver		
		CM1024	4892-25
		DM1024	4892-24
		VCM1024	4889-21
		VEM1024	4889-29
	Dense-Pac	**DPS1024**	⋆ **2579**
			1384-79
			1384-89
			1385-64
			1387-35
		DPX1024	1384-80
	EG&G-Reticon		
		RL1024C	1222-33
		RL1024D	1222-13
		RL1024G	1222-34
		RL1024H	1222-35
		RL1024S	1222-36
		RL1024SF	1222-37
	LinearTech	LT1024AC	1170-23
		LT1024AM	1171-12
		LT1024C	1171-11
		LT1024M	1171-18
	NEC	μPC1024	1118-1
	NthGraphics		
		1024	4848-11
	Telefunken	TEA1024	1230-127
1024M1			
	Dense-Pac	**DPS1024M1**	⋆ **2580**
			1388-13

Base Number	Source	Device	Page-Line
10241	**Dense-Pac**	**DPS10241**	⋆ **2580**
			1388-14
10248	Dense-Pac	DPV10248	1335-56
1025	AD	HDS1025	951-3
		HDS1025M	951-4
	AT&T	LB1025AC	994-11
	Basicon	1025	4894-52
	Dense-Pac	**DPS1025**	⋆ **2579**
			1384-76
			1385-61
	TRW-LSI	TDC1025	645-10
			921-9
1025E1	TRW-LSI	TDC1025E1C	4893-15
1026	AT&T	LB1026AA	1200-11
		LB1026AB	1200-12
	Basicon	1026	4894-51
	CMD ASIC	**C1026**	⋆ **4215**
			4043-8
	Dense-Pac	**DPS1026**	⋆ **2579**
			1384-77
			1384-85
			1385-62
			1387-33
	NEC	μPC1026	1121-134
1027	AT&T	LB1027AA	1103-108
	Basicon	1027	4894-1
	Dense-Pac	**DPS1027**	⋆ **2579**
			1384-78
			1385-52
			1387-34
1028	AT&T	LB1028BB	1193-46
	LinearTech	LT1028AC	1139-16
		LT1028AM	1139-17
		LT1028C	1140-52
		LT1028M	1140-53
	NEC	μPC1028	1121-43
	TRW-LSI	TDC1028	646-87
			¶ 406-1
10280	Toko	TK10280	1121-98
10283	Toko	TK10283	1121-99
10287	Motorola	MC10287	647-22
1029	LinearTech	LT1029AC	1225-23
		LT1029AM	1225-24
		LT1029C	1225-25
		LT1029M	1225-26
	Signetics	TDA1029	1104-54
			1127-88
	TRW-LSI	TDC1029	644-137
			916-21
			916-40
103	AT&T	LBR103DB	1205-72
	Brooktree	BT103	882-88
			940-8
	Burr-Brown	OPA103	1132-34
		OPA103AM	1132-38
			1145-7
		OPA103BM	1132-36
			1144-52
		OPA103CM	1143-37
		OPA103DM	1143-35
	Comlinear	CLC103AI	1167-4
		CLC103AM	1102-74
			1130-92
			1131-2
			1136-26
	Ferranti	ZNP103	1222-99
	Motorola	MMBTS103	1229-44
	OEI	AH103J	1151-37
		AH103L	1148-40
		AH103S	1148-42
	Signetics	**PLS103**	⋆ **3155**
			4078-30
	TI	TC103	1222-74
		TGC103	⋆ **4314**
			4041-1
103KC30			
	Brooktree	BT103KC30	882-89
1030	AT&T	LB1030AC	1133-39
			1133-96
	LinearTech	LT1030C	985-46
		LT1030M	985-47
	Sharp	LZ1030M	1108-57
	TI	TMS1030	864-4
	Thomson	TEA1030	1124-96
	TRW-LSI	TDC1030	1305-13

Base Number	Source	Device	Page-Line
10301	Enterprise	10301	4871-34
10303	Enterprise	10303	4870-33
1031	AT&T	LB1031AC	1133-40
			1133-97
			1155-48
	LinearTech	LT1031	1226-141
	NEC	μPC1031	1126-47
10311	Toko	TK10311	1120-97
10318	**Motorola**	**MC10318**	⋆ **2938**
			944-11
		MC10318-9	⋆ **2938**
			942-31
		MC10318C-6	⋆ **2938**
			948-21
		MC10318C-7	⋆ **2938**
			947-28
10319	**Motorola**	**MC10319**	⋆ **2937**
			645-2
			925-30
1032	AT&T	LB1032AC	1130-135
			1133-41
			1133-98
			1155-49
		LB1032BC	1130-97
			1133-42
			1133-99
			1155-50
	CMD ASIC	**C1032**	⋆ **4215**
			4043-12
	LinearTech	LT1032	985-29
	NEC	μPC1032	1118-2
	Sharp	LZ1032AD	1108-62
		LZ1032AM	1106-39
	Signetics	SAF1032	1122-78
	TRW-LSI	TDC1032	602-120
	Weitek	WTL1032	645-88
		WTL1032A	656-23
		WTL1032AC	656-24
			888-55
		WTL1032AM	656-25
			888-56
		WTL1032C	688-44
			888-57
		WTL1032M	688-45
			888-58
10320	**Motorola**	**MC10320**	⋆ **2938**
			940-33
10321	**Motorola**	**MC10321**	⋆ **2937**
			917-3
1033	LinearTech	LT1033C	1215-6
		LT1033M	1215-7
	Miller	MTI1033	4872-25
	TRW-LSI	TDC1033	645-76
			¶ 402-3
	Weitek	WTL1033	645-89
		WTL1033A	656-26
		WTL1033AC	656-21
			888-59
		WTL1033AM	656-22
			888-60
		WTL1033C	688-42
			888-61
		WTL1033M	688-43
			888-62
1034	AT&T	LB1034AC	1133-100
			1133-43
			1133-64
			1155-51
	Ferranti	ZN1034E	1201-78
	LinearTech	LT1034	1225-48
	TRW-LSI	TDC1034	644-133
			645-33
			940-27
			¶ 419-4
			¶ 422-35
1035	AT&T	LB1035AC	1133-101
			1133-44
			1133-95
			1149-33
			1155-52
	LinearTech	LT1035	1212-109
	National	LM1035	1116-62
10350	Toko	TK10350	1121-117
1036	Ferranti	ZN1036D	1201-29
		ZN1036E	1201-30
	LinearTech	LT1036C	1213-7

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
1036	LinearTech		(Cont'd)
		LT1036M	1213-8
	National	LM1036	1118-97
10360	Toko	TK10360	1118-58
1037	LinearTech	LT1037AC	1132-69
		LT1037AM	1132-70
	National	LM1037	1127-86
	Siemens	TDA1037	1117-110
	TI	LT1037AC	1138-22
		LT1037AM	1132-85
		LT1037C	1139-42
		LT1037M	1132-86
1038	LinearTech	LT1038C	1213-42
		LT1038M	1213-43
	National	LM1038	1127-87
1039	Basicon	1039	4894-53
	LinearTech	LT1039C	994-6
		LT1039M	994-7
	Signetics	SAF1039	1122-79
		TEA1039	⋆ **3134**
			1219-121
104	Amperex	BGD104	1123-86
		BGD104E	1123-87
	AnalogSys	MK104	1219-110
	Brooktree	BT104	957-3
	Burr-Brown	**INA104**	⋆ **2537**
			1102-108
		OPA104AM	1132-16
			1148-1
		OPA104BM	1132-9
			1144-48
		OPA104CM	1132-3
			1144-46
	Comlinear	CLC104AI	1104-70
		CLC104AM	1104-71
	LSIComp	**RDD104**	⋆ **2867**
			613-103
			692-3
	Motorola	MVME104	4891-7
	National	CIM104	4846-35
		LM104	1215-47
	OKI	MSA104	1103-50
	OEI	AH104J	1151-38
		AH104L	1148-41
		AH104S	1148-43
	SGS	M104	1125-90
	SiliconG	SG104	1215-49
	TI	TC104	1222-76
	Thomson	LM104	1215-52
	VTC	**VM104**	⋆ **3375**
			887-48
		VM104L	⋆ **3375**
			887-49
	Weitek	WTL104A	656-14
	WinSystems	MCM-S104	4875-54
1040	Ferranti	ZN1040E-RED	663-148
	LinearTech	LTC1040C	1111-6
		LTC1040M	1111-7
	National	LM1040	1118-99
10400	Samsung	KG10400	4059-50
10408	GE Semi	IGC10408	4047-20
1041	Basicon	1041	4893-37
	LinearTech	LTC1041	1220-1
	Thomson	TDA1041	1004-21
10411	Toko	TK10411	1118-59
10414	Hitachi	HM10414	1348-71
		HM10414-1	1348-70
	National	DM10414	648-141
			1348-75
		DM10414A	1348-72
10415	AMD	AM10415-10	1351-26
		AM10415A	1351-31
			1351-37
		AM10415M	1351-47
		AM10415SA	1351-29
			1351-32
	Fujitsu	MBM10415AH	1351-33
	Motorola	**MCM10415**	⋆ **2918**
			648-149
		MCM10415-15	
			⋆ **2918**
			1351-30
	National	DM10415	649-1
			1351-45
		DM10415A	1351-34
	Signetics	10415	649-2

(Continued)

Base Number	Source	Device	Page-Line
10415	Signetics		(Cont'd)
		10415A	1351-35
		10415B	1351-25
1042	Basicon	1042	4893-38
	LinearTech	LTC1042C	1109-9
		LTC1042M	1109-10
	Motorola	**SAA1042**	⋆ **2935**
			1004-46
		SAA1042A	⋆ **2935**
			1004-45
	National	LM1042	1221-72
	NEC	μPC1042	1217-32
	Plessey	TAB1042	1186-21
	TRW-LSI	TDC1042	645-77
			¶ 402-3
10420	Toko	TK10420	1121-79
10422	Fujitsu	MBM10422A-5	648-142
			1349-17
		MBM10422A-7	648-143
			1349-21
	Hitachi	HM10422	1349-36
		HM10422-7	1349-22
	Motorola	MCM10422-10	1349-29
		MCM10422-15	1349-45
	National	DM10422	648-146
			1349-46
		DM10422A	1349-30
	NEC	μPB10422-10	1349-31
		μPB10422-7	1349-23
	Signetics	10422	1349-50
		10422A	1349-47
		10422B	1349-32
10423	Fujitsu	MBM10423LL-6	
			648-144
1043	Basicon	1043	4895-9
	LinearTech	LTC1043	1102-90
			¶ 428-6
	LogicDev	LMA1043	644-28
		LMA1043C	603-150
		LMA1043M	603-151
	Plessey	TAB1043	1186-22
	TRW-LSI	TDC1043	644-107
1044	LinearTech	LTC1044C	1229-124
		LTC1044M	1229-125
	TI	LTC1044M	1230-15
	TRW-LSI	TDC1044	916-7
1045	**CMD ASIC**	**C1045**	⋆ **4215**
			4043-13
	LinearTech	LTC1045C	996-1
		LTC1045M	996-2
	Microcosm	1045	4850-9
1046	**AT&T**	**LC1046AG**	⋆ **2489**
			1194-108
		LC1046AM	⋆ **2489**
			1194-81
	TRW-LSI	TDC1046	644-140
			925-26
1047	Siemens	TDA1047	1121-55
	TRW-LSI	TDC1047	645-1
			917-5
1047E1	TRW-LSI	TDC1047E1C	4893-16
10470	AMD	AM10470AC	1359-36
		AM10470AM	1359-40
		AM10470C	1359-49
		AM10470M	1359-54
		AM10470SAC	1359-23
		AM10470SAM	1359-28
	Fujitsu	MBM10470A-10	
			649-9
			1359-17
		MBM10470A-15	
			649-10
			1359-24
		MBM10470A-20	
			649-11
			1359-29
		MBM10470A-5	649-5
		MBM10470A-7	649-12
	Hitachi	HM10470	1359-37
		HM10470-1	1359-25
	National	DM10470	649-13
			1359-38
		DM10470A	649-14
			1359-26
	NEC	μPB10470-10	1359-18
		μPB10470-15	1359-27

(Continued)

Base Number	Source	Device	Page-Line
10470			(Cont'd)
	Signetics	10470	1359-50
		10470A	1359-39
10474	AMD	AM10474AC	1352-17
		AM10474AM	1352-22
		AM10474C	1352-33
		AM10474M	1352-37
	Fujitsu	MBM10474A-10	
			1352-11
		MBM10474A-15	
			1352-6
		MBM10474A-5	
			⋆ **2616**
			1351-93
		MBM10474A-7	
			⋆ **2616**
			1352-3
		MB10474A-15	1352-18
	Hitachi	HM10474	1352-19
		HM10474-10	1352-7
	National	DM10474	1352-34
		DM10474A	1352-20
	NEC	μPB10474-10	1352-12
		μPB10474-15	1352-21
		μPB10474-8	1352-5
	Signetics	10474	649-3
			649-6
		10474A	649-4
			649-7
1048	Siemens	TDA1048	1120-2
	Thomson	TDA1048	1120-3
	TRW-LSI	TDC1048	645-8
			918-1
			925-29
1048E1	TRW-LSI	TDC1048E1C	4893-17
1048X8	**Dense-Pac**	**DPV1048X8**	⋆ **2582**
			1335-58
10480	AMD	AM10480	1370-82
		AM10480A	1370-57
	Fujitsu	MBM10480-15	1370-54
		MBM10480-25	1370-83
		MBM10480A-10	
			1370-47
	Hitachi	HM10480	1370-84
		HM10480-15	1370-52
	Toko	TK10480	1121-80
10484	Fujitsu	MBM10484-15	649-15
			1361-29
		MBM10484A-10	
			⋆ **2617**
			649-16
			1360-84
		MBM10484A-8	649-17
	NEC	μPB10484-10	1360-85
		μPB10484-15	1361-30
10488	Dense-Pac	DPV10488	1335-59
1049	TRW-LSI	TDC1049	925-32
10490	Fujitsu	MBM10490-15	1382-78
		MBM10490-25	1381-53
10494	Hitachi	HM10494L	1370-78
105	Anasco	44-105	4862-53
	Brooktree	BT105	957-4
	Burr-Brown	**INA105**	⋆ **2537**
			1102-109
		INA105A	⋆ **2537**
			1102-64
		INA105B	⋆ **2537**
			1102-65
		INA105K	⋆ **2537**
			1102-66
		INA105U	⋆ **2537**
			1102-68
		OPA105	1132-35
		OPA105UM	⋆ **2545**
			1143-38
		OPA105V	⋆ **2545**
			1143-36
		OPA105W	⋆ **2545**
			1143-34
	Fairchild	μA105M	1214-73
	Motorola	MMBTS105	1229-45
		MVME105	4891-9
	National	LM105	1214-74
	OKI	MSA105	1103-51
	Siemens	TCA105	1229-68

(Continued)

Base Number	Source	Device	Page-Line
105			(Cont'd)
	Signetics	**PLS105**	⋆ **3155**
			4079-64
		PLS105A	⋆ **3155**
			⋆ **3157**
			4079-63
	SiliconG	SG105	1214-76
	SiliconSys	SSI105	887-39
	TI	**TGC105**	⋆ **4314**
			4041-2
	Thomson	LM105	1214-78
1050	National	DT1050	1122-133
	TI	TMS1050-6	1342-38
	Western	WD1050	886-70
10500	Motorola	MC10500	648-35
10501	Motorola	MC10501	648-55
10502	**Harris**	**HMR10502**	⋆ **2723**
			653-8
			1105-18
	Motorola	MC10502	648-30
10503	**Harris**	**HMR10503**	⋆ **2723**
			653-9
			1105-19
	Motorola	MC10503	648-6
10504	Motorola	MC10504	647-121
10505	Motorola	MC10505	648-48
10506	Motorola	MC10506	648-24
10507	Motorola	MC10507	648-93
10509	Motorola	MC10509	648-42
1051	National	DT1051	1122-114
10513	Motorola	MC10513	648-83
10514	Motorola	MC10514	649-94
10515	Motorola	MC10515	649-108
10516	Motorola	MC10516	649-95
10517	Motorola	MC10517	648-73
10518	Motorola	MC10518	648-61
10519	Motorola	MC10519	648-67
1052	LinearTech	LTC1052C	1137-19
		LTC1052M	1137-20
	National	DT1052	1122-131
10520	ILC-DDC	DRC10520	646-78
			1227-74
10521	Motorola	MC10521	648-79
10524	Motorola	MC10524	649-61
10525	Motorola	MC10525	649-54
1053	National	DT1053	1122-134
10530	Motorola	MC10530	648-106
10531	Motorola	MC10531	647-99
	Toko	TK10531	1118-61
10533	Motorola	MC10533	648-119
10535	Motorola	MC10535	647-113
10538	Motorola	MC10538	647-60
1054	LinearTech	LT1054C	1228-147
		LT1054M	1228-148
	National	DT1054	1122-115
	SGS	TDA1054M	1123-53
10541	Motorola	MC10541	649-44
			1394-1
	Toko	TK10541	1118-24
1055	LinearTech	LT1055AC	1142-26
		LT1055AM	1142-27
		LT1055C	1144-35
		LT1055M	1144-36
	National	DT1055	1122-132
10553	Motorola	MC10553	648-120
10558	Motorola	MC10558	649-31
1056	**AT&T**	**LH1056A**	
		TYPE	⋆ **2513**
			1198-87
			1227-31
	LinearTech	LT1056AC	1142-28
		LT1056AM	1142-29
		LT1056C	1144-37
		LT1056M	1144-38
	National	DT1056	1122-135
10560	Motorola	MC10560	649-120
10561	Motorola	MC10561	647-75
10562	Motorola	MC10562	647-69
	Toko	TK10562	1118-62
10563	Motorola	MC10563	649-73
			982-26
10564	Motorola	MC10564	649-37
10565	Motorola	MC10565	649-113
10568	Motorola	MC10568	648-115
1057	LinearTech	LT1057AC	1171-34
		LT1057AM	1171-35

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
1057	LinearTech		(Cont'd)
		LT1057C	1172-43
		LT1057M	1172-44
	National	DT1057	1122-136
	Signetics	SAA1057	1120-117
			1191-7
10570	Toko	TK10570	1118-60
10571	Motorola	MC10571	647-83
10572	Motorola	MC10572	647-79
10574	Motorola	MC10574	649-22
10575	Motorola	MC10575	648-99
10576	Motorola	MC10576	647-106
10578	Motorola	MC10578	647-53
10579	Motorola	MC10579	647-7
1058	**CMD ASIC**	**C1058**	⋆ **4215**
			4043-16
	LinearTech	LT1058AC	1171-36
		LT1058AM	1171-37
		LT1058C	1172-45
		LT1058M	1172-46
10580	Motorola	MC10580	647-18
10581	Motorola	MC10581	647-28
10582	Motorola	MC10582	647-21
10586	Motorola	MC10586	647-110
1059	LinearTech	LTC1059C	1219-32
		LTC1059M	1219-33
10590	Motorola	MC10590	649-48
10591	Motorola	MC10591	649-64
10593	Motorola	MC10593	649-74
			982-27
10594	Motorola	MC10594	649-87
10595	Motorola	MC10595	647-46
10597	Motorola	MC10597	647-124
106	AnalogSys	MA106	1117-181
	Brooktree	BT106	947-21
	Burr-Brown	**INA106B**	⋆ **2537**
			1102-62
		INA106K	⋆ **2537**
			1102-63
		ISO106	⋆ **2538**
			1102-29
		OPA106U	1132-17
			1143-33
		OPA106V	⋆ **2545**
			1132-10
			1143-32
		OPA106W	⋆ **2545**
			1132-5
			1143-31
	Motorola	MVME106	4891-8
	National	LM106	1109-37
	SGS	M106	1127-20
	Stantel-STC	TEL106	1198-35
	Telefunken	U106	1230-128
	TI	TC106-1	1222-80
106KC30			
	Brooktree	BT106KC30	882-90
1060	AT&T	LB1060AB	1198-86
	Ferranti	ZN1060E	1216-46
	IPS	IP1060A	1215-113
		IP1060B	1215-114
		TDA1060	1216-100
	LinearTech	LTC1060C	1219-34
	NEC	μPC1060	1225-138
	Signetics	TEA1060	1198-32
10600	Samsung	KG10600	4060-1
	Toko	TK10600	1121-74
1061	**AT&T**	**LH1061A**	
		TYPE	⋆ **2514**
			1198-88
			1227-32
		LH1061AB	⋆ **2514**
			1227-33
	LinearTech	LTC1061C	1219-35
		LTC1061M	1219-36
	Signetics	SAA1061	978-39
		TEA1061	1198-33
10610	**Harris**	**HMM10610**	⋆ **2723**
			653-10
	Motorola	MC10610	648-1
	Toko	TK10610	1121-97
10611	Enterprise	10611	4875-33
	Motorola	MC10611	648-14
10612	Motorola	MC10612	648-19
10616	Motorola	MC10616	649-96

Base Number	Source	Device	Page-Line
1062	LinearTech	LTC1062C	1219-37
			¶ 428-2
		LTC1062M	1219-38
			¶ 428-2
	Telefunken	TDA1062S	1122-2
			¶ 434-35
10630	Toko	TK10630	1120-126
10631	Fairchild	F10631	647-92
	Motorola	MC10631	647-100
1064	Signetics	SAA1064	978-81
	Weitek	WTL1064	645-80
			888-38
		WTL1064A	656-15
			888-39
10640	Toko	TK10640	1116-117
1065	Weitek	WTL1065	645-81
			888-40
		WTL1065A	656-16
			888-41
1066	Ferranti	ZN1066E	1216-47
			¶ 441-33
		ZN1066J	1216-48
			¶ 441-33
	Weitek	WTL1066	646-67
1067	**Signetics**	**TEA1067**	⋆ **3112**
			1198-34
	Microcosm	1067	4850-39
1068	Signetics	TEA1068	1199-145
	TRW-LSI	THC1068	645-9
			917-33
10687	Motorola	MC10687	647-23
1069	TRW-LSI	THC1069	925-31
107	Anasco	44-107	4862-18
	Brooktree	BT107	944-5
	LinearTech	LM107	1153-16
	Motorola	MVME107	4891-10
	National	LM107	1153-17
	SiliconG	SG107	1153-19
	Thomson	LM107	1153-22
1070	LinearTech	LT1070C	1218-73
			¶ 441-27
		LT1070M	1218-74
			¶ 441-27
	TI	LT1070	1225-4
		LT1070M	1218-75
		TMS1070	817-3
			863-120
1071	LinearTech	LT1071C	1218-71
		LT1071M	1218-72
	Microcosm	1071	4850-40
10710	Toko	TK10710	1121-75
1072	Hughes	HVGA1072	4050-3
	Signetics	TDA1072	1120-23
	Telefunken	TDA1072	1120-26
1073	Ironics	IV1073	4882-32
1074	Signetics	TDA1074A	1116-63
			1224-60
	Microcosm	1074	4850-41
1075	ITT	SAA1075	1124-129
10756	GE Semi	IGC10756	4047-21
1076	Sony	CXA1076K	922-1
10764	Enterprise	10764	4877-36
108	Brooktree	BT108	944-2
	ElecConServ		
		PC-108	4874-50
	Fairchild	μA108	1133-27
		μA108AM	1146-16
		μA108M	1152-21
		FVG108	944-3
	GE/Intersil	ICL108LN	1152-17
		LM108	1133-28
			1152-23
		LM108A	1146-18
	LinearTech	LM108	1152-24
		LM108A	1146-19
	LitMach	LMSBX108	4875-16
	MicroPwr	MP108	1152-25
		MP108A	1146-20
	Motorola	**LM108**	⋆ **2919**
			1133-29
			1152-27
		LM108A	⋆ **2919**
			1146-22
	National	CIM108	4846-36
		LM108	1133-30
			1152-29

(Continued)

Base Number	Source	Device	Page-Line
108	National		(Cont'd)
		LM108A	1146-24
		LM108AFRH	1146-25
	PMI	**PM108**	⋆ **2970**
			1133-35
			1152-31
		PM108A	⋆ **2970**
			1146-27
	Raytheon	LM108A	1133-37
	SiliconSys	SSI108	887-40
	TI	**TGC108**	⋆ **4314**
			4041-3
		TISP108A	1229-99
	Thomson	LM108	1133-38
			1152-32
		LM108A	1146-28
		LM108M	1152-33
	VTC	**VC108J**	⋆ **3373**
			645-41
		VC108K	⋆ **3373**
			645-43
		VC108S	⋆ **3373**
			645-42
		VM108	887-50
1080	AD	ADSP1080	644-39
		ADSP1080A	⋆ **2450**
			602-115
		ADSP1080AJ	604-18
		ADSP1080AK	604-19
		ADSP1080AS	604-20
		ADSP1080AT	604-21
	LinearTech	LT1080C	994-2
		LT1080M	994-3
	Signetics	**TEA1080**	⋆ **3113**
			1197-64
10800	Motorola	MC10800	647-24
			819-13
			861-121
			¶ 416-26
	Samsung	KG10800	4060-2
10801	Motorola	MC10801	861-125
			¶ 413-33
10804	Motorola	MC10804	861-122
10805	Motorola	MC10805	861-123
10806	Motorola	MC10806	861-127
10807	Motorola	MC10807	861-124
10808	Motorola	MC10808	861-126
10809	Enterprise	10809	4819-2
			4872-2
1081	AD	ADSP1081	644-40
		ADSP1081A	⋆ **2450**
			602-116
		ADSP1081AJ	604-12
		ADSP1081AK	604-13
		ADSP1081AS	604-14
		ADSP1081AT	604-15
	AT&T	LB1081AC	1226-5
		LB1081BC	1226-55
		LB1081CC	1226-77
		LB1081DC	1226-80
		LB1081EC	1226-81
	LinearTech	LT1081C	994-4
		LT1081M	994-5
10812	Enterprise	10812	4817-32
			4872-1
1082	**CMD ASIC**	**C1082**	⋆ **4215**
			4043-20
1083	Telefunken	TDA1083	1120-92
			¶ 434-33
			¶ 435-8
1085	**AT&T**	**LH1085AT**	⋆ **2515**
			1197-92
			1227-34
	Motorola	**TDA1085A**	⋆ **2936**
			1004-4
	Plessey	TDA1085A	1004-6
1087	Telefunken	TEA1087	1219-6
1088	LinearTech	LT1088	1220-8
			¶ 419-7
10888	Enterprise	10888	4833-20
109	Brooktree	BT109	882-91
	Fairchild	μA109M	1202-85
	Motorola	**LM109H**	⋆ **2926**
			1202-39
		LM109K	⋆ **2926**
			1202-88

(Continued)

Base Number	Source	Device	Page-Line
109			(Cont'd)
	National	LM109H	1202-42
			¶ 442-4
		LM109K	1202-91
			¶ 442-4
	SiliconG	SG109K	1202-102
		SG109T	1202-47
1090	LinearTech	LTC1090C	926-42
		LTC1090M	926-43
	Microcosm	1090	4847-63
10900	Motorola	MC10900	647-34
			861-132
10901	Motorola	MC10901	647-38
10902	Motorola	MC10902	647-37
			819-14
10904	Motorola	MC10904	649-84
			861-133
10905	Motorola	MC10905	649-75
1091	LinearTech	LTC1091C	926-44
		LTC1091M	926-45
	Miller	MTI-1091	4879-26
1092	Miller	MTI-1092	4879-28
	Microcosm	1092	4851-1
1093	Telefunken	TDA1093	1121-63
			¶ 434-35
10937	Rockwell	10937	883-66
1094	Telefunken	TDA1094	1121-4
10951	Motorola	MC10951	647-12
1096	Telefunken	U1096B	981-3
1099	Signetics	SAA1099	1119-124
11	AllenSys	FX11	4823-6
	Basicon	MC-11	4803-24
	Burr-Brown	**OPA11HT**	⋆ **2532**
			1159-46
		UAF11	1219-20
		UAF11H	1219-21
	Clearpoint	QRAM11	4867-38
	Datacube	VFIR 11	4884-15
	Dionics	DIG11-04-200F	1001-44
		DIG11-06-030	1001-37
		DIG11-06-150	1001-34
		DIG11-08-050	1001-39
	GENROCO	DHV11	4867-20
		STV11	4866-21
	ILC-DDC	SDAC11	971-38
	Intel	INTELLEC11-MODEL245	
			4709-3
	Interdesign	ULA 11P	4067-4
	Logicraft	HCP11	4841-2
		QCP11+	4841-1
	MicroPwr	MPOP11	1183-11
		MPOP11A	1183-12
		MPOP11B	1184-13
		MPOP11E	1183-13
		MPOP11F	1184-14
	Motorola	**LM11**	⋆ **2920**
			1144-19
		LM11C	⋆ **2920**
			1147-22
		LM11L	⋆ **2920**
			1159-17
	National	LM11	1132-101
			1144-20
			¶ 428-32
		LM11A	1140-50
			¶ 428-32
		LM11AC	1142-30
			¶ 428-32
		LM11C	1132-102
			1147-23
			¶ 428-32
		LM11CL	1159-16
			¶ 428-32
	PEP-Modular		
		MPM11	4807-8
	PMI	**OP11A**	⋆ **2972**
			1183-20
		OP11B	⋆ **2972**
			1184-17
		OP11C	⋆ **2972**
			1186-24
		OP11E	⋆ **2972**
			1183-21
		OP11F	⋆ **2972**
			1184-18

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
11	**PMI**		**(Cont'd)**
		OP11G	⋆ **2972**
			1186-25
		SMP11A	⋆ **2975**
			1228-78
		SMP11B	⋆ **2975**
			1228-79
		SMP11E	⋆ **2975**
			1228-80
		SMP11F	⋆ **2975**
			1228-81
		SMP11G	⋆ **2975**
			1228-82
	Solarcom	SCMT11	4813-14
		SCMT11-C	4813-5
	Supertex	ED11	637-105
			¶ 426-11
		HV11	913-21
	TeledyneC	CDA11	908-52
		CDA11-S12	908-51
	TI	XDS11	4719-9
	Webster	SDZV11	4866-8
		SMSV11-P6	4867-30
		SRQD11B	4866-23
	Wintek	**MCI11**	⋆ **4913**
			4866-4
	Zilog	Model 11	4721-11
11C00	Western	WD11C00-13	887-17
		WD11C00-14	887-103
		WD11C00-17	887-22
		WD11C00B-20	887-104
		WD11C00C-22	887-105
11C01	Fairchild	11C01C	651-29
11C05	Fairchild	11C05C	651-4
		11C05M	651-5
11C06	Fairchild	11C06C	651-21
11C70	Fairchild	11C70C	651-18
11C90	Fairchild	11C90C	651-13
			1191-83
		11C90M	651-14
			1191-84
11C91	Fairchild	11C91C	651-11
			1191-75
		11C91M	651-12
			1191-76
11P4	MMI	PLE11P4C	4079-45
		PLE11P4M	4079-47
11P8	MMI	PLE11P8C	4079-46
		PLE11P8M	4079-48
11RA8	MMI	PLE11RA8C	4079-41
		PLE11RA8M	4079-43
11RS8	MMI	PLE11RS8C	4079-42
		PLE11RS8M	4079-44
110	Brooktree	BT110	949-4
	Burr-Brown	**INA110A**	⋆ **2537**
			1103-26
		INA110B	⋆ **2537**
			1103-25
		INA110K	⋆ **2537**
			1103-27
		INA110S	⋆ **2537**
			1103-28
		XTR110	⋆ **2538**
			1230-116
	Cirrus	CLSH110	887-31
	Motorola	MVME110	4837-13
		MWA110	1104-33
	National	LM110	1128-27
	Raytheon	RG110	674-105
	SGS	M110	1119-118
	Sharp	SM110	813-29
			862-31
	SilControls	MB110	4863-14
	Siliconix	LD110C	939-50
			¶ 420-36
			¶ 421-18
			¶ 438-6
110GA0			
	Toshiba	TC110GA0	4062-33
110GC9			
	Toshiba	TC110GC9	4062-34
110G05	Toshiba	TC110G05	4062-18
110G08	Toshiba	TC110G08	4062-24
110G11	Toshiba	TC110G11	4062-27
110G17	Toshiba	TC110G17	4062-28
110G26	Toshiba	TC110G26	4062-29
110G38	Toshiba	TC110G38	4062-30
110G51	Toshiba	TC110G51	4062-31
110G75	Toshiba	TC110G75	4062-32
1100	Cherry	CS1100	4065-22
	Fujitsu	**B1100**	⋆ **4230**
			4046-13
	Lambda	LAS1100	1214-87
	Octagon	SBS1100	4811-3
	Signetics	SCC1100M	4060-29
	Solarise	CK1100A	1190-8
			1223-78
	SMC	HDC1100-01	887-92
		HDC1100-03	887-9
		HDC1100-04	887-25
			983-12
		HDC1100-05	887-47
		HDC1100-12	887-35
	TI	TMS1100	817-4
			864-1
	Western	WD1100	887-13
11000	Sierra	SC11000	1196-86
11001	Sierra	SC11001	1196-87
11002	Sierra	SC11002	877-53
			1195-100
11003	Sierra	SC11003	877-54
			1195-101
11004	Sierra	SC11004	1196-75
11005	Sierra	SC11005	1196-88
11006	Sierra	SC11006	1196-56
11007	Sierra	SC11007	1196-53
11008	Sierra	SC11008	1196-54
11009	Sierra	SC11009	885-82
1101	**AD**	**ADSP1101**	⋆ **2450**
			604-88
	Hughes	HSGA1101	4050-4
	NCM	NCM1101Z	1349-10
11010	Sierra	SC11010	885-83
11011	**Harris**	**HMD11011-2**	⋆ **2725**
			652-15
	Sierra	SC11011	1196-49
11014	Sierra	SC11014	1195-99
11015	Sierra	SC11015	1195-97
11016	**Harris**	**HMD11016-1**	⋆ **2726**
			652-10
	Sierra	SC11016	1196-1
11017	Sierra	SC11017	1196-48
1102	Hughes	HSGA1102	4050-6
	Thomson	TDA1102	1117-22
11020	Toko	TK11020	1123-40
11027	Sierra	SC11027	1196-50
11028	Sierra	SC11028	1196-51
1103	Hughes	HSGA1103	4050-7
	ITT	UAA1103	1122-117
11030	Sierra	SC11030	1195-90
11033	Sierra	SC11033	1195-91
11037	Sierra	SC11037	1196-52
1105	**CMD ASIC**	**C1105**	⋆ **4215**
			4043-23
	Hughes	HSGA1105	4050-9
1107	Hughes	HSGA1107	4050-11
1108	Sharp	LZ1108AD	1108-50
		LZ1108AM	1106-56
1109	Hughes	HSGA1109	4050-13
111	AD	AD111	1109-53
	Burr-Brown	**OPA111A**	⋆ **2532**
			1145-4
		OPA111B	⋆ **2532**
			1137-8
		OPA111M	⋆ **2532**
			⋆ **2545**
			1145-2
		OPA111M/883B	
			⋆ **2532**
			⋆ **2545**
			1145-3
		OPA111S	⋆ **2532**
			1145-1
		OPA111V	⋆ **2532**
			1148-5
		OPA111V/883B	
			⋆ **2532**
			1148-6
	Fairchild	μA111M	1109-55
		CCD111	1222-42
			1222-57
	LinearTech	LM111	1109-52
			(Continued)
111	LinearTech		(Cont'd)
		LT111A	1109-24
	Motorola	**LM111**	⋆ **2925**
			1109-56
	National	LF111	1110-16
		LM111	1109-58
	PMI	**PM111**	⋆ **2975**
			1109-51
	Raytheon	LM111	1110-1
	Sharp	SM111	813-30
			862-23
	Signetics	LM111	1110-2
	SiliconG	SG111	1110-4
	Siliconix	LD111AC	939-51
			¶ 420-36
			¶ 438-6
	Telefunken	U111	1219-7
	Thomson	LM111	1110-6
1110	AD	ADSP1110	644-100
		ADSP1110A	⋆ **2450**
			644-101
		ADSP1110AJ	604-89
		ADSP1110AK	604-90
		ADSP1110AS	604-91
		ADSP1110AT	604-92
11101	**Harris**	**HMD11101-2**	⋆ **2724**
			652-48
11104	**Harris**	**HMD11104-2**	⋆ **2724**
			652-43
1111	Sanyo	LA1111	1121-14
	Thomson	TDA1111	1117-23
	TriQuint	TQ1111-20	652-18
		TQ1111-25	652-19
		TQ1111-30	652-20
11113	**Harris**	**HMD11113-2**	⋆ **2724**
			652-49
1112	S-MOS	SMC1112	813-7
	TriQuint	TQ1112-10	652-21
11131	**Harris**	**HMD11131-2**	⋆ **2724**
			652-33
1114	Solarise	CK1114A	1190-9
			1223-79
1115	Hughes	HSGA1115	4050-14
1116	Sharp	LZ1116AD	1108-61
		LZ1116AM	1107-52
11188	**Harris**	**HMD11188-2**	⋆ **2725**
			652-73
112	Anasco	44-112	4862-45
	Fairchild	CCD112	1222-43
			1222-58
	LogicDev	LMU112C	604-35
			604-36
			¶ 406-18
		LMU112M	604-37
			¶ 406-18
	National	LM112	1133-31
			1152-18
	SGS	M112	1119-120
	TRW-LSI	MPY112	644-62
		MPY112K	657-120
1120	Hughes	HSGA1120	4050-15
	LogicalDes	VME1120D	4839-19
11200	Samsung	KG11200	4060-3
11201	National	LF11201	905-90
11202	National	LF11202	905-91
	Sierra	SC11202	1199-69
11203	Sierra	SC11203	1199-70
11204	Sierra	SC11204	1199-71
1121	ITT	SAA1121	1126-35
	National	LM1121A	1116-105
		LM1121B	1116-106
		LM1121C	1116-107
	TriQuint	TQ1121-15	652-11
		TQ1121-20	652-12
		TQ1121-23	652-13
11219	Hitachi	HA11219	1121-100
1122	Motorola	MHW1122	1123-127
11225	Hitachi	HA11225	1121-32
1123	Chrislin	CI1123+	4867-41
11235	Hitachi	HA11235	1125-12
1124	**Dense-Pac**	**DPE1124**	⋆ **2582**
			1314-61
			1315-7
		DPS1124	⋆ **2579**
			1385-23
			1385-29
			1386-41
11247	Hitachi	HA11247	1124-60
1125	Dense-Pac	DPS1125	1385-24
			1385-30
			1386-42
	Hitachi	HA1125	1125-115
1127	**AT&T**	**LB1127AAK**	⋆ **2516**
			1227-133
	Hitachi	HA1127	1106-14
11270	Sierra	SC11270	1199-72
11271	Sierra	SC11271	1194-113
1128	MicronTech	MT1128-12	1337-13
		MT1128-15	1337-14
11280	Sierra	SC11280	1199-140
11289	Sierra	SC11289	1199-141
11290	Sierra	SC11290	1194-114
113	National	LM113	1225-51
		LM113-1	1225-52
		LM113-2	1225-53
1130	**GoldStar**	**GL1130**	⋆ **2699**
			1126-45
	Sanyo	LA1130	1120-41
11301	**Harris**	**HMD11301-2**	⋆ **2724**
			652-9
	Sierra	SC11301	1192-111
11302	Sierra	SC11302	1192-73
11305	Sierra	SC11305	1192-140
11306	Sierra	SC11306	1192-78
1131	Motorola	SYS1131DVLP	4713-6
	National	LM1131A	1116-108
		LM1131B	1116-109
		LM1131C	1116-110
	TriQuint	TQ1131	652-60
		TQ1131-15M	652-61
		TQ1131-18M	652-62
		TQ1131-20M	652-63
11310	Sierra	SC11310	1221-90
11311	Sierra	SC11311	1192-141
11312	Sierra	SC11312	1192-79
1132	Hughes	HSGA1132	4050-16
	Sharp	LZ1132AM	1106-40
		LZ1132BD	1108-63
	TriQuint	TQ1132	652-30
		TQ1132-15M	652-26
		TQ1132-18M	652-27
		TQ1132-20M	652-28
11320	Sierra	sc11320	1193-41
1133	TriQuint	TQ1133	652-56
		TQ1133-15M	652-57
		TQ1133-18M	652-58
		TQ1133-20M	652-59
11331	National	LF11331	905-92
11332	National	LF11332	905-93
11333	National	LF11333	905-94
1134	Motorola	MHW1134	1124-30
	Sharp	LZ1134R	1106-41
	TriQuint	TQ1134	652-29
		TQ1134-15M	652-23
		TQ1134-18M	652-24
		TQ1134-20M	652-25
114	Fairchild	SSI114	887-77
	Sharp	SM114	813-31
			862-24
	VTC	**VM114**	⋆ **3375**
			887-44
1140	Hughes	HSGA1140	4050-17
	Intech	**ADC1140**	⋆ **2799**
			938-1
	Sanyo	LA1140	1121-47
	VME-Microsys		
		VMIVME1140	4892-10
11401	Sierra	SC11401	947-24
11402	Sierra	SC11402	947-25
11403	Sierra	SC11403	947-26
11404	Sierra	SC11404	947-27
11410	Sierra	SC11410	1221-91
11423	Hitachi	HA11423	1126-18
11431	Hitachi	HA11431NT	1124-61
11436	Hitachi	HA11436A	1124-62

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
1144	Solarise	CK1144A	1190-10
			1223-80
11440	Hitachi	HA11440A	1126-81
11441	Hitachi	HA11441	1125-13
1145	**CMD ASIC**	**C1145**	⋆ **4215**
			4043-25
	Solarise	CK1145A	1190-11
			1223-81
1146	Thomson	TDB1146	1214-108
11461	Hitachi	HA11461NT	1125-14
11465	Hitachi	HA11465	1127-3
11466	Hitachi	HA11466	1126-82
			1127-27
1147	AD	AD1147	973-42
	TRW-LSI	TDC1147	644-143
			917-6
11476	Hitachi	HA11476	1126-83
11477	Hitachi	HA11477NT	1127-5
11478	Hitachi	HA11478	1127-19
1148	AD	AD1148	973-43
11480	Hitachi	HA11480	1124-63
11485	Hitachi	HA11485ANT	1125-107
11494	Hitachi	HA11494	1124-64
115	Anasco	44-115	4862-54
	GE/Intersil	G115A	911-22
		G115B	911-23
	ITT	SAY115	1118-124
	VTC	**VM115**	⋆ **3375**
			887-62
1150	**GoldStar**	**GL1150**	⋆ **2699**
			1125-10
	Sanyo	LA1150	1121-48
11500	GE Semi	IGC11500	4047-23
	GE/Intersil	IGD11500	4047-18
11502	**Harris**	**HMD11502-2**	⋆ **2725**
			653-1
11508	National	LF11508	914-25
11509	National	LF11509	912-72
1151	SGS	TDA1151	1004-8
1152	**Dense-Pac**	**DPS1152**	⋆ **2579**
			1384-90
			1385-37
			1385-39
			1386-45
		DPX1152	1385-38
11520	ILC-DDC	DSC11520	646-79
			1221-30
1154	Thomson	TDA1154	1004-22
1158H2			
	NEC	μPC1158H2	1118-3
116	Cherry	CS116	999-29
	Fairchild	SSI116	887-78
	GE/Intersil	G116A	911-20
		G116B	911-21
	UTMC	**UT116D**	⋆ **4331**
			4063-13
	VTC	VM116	887-96
116F1	SGS	M116F1	1197-28
1160	Sanyo	LA1160	1121-88
11600	Samsung	KG11600	4060-4
1164	Signetics	SAB1164	692-34
			1190-105
	Weitek	WTL1164	645-82
			888-42
		WTL1164A	656-17
			888-43
1165	Signetics	SAB1165	692-35
	Weitek	WTL1165	645-83
			888-44
		WTL1165A	656-18
			888-45
11685	**Harris**	**HMD11685-2**	⋆ **2724**
			652-74
117	Anasco	44-117	4862-19
	Burr-Brown	**INA117**	⋆ **2537**
			1102-67
	Cherry	CS117	888-3
	Exar	**XR117**	⋆ **2606**
			884-133
		XR117-2C	⋆ **2606**
			885-16
		XR117-4C	⋆ **2606**
			885-17
		XR117-6C	⋆ **2606**
			885-18

(Continued)

Base Number	Source	Device	Page-Line
117	**Exar**		**(Cont'd)**
		XR117R-2C	⋆ **2606**
			885-13
		XR117R-4C	⋆ **2606**
			885-14
		XR117R-6C	⋆ **2606**
			885-15
	Fairchild	μA117M	1213-121
		SSI117-2	887-79
		SSI117-4	887-80
		SSI117-5	887-81
		SSI117-6	887-82
		SSI117-8	887-83
	IPS	**IP117**	⋆ **2854**
			1214-1
		IP117A	⋆ **2854**
			1214-2
		IP117AHV	⋆ **2854**
			1214-94
		IP117HV	⋆ **2854**
			1214-95
		LM117	1214-7
		LM117HV	1214-100
	LinearTech	LM117	1214-11
		LM117AHV	1214-103
		LM117HV	1214-91
		LT117A	1214-13
		LT117AHV	1214-105
	MCE	MCELM117	1214-15
	MicroLinear	ML117	887-84
	Motorola	**LM117**	⋆ **2929**
			1214-18
		LM117L	⋆ **2929**
			1213-111
		MVME117-3	4839-31
		MVME117-3FP	4839-32
		MVME117-4	4839-33
	National	LM117	1214-21
			¶ 442-4
		LM117HV	1214-106
			¶ 442-4
	SGS	LM117	1214-24
	SiliconG	SG117	1213-115
			1214-27
		SG117A	1214-28
		SG117HV	1214-107
	Thomson	LM117	1214-35
	Unitrode	**UC117**	⋆ **3325**
			1214-37
	VTC	**VM117**	⋆ **3375**
			887-85
117R2	VTC	VM117R2	887-52
117R4	VTC	VM117R4	887-53
117R6	VTC	VM117R6	887-54
1170	AD	AD1170	4893-24
	GoldStar	**GL1170**	⋆ **2699**
			1126-46
	SGS	TDA1170	1126-53
		TDA1170D	1126-54
		TDA1170N	1126-55
	Telefunken	TDA1170	1126-67
	TI	TMS1170	817-5
	Thomson	TDA1170	1126-70
11700	National	LM11700A	1173-16
11703	Hitachi	HA11703	1123-66
1172	**STI**	**ST1172A**	⋆ **3207**
			637-24
			646-102
			1191-16
	VTC	VM1172	887-57
11720	Hitachi	HA11720	1119-15
1173	Chrislin	CI1173	4867-40
		CI1173-EDC	4867-39
	SiliconG	SG1173	1130-55
1174	VTC	VM1174	887-59
1176	NEC	μPC1176C	1121-101
	Sony	CXA1176K	922-4
	VTC	VM1176	887-63
11767	Hitachi	HA11767AMP	1127-24
11774	Hitachi	HA11774MP	1127-23
11776	Hitachi	HA11776AMP	1127-25
11777	Hitachi	HA1777MP	1127-22
118	GE/Intersil	DG118	905-76
		G118A	911-24
		G118B	911-25
	LinearTech	LM118	1157-7

(Continued)

Base Number	Source	Device	Page-Line
118	LinearTech		(Cont'd)
		LM118X	1150-11
		LM118X/883B	1150-12
		LT118A	1149-40
	National	LM118	1157-8
	Siliconix	G118A	911-26
	Thomson	LM118	1157-11
	VTC	**VM118**	⋆ **3375**
			887-86
1180	S-MOS	SED1180F	977-138
	SGS	TDA1180	1125-34
1181	S-MOS	SED1181F	977-139
11810	**Harris**	**HMM11810**	⋆ **2723**
			653-12
			1105-20
1182	VTC	VM1182	887-58
1184	Motorola	MHW1184	1124-31
	VTC	VM1184	887-60
1185	**CMD ASIC**	**C1185**	⋆ **4215**
			4043-27
	Motorola	**TDA1185**	⋆ **2935**
			1229-108
	NEC	μPC1185HC	1117-157
1186	VTC	VM1186	887-64
1188	NEC	μPC1188H	1116-140
119	GE/Intersil	G119A	911-29
		G119B	911-30
	LinearTech	LM119	1112-2
		LT119A	1111-15
	National	LM119	1112-1
			1112-3
	PMI	**PM119**	⋆ **2975**
			1109-45
	Signetics	LM119	1112-5
	Siliconix	G119A	911-31
		G119B	911-32
	Thomson	LM119	1112-7
1190	GE/RCA	CA1190	1125-109
	Motorola	**TDA1190**	⋆ **2948**
			1125-120
		TDA1190P	⋆ **2948**
			1125-121
	S-MOS	SED1190F	977-140
	SGS	TDA1190	1125-132
1191	GE/RCA	CA1191	1125-110
	S-MOS	SED1191F	977-141
1196	Hitachi	HA1196	1121-128
1197	Hitachi	HA1197	1120-13
	NEC	μPC1197	1121-135
1199	Hitachi	HA1199	1120-14
12	**Apex**	**PA12**	⋆ **2458**
			1130-40
			1131-74
			1162-32
			¶ 436-32
		PA12A	⋆ **2458**
			1130-38
			1131-72
			1156-5
			¶ 436-32
		PA12H	⋆ **2458**
			1162-30
			¶ 436-32
		PA12M	⋆ **2458**
			1130-41
			1162-33
			¶ 436-32
		PA12Q	⋆ **2458**
			1162-31
			¶ 436-32
	Burr-Brown	OPA12HT	1166-37
	Datel	**ADCEK12B**	⋆ **2575**
			933-26
		ADCEK12DC	936-33
		ADCET12BC	936-2
		ADCHC12BMC	933-22
		ADCHC12BMM	
			⋆ **2574**
			933-23
		ADCHS12BMC	930-5
		ADCHS12BMM	
			⋆ **2574**
			930-6
		ADCHX12BGC	931-45

(Continued)

Base Number	Source	Device	Page-Line
12	**Datel**		**(Cont'd)**
		ADCHX12BMM	
			⋆ **2574**
			931-46
		ADCHZ12BGC	930-3
		ADCHZ12BMM	
			⋆ **2574**
			930-4
		DACHA12BC	⋆ **2576**
			959-23
		DACHA12BC-1	
			⋆ **2576**
			959-25
		DACHA12BM	⋆ **2576**
			959-24
		DACHA12BM-1	
			⋆ **2576**
			959-26
		DACHA12DC	⋆ **2576**
			971-25
		DACHA12DC-1	
			⋆ **2576**
			971-27
		DACHA12DM	⋆ **2576**
			971-26
		DACHA12DM-1	
			⋆ **2576**
			971-28
		DACHF12BMC	957-19
		DACHF12BMM	
			⋆ **2574**
			957-20
		DACHK12BGC	
			⋆ **2576**
			963-20
		DACHK12BGC-2	
			⋆ **2576**
			963-21
		DACHK12BMM	
			⋆ **2574**
			⋆ **2576**
			963-22
		DACHK12BMM-2	
			⋆ **2576**
			963-23
		DACHK12DGC	
			⋆ **2576**
			971-17
		DACHK12DMM	
			⋆ **2576**
			971-18
		DACHZ12BGC	
			⋆ **2576**
			963-29
		DACHZ12BMM	
			⋆ **2574**
			⋆ **2576**
			963-30
		DACHZ12DGC	
			⋆ **2576**
			971-19
		DACHZ12DMC	
			⋆ **2576**
			971-20
		DACHZ12DMM	
			⋆ **2576**
			971-21
	Digitronics	60D/A12A-2	4893-21
		60D/A12B-2	4893-20
		60D/A12B-4	4893-19
	Dionics	DIG12-06-025	1001-35
		DIG12-06-100	1001-33
		DIG12-06-250	1001-36
		DIG12-08-010	1001-32
		DIG12-08-045	1001-38
	DUAL	AIM12	4868-29
		AOM12	4868-30
	Ferranti	REF12	1227-16
		REF12Z	1227-17
	ILC-DDC	SDAC12	971-36
	Intech	DACHK12BGC	963-24
		DACHK12BMM	963-25
	Intelicom	ADC12	4872-4
	Interdesign	ULA12DSA	4045-19
		ULA12DSB	4045-20
		ULA12DSC	4045-21
		ULA12RA	4044-52

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
12	Interdesign		(Cont'd)
		ULA12RB	4044-53
		ULA12RC	4044-54
		ULA12RD	4044-55
	ICC	LP12	4825-32
		LP12P	4825-31
	IMI	MPV12	644-57
		MPY12	644-58
		MPY12IMI	604-34
	LogicDev	LMS12C	604-113
		LMS12M	604-114
		LMU12	644-59
		LMU12C	603-160
		LMU12M	604-38
	Matrix	ADC12	4872-37
		DAC12	4872-21
	MicroPwr	MPOP12A	1170-34
		MPOP12B	1171-19
		MPOP12C	1170-20
		MPOP12E	1170-35
		MPOP12F	1171-20
		MPOP12G	1170-21
	National	LM12	1168-12
			¶ 428-21
		LM12C	1168-39
			¶ 428-21
		LM12CL	1168-38
			¶ 428-21
		LM12L	1168-11
			¶ 428-21
	PMI	**OP12**	*** 2970**
			1133-34
		OP12A	*** 2970**
			1142-31
		OP12B	*** 2970**
			1144-23
		OP12C	*** 2970**
			1149-23
		OP12E	*** 2970**
			1142-32
		OP12F	*** 2970**
			1144-24
		OP12G	*** 2970**
			1149-24
	Robotrol	DA12	4849-25
	SBE	MPU12	4839-11
	Supertex	VF12	1004-80
	Thomson	TSGF12	1221-63
	Toshiba	TLCS12A	845-2
12B32	IndComp	A/D12B32	4848-41
12G014	**GigaBit**	**12G014**	*** 2690**
			1349-13
			¶ 447-5
		12G014-2	*** 2690**
			1349-14
			¶ 447-5
		12G014-3	*** 2690**
			1349-15
			¶ 447-5
12H6	MMI	HAL12H6-2C	4081-9
		HAL12H6-2M	4081-22
		HAL12H6C	4080-50
		HAL12H6M	4080-102
		PAL12H6-2C	4076-16
		PAL12H6-2M	4076-38
		PAL12H6C	4074-70
		PAL12H6M	4075-58
		ZHAL12H6AC	4080-66
	National	PAL12H6AC	4073-23
		PAL12H6AM	4074-24
		PAL12H6C	4074-98
		PAL12H6M	4075-75
12H6A2			
	National	PAL12H6A2C	4073-24
		PAL12H6A2M	4073-25
12L10	MMI	HAL12L10C	4080-81
		HAL12L10M	4080-103
		PAL12L10C	4075-29
		PAL12L10M	4075-59
		ZHAL12L10A	4081-29
	National	PAL12L10C	4075-43
		PAL12L10M	4075-44
12L6	MMI	HAL12L6-2C	4081-10
		HAL12L6-2M	4081-23
		HAL12L6C	4080-51
		HAL12L6M	4080-104
			(Continued)

Base Number	Source	Device	Page-Line
12L6	MMI		(Cont'd)
		PAL12L6-2C	4076-17
		PAL12L6-2M	4076-39
		PAL12L6C	4074-71
		PAL12L6M	4075-60
		ZHAL12L6AC	4080-67
	National	PAL12L6AC	4073-26
		PAL12L6AM	4074-25
		PAL12L6C	4074-99
		PAL12L6M	4075-76
12L6A2	National	PAL12L6A2C	4073-27
		PAL12L6A2M	4073-28
12L60	Raytheon	CGA12L60	4058-37
12P4	MMI	PLE12P4C	4079-49
		PLE12P4M	4079-51
12P6	Panatech	12P6	4077-30
		12P6BP-35	4074-110
	VLSI Tech	VP12P6	4080-6
12P8	MMI	PLE12P8C	4079-50
		PLE12P8M	4079-52
120	AnalogSys	MS120	1228-107
	AT&T	LBR120AB	1205-76
	Burr-Brown	SPV120	4884-9
	Cirrus	CLSH120	887-10
	Codar	120	4868-9
	GE/Intersil	IT120	1106-96
		IT120A	1106-97
	IPS	**IP120-12**	*** 2854**
			1211-20
		IP120-15	*** 2854**
			1211-108
		IP120-5	*** 2854**
			1209-104
		IP120A-12	*** 2854**
			1211-21
		IP120A-15	*** 2854**
			1211-109
		IP120A-5	*** 2854**
			1209-105
		LM120-12	1211-30
		LM120-15	1211-118
		LM120-5	1209-114
	Motorola	MWA120	1104-34
		TBA120	1125-119
		TBA120C	*** 2948**
			1120-103
	National	LM120-15	1212-1
			¶ 442-4
	NEC	MC120	1386-31
	Raytheon	RG120	671-85
		RLA120	*** 2984**
			*** 4299**
			4069-2
	Sharp	SM120	813-32
	Siemens	TBA120	1121-53
	Signetics	TBA120U	1121-125
			1121-60
			1125-137
		TCA120	1116-3
	SiliconG	SG120-05K	1210-3
		SG120-05P	1209-98
		SG120-05T	1209-89
		SG120-08K	1210-69
		SG120-08R	1210-70
		SG120-08T	1210-60
		SG120-12K	1211-40
		SG120-12P	1211-14
		SG120-12T	1210-113
		SG120-15K	1212-4
		SG120-15R	1211-102
		SG120-15T	1211-75
		SG120-18K	1212-43
		SG120-18R	1212-44
		SG120-18T	1212-31
		SG120-20K	1212-65
		SG120-20R	1212-66
		SG120-20T	1212-58
		SG120-5	1210-23
	Siliconix	LD120C	939-66
			¶ 420-37
			¶ 421-18
			¶ 438-10
	Telefunken	TBA120	1121-62
			1125-142
120H12			
	National	LM120H12	1210-111

Base Number	Source	Device	Page-Line
120H15			
	National	LM120H15	1211-73
120H5	National	LM120H5	1209-84
120K12	National	LM120K12	1211-8
120K15	National	LM120K15	1211-96
120K5	National	LM120K5	1209-121
1200	ArrayTech	DHS1200	4041-38
	Burr-Brown	DAC1200	1127-31
		DAC1200K-V	969-37
	CalDevices	DLM1200	4042-38
	Cherry	CS1200	4043-30
	Comark	CBX-S1200	4855-19
	Fairchild	FGC1200	4044-19
	Fujitsu	**BC1200**	*** 4230**
			4046-15
		C1200AVB	*** 4229**
			*** 4231**
			*** 4233**
			4046-6
		C1200AVL	*** 4229**
			*** 4231**
			*** 4233**
			4046-7
		C1200UHB	*** 4229**
			*** 4231**
			*** 4233**
			4046-4
	Galil	GL1200	1222-127
	Harris	**HSG1200RH**	*** 2721**
			4049-6
	IntCirSys	**VGC1200**	*** 4256**
			4051-14
	Matra	MA1200	4054-8
	Matra-Harris		
		MA1200	4054-17
	Motorola	**MCA1200ECL**	
			*** 4282**
			4055-40
	Octagon	SBS1200	4811-4
	S-MOS	SED1200	977-122
	VLSI Tech	**VGC1200**	*** 4665**
			4064-2
12000	CalDevices	CHA12000	4042-51
	Fujitsu	**C12000UHB**	*** 4229**
			*** 4233**
			4047-9
	Samsung	KG12000	4060-5
12002	Hitachi	HA12002	1116-127
	Motorola	MC12002	649-70
			1190-28
12008	Thomson	ISB12008	4061-39
12009	Motorola	MC12009	691-95
			1191-77
			1191-79
			¶ 439-14
1201	AD	HAS1201K	928-46
		HAS1201S	928-47
	Burr-Brown	DAC1201	1127-32
		DAC1201K-V	969-38
	Dallas	DS1201	889-4
			1308-64
	Sanyo	LA1201	1120-67
12010	Hitachi	HA12010	977-27
12011	Motorola	MC12011	692-65
			1191-81
			¶ 439-14
	Thomson	ISB12011	4061-40
12013	Motorola	MC12013	691-107
			1191-85
			¶ 439-14
12014	Motorola	MC12014	691-43
			1190-6
12015	Motorola	MC12015	692-16
			1191-92
	Thomson	ISB12015	4061-41
12016	Hitachi	HA12016	1121-91
	Motorola	MC12016	692-19
			1191-95
12017	Hitachi	HA12017	1117-190
	Motorola	MC12017	692-30
			1191-100
12018	Motorola	MC12018	692-42
			1191-108
12019	Motorola	MC12019	649-110
			1191-91

Base Number	Source	Device	Page-Line
1202	AD	CAV1202	4893-32
		HAS1202	929-15
		HAS1202A	929-5
		MAS1202	925-35
12020	Thomson	ISB12020	4061-42
12022	Motorola	MC12022A	1190-96
		MC12022B	1190-97
12023	Motorola	MC12023	692-37
			1190-90
12025	Motorola	MC12025	1190-86
	Thomson	ISB12025	4061-43
12026	Hitachi	HA12026	1121-92
1203	**Inmos**	**IMS1203-25**	*** 2780**
			1359-31
		IMS1203-25M	
			*** 2780**
			1359-32
		IMS1203-35	*** 2780**
			1359-45
		IMS1203-35M	
			*** 2780**
			1359-46
		IMS1203-45M	
			*** 2780**
			1359-60
	National	LM1203	1125-98
	UMC	**UM1203**	*** 4329**
			4062-36
12038	Thomson	ISB12038	4061-44
12039	Hitachi	HA12039	1118-95
1204	**AD**	**HAS1204**	*** 2422**
			929-13
	Dallas	DS1204U	889-3
			1308-49
	MicronTech	1204	4850-35
12040	Motorola	MC12040	1190-70
12043	Hitachi	HA12043	1116-95
12044	Hitachi	HA12044	1116-96
12045	Hitachi	HA12045	1116-98
12046	Hitachi	HA12046	1116-99
12047	Hitachi	HA12047	1116-100
12048	Hitachi	HA12048	1116-101
1205	AD	HDH1205	960-4
		HDH1205M	960-5
	National	ADC1205BC	936-7
		ADC1205BC-1	936-8
		ADC1205CC	936-13
		ADC1205CC-1	936-14
	TI	TLC1205M	936-11
12051	Hitachi	HA12051	1123-56
12052	Hitachi	HA12052CFP	1123-60
12054	Thomson	HA12054	1123-62
		ISB12054	4061-45
12058	Hitachi	HA12058MP	1116-102
1206	AD	HDD1206J	963-8
		HDD1206S	963-9
	Dallas	DS1206	889-47
	UMC	**UM1206**	*** 4329**
			4062-37
12061	Motorola	MC12061	1190-7
			¶ 439-3
1207	Dallas	DS1207	889-63
12071	Motorola	MC12071	692-32
			1190-82
			1191-103
12073	Motorola	MC12073	692-36
			1190-89
12074	Motorola	MC12074	692-53
			1190-91
12076	Hitachi	HA12076NT	1221-26
	Thomson	ISB12076	4061-46
12077	Hitachi	HA12077NT	1221-25
1208	MicroPwr	MP1208B	968-20
		MP1208K	968-21
		MP1208T	968-22
	National	DAC1208	960-44
12088	Hitachi	HA12088NT	1116-103
1209	MicroPwr	MP1209A	967-13
		MP1209J	967-14
		MP1209S	967-15
	National	DAC1209	966-35
	UMC	**UM1209**	*** 4239**
			4063-1
12090	Motorola	MC12090	691-88
			1190-94
12091	Hitachi	HA12091MP	1116-104

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
121	**Burr-Brown**	**OPA121K**	⋆ **2532**
			1145-16
		OPA121U	⋆ **2532**
			1154-27
	Fairchild	CCD121	1222-67
	GE/Intersil	IT121	1106-98
	Motorola	MVME121	4845-13
	National	LM121	1104-5
		LM121A	1104-6
	Siliconix	LD121AC	939-67
			¶ 438-10
1210	Altera	EP1210-1C	4078-54
		EP1210-1M	4078-55
		EP1210-2C	4078-64
		EP1210-2M	4078-65
		EP1210C	4078-66
		EP1210M	4078-67
	Dallas	DS1210	889-14
	ICSensors	1210	1224-120
	MicroPwr	MP1210H	968-32
		MP1210R	968-33
		MP1210Z	968-34
	National	ADC1210	933-36
		ADC1210C	933-37
		DAC1210	969-18
	Sanyo	LA1210	1120-84
12103	Thomson	ISB12103	4061-47
1211	Dallas	DS1211	889-15
	National	ADC1211	936-3
		ADC1211C	936-4
		LM1211	1120-54
	UMC	**UM1211**	⋆ **4329**
			4063-2
1212	Dallas	DS1212	889-16
	Fairchild	F1212	1196-21
	NEC	μPC1212	1117-39
12128	Thomson	ISB12128	4061-48
1213	Dallas	DS1213	889-52
		DS1213C	889-53
	NEC	μPC1213	1117-40
1214	Supertex	HV1214	913-22
12141	**Harris**	**HMD12141-1**	⋆ **2726**
			652-65
			1394-22
1215	Dallas	DS1215	889-64
			889-70
	NEC	μPC1215V	1120-18
1216	Dallas	DS1216	889-54
		DS1216C	889-55
		DS1216E	637-124
			889-56
	NEC	μPC1216	1120-19
	Supertex	HV1216	913-25
1217	Dallas	DS1217A-128	1313-34
		DS1217A-16	1310-40
		DS1217A-192	1313-46
		DS1217A-256	1314-19
		DS1217A-64	1312-38
		DS1217M-1	1315-10
		DS1217M-1/2	1314-55
		DS1217M-2	1315-20
		DS1217M-4	1315-27
1218	National	DAC1218	960-45
1219	National	DAC1219	966-36
122	Cherry	CS122	692-115
			1119-13
			1222-90
	Fairchild	CCD122	1222-44
			1222-68
	GE/Intersil	IT122	1106-99
	National	LM122	1201-10
	SiliconSys	SSI122	887-41
	Siliconix	LD122C	939-68
			¶ 420-38
			¶ 421-18
	VTC	VM122	887-51
1220	AD	CAV1220	4893-33
	Dallas	DS1220-150	1310-21
		DS1220-200	1310-38
	ICSensors	1220	1224-121
	ITT	SAA1220	1126-36
	National	DAC1220	968-49
		DAC1220C	969-1
	SGS	TDA1220A	1120-85
		TDA1220B	1120-86
		TDA1220L	1120-87

Base Number	Source	Device	Page-Line
1221	Dallas	DS1221	889-17
	National	DAC1221	970-5
		DAC1221C	970-6
1222	Dallas	DS1222	999-1
	National	DAC1222	970-21
		DAC1222C	970-22
	NEC	μPC1222	1120-51
	Samsung	KA1222	1118-35
	Sanyo	LA1222	1121-15
1223	Dallas	DS1223	637-118
			889-2
	GoldStar	**GL1223**	⋆ **2699**
			1222-96
	Inmos	**IMS1223-25**	⋆ **2781**
			1352-26
		IMS1223-25M	
			⋆ **2781**
			1352-27
		IMS1223-35	⋆ **2781**
			1352-47
		IMS1223-35M	
			⋆ **2781**
			1352-48
		IMS1223-45M	
			⋆ **2781**
			1352-69
1224	**Dense-Pac**	**DPE1224**	⋆ **2582**
			1314-60
			1315-6
		DPS1224	⋆ **2579**
			1385-22
			1385-28
			1386-40
	Motorola	MHW1224	1124-32
1225	AD	RTI1225	4873-15
	Dallas	DS1225-150	1312-17
		DS1225-200	1312-37
	National	ADC1225BC	936-9
		ADC1225BC-1	936-10
		ADC1225CC	936-15
		ADC1225CC-1	936-16
	NEC	μPC1225	1116-123
	TI	TLC1225M	936-12
	VersaLogic	VL1225	4876-53
1226	AD	RTI1226	4872-44
	VersaLogic	VL1226	4876-54
1227	NEC	μPC1227	1121-136
1228	Dallas	DS1228	1012-2
1229	Dallas	DS1229	1012-4
123	Datacube	QVG123	4866-31
		VG123	4859-20
	Fairchild	μA123	1203-45
		CCD123	1222-45
			1222-69
		SH123	1203-48
	GE/Intersil	**DG123**	⋆ **2679**
			905-100
		DG123B	⋆ **2679**
			906-3
		D123A	⋆ **2679**
			911-42
		D123B	⋆ **2679**
			911-43
	IPS	**IP123**	⋆ **2854**
			1203-51
		IP123-12	⋆ **2854**
			1206-70
		IP123-15	⋆ **2854**
			1207-88
		IP123A	⋆ **2854**
			1203-52
		IP123A-12	⋆ **2854**
			1206-71
		IP123A-15	⋆ **2854**
			1207-89
		LM123	1203-57
	LinearTech	LM123	1203-63
		LM123A	1203-64
		LT123A	1203-67
	Motorola	**LM123**	⋆ **2927**
			1203-69
		LM123A	⋆ **2927**
			1203-70
		MVME123	4845-14
	National	LM123	1203-79
			¶ 442-4

(Continued)

Base Number	Source	Device	Page-Line
123			(Cont'd)
	SiliconG	SG123	1203-86
		SG123A	1203-87
	Siliconix	DG123A	905-101
	Telefunken	U123	1222-101
	Thomson	LM123	1203-96
1230	AD	RTI1230	4856-26
	Cermetek	CH1230	1197-18
	Dallas	DS1230-100	1313-63
		DS1230-120	1314-3
		DS1230-150	1314-13
		DS1230-70	1313-55
	MicroPwr	MP1230B	968-23
		MP1230K	968-24
		MP1230T	968-25
	National	DAC1230	960-46
	Sanyo	LA1230	1121-49
1230H2			
	NEC	μPC1230H2	1116-141
1231	AD	RTI1231	4856-29
	Dallas	DS1231	1230-39
	MicroPwr	MP1231A	967-16
		MP1231J	967-17
		MP1231S	967-18
	National	DAC1231	966-37
	Sanyo	LA1231N	1121-50
1232	AD	RTI1232	4856-28
	Dallas	DS1232	888-22
			1230-40
	MicroPwr	MP1232H	967-19
		MP1232R	967-20
		MP1232Z	967-21
	National	DAC1232	969-19
	Sharp	LZ1232M	1106-42
1235	Dallas	DS1235-150	1314-12
		DS1235-200	1314-18
	ITT	TDA1235	1125-116
	Sanyo	LA1235	1121-76
1236	ITT	TDA1236	1125-117
1238	NEC	μPC1238H/V	1117-84
124	Fairchild	μA124M	1135-6
	GE/RCA	**CA124**	⋆ **2645**
			1135-9
	Motorola	**LM124**	⋆ **2924**
			1135-14
	National	LM124	1135-17
		LM124A	1183-42
		LP124	1187-36
	Raytheon	LM124	1135-21
	SGS	LM124	1186-2
		LM124A	1183-41
	Signetics	LM124	1135-23
	SiliconG	SG124	1135-26
		SG124A	1183-43
	Thomson	LM124	1186-1
	UTMC	**UT124B**	⋆ **4331**
			4063-14
		UT124BR	⋆ **4331**
			4063-15
	WDC	ICE 124	4719-22
1240	AD	HDS1240E	965-3
		HDS1240EM	965-4
		RTI1240	4879-34
	Sanyo	LA1240	1120-42
	SGS	LS1240	1199-136
1241	AD	RTI1241	4879-35
	NEC	μPC1241H	1117-85
	Samsung	KA1241	1120-44
	SGS	LS1241	1199-137
12411	Hitachi	HA12411	1121-33
12412	Hitachi	HA12412	1118-79
			1121-34
12413	Hitachi	HA12413	1120-73
1242	AD	RT1242	4879-32
	NEC	μPC1242H	1117-86
12427	Hitachi	HA12427AV	1120-36
12428	Hitachi	HA12428	1120-37
12429	Hitachi	HA12429	1120-8
1243	AD	RTI1243	4879-33
	NEC	μPC1243	1120-40
12430	Hitachi	HA12430	1120-49
12432	Hitachi	HA12432	1120-15
12438	Hitachi	HA12438AFP	1120-122
1244	Motorola	MHW1244	1124-33
12440	Hitachi	HA12440	1120-16
12441	Hitachi	HA12441V	1195-59

Base Number	Source	Device	Page-Line
12442	Hitachi	HA12442V	1119-20
1245	NEC	μPC1245	1121-44
	Sanyo	LA1245	1120-43
1248	NEC	μPC1248	1120-20
125	**GE/Intersil**	**DG125**	⋆ **2680**
			906-1
		DG125B	⋆ **2680**
			906-4
		D125A	⋆ **2679**
			911-44
		D125B	⋆ **2679**
			911-45
	National	LM125	1212-118
			¶ 442-4
	Siliconix	DG125A	906-2
		D125A	688-13
			911-46
		D125B	688-14
			911-47
		PWM125A	1217-103
		PWM125C	1217-104
	TeledyneC	CDR125A	911-48
1250	AD	HDS1250	957-11
		HDS1250M	957-12
		RTI1250	4856-8
	ILC-DDC	DDC1250-10-1	969-32
		DDC1250-10-3	969-33
		DDC1250-12-1	964-41
		DDC1250-12-3	964-42
	ITT	SAA1250	1122-56
1251	AD	RTI1251	4856-10
	ITT	SAA1251	1122-57
1252	AD	RTI1252	4856-9
1252H2			
	NEC	μPC1252H2	1118-91
1253	SiliconG	SG1253	1134-32
1253H2			
	NEC	μPC1253H2	1116-78
1256	Dense-Pac	DPV1256	1335-44
	Signetics	SAB1256	692-52
			1190-104
1259	Dallas	DS1259	1230-37
	MicronTech	MT1259-10	1340-17
		MT1259-10/883C	
			1387-27
		MT1259-12	1340-18
		MT1259-12/883C	
			1387-28
		MT1259-15	1340-91
		MT1259-15/883C	
			1387-29
		MT1259-20/883C	
			1387-30
		MT1259-8	1339-64
126	**GE/Intersil**	**DG126A**	⋆ **2679**
			909-53
	National	LM126	1212-111
	Siliconix	DG126A	909-54
1260	AD	RTI1260	4873-19
	Dallas	DS1260	1230-38
	Sanyo	LB1260	1107-146
	VersaLogic	VL1260	4876-55
1261	Sanyo	LB1261	1107-147
1262	AD	RTI1262	4873-17
	Cermetek	CH1262	1195-103
	VersaLogic	VL1262	4876-6
1263	Cermetek	CH1263	1196-28
1264	Sanyo	LB1264	1107-148
	Weitek	WTL1264	645-84
			888-46
		WTL1264A	656-19
			888-47
1265	National	DAC1265A	955-49
		DAC1265AC	956-1
		DAC1265L	958-11
		DAC1265LC	958-12
	Weitek	WTL1265	645-85
			888-48
		WTL1265A	656-20
			888-49
1266	National	DAC1266A	955-47
		DAC1266AC	955-48
		DAC1266L	958-9
		DAC1266LC	958-10
1267	Cermetek	CH1267	1195-104
1268	Cermetek	CH1268	1196-29

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
127	Siliconix	PWM127A	1217-105
		PWM127C	1217-106
1270	AD	RTI1270	4872-39
	TI	TMS1270	817-6
			864-2
1272	ITT	SAA1272	1122-58
	Sanyo	LB1272	1107-46
1273	Sanyo	LB1273R	1107-47
1274	ITT	SAA1274	1124-130
	Sanyo	LB1274	1107-2
1275	Sanyo	LB1275	1107-138
1276	ITT	SAA1276	1124-131
1277	NEC	μPC1277	1117-140
128	AdvMicroSys		
		RAM128	4877-20
	Burr-Brown	**OPA128J**	★ **2533**
			1144-18
			¶ 429-5
		OPA128K	★ **2533**
			1142-23
			¶ 429-5
		OPA128L	★ **2533**
			1142-22
			¶ 429-5
		OPA128S	★ **2533**
			1142-24
			¶ 429-5
	Datacube	IVG128	4849-3
		VG128	4859-17
		VVG128	4884-12
	Datricon	MS-128	4878-1
	Dense-Pac	DPS128KU	1376-80
		DPX128KU	1377-28
	FujitsuA	FBM-C128GA	4894-16
	GE/Intersil	G128	910-70
		ISP128M	637-5
	GIM	SPR128	1390-107
	IndComp	ADA128	4848-40
	Plessey	PME128S	4890-31
	WinSystems	MCM-DRAM 128	4877-29
128x128			
	EG&G-Reticon		
		RA128x128	1222-1
128x4	EG&G-Reticon		
		CCPD128x4	1222-8
128x8	EG&G-Reticon		
		CCPD128x8	1222-9
128K8	**Inova**	**S128K8-100CC**	
			★ **2797**
			1386-20
		S128K8-100IC	
			★ **2797**
			1386-21
		S128K8-100MC	
			★ **2797**
			1386-22
		S128K8-45CC	
			★ **2797**
			1385-55
		S128K8-45IC	★ **2797**
			1385-56
		S128K8-55CC	
			★ **2797**
			1385-66
		S128K8-55IC	★ **2797**
			1385-67
		S128K8-55MC	
			★ **2797**
			1385-68
		S128K8-70CC	
			★ **2797**
			1386-3
		S128K8-70IC	★ **2797**
			1386-4
		S128K8-70MC	
			★ **2797**
			1386-5
128X16	**Dense-Pac**	**DPE128X16V**	★ **2583**
			1315-13
		DPS128X16V	★ **2583**
			1386-46
		DPV128X16	★ **2582**
			1335-32
		DPV128X16B	★ **2582**
			1335-31

(Continued)

Base Number	Source	Device	Page-Line
128X16	**Dense-Pac**		**(Cont'd)**
		DPV128X16V	★ **2582**
			★ **2584**
			1335-30
128X24	**Dense-Pac**	**DPE128X24V**	★ **2583**
			1315-15
		DPS128X24V	★ **2583**
			1386-50
		DPV128X24B	1335-36
		DPV128X24V	★ **2584**
			1335-35
128X32	**Dense-Pac**	**DPE128X32V**	★ **2583**
			1315-16
		DPS128X32V	★ **2583**
			1386-51
		DPV128X32	★ **2582**
			1335-38
		DPV128X32B	★ **2582**
			1335-39
		DPV128X32V	★ **2582**
			★ **2584**
			1335-37
128X8	**Dense-Pac**	**DPE128X8V**	★ **2583**
			1315-4
		DPP128X8	★ **2584**
			1385-54
		DPS128X8V	★ **2583**
			1385-53
		DPV128X8V	★ **2584**
			1334-52
128X9	**Dense-Pac**	**DPF128X9**	★ **2585**
			1307-51
1280	AD	RTI1280	4873-6
	Cermetek	CH1280	1195-105
	Matrox	PG1280	4848-34
12808	Mitsubishi	MH12808TNA-10	1386-23
		MH12808TNA-12	1386-30
		MH12808TNA-15	1386-38
1281	AD	RTI1281	4873-16
12816	Dense-Pac	DPV12816	1335-34
1282	AD	RTI1282	4873-11
	EG&G-Reticon		
		RL1282D	1222-14
12832	**Dense-Pac**	**DPS12832**	★ **2580**
			1386-52
		DPV12832	1335-40
			1335-54
			1335-57
			1335-61
1284	EG&G-Reticon		
		RL1284D	1222-15
1285	**Motorola**	**TDA1285**	★ **2936**
			1003-16
		TDA1285A	★ **2936**
			1003-119
1287	AD	RTI1287	4873-40
	Dallas	DS1287	889-43
	Sanyo	LB1287	1001-81
			1107-39
1288	Dense-Pac	DPV1288	1335-24
	EG&G-Reticon		
		RL1288D	1222-16
	Sanyo	LB1288	1001-82
			1107-40
129	**AT&T**	**129EH-P**	★ **2497**
			1193-42
	Dense-Pac	**DPS129**	★ **2578**
			1376-81
			1378-34
			1383-40
		DPX129	1376-82
	GE/Intersil	**DG129A**	★ **2680**
			909-36
		D129A	★ **2679**
			911-37
		D129B	★ **2679**
			911-38
	LinearTech	LM129	1226-62
	National	LM129	1226-66
			¶ 442-4
	Siemens	TBA129-2	1121-54
	Siliconix	DG129A	909-37
		D129A	911-39

Base Number	Source	Device	Page-Line
1290	Cermetek	CH1290	1219-26
	Dallas	DS1290	637-119
1291	Dallas	DS1291	637-120
1292	Dallas	DS1292	637-121
1293	Dallas	DS1293	637-122
1295	Cermetek	CH1295	1194-124
			1219-27
1296	Cermetek	CH1296	1195-1
			1219-28
13	ILC-DDC	DGL13	1229-86
	LogicDev	LMU13	644-60
		LMU13C	603-161
		LMU13M	604-29
	Supertex	VC13	1006-126
		VF13	1004-81
	TeledyneC	CAG13	903-73
		CDA13	906-26
130	Cirrus	CLSH130	887-23
	GE/Intersil	IT130	1106-126
		IT130A	1106-127
	Motorola	MWA130	1104-35
	Raytheon	RG130	671-183
	Siemens	TBA130-2	1125-136
1300	AMCC	Q1300S	4041-7
	Matra-Harris		
		MB1300	4054-18
	Motorola	**MCA1300ALS**	★ **4282**
			4055-43
	Northern	NPC1300	4859-16
13001	Hitachi	HA13001	1116-131
	Motorola	MC13001	1126-84
			¶ 436-11
		MC13001X	★ **2948**
			1126-85
			¶ 436-11
13002	Motorola	MC13002	1126-86
		MC13002X	★ **2948**
			1126-87
13006	National	LF13006	691-76
			1221-27
			¶ 429-28
			¶ 429-29
13007	Hitachi	HA13007	999-7
			1006-114
	National	LF13007	691-77
			1221-28
			¶ 429-28
			¶ 429-29
13010	**Motorola**	**MC13010**	★ **2948**
			1126-88
13011	**Motorola**	**MC13011**	★ **2948**
			★ **2959**
			1125-43
13014	**Motorola**	**MC13014**	★ **2948**
			1126-89
13020	**Motorola**	**MC13020**	★ **2946**
			1120-4
13021	**Motorola**	**MC13021**	★ **2946**
			1120-34
13022	**Motorola**	**MC13022**	★ **2946**
			★ **2959**
			1120-32
13024	**Motorola**	**MC13024**	★ **2946**
			★ **2959**
			1125-70
			1127-49
1303	National	LM1303	1118-30
13041	**Motorola**	**MC13041**	★ **2939**
			★ **2946**
			★ **2959**
			1120-17
1305	Interdesign	MOF1305B	986-13
13055	**Motorola**	**MC13055**	★ **2939**
			★ **2959**
			1195-63
1306	MicronTech	1306/8/10	4850-36
13060	**Motorola**	**MC13060**	★ **2946**
			★ **2959**
			1117-30
13062	Motorola	MC13062	1122-4
13080	National	LM13080	1163-39
131	GE/Intersil	IT131	1106-128
	National	LM131	1230-100
		LM131A	1230-101
1310	National	LM1310	1121-130
13108	Hitachi	HA13108	1117-152

Base Number	Source	Device	Page-Line
1313	**UMC**	**UM1313**	★ **4330**
			4063-3
1314	Supertex	HV1314	913-9
1316	Supertex	HV1316	913-10
1318	TRW-LSI	TDC1318	645-45
	UMC	**UM1318**	★ **4330**
			4063-4
132	GE/Intersil	IT132	1106-129
1320	Sanyo	LA1320	1125-129
	Signetics	**ACE1320**	★ **4301**
			4060-40
		ACE1320M	★ **4301**
			4060-28
13201	National	LF13201	905-95
13202	National	LF13202	905-96
132081	TI	T132081	851-17
1321	TeledyneP	1321	1160-5
		1321-01	1160-4
1322	TeledyneP	1322	1166-35
		1322-01	1166-36
	UMC	**UM1322**	★ **4330**
			4063-5
1324	Panasonic	AN1324	1187-38
133	Fairchild	CCD133	1222-46
			1222-64
	GE/Intersil	**DG133A**	★ **2680**
			903-62
		DG133B	★ **2680**
			903-72
	Maxim	MAX133	928-22
	Motorola	MVME133	4845-16
		MVME133-1	4845-26
	Siliconix	DG133A	903-63
			¶ 427-20
1330	S-MOS	SED1330F	977-88
	SGS	TEA1330	1121-149
	UMC	**UM1330**	★ **4330**
			4063-6
1330A1	**Motorola**	**MC1330A1**	★ **2948**
			1126-90
1330A2	**Motorola**	**MC1330A2**	★ **2948**
			1126-91
1332	Sanyo	LB1332	1124-78
	TeledyneP	1332	1131-90
			1162-26
13331	National	LF13331	905-97
13332	National	LF13332	905-98
13333	National	LF13333	905-99
1334	Telefunken	U1334	1122-82
	TRW-LSI	TDC1334	645-27
1339	Panasonic	AN1339	1114-4
134	Fairchild	CCD134	1222-47
			1222-65
	Ferranti	ZNA134E	1123-80
		ZNA134J	1123-81
	GE/Intersil	**DG134A**	★ **2680**
			903-86
		DG134B	★ **2680**
			904-9
	LinearTech	LM134	1229-41
	Maxim	MAX134	928-23
	Motorola	MVME134	4891-11
	National	LM134	1219-118
			1229-46
	Siliconix	DG134A	903-87
	Stantel-STC	DSP134	644-22
	WDC	ICE 134	4719-23
134021	Hitachi	HA134021A	1003-71
13406	Hitachi	HA13406W	1003-46
			1127-56
13408	Hitachi	HA13408	1002-131
1341	S-MOS	SED1341F	978-105
	TeledyneP	1341	1168-17
13415	Hitachi	HA13415	1006-132
1342	TeledyneP	1342	1168-14
13421	Hitachi	HA13421A	1003-70
13426	Hitachi	HA13426	1127-58
13431	Hitachi	HA13431	1127-59
13432	Hitachi	HA13432	1127-60
1344	TeledyneP	1344	1154-41
		1344-01	1154-39
1345	TeledyneP	1345	1167-38
1346	TeledyneP	1346	1154-25
		1346-01	1154-26
1349	**Motorola**	**MC1349**	★ **2948**
			1126-92

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
135	Cirrus	CLSH135	887-32
	National	LM135	1229-47
	Stantel-STC	DSP135	644-21
			644-23
1350	GIM	AY3-1350	1116-1
			1127-109
			¶ 435-33
	ITT	SAA1350	1122-59
	Motorola	**MC1350**	⋆ **2948**
			1121-12
			1126-93
			¶ 436-16
	NEC	μPC1350	1116-4
13508	National	LF13508	914-26
13509	National	LF13509	912-73
1351	ITT	SAA1351	1122-60
1352	**Motorola**	**MC1352**	⋆ **2948**
			1126-94
			¶ 436-16
	NEC	μPC1352	1124-70
	Sanyo	LA1352	1126-113
1353	Sanyo	LA1353	1126-114
1354	Sanyo	LA1354	1126-115
1355	Motorola	MC1355	1118-80
			1121-35
1356	NEC	μPC1356	1126-104
1357	Motorola	MC1357	1121-36
	Sanyo	LA1357N	1126-116
1358	Motorola	MC1358	1121-37
			1125-118
	Panasonic	AN1358	1180-1
136	LinearTech	LM136-2	1225-105
	Maxim	MAX136	939-45
	National	LM136-2	1225-129
			¶ 442-4
		LM136-5	1226-27
			¶ 442-4
		LM136A-2	1225-130
			¶ 442-4
		LM136A-5	1226-28
			¶ 442-4
	TI	TL136C	1187-31
13600	Exar	XR13600	1119-110
	National	LM13600	1178-9
	Signetics	LM13600	1178-8
		LM13600A	1174-48
1361	NEC	μPC1361	1124-38
1362	NEC	μPC1362	1124-39
1363	NEC	μPC1363	1124-40
	Sanyo	LA1363	1125-130
1364	Sanyo	LA1364	1123-73
1365	Sanyo	LA1365	1125-131
	Siemens	TCA1365	1166-48
1368	Sanyo	LA1368	1124-75
1369	Sanyo	LA1369	1124-76
137	**IPS**	**IP137**	⋆ **2854**
			1215-11
		IP137A	⋆ **2854**
			1215-12
		IP137AHV	⋆ **2854**
			1215-58
		IP137HV	⋆ **2854**
			1215-59
		LM137	1215-17
		LM137HV	1215-64
	LinearTech	LM137	1215-20
		LM137HV	1215-54
			1215-67
		LT137A	1215-22
		LT137AHV	1215-56
			1215-69
	MCE	MCELM137	1215-24
	Motorola	**LM137**	⋆ **2929**
			1215-27
	National	LM137	1215-30
			1215-78
			¶ 442-4
		LM137HV	1203-80
			¶ 442-4
		LT137A	1215-33
	SiliconG	SG137	1215-35
		SG137A	1215-36
		SG137HV	1203-88
	Thomson	LM137	1215-42
			1215-81
			(Continued)

Base Number	Source	Device	Page-Line
137			(Cont'd)
	Unitrode	**UC137**	⋆ **3325**
			1215-44
			1215-83
1370	TI	TMS1370	817-7
13700	National	LM13700	1176-7
		LM13700A	1173-17
1372	**Motorola**	**MC1372**	⋆ **2903**
			⋆ **2947**
			1126-95
			1127-28
			¶ 408-13
			¶ 408-8
			¶ 412-7
	NEC	μPC1372	1124-71
1373	**Motorola**	**MC1373**	⋆ **2947**
			1126-96
1374	**Motorola**	**MC1374**	⋆ **2947**
			1125-68
			¶ 436-2
13741	National	LF13741	1130-34
			1167-39
1376	**AD**	**AD1376**	⋆ **2412**
			937-44
	Motorola	MC1376	1121-90
1377	Hitachi	HA1377	1117-153
	Motorola	**MC1377**	⋆ **2947**
			⋆ **2958**
			1124-65
			¶ 436-3
	NEC	μPC1377	1124-72
1378	**Motorola**	**MC1378**	⋆ **2947**
			⋆ **2958**
			1124-116
	NEC	μPC1378	1126-48
1379	**Motorola**	**MC1379**	⋆ **2947**
			1124-110
138	Fairchild	μA138	1213-78
	IPS	**IP138**	⋆ **2854**
			1213-81
		IP138A	⋆ **2854**
			1213-82
		LM138	1213-87
	LinearTech	LM138	1213-91
		LT138A	1213-93
	National	LM138	1213-95
	SiliconG	SG138	1213-98
		SG138A	1213-99
1382	NEC	μPC1382	1125-123
1384	Hitachi	HA1384	1116-132
1385	Sanyo	LA1385	1126-49
1388	Hitachi	HA1388	1116-133
139	Fairchild	μA139M	1114-19
	GE/Intersil	**DG139A**	⋆ **2679**
			909-75
	GE/RCA	**CA139**	⋆ **2647**
			1114-20
		CA139A	⋆ **2647**
			1113-45
	Motorola	**LM139**	⋆ **2925**
			1114-21
		LM139A	⋆ **2925**
			1113-46
	National	LM139	1114-22
		LM139A	1113-47
	PMI	**PM139**	⋆ **2975**
			1114-23
		PM139A	⋆ **2975**
			1113-48
	Raytheon	LM139	1114-24
	SGS	LM139	1114-25
		LM139A	1113-49
	Signetics	LM139A	1114-26
	Siliconix	DG139A	909-76
		D139A	688-1
			911-36
	TI	TLC139M	1114-18
	Thomson	LM139	1114-27
1390	Sanyo	LA1390	1124-77
1391	GE/RCA	CA1391	1125-22
	Motorola	**MC1391**	⋆ **2948**
			1125-31
	National	LM1391	1125-33
	NEC	μPC1391	1126-3
1392	Hitachi	HA1392	1116-134
1393	Hitachi	HA1393	1116-135

Base Number	Source	Device	Page-Line
1394	GE/RCA	CA1394	1125-23
	Hitachi	HA1394	1117-154
	Motorola	MC1394	1125-32
	NEC	μPC1394	1126-12
1396	Hitachi	HA1396	1116-136
1397	Hitachi	HA1397	1116-137
	NEC	μPC1397	1126-25
1398	GE/RCA	CA1398	1124-46
14	Datel	DACHA14BC	972-14
		DACHA14BC-1	972-16
		DACHA14BM	972-15
		DACHA14BM-1	972-17
	Digitronics	60A/D14-4	4893-29
	ILC-DDC	HRCT14	1227-53
		HRDC14	1227-55
		HSCT14	1227-57
		HSDC14	1227-58
		HXDC14	1227-69
	Lambda	LAS14AU	1213-31
	MicroPwr	MPOP14	1174-23
		MPOP14A	1172-40
		MPOP14B	1177-13
		MPOP14C	1174-26
		MPOP14D	1177-14
		MPOP14E	1172-41
	PMI	**OP14**	⋆ **2972**
			1174-31
		OP14A	⋆ **2972**
			1172-35
		OP14B	⋆ **2972**
			1177-18
		OP14C	⋆ **2972**
			1174-32
		OP14D	⋆ **2972**
			1177-10
		OP14E	⋆ **2972**
			1172-36
	TeledyneC	CAG14	902-58
	TI	TLC14	1228-139
14A05	Lambda	LAS14A05	1203-60
14A12	Lambda	LAS14A12	1206-76
14A15	Lambda	LAS14A15	1207-94
14C88	National	DS14C88	985-28
			¶ 424-10
14C89	National	DS14C89A	990-19
14GD048			
	GigaBit	**14GD048**	⋆ **2690**
			653-13
14GM048			
	GigaBit	**14GM048**	⋆ **2690**
			653-14
			1389-2
14H4	MMI	HAL14H4-2C	4081-11
		HAL14H4-2M	4081-24
		HAL14H4C	4080-52
		HAL14H4M	4080-105
		PAL14H4-2C	4076-18
		PAL14H4-2M	4076-40
		PAL14H4C	4074-72
		PAL14H4M	4075-61
		ZHAL14H4AC	4080-68
	National	PAL14H4AC	4073-29
		PAL14H4AM	4074-26
		PAL14H4C	4074-100
		PAL14H4M	4075-77
14H4A2			
	National	PAL14H4A2C	4073-30
		PAL14H4A2M	4073-31
14LP00	**Signetics**	**ACE14LP00**	⋆ **4301**
			4060-44
14L4	MMI	HAL14L4-2C	4081-12
		HAL14L4-2M	4081-25
		HAL14L4C	4080-53
		HAL14L4M	4080-106
		PAL14L4-2C	4076-19
		PAL14L4-2M	4076-41
		PAL14L4C	4074-73
		PAL14L4M	4075-62
		ZHAL14L4AC	4080-69
	National	PAL14L4AM	4074-27
		PAL14L4C	4074-101
		PAL14L4M	4075-78
14L4A2	National	PAL14L4A2C	4073-32
		PAL14L4A2M	4073-33
14L8	MMI	HAL14L8C	4080-82
		HAL14L8M	4080-107
			(Continued)

Base Number	Source	Device	Page-Line
14L8	MMI		(Cont'd)
		PAL14L8C	4075-30
		PAL14L8M	4075-63
		ZHAL14L8A	4081-30
	National	PAL14L8C	4075-45
		PAL14L8M	4075-46
14P4	Panatech	14P4	4077-31
		14P4AP-55	4076-9
		14P4BP-35	4074-111
	VLSI Tech	VP14P4	4080-7
14R21	MMI	PMS14R21	4081-57
		PMS14R21A	4081-58
14T00	**Signetics**	**ACE14T00**	⋆ **4301**
			4060-43
140	Cherry	CS140	1004-9
	Codar	140	4868-16
			4868-6
	GE/Intersil	**DG140A**	⋆ **2680**
			909-24
	IPS	**IP140-12**	⋆ **2854**
			1206-11
		IP140-15	⋆ **2854**
			1207-39
		IP140-5	⋆ **2854**
			1202-118
		IP140A-12	⋆ **2854**
			1206-12
		IP140A-15	⋆ **2854**
			1207-40
		IP140A-5	⋆ **2854**
			1202-119
		LM140-12	1206-21
		LM140-15	1207-49
		LM140-5	1203-3
	Motorola	**LM140-12**	⋆ **2926**
			⋆ **2928**
			1206-27
		LM140-15	⋆ **2926**
			⋆ **2928**
			1207-54
		LM140-5	⋆ **2926**
			⋆ **2928**
			1203-9
		LM140-8	⋆ **2926**
			⋆ **2928**
			1204-112
		LM140A-12	⋆ **2926**
			⋆ **2928**
			1206-28
	National	LM140-12	1206-36
		LM140-15	1207-60
		LM140-5	1203-16
		LM140A-12	1206-37
		LM140A-15	1207-61
		LM140A-5	1203-17
		LM140LA-12	1205-81
		LM140LA-15	1206-110
		LM140LA-5	1202-20
	Raytheon	RG140	673-52
	SiliconG	SG140-05K	1203-24
		SG140-05R	1203-25
		SG140-05T	1202-73
		SG140-06K	1204-31
		SG140-06R	1204-32
		SG140-06T	1204-4
		SG140-08K	1204-121
		SG140-08R	1204-122
		SG140-08T	1204-93
		SG140-12K	1206-45
		SG140-12R	1206-46
		SG140-12T	1205-110
		SG140-15K	1207-67
		SG140-15R	1207-68
		SG140-15T	1207-16
		SG140-18K	1208-36
		SG140-18R	1208-37
		SG140-18T	1208-5
		SG140-20K	1208-77
		SG140-20R	1208-78
		SG140-20T	1208-66
		SG140-24K	1209-14
		SG140-24R	1209-15
		SG140-24T	1208-110
	Siliconix	DG140A	909-25

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
1400	Altera	EPB1400	886-105
			4081-69
	AMCC	Q1400C	4041-8
		Q1400D	4041-9
	CalDevices	CHA1400	4042-39
	Cherry	CS1400	4065-24
	GIM	ER1400	1308-45
			¶ 435-5
			¶ 444-16
			¶ 444-20
	Inmos	IMS1400-55M	1371-75
		IMS1400-70M	1371-95
	MMI	MLA1400	4055-6
	Panasonic	MN1400	811-18
			862-44
			¶ 415-33
	Signetics	**ACE1400**	*** 4302**
			4060-34
	TI	SE1400P	815-34
			864-6
		TMS1400	817-8
	Toshiba	T1400	1120-81
14000	Motorola	MC14000UBA	624-176
		MC14000UBC	624-177
14001	Motorola	MC14001BA	625-150
		MC14001BC	625-151
		MC14001UBA	625-152
		MC14001UBC	625-153
14002	Motorola	MC14002BA	625-39
		MC14002BC	625-40
		MC14002UBA	625-41
		MC14002UBC	625-42
14006	Motorola	MC14006BA	636-24
			1394-53
		MC14006BC	636-25
			1394-52
14007	Motorola	MC14007UBA	607-125
		MC14007UBC	607-126
	Thomson	MK14007	875-41
14008	Motorola	MC14008BA	602-60
		MC14008BC	602-61
1401	**AD**	**ADSP1401**	*** 2449**
			646-10
		ADSP1401J	*** 2449**
			604-143
		ADSP1401K	*** 2449**
			604-144
		ADSP1401S	*** 2449**
			604-145
		ADSP1401T	*** 2449**
			604-146
	DataTrans	DT1401	4884-43
	NEC	μPC1401	1124-73
	SiliconG	SG1401	1104-110
			¶ 431-21
14011	Motorola	MC14011BA	623-94
		MC14011BC	623-95
		MC14011UBA	623-96
		MC14011UBC	623-97
14012	Motorola	MC14012BA	622-152
		MC14012BC	622-153
		MC14012UBA	622-154
		MC14012UBC	622-155
14013	Motorola	MC14013BA	617-103
		MC14013BC	617-104
14014	Motorola	MC14014BA	635-123
			1395-27
		MC14014BC	635-124
14015	Motorola	MC14015BA	633-134
			1394-36
		MC14015BC	633-135
			1394-30
14016	Motorola	MC14016BA	905-14
		MC14016BC	905-15
14017	Motorola	MC14017BA	611-131
		MC14017BC	611-132
14018	Motorola	MC14018BA	614-5
		MC14018BC	614-6
1402	AMD	AM1402AC	1393-3
		AM1402AM	1393-4
	Panasonic	MN1402	811-19
			862-45
			¶ 415-33
14020	Motorola	MC14020BA	611-41
		MC14020BC	611-42
14021	Motorola	MC14021BA	634-113
			1395-28
		MC14021BC	634-114
			1395-19
14022	Motorola	MC14022BA	613-126
		MC14022BC	613-127
14023	Motorola	MC14023BA	623-31
		MC14023BC	623-32
		MC14023UBA	623-33
		MC14023UBC	623-34
14024	Motorola	MC14024BA	610-90
		MC14024BC	610-91
14025	Motorola	MC14025BA	625-85
		MC14025BC	625-86
		MC14025UBA	625-87
		MC14025UBC	625-88
14027	Motorola	MC14027BA	621-37
		MC14027BC	621-38
14028	Motorola	MC14028BA	614-88
		MC14028BC	614-89
14029	Motorola	MC14029BA	614-22
		MC14029BC	614-23
1403	AMD	AM1403AC	1393-8
		AM1403AM	1393-9
	AD	AD1403	1225-91
		AD1403A	1225-92
	Inmos	**IMS1403-25**	*** 2782**
			1370-68
		IMS1403-25L	*** 2782**
			1370-69
		IMS1403-35	*** 2782**
			1371-8
		IMS1403-35L	*** 2782**
			1370-86
		IMS1403-35LM	*** 2782**
			1370-87
		IMS1403-45	*** 2782**
			1371-33
		IMS1403-45L	*** 2782**
			1371-23
		IMS1403-45LM	*** 2782**
			1371-24
		IMS1403-55LM	*** 2782**
			1371-58
	Motorola	**MC1403**	*** 2958**
			1192-48
			1225-125
		MC1403A	*** 2958**
			1225-126
	Panasonic	MN1403	811-20
			862-46
14032	Motorola	MC14032BA	602-24
		MC14032BC	602-25
14034	Motorola	MC14034BA	634-131
			1394-93
		MC14034BC	634-132
			1394-86
14035	Motorola	MC14035BA	634-64
			1394-16
		MC14035BC	634-65
			1394-7
14038	Motorola	MC14038BA	602-15
		MC14038BC	602-16
1404	AMD	AM1404AC	1393-12
		AM1404AM	1393-13
	Panasonic	MN1404	811-21
			862-47
14040	Motorola	MC14040BA	611-6
		MC14040BC	611-7
14042	Motorola	MC14042BA	627-10
		MC14042BC	627-11
14043	Motorola	MC14043BA	627-46
		MC14043BC	627-47
14044	Motorola	MC14044BA	627-27
		MC14044BC	627-28
14046	Motorola	MC14046BA	637-52
			1190-55
		MC14046BC	637-53
			1190-56
14049	Motorola	MC14049UBA	605-147
		MC14049UBC	605-148
1405	Lambda	LAS1405	1203-61
		LAS1405B	1203-62
	Panasonic	MN1405	811-22
			862-48
	Sanyo	LB1405	977-10
			1222-93
14050	Motorola	MC14050BA	606-22
		MC14050BC	606-23
14051	Motorola	MC14051BA	913-43
		MC14051BC	913-44
14052	Motorola	MC14052BA	912-9
		MC14052BC	912-10
14053	Motorola	MC14053BA	908-30
		MC14053BC	908-31
1406	DataTrans	DT1406	4885-15
	NEC	μPC1406	1125-124
14060	Motorola	MC14060B	611-73
14066	Motorola	MC14066BA	904-92
		MC14066BC	904-93
14067	Motorola	MC14067BA	632-58
			915-21
		MC14067BC	632-59
			915-22
14068	Motorola	MC14068BA	623-167
		MC14068BC	623-168
14069	Motorola	MC14069UBA	608-49
		MC14069UBC	608-50
1407	DataTrans	DT1407	4885-1
14070	Motorola	MC14070BA	626-56
		MC14070BC	626-57
14071	Motorola	MC14071BA	624-156
		MC14071BC	624-157
14072	Motorola	MC14072BA	624-70
		MC14072BC	624-71
14073	Motorola	MC14073BA	622-29
		MC14073BC	622-30
14075	Motorola	MC14075BA	624-105
		MC14075BC	624-106
14076	Motorola	MC14076BA	618-47
		MC14076BC	618-48
14077	Motorola	MC14077BA	626-97
		MC14077BC	626-98
14078	Motorola	MC14078BA	625-187
		MC14078BC	625-188
1408	AMD	AM1408-6	948-24
		AM1408-7	947-50
		AM1408-8	945-28
		SSS1408A-7	947-44
		SSS1408A-8	945-18
	AD	AD1408-7	947-45
		AD1408-8	945-20
		AD1408-9	943-29
	Fairchild	DAC1408	945-31
		DAC1408AC	945-32
		DAC1408BC	947-46
		DAC1408CC	948-22
	Motorola	**MC1408-6**	*** 2938**
			948-25
		MC1408-7	*** 2938**
			947-51
		MC1408-8	*** 2938**
			945-33
	National	MC1408-6	948-27
		MC1408-7	947-53
		MC1408-8	945-35
	PMI	DAC1408A-6	948-23
		DAC1408A-7	947-47
		DAC1408A-8	945-23
	Signetics	MC1408-7	947-29
		MC1408-8	945-37
14081	Motorola	MC14081BA	622-85
		MC14081BC	622-86
14082	Motorola	MC14082BA	621-169
		MC14082BC	621-170
1409	AD	HAS1409	937-2
		HDD1409	972-13
	Sanyo	LB1409	977-11
14093	Motorola	MC14093BA	638-104
		MC14093BC	638-105
14094	Motorola	MC14094BA	634-155
			1395-71
		MC14094BC	634-156
			1395-72
14097	Motorola	MC14097BA	632-134
			914-39
		MC14097BC	632-135
			914-40
14099	Motorola	MC14099BA	629-31
		MC14099BC	629-32
141	**GE/Intersil**	**DG141A**	*** 2679**
			903-45
		DG141B	*** 2679**
			903-51
	Siliconix	DG141A	903-46
1410	**AD**	**ADSP1410**	*** 2449**
			644-9
		ADSP1410J	*** 2449**
			602-71
		ADSP1410K	*** 2449**
			602-72
		ADSP1410S	*** 2449**
			602-73
		ADSP1410T	*** 2449**
			602-74
	Plessey	MJ1410	1197-61
	Telefunken	TDA1410	1106-57
14106	Motorola	MC14106	608-64
1411	**Motorola**	**MC1411**	*** 2954**
			1002-12
			1107-82
	NEC	μPC1411	1125-108
1412	Fujitsu	MB1412A	688-35
			982-29
	Lambda	LAS1412	1206-77
		LAS1412B	1206-78
	Motorola	**MC1412**	*** 2954**
			1002-33
			1107-83
1413	**Motorola**	**MC1413**	*** 2954**
			*** 2958**
			1001-107
			1107-84
1414	Motorola	MC1414	1112-26
	National	LM1414	1112-25
	Supertex	HV1414	915-11
1415	Lambda	LAS1415	1207-95
		LAS1415B	1207-96
	Sanyo	LB1415	977-12
1416	**Motorola**	**MC1416**	*** 2954**
			1001-87
			1107-85
	Sanyo	LB1416	977-13
	Supertex	HV1416	915-13
14160	Motorola	MC14160BA	612-47
		MC14160BC	612-48
14161	Motorola	MC14161BA	609-38
		MC14161BC	609-39
14162	Motorola	MC14162BA	612-4
		MC14162BC	612-5
14163	Motorola	MC14163BA	608-156
		MC14163BC	608-157
14174	Motorola	MC14174BA	618-103
		MC14174BC	618-104
14175	Motorola	MC14175BA	618-6
		MC14175BC	618-7
1419	Sanyo	LB1419	977-14
14194	Motorola	MC14194BA	634-41
			1394-19
		MC14194BC	634-42
142	**GE/Intersil**	**DG142A**	*** 2680**
			909-78
	Siliconix	DG142A	909-79
1420	Inmos	IMS1420-55M	1364-89
		IMS1420-70M	1365-26
142100	Motorola	MC142100	911-62
			1193-31
142103	Motorola	MC142103	1199-144
1422	Fujitsu	MB1422A	688-34
			999-70
1423	**Inmos**	**IMS1423-25**	*** 2783**
			1361-77
		IMS1423-35	*** 2783**
			1362-78
		IMS1423-35M	*** 2783**
			1362-79
		IMS1423-45	*** 2783**
			1363-81

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
1423	**Inmos**		**(Cont'd)**
		IMS1423-45M	
			⋆ **2783**
			1363-82
		IMS1423-55M	
			⋆ **2783**
			1364-55
	Motorola	MCM1423-45	1364-3
1424	TeledyneP	1424	1169-8
1426	Fujitsu	MB1426	688-36
			982-30
	Sanyo	LB1426	977-15
143	Fairchild	CCD143	1222-48
			1222-70
	GE/Intersil	**DG143**	⋆ **2680**
			907-9
	National	LM143	1131-84
	Sharp	SM143	813-33
	SiliconG	SG143	1131-87
	Siliconix	DG143A	907-10
	Telefunken	U143	978-110
			1124-37
1430	Panasonic	MN1430	811-23
			862-49
	Plessey	SL1430	1126-106
	TeledyneP	1430	1130-127
			1131-19
			1135-85
			1152-11
		1430HR	1131-20
			1135-86
			1152-12
1431	Plessey	SL1431	1126-107
1432	Panasonic	MN1432	811-24
			862-50
	Plessey	SL1432	1126-108
1433	**Inmos**	**IMS1433-35**	⋆ **2784**
			1355-53
		IMS1433-45	⋆ **2784**
			1355-87
		IMS1433-45M	
			⋆ **2784**
			1355-88
		IMS1433-55	⋆ **2784**
			1356-30
		IMS1433-55M	
			⋆ **2784**
			1356-31
		IMS1433-70	⋆ **2784**
			1356-73
		IMS1433-70M	
			⋆ **2784**
			1356-74
143403	**Motorola**	**MC143403**	⋆ **2924**
			1189-45
143404	**Motorola**	**MC143404**	⋆ **2924**
			1189-44
1435	**Datel**	**AM1435C**	⋆ **2577**
			1158-2
		AM1435M	⋆ **2577**
			1158-3
		AM1435MC	⋆ **2577**
			1131-36
		AM1435MM	⋆ **2574**
			⋆ **2577**
			1131-37
	Panasonic	MN1435	811-25
			862-51
	TeledyneP	1435	1131-46
			1136-33
			1161-44
		1435HR	1161-45
1436	**Motorola**	**MC1436**	⋆ **2920**
			⋆ **2958**
			1131-93
			1166-12
		MC1436C	⋆ **2920**
			⋆ **2958**
			1131-103
			1167-11
	National	LM1436	1131-104
			1167-14
	Sanyo	LB1436	977-16
	SiliconG	SG1436	1131-95
			1166-13

(Continued)

Base Number	Source	Device	Page-Line
1436	SiliconG		(Cont'd)
		SG1436C	1131-106
			1167-12
1437	HyComp	HC1437	1152-8
		HC1437-883	1152-9
	Motorola	**MC1437**	⋆ **2921**
			1180-14
	TeledyneP	1437	1149-17
		1437HR	1149-18
1438	TeledyneP	1438	1152-1
		1438HR	1152-2
1439	**Motorola**	**MC1439**	⋆ **2919**
			1164-20
144	**GE/Intersil**	**DG144A**	⋆ **2680**
			906-78
		DG144B	⋆ **2680**
			906-88
	National	LM144	1131-85
			1159-33
	Siliconix	DG144A	906-79
		L144A	1134-35
			¶ 429-17
		L144B	1134-36
			¶ 429-17
		L144C	1134-37
			¶ 429-17
	Siltronics	S144	1182-6
	UTMC	**UT144B**	⋆ **4331**
			4063-17
		UT144BR	⋆ **4331**
			4063-18
1440	Plessey	MJ1440	1195-67
	Siemens	TBA1440G	1126-117
	Thomson	TBA1440G	1126-141
1441	EG&G-Reticon		
		RA1441A	1222-6
	Thomson	TBA1441	1126-142
14410	Motorola	MC14410	1199-10
14411	Motorola	MC14411	636-101
			1009-28
144110	**Motorola**	**MC144110**	⋆ **2938**
			941-10
144111	**Motorola**	**MC144111**	⋆ **2938**
			941-9
14412	Exar	XR14412V	1197-20
			¶ 432-25
	Motorola	MC14412	1197-21
			¶ 442-11
14415	Motorola	MC14415	638-74
		MC14415E	638-75
14416	Motorola	MC14416	1198-103
14417	Motorola	MC14417	1198-104
14418	Motorola	MC14418	1198-105
14419	Motorola	MC14419	642-68
			984-7
			1194-119
			¶ 446-20
1443	TeledyneP	1443	1154-37
		1443HR	1150-27
14433	**Motorola**	**MC14433**	⋆ **2937**
			939-29
			¶ 408-24
			¶ 419-27
	TeledyneS	TSC14433	939-33
			¶ 425-9
			¶ 426-2
		TSC14433A	939-34
			¶ 425-9
			¶ 426-2
		TSC14433B	939-35
			¶ 425-9
			¶ 426-2
1444	Plessey	MJ1444	1198-107
	Ziatech	ZT1444	4848-7
14442	**Motorola**	**MC14442**	⋆ **2937**
			920-52
14443	**Motorola**	**MC14443**	⋆ **2937**
			925-20
14447	**Motorola**	**MC14447**	⋆ **2937**
			925-21
1445	Motorola	MC1445	1104-24
	Plessey	MJ1445	1198-106
	TI	MC1445	1104-64
1446	Plessey	MJ1446	1198-100
14467	Motorola	MC14467	1127-72
14468	Motorola	MC14468	1228-120

Base Number	Source	Device	Page-Line
14469	Motorola	MC14469	636-93
			1009-12
14489	Motorola	MC14489	979-134
14490	Motorola	MC14490	638-119
14495	Motorola	MC14495	617-6
			979-133
14497	Motorola	MC14497	1010-65
			1122-54
14499	Motorola	MC14499	980-78
145	Fairchild	CCD145	1222-49
			1222-71
	GE/Intersil	**DG145A**	⋆ **2680**
			909-71
	Siliconix	DG145A	909-72
	Telefunken	UAA145	1228-100
		U145	1193-27
145K5	National	LM145K5	1210-32
1450	Panasonic	MN1450	811-26
			862-52
	Plessey	SP1450B	1197-54
	Sanyo	LB1450	1121-86
14500	Motorola	MC14500B	636-92
			862-15
145000	Motorola	MC145000	978-88
145001	Motorola	MC145001	978-89
14501	Motorola	MC14501UBA	626-111
		MC14501UBC	626-112
145010	Motorola	MC145010	1127-81
14502	Motorola	MC14502BA	605-118
		MC14502BC	605-119
145026	Motorola	MC145026	1011-2
			1122-61
145027	Motorola	MC145027	1010-73
			1122-62
145028	Motorola	MC145028	1011-1
			1122-63
14503	Motorola	MC14503BA	606-96
		MC14503BC	606-97
145030	Motorola	MC145030	885-69
14504	Motorola	MC14504BA	636-80
		MC14504BC	636-81
145040	**Motorola**	**MC145040**	⋆ **2937**
			920-14
145041	**Motorola**	**MC145041**	⋆ **2937**
			920-36
14505	Motorola	MCM14505A	630-53
			1348-44
		MCM14505C	630-54
			1348-46
14506	Motorola	MC14506BA	624-29
		MC14506BC	624-30
14508	Motorola	MC14508BA	626-133
		MC14508BC	626-134
1451	DataTrans	DT1451	4884-19
	GIM	ER1451	1308-22
			1308-48
14510	Motorola	MC14510BA	612-96
		MC14510BC	612-97
145100	Motorola	MC145100	911-63
			1193-32
145106	Motorola	MC145106	1190-123
14511	Motorola	MC14511BA	617-31
			979-78
			¶ 425-20
		MC14511BC	617-32
			979-79
			¶ 425-20
14512	Motorola	MC14512A	632-48
		MC14512C	632-49
14513	Motorola	MC14513BA	617-33
			979-80
		MC14513BC	617-34
			979-81
14514	Motorola	MC14514BA	616-41
		MC14514BC	616-42
145145	Motorola	MC145145	1190-124
145146	Motorola	MC145146	1190-125
14515	Motorola	MC14515BA	616-43
		MC14515BC	616-44
145151	Motorola	MC145151	1190-126
145152	Motorola	MC145152	1190-127
145155	IMI	IMI145155	1190-119
	Motorola	MC145155	1190-128
145156	IMI	IMI145156	1190-120
	Motorola	MC145156	1190-129

Base Number	Source	Device	Page-Line
145157	IMI	IMI145157	1190-121
	Motorola	MC145157	1190-130
145158	IMI	IMI145158	1190-122
	Motorola	MC145158	1190-131
145159	Motorola	MC145159	1190-132
			¶ 439-7
14516	Motorola	MC14516BA	609-127
		MC14516BC	609-128
145160	Motorola	MC145160	1191-68
145166	Motorola	MC145166	1191-69
145167	Motorola	MC145167	1191-70
14517	Motorola	MC14517BA	633-149
			1396-9
		MC14517BC	633-150
			1396-7
14518	Motorola	MC14518BA	613-36
		MC14518BC	613-37
14519	Motorola	MC14519BA	631-174
		MC14519BC	632-1
14520	ILC-DDC	SDC14520	1227-70
	Motorola	MC14520BA	610-1
		MC14520BC	610-2
14521	Motorola	MC14521BA	633-103
		MC14521BC	633-104
14522	Motorola	MC14522BA	612-132
		MC14522BC	612-133
14526	Motorola	MC14526BA	609-153
		MC14526BC	609-154
14527	Motorola	MC14527BA	637-89
		MC14527BC	637-90
14528	Motorola	MC14528BA	633-61
		MC14528BC	633-62
14529	Motorola	MC14529BA	911-84
			913-1
		MC14529BC	911-85
			913-2
1453	Panasonic	MN1453	811-27
			862-53
14530	Motorola	MC14530BA	626-108
		MC14530BC	626-109
14531	Motorola	MC14531BA	643-62
		MC14531BC	643-63
14532	Motorola	MC14532BA	642-95
		MC14532BC	642-96
14534	Motorola	MC14534BA	613-107
			¶ 404-13
		MC14534BC	613-108
			¶ 404-13
14536	Motorola	MC14536BA	633-85
		MC14536BC	633-86
14537	Motorola	MCM14537A	630-74
			1349-11
		MCM14537C	630-75
			1349-12
14538	Motorola	MC14538BA	633-31
		MC14538BC	633-32
14539	Motorola	MC14539BA	630-111
		MC14539BC	630-112
1454	Motorola	MC1454	1117-31
	Panasonic	MN1454	811-28
			862-54
145402	**Motorola**	**MC145402**	⋆ **2938**
			936-38
145406	**Motorola**	**MC145406**	⋆ **2954**
			1194-107
14541	Motorola	MC14541BA	633-80
			1201-26
		MC14541BC	633-81
			1201-27
145410	Motorola	MC145410	1194-22
145411	Motorola	MC145411	1219-96
145412	Motorola	MC145412	1193-119
145413	Motorola	MC145413	1193-120
			¶ 431-28
145414	Motorola	MC145414	1195-22
145415	Motorola	MC145415	1195-19
			¶ 431-29
145418	Motorola	MC145418	1010-15
145419	Motorola	MC145419	1011-6
14542	ILC-DDC	IDC14542	1227-83
145421	Motorola	MC145421	1010-17
			1195-88
145422	Motorola	MC145422	1010-16
			1195-87
			¶ 431-28
			¶ 434-2

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
145425	Motorola	MC145425	1011-8
			1197-110
145426	Motorola	MC145426	1011-7
			1197-109
			¶ 431-28
			¶ 434-2
145428	Motorola	MC145428	1193-52
145429	Motorola	MC145429	1198-95
14543	Motorola	MC14543BA	616-139
			979-97
			¶ 425-20
		MC14543BC	616-140
			979-98
			¶ 425-20
145432	Motorola	MC145432	1195-47
145439	Motorola	MC145439	1199-143
14544	ILC-DDC	IDC14544	1227-86
	Motorola	MC14544BA	979-103
		MC14544BC	979-104
145440	Motorola	MC145440	1197-6
			¶ 442-11
145441	Motorola	MC145441	1197-7
145442	Motorola	MC145442	1196-36
145443	Motorola	MC145443	1196-3
145453	Motorola	MC145453	978-7
14547	Motorola	MC14547BA	614-100
			978-111
		MC14547BC	614-101
			978-112
145488	Motorola	MC145488	888-17
			1195-77
14549	**Motorola**	**MC14549BA**	★ **2937**
			637-116
		MC14549BC	★ **2937**
			637-117
1455	**Motorola**	**MC1455**	★ **2958**
			1201-43
		MC1455BC	★ **2958**
			1395-104
	Panasonic	MN1455	811-29
			862-55
	Plessey	SP1455B	1197-55
145500	Motorola	MC145500	1192-133
145501	Motorola	MC145501	1192-118
145502	Motorola	MC145502	1192-119
145503	Motorola	MC145503	1192-120
145505	Motorola	MC145505	1192-121
14551	Motorola	MC14551BA	908-47
		MC14551BC	908-48
14552	Motorola	MCM14552A	630-87
			1348-47
		MCM14552C	630-88
			1348-48
14553	Motorola	MC14553BA	613-55
		MC14553BC	613-56
14554	Motorola	MC14554BA	604-8
		MC14554BC	604-9
14555	Motorola	MC14555BA	614-114
		MC14555BC	614-115
14556	Motorola	MC14556BA	614-116
		MC14556BC	614-117
14557	Motorola	MC14557BA	636-60
			1396-4
		MC14557BC	636-61
14558	Motorola	MC14558	978-113
14559	**Motorola**	**MC14559BA**	★ **2937**
			637-114
		MC14559BC	★ **2937**
			637-115
1456	**Motorola**	**MC1456**	★ **2920**
			1166-9
		MC1456C	★ **2920**
			1167-13
14560	ILC-DDC	SDC14560	1229-17
	Motorola	MC14560BA	602-8
			¶ 402-13
		MC14560BC	602-9
			¶ 402-13
14561	ILC-DDC	SDC14561	1229-18
	Motorola	MC14561BA	604-153
			¶ 402-13
		MC14561BC	604-154
			¶ 402-13
14562	ILC-DDC	SDC14562	1229-19
	Motorola	MC14562BA	636-65
			1395-95
			(Continued)

Base Number	Source	Device	Page-Line
14562	Motorola		(Cont'd)
		MC14562BC	636-66
			1395-94
14563	ILC-DDC	SDC14563	1229-20
14564	ILC-DDC	SDC14564	1227-79
14565	ILC-DDC	SDC14565	1227-80
14566	ILC-DDC	SDC14566	1227-81
	Motorola	MC14566BA	613-136
		MC14566BC	613-137
14568	Motorola	MC14568BA	613-140
			1190-29
		MC14568BC	613-141
			1190-30
14569	Motorola	MC14569BC	614-33
14572	Motorola	MC14572A	626-114
		MC14572C	626-115
14573	Motorola	MC14573	637-25
			1189-43
14574	**Motorola**	**MC14574**	★ **2925**
			636-120
			1115-17
14575	**Motorola**	**MC14575**	★ **2925**
			636-121
			1113-32
			1113-33
1458	DataTrans	DT1458	4884-20
	Exar	XR1458	1130-1
			1179-3
	Fairchild	μA1458	1130-2
		μA1458CC	1179-4
	GE/RCA	**CA1458**	★ **2645**
			1130-3
		LM1458	★ **2645**
			1179-22
	Motorola	**MC1458**	★ **2921**
			★ **2958**
			1130-5
			1179-7
		MC1458C	★ **2921**
			★ **2958**
			1181-2
		MC1458S	★ **2921**
			★ **2958**
			1179-43
	National	LM1458	1130-6
			1179-9
	NEC	μPC1458	1130-7
			1179-11
	Panasonic	AN1458	1176-1
	Samsung	MC1458	1179-18
		MC1458C	1180-54
	SGS	MC1458	1179-41
		MC1458C	1181-1
	Signetics	MC1458	1130-8
			1179-16
		SA1458	1179-44
	TI	MC1458	1179-19
	Thomson	LM1458C	1179-21
		LM1458M	1177-36
14580	Motorola	MC14580BA	630-15
			1347-30
		MC14580BC	630-16
			1347-31
14581	Motorola	MC14581BA	603-43
		MC14581BC	603-44
14582	Motorola	MC14582BA	603-75
		MC14582BC	603-76
14583	Motorola	MC14583BA	638-9
		MC14583BC	638-10
14584	Motorola	MC14584BA	638-153
		MC14584BC	638-154
14585	Motorola	MC14585BA	603-112
		MC14585BC	603-113
14597	Motorola	MC14597BA	629-43
			862-16
		MC14597BC	629-44
			862-17
14598	Motorola	MC14598BA	628-168
			862-18
		MC14598BC	628-169
			862-19
14599	Motorola	MC14599BA	628-166
			862-20
		MC14599BC	628-167
			862-21

Base Number	Source	Device	Page-Line
146	Exar	XR146	1134-38
			1160-29
	GE/Intersil	**DG146A**	★ **2680**
			906-66
		DG146B	★ **2680**
			906-69
	National	LM146	1134-43
	Siliconix	DG146A	906-67
	Telefunken	UAA146	1228-101
	Thomson	LM146	1185-39
1460	TeledyneP	1460	1161-27
		1460HR	1161-35
1461	TeledyneP	1461	1130-88
		1461HR	1146-4
1463	Sanyo	LA1463	1126-50
	TeledyneP	1463	1152-7
		1463HR	1152-6
1464	Sanyo	LA1464	1126-51
	TeledyneP	1464	1159-22
		1464HR	1159-21
1466	**Motorola**	**MC1466**	★ **2931**
			1214-110
1467	TeledyneP	1467	1139-11
		1467HR	1139-12
1468	Exar	XR1468	1212-113
	Motorola	**MC1468**	★ **2931**
			1212-116
			1215-86
			1215-88
	SiliconG	SG1468	1213-1
			1215-90
		SG1468T	1215-92
146805H2			
	Motorola	MC146805H2	831-25
146818	**Motorola**	**MC146818**	★ **2902**
			867-143
			¶ 411-26
		MC146818A	★ **2902**
			867-144
			¶ 411-26
146823	**Motorola**	**MC146823**	★ **2902**
			868-43
			¶ 411-26
1468705			
	Motorola	M1468705EVM	4895-16
1468705F2			
	Motorola	**MC1468705F2**	★ **2901**
			831-26
			867-30
1468705G2			
	Motorola	**MC1468705G2**	★ **2901**
			831-27
			867-19
			¶ 413-15
1469	Siemens	TBB1469	1121-111
1470	Sanyo	LB1470	977-29
	TI	TMS1470	817-9
14700	ILC-DDC	SDC14700	1229-12
1472	**Motorola**	**MC1472**	★ **2954**
			1005-62
	Plessey	MJ1472	1197-43
1473	NEC	μPC1473	1103-129
			1122-17
	Plessey	MJ1473	1197-44
	Sanyo	LB1473	1121-87
1474	NEC	μPC1474	1103-130
			1122-18
	Plessey	MJ1474	1197-29
1475	NEC	μPC1475	1103-131
			1122-19
1476	NEC	μPC1476	1123-74
1477	NEC	μPC1477	1125-3
1478	NEC	μPC1478	1125-87
148	Fairchild	μA148M	1185-42
	Motorola	**LM148**	★ **2924**
			1185-43
	National	LM148	1185-44
	PMI	PM148	1184-4
	Raytheon	LM148	1185-45
	Thomson	LM148	1185-40
1480	Analogic	MP1480S	964-19
	NEC	μPC1480CA	1126-10
	TeledyneP	1480	1130-116
			(Continued)

Base Number	Source	Device	Page-Line
1480	TeledyneP		(Cont'd)
		1480HR	1155-14
1481	NEC	μPC1481	1125-74
1487	**CTI**	**CT1487**	★ **2554**
			1011-15
1488	Exar	XR1488	985-37
	Fairchild	μA1488C	985-38
	Motorola	**MC1488**	★ **2952**
			★ **2958**
			985-39
			¶ 424-21
			¶ 425-22
	National	DS1488	985-40
	Samsung	MC1488	985-41
	SGS	MC1488	985-42
	Signetics	MC1488	985-43
	Ziatech	ZT 1488A	4848-15
1489	Exar	XR1489A	990-33
	Fairchild	μA1489AC	990-34
		μA1489C	990-24
	Motorola	**MC1489**	★ **2952**
			★ **2958**
			990-26
			¶ 424-21
			¶ 425-22
		MC1489A	★ **2952**
			★ **2958**
			990-35
			¶ 424-21
			¶ 425-22
	National	DS1489	990-27
		DS1489A	990-36
	Samsung	MC1489	990-28
		MC1489A	990-37
	SGS	MC1489	990-29
	Signetics	MC1489	990-30
		MC1489A	990-38
	SiliconG	SG1489A	990-39
149	National	LM149	1185-46
	SGS	L149	1117-99
1490	Motorola	MC1490	1116-39
1494	Motorola	MC1494	1223-24
1495	Motorola	MC1495	1223-25
	SiliconG	SG1495	1223-28
1496	**Motorola**	**MC1496**	★ **2939**
			★ **2958**
			1219-80
	National	LM1496	1219-82
	Signetics	MC1496	1219-88
	SiliconG	SG1496	1219-90
1498	Panasonic	MN1498	811-30
			862-58
			¶ 415-33
1499	Panasonic	MN1499	811-31
			862-56
			¶ 415-33
		MN1499A	813-1
			862-57
			¶ 415-33
15	CIC	MSA15	4065-36
	Lambda	LAS15CB	1206-99
		LAS15U	1213-29
	LinearTech	OP15A	1145-39
		OP15B	1149-1
		OP15C	1155-20
		OP15E	1145-38
		OP15F	1149-2
		OP15G	1155-19
	LSI Logic	**LSC15**	★ **4271**
			4084-23
	MCE	D15A	4054-25
	PMI	**OP15A**	★ **2971**
			1145-40
		OP15B	★ **2971**
			1149-3
		OP15C	★ **2971**
			1155-21
		OP15E	★ **2971**
			1145-41
		OP15F	★ **2971**
			1149-4
		OP15G	★ **2971**
			1155-22
	Raytheon	**RVG15**	★ **4296**
			4059-8
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
15			(Cont'd)
	Supertex	ED15	637-106
			¶ 426-11
	Tektronix	TKCP15P	1112-18
15A05	Lambda	LAS15A05	1203-6
15A06	Lambda	LAS15A06	1204-21
15A08	Lambda	LAS15A08	1204-110
15A10	Lambda	LAS15A10	1205-64
15A12	Lambda	LAS15A12	1206-24
15A15	Lambda	LAS15A15	1207-51
15A18	Lambda	LAS15A18	1208-27
15A20	Lambda	LAS15A20	1208-73
15A24	Lambda	LAS15A24	1209-6
15G008	Toshiba	TC15G008	4062-8
15G014	Toshiba	TC15G014	4062-10
15G022	Toshiba	TC15G022	4062-12
15G032	Toshiba	TC15G032	4062-14
15G042	Toshiba	TC15G042	4062-17
15G060	Toshiba	TC15G060	4062-21
150	ArrayTech	DHS150	4041-31
	AT&T	LBR150AS	1206-106
	Fairchild	μA150	1213-44
	Imaging	Series 150	4884-18
	IPS	**IP150**	⋆ **2854**
			1213-47
		IP150A	⋆ **2854**
			1213-48
		LM150	1213-53
	Interconics	Interchip 150	4051-30
	IXYS	IXMS150	1003-107
	LinearTech	LM150	1213-57
		LM150A	1213-58
		LT150A	1213-61
	Maxim	MAX150	918-29
		MAX150BE	918-42
		MAX150BL	918-43
		MAX150BM	918-44
		MAX150CC	923-35
		MAX150CE	923-36
		MAX150CM	923-37
	Motorola	**LM150**	⋆ **2929**
			1213-63
	National	AF150	1219-41
		LM150	1213-66
			¶ 442-4
	Raytheon	RG150	674-166
	SiliconG	SG150	1213-69
		SG150A	1213-70
	Teletek	Z-150MB	4850-29
	Unitrode	**UC150**	⋆ **3325**
			1213-75
1500	AMD	AM1500C	1113-13
		AM1500L	1111-47
		AM1500M	1111-48
	AMCC	QH1500A	4041-12
		Q1500A	4041-10
	ArrayTech	DHS1500	4041-39
		HCD1500	4041-40
	Buckminster		
		C1500	4866-26
	Cherry	CS1500	4065-23
	Fujitsu	**ET1500**	⋆ **4230**
			4046-20
	Maxim	MAX1500LL	948-8
	Microvoice	MV1500	4891-25
	Motorola	**MCA1500M**	⋆ **4282**
			⋆ **4287**
			4055-45
	S-MOS	SED1500	978-23
	Sanyo	LB1500	1124-41
	Stantel-STC	TEL1500	1194-117
	TLSI	TA1500	4061-58
15000	**Gould**	**GC15000**	⋆ **4244**
			4048-49
1500025			
	Microvoice	MV1500025	4863-13
15001	ILC-DDC	REF15001	1229-13
15006	**Fujitsu**	**C15006UM**	⋆ **4229**
			⋆ **4232**
			4047-10
1501	SiliconG	SG1501A	1213-4
			¶ 442-1
1502	AdvLinear	ALD1502	1201-62
	Fujitsu	**C1502AVM**	⋆ **4229**
			⋆ **4231**
			4046-9
	SiliconG	SG1502	1215-94
1503	Motorola	MC1503	1225-127
		MC1503A	1225-128
	SiliconG	SG1503	1225-145
1504	AdvLinear	ALD1504	1201-61
1505	Lambda	LAS1505	1203-7
			¶ 441-19
1506	AMD	AM1506	1393-1
	Lambda	LAS1506	1204-22
1507	AMD	AM1507	1393-2
	NEC	μPC1507	1126-105
			1127-30
1508	AMD	AM1508-8	945-29
		SSS1508A-8	945-19
	AD	AD1508-8	945-21
		AD1508-9	943-30
	Lambda	LAS1508	1204-111
	Motorola	**MC1508-8**	⋆ **2938**
			945-34
	National	MC1508-8	945-36
	PMI	DAC1508A-8	945-24
	Signetics	MC1508-8	945-38
151	Fairchild	CCD151	1222-50
			1222-75
	GE/Intersil	**DG151A**	⋆ **2680**
			903-50
		DG151B	⋆ **2680**
			903-52
	Imaging	Series 151	4849-11
	National	AF151	1219-42
	SGS	M151	1119-103
	Signetics	**PLS151**	⋆ **3155**
			⋆ **3168**
			4078-31
1510	Anadigics	AOP1510	1169-13
	Buckminster		
		C1510	4872-12
	Lambda	LAS1510	1205-65
	Signetics	**TDA1510**	⋆ **3094**
			1117-170
	Thomson	TEA1510	1228-99
	Western	WD1510-00	1305-23
		WD1510-01	1305-24
		WD1510-02	1307-54
1511	Thomson	TEA1511	1228-105
			1229-109
1512	AppBusComp		
		AI1512	4850-37
	Lambda	LAS1512	1206-25
	Signetics	**TDA1512**	⋆ **3096**
			1117-20
	Thomson	TEA1512	691-24
			1001-3
1514	Motorola	MC1514	1111-26
	National	LM1514	1111-25
	Supertex	HV1514	915-12
1515	Lambda	LAS1515	1207-52
	Sanyo	LB1515	1124-42
	Signetics	**TDA1515A**	⋆ **3095**
			1150-16
1516	Supertex	HV1516	915-14
	Weitek	WTL1516	692-101
1517	Unitrode	UC1517	1004-30
1518	Lambda	LAS1518	1208-28
152	**GE/Intersil**	**DG152A**	⋆ **2680**
			903-71
1520	Lambda	LAS1520	1208-74
1521	Plessey	SL1521	1104-149
			¶ 430-28
			¶ 435-12
1522	Plessey	SL1522	1104-150
	Signetics	TDA1522	1118-47
1523	**GE/RCA**	**CA1523**	⋆ **2650**
			1216-51
	Plessey	SL1523	1104-151
1524	Cherry	CS1524	1216-3
		CS1524A	1216-4
	Exar	XR1524	1216-28
	Fairchild	μA1524A	1202-37
			1224-140
1524			(Cont'd)
	GE/RCA	**CA1524**	⋆ **2650**
			1216-52
			¶ 438-14
	IPS	**IP1524**	⋆ **2854**
			1216-59
		IP1524B	⋆ **2854**
			1216-60
	Lambda	LAS1524	1209-7
	LinearTech	LT1524	1216-112
		SG1524	1216-120
	Motorola	**TDA1524**	⋆ **2946**
			1116-61
			1118-82
		TDA1524A	⋆ **2946**
			1118-84
			1120-107
	National	LM1524	1217-27
	Plessey	SL1524	1104-152
	SGS	SG1524A	1217-50
		UD1524A	1217-62
	Signetics	TDA1524A	1116-64
			1126-27
	SiliconG	SG1524	1217-79
			¶ 438-15
			¶ 438-17
			¶ 441-32
		SG1524B	1217-80
			¶ 438-15
			¶ 438-17
			¶ 441-32
	Unitrode	**UC1524**	⋆ **3323**
			1218-29
		UC1524/883B	
			⋆ **3323**
			1218-30
		UC1524A	⋆ **3323**
			1218-31
		UC1524A/883B	
			⋆ **3323**
			1218-32
1525	Cherry	CS1525A	1216-5
	Exar	**XR1525A**	⋆ **2607**
			1216-29
	IPS	**IP1525A**	⋆ **2854**
			1216-61
	LinearTech	LT1525A	1216-113
		SG1525A	1216-121
	Motorola	**SG1525A**	⋆ **2931**
			1217-14
	Plessey	SL1525	1104-153
	SGS	SG1525A	1217-51
	SiliconG	SG1525A	1217-81
			¶ 438-16
	Unitrode	**UC1525A**	⋆ **3323**
			1218-33
		UC1525A/883B	
			⋆ **3323**
			1218-34
1526	**IPS**	**IP1526**	⋆ **2854**
			⋆ **2856**
			1216-62
		IP1526A	⋆ **2854**
			⋆ **2856**
			1216-63
	LinearTech	LT1526	1216-114
	Motorola	**SG1526**	⋆ **2931**
			1217-15
	SiliconG	SG1526	1217-82
			¶ 441-1
		SG1526A	1217-83
			¶ 441-1
	Unitrode	**UC1526/883B**	
			⋆ **3323**
			1218-35
		UC1526A	⋆ **3323**
			1218-36
15268	STI	ST15268	1193-23
1527	Cherry	CS1527A	1216-6
	Exar	**XR1527A**	⋆ **2607**
			1216-30
	IPS	**IP1527A**	⋆ **2854**
			1216-64
	LinearTech	LT1527A	1216-115
		SG1527A	1216-122
1527			(Cont'd)
	Motorola	**SG1527A**	⋆ **2931**
			1217-16
	SGS	SG1527A	1217-52
	SiliconG	SG1527A	1217-84
			¶ 438-16
	Unitrode	**UC1527A**	⋆ **3323**
			1218-37
		UC1527A/883B	
			⋆ **3323**
			1218-38
153	**GE/Intersil**	**DG153A**	⋆ **2680**
			909-26
		DG153B	⋆ **2680**
			909-27
	ICT	**PEEL153-30**	⋆ **4259**
			⋆ **4263**
			4070-43
	Signetics	PLC153	4079-10
		PLHS153	4079-19
		PLS153	⋆ **3155**
			⋆ **3169**
			4079-20
			¶ 406-32
		PLS153A	⋆ **3155**
			⋆ **3169**
			4079-21
			¶ 406-32
		PLUS153	4078-29
	SiliconG	SG153-05	1203-89
		SG153-12	1206-84
		SG153-15	1207-102
1531	Plessey	SL1531	1104-144
	TI	TCM1531	1199-108
1532	Plessey	SL1532	1104-145
	SiliconG	SG1532	1214-85
	TI	TCM1532	1199-109
1534	Signetics	SAF1534	650-5
		S1534	691-91
		TDA1534	937-4
1535	Unitrode	UC1535	1218-39
1536	**Motorola**	**MC1536**	⋆ **2921**
			1131-81
			1159-34
	National	LM1536	1131-86
			1159-35
	SiliconG	SG1536	1131-88
			1159-36
	TI	TCM1536	1199-110
1537	**Motorola**	**MC1537**	⋆ **2921**
			1178-5
1539	**Motorola**	**MC1539**	⋆ **2919**
			1156-27
	TI	TCM1539	1199-111
154	**GE/Intersil**	**DG154A**	⋆ **2680**
			909-44
		DG154B	⋆ **2680**
			909-61
	Maxim	MAX154	919-13
		MAX154BC	918-48
		MAX154BE	918-49
		MAX154BM	918-50
		MAX154CC	923-40
		MAX154CE	923-41
		MAX154CM	923-42
1540	Signetics	TDA1540	972-3
	SiliconG	SG1540	1228-128
	TI	TLC1540M	926-46
1541	Panasonic	MN1541	813-2
			862-59
	Signetics	TDA1541	973-13
	TI	TLC1541M	927-25
1542	Panasonic	MN1542	813-3
			862-60
	SiliconG	SG1542	1223-107
1543	Exar	XR1543	1224-68
	SiliconG	SG1543	1224-71
			¶ 440-23
			¶ 441-2
	Unitrode	**UC1543**	⋆ **3324**
			1224-77
		UC1543/883B	
			⋆ **3324**
			1224-78

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
1544	Panasonic	MN1544	813-4
			862-61
	SiliconG	SG1544	1224-72
	Unitrode	**UC1544**	*** 3324**
			1224-79
		UC1544/883B	
			*** 3324**
			1224-80
1545	Motorola	MC1545	1104-25
			¶ 431-20
1549	SiliconG	SG1549	1220-17
			¶ 440-29
155	LinearTech	LF155	1156-38
		LF155A	1153-6
	MicroPwr	MP155	1158-42
		MP155A	1150-39
	National	LF155	1158-44
		LF155A	1150-36
	PMI	**PM155**	*** 2971**
			1130-36
			1146-5
		PM155A	*** 2971**
			1150-38
	Signetics	**PLS155**	*** 3155**
			*** 3158**
			4079-62
	Thomson	LF155	1158-41
		LF155A	1150-40
1550	Plessey	SL1550	1104-95
	Sanyo	LB1550	1124-43
1553	ILC-DDC	BUS1553	1010-35
	MicroInds	MIBII 1553	4860-41
	PlesseyMicro		
		PMV1553B	4882-29
	Rockwell	R1553	889-72
	SMC	COM1553A	885-77
			1011-29
			¶ 415-31
		COM1553B	885-78
			1011-30
			¶ 415-31
	UTMC	**UT1553-BCRT**	
			*** 4331**
			1010-51
		UT1553B	*** 4331**
			1011-3
15530	**Harris**	**HD15530-Cell**	
			*** 2703**
			*** 2736**
			*** 2768**
			*** 4249**
			636-113
			1010-7
		HD15530-2	*** 2703**
			*** 2736**
			*** 2768**
			*** 4249**
			636-108
			1010-8
		HD15530-9	*** 2703**
			*** 2736**
			*** 2768**
			*** 4249**
			636-109
			1010-9
		HS15530RH	*** 2719**
			885-52
			1010-6
	Marconi	CT15530	636-112
			1010-13
		MA15530	*** 2880**
			885-53
15531	**Harris**	**HD15531-Cell**	
			*** 2703**
			*** 2736**
			*** 4249**
			636-114
			1010-10
		HD15531-2	*** 2703**
			*** 2736**
			*** 4249**
			636-110
			1010-11

(Continued)

Base Number	Source	Device	Page-Line
15531	**Harris**		**(Cont'd)**
		HD15531-9	*** 2703**
			*** 2736**
			*** 4249**
			636-111
			1010-12
		HD15531B	*** 2703**
			*** 2736**
			*** 4249**
			1010-14
1554	Motorola	MC1554	1117-32
1555	CTI	CT1555	883-48
	ILC-DDC	BUS1555	1010-27
	Motorola	MC1555	1201-44
	NEC	μPC1555	1201-46
1556	ILC-DDC	BUS1556	1010-26
	Motorola	**MC1556**	*** 2921**
			1156-46
1558	Fairchild	μA1558M	1177-49
	GE/RCA	**CA1558**	*** 2645**
			1177-51
		LM1558	*** 2645**
			1177-37
	Motorola	**MC1558**	*** 2922**
			1177-53
		MC1558S	*** 2922**
			1177-34
	National	LM1558	1177-55
	SGS	MC1558	1178-1
	Signetics	MC1558	1178-2
156	**Burr-Brown**	**OPA156A**	*** 2532**
			1150-45
	LinearTech	LF156	1156-39
		LF156A	1153-8
	MicroPwr	MP156	1158-48
		MP156A	1150-44
	National	LF156	1158-50
		LF156A	1150-41
		LF156HRH	1158-51
	PMI	**PM156**	*** 2971**
			1158-54
		PM156A	*** 2971**
			1150-43
	Thomson	LF156	1158-47
		LF156A	1150-47
1560	**CTI**	**CT1560**	*** 2554**
			886-9
	Siemens	TCA1560	1004-35
1561	**CTI**	**CT1561**	*** 2554**
			886-10
	Siemens	TCA1561	1004-36
1562	**CTI**	**CT1562**	*** 2554**
			886-11
	Panasonic	MN1562	813-5
			862-62
1563	**CTI**	**CT1563**	*** 2554**
			886-12
1564	Panasonic	MN1564	813-6
			862-63
1566	**Motorola**	**MC1566**	*** 2931**
			1214-111
1568	Exar	XR1568	1212-114
	Motorola	**MC1568**	*** 2931**
			1212-117
			1215-87
			1215-89
	SiliconG	SG1568	1213-2
			1215-91
		SG1568T	1215-93
157	MicroPwr	MP157	1158-55
		MP157A	1150-32
	National	LF157	1158-36
		LF157A	1150-33
	PMI	**PM157**	*** 2971**
			1158-39
		PM157A	*** 2971**
			1150-35
	Signetics	**PLS157**	*** 3155**
			*** 3159**
			4080-2
			¶ 437-3
	Thomson	LF157	1158-40
		LF157A	1150-48
1574	Siemens	TUA1574	1120-110
	Signetics	TDA1574	1120-124
1576	Signetics	TDA1576	1121-16

Base Number	Source	Device	Page-Line
1578	National	LM1578	1217-28
			¶ 440-31
	Signetics	TDA1578A	1121-153
158	**GE/RCA**	**CA158**	*** 2645**
			1134-91
			1177-19
		CA158A	*** 2645**
			1174-19
	Maxim	MAX158	919-14
		MAX158BC	918-51
		MAX158BE	919-1
		MAX158BM	919-2
		MAX158CC	923-43
		MAX158CE	923-44
		MAX158CM	923-45
	Motorola	**LM158**	*** 2922**
			1134-96
			1177-21
	National	LM158	1134-99
			1177-22
		LM158A	1134-100
	SGS	LM158	1177-24
		LM158A	1174-20
	Signetics	LM158	1134-105
			1177-25
	Thomson	LM158	1177-28
1580	Signetics	TDA1580	1120-102
1589	**CTI**	**CT1589**	*** 2554**
			1011-16
159	National	LM159	1169-28
	SGS	LS159	1107-43
	Signetics	**PLS159**	*** 3155**
			*** 3160**
			4080-3
			¶ 406-33
1590	Motorola	MC1590	1102-73
1591	Panasonic	MN1591	862-65
1594	Motorola	MC1594	1223-26
1595	Motorola	MC1595	1223-27
	SiliconG	SG1595	1223-29
1596	**Motorola**	**MC1596**	*** 2939**
			1219-81
	National	LM1596	1219-83
	Signetics	MC1596	1219-89
	SiliconG	SG1596	1219-91
1599	Panasonic	MN1599	862-64
16	AdvMicroSys		
		ACQ16	4872-16
	Analogic	AB3-16-XX	937-31
		AB4-16-XX	937-32
	AT&T	**WEDSP16**	*** 2459**
			*** 2465**
			645-99
	Burr-Brown	**MPC16S**	*** 2543**
			915-59
	Chrislin	CI-MIV16	4867-37
	Datel	**DACHP16BMC**	
			*** 2576**
			976-2
		DACHP16BMC-1	
			*** 2576**
			976-3
		DACHP16BMM	
			*** 2574**
			*** 2576**
			976-4
		DACHP16BMM-1	
			*** 2576**
			976-5
		DACHP16DGC	
			*** 2576**
			976-23
		DACHP16DMC	
			*** 2576**
			976-24
		DACHP16DMM	
			*** 2576**
			976-25
		HDAS16MC	*** 2577**
			930-7
			1220-128
		HDAS16MM	*** 2574**
			*** 2577**
			1220-129
	Digitronics	60A/D16-32	4893-31
	Fairchild	GLOW16	4831-9

(Continued)

Base Number	Source	Device	Page-Line
16			(Cont'd)
	Harris	**HIDAC16B-5**	*** 2738**
			*** 2749**
			973-31
		HIDAC16C-5	*** 2738**
			*** 2749**
			974-19
	IntSolutions	VME-ICP16	4887-46
	Interdesign	ULA16RA	4045-1
		ULA16RB	4045-2
		ULA16RC	4045-3
		ULA16RD	4045-4
	IMI	MPY16	644-74
		MPY16IMI	604-60
	Lambda	LAS16U	1213-30
	LinearTech	OP16A	1145-42
		OP16B	1149-5
		OP16C	1155-23
		OP16E	1145-43
		OP16F	1149-6
		OP16G	1155-24
	LitMach	DN16	4711-5
		SA16	4711-6
		WN16	4711-7
	LogicDev	LMU16	644-75
		LMU16C	604-1
		LMU16M	604-61
	Magnum	S-D/A16	4893-30
	MicroSys	STD16-1	4711-12
		STD16-2	4711-13
		STD16-21	4711-14
		STD16-22	4711-15
		STD16-31	4711-16
		STD16-32	4711-17
	Microbar	COM16	4829-12
			4857-7
	National	ISE16	4713-11
	Pacific	DSP16	4715-6
			4831-18
	PMI	**MUX16A**	*** 2975**
			915-68
		MUX16B	*** 2975**
			915-70
		MUX16E	*** 2975**
			915-69
		MUX16F	*** 2975**
			915-71
		OP16A	*** 2971**
			1145-44
		OP16B	*** 2971**
			1149-7
		OP16C	*** 2971**
			1155-25
		OP16E	*** 2971**
			1145-45
		OP16F	*** 2971**
			1149-8
		OP16G	*** 2971**
			1155-26
16AM8	**VLSI Tech**	**VT16AM8**	*** 3354**
			1354-76
		VT16AM8-60	*** 3354**
			1354-72
		VT16AM8-70	*** 3354**
			1354-77
16A05	Lambda	LAS16A05	1203-40
16A08	Lambda	LAS16A08	1205-10
16A12	Lambda	LAS16A12	1206-63
16A15	Lambda	LAS16A15	1207-80
16A4	MMI	HAL16A4C	4080-83
		HAL16A4M	4080-108
		PAL16A4C	4075-31
		PAL16A4M	4075-64
16C08	Calmos	CA16C08	1355-33
16C09	Calmos	CA16C09	1358-91
16C1	MMI	HAL16C1-2C	4081-13
		HAL16C1-2M	4081-26
		HAL16C1C	4080-84
		HAL16C1M	4080-109
		PAL16C1-2C	4076-20
		PAL16C1-2M	4076-42
		PAL16C1C	4075-32
		PAL16C1M	4075-65
		ZHAL16C1AC	4080-70
	National	PAL16C1AC	4073-34
		PAL16C1AM	4074-28

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
16C1	National		(Cont'd)
		PAL16C1C	4074-102
		PAL16C1M	4075-79
16C1A2	National	PAL16C1A2C	4073-35
		PAL16C1A2M	4073-36
16C450	**VLSI Tech**	**VL16C450**	*** 3329**
			1011-42
	Western	**WD16C450**	*** 3381**
			1011-45
16C452	**VLSI Tech**	**VL16C452**	*** 3331**
			1009-72
16C92	Western	WD16C92A	884-107
16DP8	**VLSI Tech**	**VT16DP8**	*** 3355**
			1354-81
16F60	Plessey	SP16F60	651-27
16G010	**GigaBit**	**16G010**	*** 2689**
			652-68
			1108-54
16G011	**GigaBit**	**16G011**	*** 2689**
			652-69
			1108-55
16G020	**GigaBit**	**16G020**	*** 2689**
			652-70
			1106-34
16G021	**GigaBit**	**16G021**	*** 2689**
			652-71
			1106-35
16G040	**GigaBit**	**16G040**	*** 2689**
			1219-103
16G044	**GigaBit**	**16G044-3**	*** 2689**
			1224-47
16G060	**GigaBit**	**16G060**	*** 2689**
			1201-32
16G061	**GigaBit**	**16G061**	*** 2689**
			1001-24
16HD8	AMD	AMPAL16HD8AC	4072-67
		AMPAL16HD8ALC	4072-68
		AMPAL16HD8AM	4073-96
		AMPAL16HD8BC	4071-75
		AMPAL16HD8BM	4072-49
		AMPAL16HD8C	4074-42
		AMPAL16HD8LC	4074-43
		AMPAL16HD8LM	4075-5
		AMPAL16HD8M	4075-6
		AMPAL16HD8QC	4074-44
		AMPAL16HD8QM	4075-7
16H2	MMI	HAL16H2-2C	4081-14
		HAL16H2-2M	4081-27
		HAL16H2C	4080-54
		HAL16H2M	4080-110
		PAL16H2-2C	4076-21
		PAL16H2-2M	4076-43
		PAL16H2C	4074-74
		PAL16H2M	4075-66
		ZHAL16H2AC	4080-71
	National	PAL16H2AC	4073-37
		PAL16H2AM	4074-29
		PAL16H2C	4074-103
		PAL16H2M	4075-80
16H2A2			
	National	PAL16H2A2C	4073-38
		PAL16H2A2M	4073-39
16H4	VLSI Tech	VT16H4	1374-34
		VT16H4-35	1374-35
		VT16H4-40	1381-14
		VT16H4-45	1375-31
		VT16H4-55	1376-2
16H41	VLSI Tech	VT16H41-35	1381-13
		VT16H41-40	1381-15
		VT16H41-45	1381-16
		VT16H41-55	1381-17
16H8	AMD	AMPAL16H8AC	4072-69
		AMPAL16H8ALC	4072-70
		AMPAL16H8ALM	4073-97

(Continued)

Base Number	Source	Device	Page-Line
16H8	AMD		(Cont'd)
		AMPAL16H8AM	4073-98
		AMPAL16H8BC	4071-76
		AMPAL16H8BM	4072-50
		AMPAL16H8C	4074-45
		AMPAL16H8LC	4074-46
		AMPAL16H8LM	4075-8
		AMPAL16H8M	4075-9
		AMPAL16H8QC	4074-47
		AMPAL16H8QM	4075-10
16LC8	**Harris**	**HPL16LC8-2**	*** 2768**
			4076-45
			¶ 451-2
		HPL16LC8-9	*** 2768**
			4076-46
			¶ 451-2
16LD8	AMD	AMPAL16LD8AC	4072-71
		AMPAL16LD8ALC	4072-72
		AMPAL16LD8ALM	4073-99
		AMPAL16LD8AM	4073-100
		AMPAL16LD8BM	4072-51
		AMPAL16LD8C	4074-48
		AMPAL16LD8LC	4074-49
		AMPAL16LD8LM	4075-11
		AMPAL16LD8M	4075-12
		AMPAL16LD8QC	4074-50
		AMPAL16LD8QM	4075-13
16L2	MMI	HAL16L2-2C	4081-15
		HAL16L2-2M	4081-28
		HAL16L2C	4080-55
		HAL16L2M	4080-111
		PAL16L2-2C	4076-22
		PAL16L2-2M	4076-44
		PAL16L2C	4074-75
		PAL16L2M	4075-67
		ZHAL16L2AC	4080-72
	National	PAL16L2AC	4073-40
		PAL16L2AM	4074-30
		PAL16L2C	4074-104
		PAL16L2M	4075-81
16L2A2	National	PAL16L2A2C	4073-41
		PAL16L2A2M	4073-42
16L6	MMI	HAL16L6C	4080-85
		HAL16L6M	4080-112
		PAL16L6C	4075-33
		PAL16L6M	4075-68
		ZHAL16L6A	4081-31
	National	PAL16L6C	4075-47
		PAL16L6M	4075-48
	TI	TIBPAL16L6	4071-40
16L68	Raytheon	CGA16L68	4058-39
16L8	AMD	AMPAL16L8AC	4072-73
		AMPAL16L8ALC	4072-74
		AMPAL16L8ALM	4073-101
		AMPAL16L8AM	4073-102
		AMPAL16L8BC	4071-77
		AMPAL16L8BM	4072-52
		AMPAL16L8C	4074-51
		AMPAL16L8LC	4074-52
		AMPAL16L8LM	4075-14
		AMPAL16L8M	4075-15
		AMPAL16L8QC	4074-53
		AMPAL16L8QM	4075-16
	Cypress	**PALC16L8-20M**	*** 4217**
			4070-15
		PALC16L8-20WM	*** 4217**
			4076-85

(Continued)

Base Number	Source	Device	Page-Line
16L8	**Cypress**		**(Cont'd)**
		PALC16L8-25C	*** 4217**
			4076-54
		PALC16L8-25WC	*** 4217**
			4076-88
		PALC16L8-30M	*** 4217**
			4076-63
		PALC16L8-30WM	*** 4217**
			4076-96
		PALC16L8-35C	*** 4217**
			4076-67
		PALC16L8-35WC	*** 4217**
			4076-100
		PALC16L8-40M	*** 4217**
			4076-76
		PALC16L8-40WM	*** 4217**
			4077-1
		PALC16L8L-25C	*** 4217**
			4077-21
		PALC16L8L-25WC	*** 4217**
			4076-89
		PALC16L8L-35C	*** 4217**
			4077-25
		PALC16L8L-35WC	*** 4217**
			4076-101
	Fairchild	16L8A	4072-86
		16L8B	4072-5
	Lattice	RAL16L8-35	4071-20
	MMI	HAL16L8A-2C	4080-56
		HAL16L8AC	4080-24
		HAL16L8AM	4080-36
		HAL16L8B-2C	4080-25
		HAL16L8B-4C	4080-57
		HAL16L8BC	4080-16
		HAL16L8M	4080-113
		PALC16L8Q-25	4076-58
		PAL16L8A-2C	4074-76
		PAL16L8A-2M	4075-87
		PAL16L8A-4C	4076-3
		PAL16L8A-4M	4076-32
		PAL16L8AC	4072-95
		PAL16L8AM	4074-3
		PAL16L8B-2C	4072-96
		PAL16L8B-4C	4074-77
		PAL16L8BC	4072-21
		PAL16L8DC	4071-55
		ZHAL16L8AC	4080-73
	National	PAL16L8AC	4073-43
		PAL16L8AM	4074-31
		PAL16L8C	4074-105
		PAL16L8M	4075-82
	TI	PAL16L8A	4073-67
		PAL16L8A-2	4074-116
		PAL16L8A-2M	4074-117
		PAL16L8AM	4073-68
		TIBPAL16L8-10	*** 4320**
			4071-59
		TIBPAL16L8-12	*** 4320**
			4071-63
		TIBPAL16L8-12M	*** 4320**
			4071-67
		TIBPAL16L8-15	*** 4320**
			4072-29
		TIBPAL16L8-15M	*** 4320**
			4072-30
		TIBPAL16L8-20M	*** 4320**
			4072-58

(Continued)

Base Number	Source	Device	Page-Line
16L8	**TI**		**(Cont'd)**
		TIBPAL16L8-25	*** 4320**
			4073-80
		TIBPAL16L8-30M	*** 4320**
			4074-35
		TICPAL16L8-55	*** 4320**
			4077-48
		TICPAL16L8M	*** 4320**
			4077-45
16L8A2	National	PAL16L8A2C	4073-44
		PAL16L8A2M	4073-45
16L8B2	National	PAL16L8B2C	4077-41
		PAL16L8B2M	4077-43
16L8B4	National	PAL16L8B4C	4077-58
		PAL16L8B4M	4077-60
16P2	Panatech	16P2	4077-32
		16P2AP-55	4076-10
		16P2BP-35	4074-112
	VLSI Tech	VP16P2	4080-8
16P8	AMD	AMPAL16P8LM	4075-17
	Fairchild	16P8A	4072-87
		16P8B	4072-6
		16P8D	4071-51
	MMI	HAL16P8A	4080-86
		PAL16P8AC	4072-97
		PAL16P8AM	4074-4
		ZHAL16P8AC	4080-74
	National	PAL16P8A	4073-46
	Panatech	16P8	4077-33
	VLSI Tech	VP16P8	4080-9
16RA8	MMI	HAL16RA8C	4080-87
		PAL16RA8C	4074-5
16RB4	National	PAL16RB4M	4077-61
16RC4	**Harris**	**HPL16RC4-2**	*** 2768**
			4076-47
		HPL16RC4-9	*** 2768**
			4076-48
16RC6	**Harris**	**HPL16RC6-2**	*** 2768**
			4076-49
		HPL16RC6-9	*** 2768**
			4076-50
16RC8	**Harris**	**HPL16RC8-2**	*** 2768**
			4076-51
		HPL16RC8-9	*** 2768**
			4076-52
16RP4	Fairchild	16RP4A	4072-88
		16RP4B	4072-7
		16RP4D	4071-52
	MMI	HAL16RP4AC	4080-88
		PAL16RP4AC	4072-98
		PAL16RP4AM	4074-6
		ZHAL16RP4AC	4080-75
	National	PAL16RP4A	4073-47
	Panatech	16RP4AP-55	4076-11
		16RP4BP-35	4074-113
	VLSI Tech	VP16RP4	4080-10
16RP6	Fairchild	16RP6A	4072-89
		16RP6B	4072-8
		16RP6D	4071-53
	MMI	HAL16RP6A	4080-89
		PAL16RP6AC	4072-99
		PAL16RP6AM	4074-7
		ZHAL16RP6AC	4080-76
	National	PAL16RP6A	4073-48
	Panatech	16RP6	4077-34
		16RP6AP-55	4076-12
		16RP6BP-35	4074-114
	VLSI Tech	VP16RP6	4080-11
16RP8	Fairchild	16RP8A	4072-90
		16RP8B	4072-9
		16RP8D	4071-54
	MMI	HAL16RP8A	4080-90
		PAL16RP8AC	4072-100
		PAL16RP8AM	4074-8
		ZHAL16RP8AC	4080-77
	National	PAL16RP8A	4073-49
	Panatech	16RP8	4077-35
		16RP8AP-55	4076-13
		16RP8BP-35	4074-115
	VLSI Tech	VP16RP8	4080-12
		VP16RP8M	4073-93
16RQ4	MMI	PALC16RQ4-25	4076-59

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
16R4	AMD	AMPAL16R4AC	4072-75
		AMPAL16R4ALC	4072-76
		AMPAL16R4AM	4073-103
		AMPAL16R4BC	4072-1
		AMPAL16R4C	4074-54
		AMPAL16R4LC	4074-55
		AMPAL16R4LM	4075-18
		AMPAL16R4M	4075-19
		AMPAL16R4QC	4074-56
		AMPAL16R4QM	4075-20
	Cypress	**PALC16R4-20M**	
		★ 4217	4070-16
		PALC16R4-20WM	
		★ 4217	4076-84
		PALC16R4-25C	
		★ 4217	4076-55
		PALC16R4-25WC	
		★ 4217	4076-90
		PALC16R4-30M	
		★ 4217	4076-64
		PALC16R4-30WM	
		★ 4217	4076-97
		PALC16R4-35C	
		★ 4217	4076-68
		PALC16R4-35WC	
		★ 4217	4076-102
		PALC16R4-40M	
		★ 4217	4076-77
		PALC16R4-40WM	
		★ 4217	4077-2
		PALC16R4L-25C	
		★ 4217	4077-22
		PALC16R4L-25WC	
		★ 4217	4076-91
		PALC16R4L-35	
		★ 4217	4077-26
		PALC16R4L-35WC	
		★ 4217	4076-103
	Fairchild	16R4A	4072-91
		16R4B	4072-10
	MMI	HAL16R4A-2C	4080-58
		HAL16R4AC	4080-26
		HAL16R4AM	4080-37
		HAL16R4B-2C	4080-27
		HAL16R4B-4C	4080-59
		HAL16R4BC	4080-17
		HAL16R4M	4080-114
		PAL16R4A-2C	4074-78
		PAL16R4A-2M	4075-88
		PAL16R4A-4C	4076-4
		PAL16R4A-4M	4076-33
		PAL16R4AC	4072-101
		PAL16R4AM	4074-9
		PAL16R4B-2C	4072-102
		PAL16R4B-4C	4074-79
		PAL16R4BC	4072-22
		PAL16R4DC	4071-56
		ZHAL16R4AC	4080-78
	National	PAL16R4AC	4073-50
		PAL16R4AM	4074-32
		PAL16R4C	4074-106
		PAL16R4M	4075-83
	TI	PAL16R4A	4073-69
		PAL16R4A-2	4074-118
		PAL16R4A-2M	4075-1
		TIBPAL16R4-10	
		★ 4320	4071-60

(Continued)

Base Number	Source	Device	Page-Line
16R4	**TI**		**(Cont'd)**
		TIBPAL16R4-12	
		★ 4320	4071-64
		TIBPAL16R4-12M	
		★ 4320	4071-68
		TIBPAL16R4-15	
		★ 4320	4072-31
		TIBPAL16R4-15M	
		★ 4320	4072-32
		TIBPAL16R4-20	
		★ 4320	4072-59
		TIBPAL16R4-20M	
		★ 4320	4072-60
		TIBPAL16R4-25	
		★ 4320	4073-81
		TIBPAL16R4-30M	
		★ 4320	4074-36
		TICPAL16R4-55	
		★ 4320	4077-49
		TICPAL16R4M	
		★ 4320	4077-46
16R4A2	National	PAL16R4A2C	4073-51
		PAL16R4A2M	4073-52
16R4B2			
	National	PAL16R4B2C	4071-37
		PAL16R4B2M	4077-38
16R4B4			
	National	PAL16R4B4C	4077-55
		PAL16R4B4M	4077-56
16R6	AMD	AMPAL16R6AC	4072-77
		AMPAL16R6ALC	4072-78
		AMPAL16R6AM	4073-104
		AMPAL16R6BC	4072-2
		AMPAL16R6BM	4072-53
		AMPAL16R6C	4074-57
		AMPAL16R6LC	4074-58
		AMPAL16R6LM	4075-21
		AMPAL16R6M	4075-22
		AMPAL16R6QC	4074-59
		AMPAL16R6QM	4075-23
	Cypress	**PALC16R6-20M**	
		★ 4217	4076-53
		¶	451-17
		PALC16R6-20WM	
		★ 4217	4076-86
		¶	451-17
		PALC16R6-25C	
		★ 4217	4076-56
		¶	451-17
		PALC16R6-25WC	
		★ 4217	4076-92
		¶	451-17
		PALC16R6-30M	
		★ 4217	4076-65
		¶	451-17
		PALC16R6-30WM	
		★ 4217	4076-98
		¶	451-17
		PALC16R6-35C	
		★ 4217	4076-69
		¶	451-17
		PALC16R6-35WC	
		★ 4217	4076-104
		¶	451-17

(Continued)

Base Number	Source	Device	Page-Line
16R6	**Cypress**		**(Cont'd)**
		PALC16R6-40M	
		★ 4217	4076-78
		¶	451-17
		PALC16R6-40WM	
		★ 4217	4077-3
		¶	451-17
		PALC16R6L-25C	
		★ 4217	4077-23
		¶	451-17
		PALC16R6L-25WC	
		★ 4217	4076-93
		¶	451-17
		PALC16R6L-35C	
		★ 4217	4077-27
		¶	451-17
		PALC16R6L-35WC	
		★ 4217	4076-105
		¶	451-17
	Fairchild	16R6A	4072-92
		16R6B	4072-11
	MMI	HAL16R6A-2C	4080-60
		HAL16R6AC	4080-28
		HAL16R6AM	4080-38
		HAL16R6B-2C	4080-29
		HAL16R6B-4C	4080-61
		HAL16R6BC	4080-18
		HAL16R6M	4080-115
		PALC16R6Q-25	4076-60
		PAL16R6A-2C	4074-80
		PAL16R6A-2M	4075-89
		PAL16R6A-4C	4076-5
		PAL16R6A-4M	4076-34
		PAL16R6AC	4073-1
		PAL16R6AM	4074-10
		PAL16R6B-2C	4073-2
		PAL16R6B-4C	4074-81
		PAL16R6BC	4072-23
		PAL16R6DC	4071-57
		ZHAL16R6AC	4080-79
	National	PAL16R6AC	4073-53
		PAL16R6AM	4074-33
		PAL16R6C	4074-107
		PAL16R6M	4075-84
	TI	PAL16R6A	4073-70
		PAL16R6A-2	4075-2
		PAL16R6A-2M	4075-3
		PAL16R6AM	4073-71
		TIBPAL16R6-10	
		★ 4320	4071-61
		TIBPAL16R6-12	
		★ 4320	4071-65
		TIBPAL16R6-12M	
		★ 4320	4071-69
		TIBPAL16R6-15	
		★ 4320	4072-33
		TIBPAL16R6-15M	
		★ 4320	4072-34
		TIBPAL16R6-20M	
		★ 4320	4072-61
		TIBPAL16R6-25	
		★ 4320	4073-82
		TIBPAL16R6-30M	
		★ 4320	4074-37
		TICPAL16R6-55	
		★ 4320	4077-50
		TICPAL16R6M	
		★ 4320	4077-47
16R6A2	National	PAL16R6A2C	4073-54
		PAL16R6A2M	4073-55

Base Number	Source	Device	Page-Line
16R6B2			
	National	PAL16R6B2C	4077-39
		PAL16R6B2M	4077-40
16R6B4			
	National	PAL16R6B4C	4077-57
16R8	AMD	AMPAL16R8AC	4072-79
		AMPAL16R8ALC	4072-80
		AMPAL16R8AM	4073-105
		AMPAL16R8BC	4072-3
		AMPAL16R8BM	4072-54
		AMPAL16R8C	4074-60
		AMPAL16R8LC	4074-61
		AMPAL16R8LM	4075-24
		AMPAL16R8M	4075-25
		AMPAL16R8QC	4074-62
		AMPAL16R8QM	4075-26
	Cypress	**PALC16R8-20M**	
		★ 4217	4070-17
		PALC16R8-20WM	
		★ 4217	4076-87
		PALC16R8-25C	
		★ 4217	4076-57
		PALC16R8-25WC	
		★ 4217	4076-94
		PALC16R8-30M	
		★ 4217	4076-66
		PALC16R8-30WM	
		★ 4217	4076-99
		PALC16R8-35C	
		★ 4217	4076-70
		PALC16R8-35WC	
		★ 4217	4076-106
		PALC16R8-40M	
		★ 4217	4076-79
		PALC16R8-40WM	
		★ 4217	4077-4
		PALC16R8L-25C	
		★ 4217	4077-24
		PALC16R8L-25WC	
		★ 4217	4076-95
		PALC16R8L-35C	
		★ 4217	4077-28
		PALC16R8L-35WC	
		★ 4217	4076-107
	Fairchild	16R8A	4072-93
		16R8B	4072-12
	MMI	HAL16R8A-2C	4080-62
		HAL16R8AC	4080-30
		HAL16R8AM	4080-39
		HAL16R8B-2C	4080-31
		HAL16R8B-4C	4080-63
		HAL16R8BC	4080-19
		HAL16R8M	4080-116
		PALC16R8Q-25	4076-61
		PAL16R8A-2C	4074-82
		PAL16R8A-2M	4075-90
		PAL16R8A-4C	4076-6
		PAL16R8A-4M	4076-35
		PAL16R8AC	4073-3
		PAL16R8AM	4074-11
		PAL16R8B-2C	4073-4
		PAL16R8B-4C	4074-83
		PAL16R8BC	4072-24
		PAL16R8DC	4071-58
		ZHAL16R8AC	4080-80
	National	PAL16R8AC	4073-56
		PAL16R8AM	4074-34
		PAL16R8C	4074-108
		PAL16R8M	4075-85

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
16R8			(Cont'd)
	TI	PAL16R8A	4073-72
		PAL16R8A-2	4075-4
		PAL16R8A-2M	4073-73
		PAL16R8AM	4073-74
		TIBPAL16R8-10	
			*** 4320**
			4071-62
		TIBPAL16R8-12	
			*** 4320**
			4071-66
		TIBPAL16R8-12M	
			*** 4320**
			4071-70
		TIBPAL16R8-15	
			*** 4320**
			4072-35
		TIBPAL16R8-15M	
			*** 4320**
			4072-36
		TIBPAL16R8-20M	
			*** 4320**
			4072-62
		TIBPAL16R8-25	
			*** 4320**
			4073-83
		TIBPAL16R8-30M	
			*** 4320**
			4074-38
		TICPAL16R8-55	
			*** 4320**
			4077-51
16R8A2	National	PAL16R8A2C	4073-57
		PAL16R8A2M	4073-58
16R8B2			
	National	PAL16R8B2C	4077-42
		PAL16R8B2M	4077-44
16R8B4			
	National	PAL16R8B4C	4077-59
		PAL16R8B4M	4077-54
16V8	Lattice	GAL16V8-10	4071-27
			¶ 450-19
			¶ 450-38
			¶ 450-40
		GAL16V8-15L	4071-7
			¶ 450-19
			¶ 450-38
			¶ 450-40
		GAL16V8-25L	4071-13
			4071-16
			4071-9
			¶ 450-19
			¶ 450-38
			¶ 450-40
		GAL16V8-25Q	4071-29
			¶ 450-19
			¶ 450-38
			¶ 450-40
		GAL16V8-30LM	4071-24
			¶ 450-19
			¶ 450-38
			¶ 450-40
		GAL16V8-35L	4071-11
			4071-18
			¶ 450-19
			¶ 450-38
			¶ 450-40
		GAL16V8-35Q	4071-30
			¶ 450-19
			¶ 450-38
			¶ 450-40
	Signetics	PLC16V8	4070-27
	VLSI Tech	VP16V8E-25	4071-32
		VP16V8E-35	4071-35
16X16	**Dense-Pac**	**DPE16X16V**	*** 2583**
			1313-38
		DPP16X16	*** 2584**
			1377-47
		DPS16X16	*** 2579**
			1377-40
		DPS16X16V	*** 2579**
			*** 2583**
			1377-46
		DPV16X16V	*** 2584**
			1330-16
16X17	**Dense-Pac**	**DPS16X17**	*** 2579**
			1377-39
16X18	**Dense-Pac**	**DPF16X18**	*** 2585**
			1307-43
16X24	**Dense-Pac**	**DPE16X24V**	*** 2583**
			1313-40
		DPS16X24V	*** 2583**
			1378-16
		DPV16X24V	*** 2584**
			1330-17
16X32	**Dense-Pac**	**DPE16X32V**	*** 2583**
			1313-41
		DPP16X32	*** 2584**
			1378-19
		DPS16X32V	*** 2583**
			1378-18
		DPV16X32V	*** 2584**
			1330-18
16X36	**Dense-Pac**	**DPF16X36**	*** 2585**
			1307-44
16X4	**Dense-Pac**	**DPS16X4**	*** 2578**
			1374-64
		DPX16X4	1376-67
	MMI	HAL16X4C	4080-91
		HAL16X4M	4080-117
		PAL16X4C	4075-34
		PAL16X4M	4075-69
16X5	**Dense-Pac**	**DPS16X5**	*** 2578**
			1374-65
		DPX16X5	1376-77
16X6	Dense-Pac	DPS16X6	1376-76
16X8	**Dense-Pac**	**DPE16X8V**	*** 2583**
			1313-28
		DPP16X8	*** 2584**
			1376-84
		DPS16X8V	*** 2583**
			1376-83
		DPV16X8V	*** 2584**
			1328-34
16X9	**Dense-Pac**	**DPF16X9**	*** 2585**
			1307-42
16Z8	Lattice	ispGAL16Z8-15L	4071-1
			¶ 450-19
			¶ 450-38
			¶ 450-39
		ispGAL16Z8-25L	4071-3
			¶ 450-19
			¶ 450-38
			¶ 450-39
		ispGAL16Z8-35L	4071-5
			¶ 450-19
			¶ 450-38
			¶ 450-39
160	Codar	160	4868-8
			4880-30
	Maxim	MAX160	919-37
		MAX160C	919-39
		MAX160E	919-40
		MAX160M	919-41
	Raytheon	RG160	684-71
		RLA160	*** 2984**
			*** 4299**
			4069-3
	UTMC	**UT160D**	*** 4331**
			4063-16
160P8	VLSI Tech	VT160P8-60	1354-73
		VT160P8-70	1354-78
1600	AMCC	QM1600S	4041-11
	Burr-Brown	DAC1600	1127-33
		DAC1600J-V	976-6
		DAC1600K-V	975-27
	CalDevices	DLM1600	4042-40
	Fairchild	F1600A	1381-38
		F1600A-45	1382-14
		F1600AM	1381-66
		F1600AM-55	1382-36
	Fujitsu	**C1600AVB**	*** 4229**
			*** 4231**
			4046-10
			4046-11
		C1600AVL	*** 4229**
			*** 4231**
			4046-12
			(Continued)
1600			(Cont'd)
	Inmos	**IMS1600-35**	*** 2785**
			1381-70
		IMS1600-45	*** 2785**
			1382-19
		IMS1600-45M	
			*** 2785**
			1382-20
		IMS1600-55	*** 2785**
			1382-40
		IMS1600-55M	
			*** 2785**
			1382-41
		IMS1600-70	*** 2785**
			1382-58
		IMS1600-70M	
			*** 2785**
			1382-59
	Intech	ADC-1600-2	937-17
		ADC1600	*** 2799**
			937-19
	Ironics	IV1600	4839-22
	S-MOS	SED1600F	977-142
	TI	TMS1600	817-10
	Thomson	ESM1600	992-12
16000	Fujitsu	C16000UH	4047-11
	National	DB16000	4827-20
1601	CTI	CT1601	886-13
	Fairchild	F1601-45	1382-15
		F1601A	1381-39
		F1601AM	1381-67
	Inmos	**IMS1601L-55M**	
			*** 2786**
			1382-42
		IMS1601L-70M	
			*** 2786**
			1382-60
	Ironics	IV1601	4841-3
	Sanyo	LB1601	1228-112
1602	**CTI**	**CT1602**	*** 2554**
			886-14
	Gould	S1602	1011-68
	Ironics	IV1602	4837-26
	Northern	NPT1602	4861-6
	Thomson	ESM1602	992-13
1603	CTI	CT1603	886-15
	National	DS1603	991-30
			1008-20
16030	National	HPC16030	847-28
			878-111
1603?	Fairchild	F16032	853-9
			878-110
1604	CTI	CT1604	886-16
16040	National	HPC16040	847-29
			878-112
1605	CTI	CT1605	886-17
	ElecConServ		
		CIM1605	4825-38
	Fairchild	SH1605A	1216-45
	ITT	TDD1605	1202-62
	Lambda	LAS1605	1203-41
		LAS1605B	1203-42
	National	LH1605	1217-25
			¶ 441-24
		LH1605C	1217-26
			¶ 441-24
1606	**CTI**	**CT1606**	*** 2554**
			886-18
	Datel	**MV1606**	*** 2577**
			915-23
		MX1606	*** 2577**
			915-60
	ITT	TDD1606	1203-125
1607	Thomson	TDE1607	1004-95
1608	CTI	CT1608	883-49
	ITT	TDD1608	1204-86
	Lambda	LAS1608	1205-11
		LAS1608B	1205-12
161	**GE/Intersil**	**DG161A**	*** 2680**
			906-68
	Maxim	MAX161	920-37
		MAX161C	920-39
		MAX161E	920-40
		MAX161M	920-41
	Signetics	**PLS161**	*** 3155**
			4079-2
			(Continued)
161			(Cont'd)
	Siliconix	L161A	1113-38
			¶ 434-20
		L161B	1113-36
			¶ 434-20
		L161C	1113-37
			¶ 434-20
1610	**CTI**	**CT1610**	*** 2554**
			886-19
	ITT	TDD1610	1205-55
	S-MOS	SED1610F	977-143
	Unitrode	**UC1610**	*** 3326**
			1222-129
1611	**CTI**	**CT1611**	*** 2554**
			885-80
	National	DS1611	1005-36
	TLIndustries		
		TVME 1611	4837-2
		TVME	
		1611-1	4837-3
		TVME	
		1611-2	4837-4
		TVME	
		1611-3	4837-5
		TVME	
		1611-4	4837-6
		TVME	
		1611-5	4837-7
		TVME	
		1611-6	4837-8
		TVME	
		1611-7	4837-9
		TVME	
		1611-8	4837-10
	Unitrode	**UC1611**	*** 3324**
			1106-159
1612	**CTI**	**CT1612**	*** 2554**
			886-20
	ITT	TDD1612	1205-101
	Lambda	LAS1612	1206-64
			¶ 421-37
		LAS1612B	1206-65
			¶ 421-37
	National	DS1612	1005-64
	TLIndustries		
		TVME 1612	4835-31
		TVME	
		1612-1	4835-30
		TVME	
		1612-2	4835-36
1613	National	DS1613	1005-121
	Plessey	SL1613	1104-143
	TLIndustries		
		TVME	
		1613-1	4835-37
		TVME	
		1613-2	4835-38
1614	National	DS1614	1005-91
			1005-92
	Supertex	HV1614	913-23
16149	National	DS16149	666-56
			1000-10
1615	**CTI**	**CT1615**	*** 2554**
			886-21
	ITT	TDD1615	1207-7
	Lambda	LAS1615	1207-81
		LAS1615B	1207-82
1616	**Datel**	**MX1616**	*** 2577**
			915-57
		MX1616M	*** 2577**
			915-58
	Dense-Pac	DPS1616	1377-51
	Supertex	HV1616	913-26
16160	VLSI Tech	VL16160	882-84
1617	**CTI**	**CT1617**	*** 2554**
			886-22
16177	National	DS16177	999-114
16179	National	DS16179	666-57
			1000-11
1618	ITT	TDD1618	1207-123
162	**GE/Intersil**	**DG162A**	*** 2680**
			906-86
	Signetics	**PLS162**	*** 3155**
			*** 3170**
			4071-39
1620	Fairchild	F1620	1372-53
		F1620-25	1372-54
			(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
1620	Fairchild		(Cont'd)
		F1620-35	1373-72
		F1620-45	1374-77
		F1620M	1373-73
	Inmos	**IMS1620-45**	* **2787**
			1375-60
		IMS1620-45M	
			* **2787**
			1374-81
		IMS1620-55	* **2787**
			1375-68
		IMS1620-55M	
			* **2787**
			1375-69
		IMS1620-70	* **2787**
			1376-51
		IMS1620-70M	
			* **2787**
			1376-25
		IMS1620A-25	
			* **2787**
			1372-57
		IMS1620A-35	
			* **2787**
			1373-77
		IMS1620A-35M	
			* **2787**
			1373-78
	Ironics	IV1620	4881-14
1621	Fairchild	F1621	1372-55
		F1621-25	1372-70
		F1621-35	1374-11
		F1621-45	1375-12
		F1621M	1373-74
	Ironics	IV1621	4886-14
1623	Interdesign	MOF1623B	993-12
	Ironics	IV1623	4886-40
1624	Fairchild	F1624	1372-71
		F1624-25	1372-72
		F1624-35	1374-12
		F1624-45	1375-13
		F1624M	1374-13
	Inmos	**IMS1624-45**	* **2788**
			1375-61
		IMS1624-45M	
			* **2788**
			1375-39
		IMS1624-55	* **2788**
			1375-86
		IMS1624-55M	
			* **2788**
			1376-4
		IMS1624-70	* **2788**
			1376-52
		IMS1624-70M	
			* **2788**
			1376-38
	Ironics	IV1624	4887-49
	ITT	TDD1624	1208-103
1625	Ironics	IV1625	4887-43
1626	SiliconG	SG1626	1108-70
1627	SiliconG	SG1627	1001-60
			¶ 440-27
1628	National	DS1628	1000-35
1629	SiliconG	SG1629	911-33
			1002-161
			1221-38
			¶ 440-27
163	**GE/Intersil**	**DG163A**	* **2680**
			909-73
		DG163B	* **2680**
			909-74
	National	LM163	1141-1
		LM163A	1103-10
			1139-26
	Signetics	**PLS163**	* **3155**
			* **3171**
			4071-38
1630	**Inmos**	**IMS1630-45**	* **2789**
			1366-86
		IMS1630-55	* **2789**
			1367-33
		IMS1630-55LM	
			* **2789**
			1367-25

(Continued)

Base Number	Source	Device	Page-Line
1630	**Inmos**		**(Cont'd)**
		IMS1630-70	* **2789**
			1367-74
		IMS1630-70LM	
			* **2789**
			1367-66
	National	DS1630	605-100
1631	National	DS1631	1005-30
1632	National	DS1632	1005-58
1633	National	DS1633	1005-115
	Unitrode	**UC1633**	* **3326**
			1190-31
		UC1633/883	* **3326**
			1190-32
1634	National	DS1634	1005-85
	Unitrode	**UC1634**	* **3326**
			1190-33
		UC1634/883	* **3326**
			1190-34
1635	SiliconG	SG1635	1003-53
1637	**Unitrode**	**UC1637**	* **3326**
			1004-23
			¶ 426-5
1639	Ironics	IV1639	4883-20
164	**GE/Intersil**	**DG164A**	* **2680**
			909-77
		DG164B	* **2680**
			909-80
	Xycom	XVME164	4888-34
1640	Ironics	IV1640	4883-25
16400	National	HPC16400	878-118
1641	Ironics	IV1641	4883-22
	TLIndustries		
		TVME 1641	4886-13
1642	Ironics	IV1642	4883-43
1643	Ironics	IV1643	4883-40
1644	Ironics	IV1644	4883-38
	TI	PAL1644AM	4073-75
1645	Ironics	IV1645	4884-4
16450	National	NS16450	881-63
1646	Ironics	IV1646	4883-26
1647	Ironics	IV1647	4884-11
	Thomson	TDE1647	1004-94
		TDE1647A	1004-96
1648	Ironics	IV1648	4883-23
	Motorola	MC1648	651-39
		MC1648M	651-40
	National	DS1648	999-117
	Plessey	SP1648	651-41
			¶ 435-12
1649	Ironics	IV1649	4885-23
	National	DS1649	1000-14
165	MCE	MCEL165	1130-56
	National	LP165	1219-106
	Raytheon	LP165	1114-8
	SGS	L165	1167-2
1650	Motorola	MC1650	651-42
			¶ 405-12
	National	DS1650	992-16
	Plessey	SP1650B	651-44
1651	Ironics	IV1651	4882-14
	Motorola	MC1651	651-43
	National	DS1651	1008-27
	NEC	μPC1651	1104-89
1652	GIM	PIC1652	823-5
			864-76
	National	DS1652	992-19
	NEC	μPC1652	1104-90
1653	Ironics	IV1653	4881-35
	National	DS1653	1008-28
1654	GIM	PIC1654	823-6
			864-77
	Motorola	MC1654	651-17
1655	GIM	PIC1655	864-78
	NEC	μPC1655	1104-91
16550	National	NS16550	880-80
1656	NEC	μPC1656	1104-92
1657	GIM	PIC1657	823-8
			864-79
	Unitrode	**UC1657**	* **3326**
			1004-70
1658	Motorola	MC1658	651-35
	NEC	μPC1658	1104-93
	Plessey	SP1658	651-36
			1191-32
1659	NEC	μPC1659	1104-94

Base Number	Source	Device	Page-Line
166	Cherry	CS166	1221-69
1660	Motorola	MC1660	651-26
			¶ 405-24
	Plessey	SP1660B	651-28
16605	Hitachi	HA16605W	1127-34
166167	**Dense-Pac**	**DPS166167**	* **2578**
			1385-50
			1387-26
		DX166167	1385-51
16617	Hitachi	HA16617	977-81
16619	Hitachi	HA16619	977-82
1662	Motorola	MC1662	651-25
			¶ 405-24
16628	Hitachi	HA16628P	1127-54
16629	Hitachi	HA16629P	1127-55
16631	Hitachi	HA16631	884-101
			1105-11
16632	Hitachi	HA16632A	883-58
16636	Hitachi	HA16636	1221-92
1664	Motorola	MC1664	651-24
			¶ 405-24
16640	Hitachi	HA16640NT	884-109
16642	Hitachi	HA16642	884-102
16643	Hitachi	HA16643	884-9
16654	Hitachi	HA16654	1216-56
1666	Motorola	MC1666	651-23
1668	Motorola	MC1668	651-34
167	**Signetics**	**PLS167**	* **3155**
			* **3162**
			4079-61
		PLS167A	* **3155**
			* **3162**
			4079-59
1670	GIM	PIC1670	823-9
			864-80
	Motorola	MC1670	651-19
	Plessey	SP1670B	651-20
	SGS	TDA1670	1126-56
	TI	TMS1670	817-11
16701	Hitachi	HC16701	1007-37
			1007-39
1671	National	DS1671	999-108
	SMC	COM1671	875-72
			1009-9
	Western	UC1671	875-73
			1009-10
1672	GIM	PIC1672	823-10
			864-81
	Motorola	MC1672	651-32
1674	Motorola	MC1674	651-33
	National	DS1674	1000-4
1675	National	DS1675	1000-18
1677	National	DS1677	999-115
1678	Motorola	MC1678	651-1
	National	DS1678	999-118
1679	National	DS1679	1000-15
168	National	LM168-10	1226-166
		LM168-5	1226-29
		LM168-6	1226-58
	Signetics	**PLS168**	* **3155**
			* **3164**
			4079-60
		PLS168A	* **3155**
			* **3164**
			4079-58
16802	Hitachi	HA16802	1199-100
16803	Hitachi	HA16803	1198-21
16804	Hitachi	HA16804	1199-101
16805	Hitachi	HA16805	1199-102
1681	IDT	IDT1681LA-15	1361-19
		IDT1681LA-20	1361-54
1682	IDT	IDT1682SA-10	1360-78
1686	National	DS1686	1197-75
1687	National	DS1687	1004-107
			1197-76
1688	Motorola	MC1688	651-31
	National	DS1688	988-44
1689	National	DS1689	992-51
169	Siliconix	D169A	1005-143
1690	Motorola	MC1690	651-22
	National	DS1690	992-52
1691	National	DS1691	985-33
	Western	WD1691	884-114

Base Number	Source	Device	Page-Line
1692	Motorola	MC1692	651-45
			¶ 405-12
	National	DS1692	988-48
	Plessey	SP1692B	651-46
1694	Motorola	MC1694	651-37
			1394-26
1697	Motorola	MC1697	651-2
1699	Motorola	MC1699	651-3
17	LogicDev	LMU17	644-76
		LMU17C	604-2
		LMU17M	604-62
	PMI	**OP17A**	* **2971**
			1145-36
		OP17B	* **2971**
			1148-46
		OP17C	* **2971**
			1155-17
		OP17E	* **2971**
			1145-37
		OP17F	* **2971**
			1148-47
		OP17G	* **2971**
			1155-18
17G005	Toshiba	TC17G005	4062-6
17G008	Toshiba	TC17G008	4062-7
17G032	Toshiba	TC17G032	4062-11
17G042	Toshiba	TC17G042	4062-16
17G064	Toshiba	TC17G064	4062-20
17G080	Toshiba	TC17G080	4062-23
17G100	Toshiba	TC17G100	4062-26
17G14	Toshiba	TC17G14	4062-9
170	Codar	170	4867-47
			4868-7
	Inmos	IMSG170-35	645-35
			882-33
			941-42
		IMSG170-50	645-36
			882-34
			941-43
	Raytheon	RG170	674-109
	Siemens	UAA170	977-17
			1222-94
	TI	TL170C	692-88
1700	**Fujitsu**	**C1700UHB**	* **4229**
			* **4233**
			4046-14
	TI	TMS1700	817-12
17008	Hitachi	HA17008R	944-50
1701	AdvLinear	ALD1701	1157-35
		ALD1701A	1147-42
		ALD1701B	1152-10
		ALD1701G	1165-2
17012	Hitachi	HA17012B	968-48
		HA17012C	969-39
1702	AdvLinear	ALD1702	1157-36
		ALD1702A	1147-43
		ALD1702B	1150-30
1703	AdvLinear	ALD1703	1165-12
1704	AdvLinear	ALD1704	1157-37
		ALD1704A	1147-44
		ALD1704B	1154-9
1705	**Unitrode**	**UC1705**	* **3324**
			* **3326**
			1001-22
1706	AdvLinear	ALD1706	1157-34
		ALD1706A	1147-41
		ALD1706B	1150-29
		ALD1706G	1165-1
	Unitrode	**UC1706**	* **3324**
			* **3326**
			1221-40
			¶ 440-9
1707	**Unitrode**	**UC1707**	* **3324**
			* **3326**
			1221-42
17080	Hitachi	HA17080	1168-2
17082	Hitachi	HA17082	1181-27
17083	Hitachi	HA17083	1181-28
17084	Hitachi	HA17084	1189-25
1709	**Motorola**	**MC1709**	* **2919**
			1161-21
		MC1709A	* **2919**
			1156-28
		MC1709C	* **2919**
			1164-29

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
171	**Inmos**	**IMSG171**	* **2795**
			636-115
		IMSG171-50	* **2795**
			645-37
1710	Cermetek	CH1710	1197-8
1711	DataTrans	DT1711	4880-18
1712	DataTrans	DT1712	4880-13
1714	Supertex	HV1714	911-77
1715	DataTrans	DT1715	4880-21
1716	DataTrans	DT1716	4880-14
	Supertex	HV1716	911-79
1717	IPS	IP1717	1004-47
		IP1717A	1004-48
	Unitrode	**UC1717**	* **3326**
			1004-31
172	Siliconix	DG172A	905-77
		DG172C	905-78
	TI	TL172C	692-89
			1221-102
1720	Cermetek	CH1720	1197-9
1721	Signetics	TDA1721	946-32
1723	**Motorola**	**MC1723**	* **2929**
			* **2958**
			1214-50
		MC1723C	* **2929**
			* **2958**
			1214-51
1724	GE/RCA	CA1724G	1107-11
1725	GE/RCA	CA1725G	1107-12
1728	EG&G-Reticon		
		RL1728H	1222-38
	Unitrode	**UC1728**	* **3327**
			1230-135
173	**ICT**	**PEEL173-30**	* **4259**
			* **4261**
			4070-29
	Signetics	**PLS173**	* **3155**
			* **3172**
			4079-15
		PLUS173	4079-14
	TI	TL173C	1221-103
1730	Cermetek	CH1730	1197-10
	TI	TMS1730	864-3
	Unitrode	UC1730	1229-24
17301	Hitachi	HA17301	1135-42
1731	SiliconG	SG1731	1004-17
			¶ 437-35
1732	**UTMC**	**UT1732**	* **4331**
			644-24
17324	Hitachi	HA17324	1135-13
1733	**Motorola**	**MC1733**	* **2920**
			1104-85
			¶ 423-19
		MC1733C	* **2920**
			1104-86
			¶ 423-19
17339	Hitachi	HA17339	1114-37
17358	Hitachi	HA17358	1134-95
1736	Xilinx	XC1736	1332-77
1737	Thomson	TDE1737	1004-97
17393	Hitachi	HA17393	1112-38
1740	AD	SDC1740	1227-36
	Cermetek	CH1740	1197-11
17408	Hitachi	HA17408	945-22
1741	AD	SDC1741	1227-37
	Motorola	**MC1741**	* **2920**
			* **2958**
			1130-23
			1161-5
		MC1741C	* **2920**
			* **2958**
			1163-2
		MC1741S	* **2920**
			* **2958**
			1161-17
		MC1741SC	* **2920**
			* **2958**
			1163-20
	Panasonic	AN1741	1157-13
1742	AD	SDC1742	1227-38
	DataTrans	DT1742	4859-33
	Signetics	TDO1742	1190-113
1744	DataTrans	DT1744	4860-38
17458	Hitachi	HA17458	1130-4
1747	**Motorola**	**MC1747**	* **2921**
			* **2958**
			1177-54
		MC1747C	* **2921**
			* **2958**
			1179-8
1748	DataTrans	DT1748	4860-36
	Motorola	**MC1748**	* **2919**
			1161-14
		MC1748C	* **2919**
			1163-11
175	Cherry	CS175	1004-10
	Inmos	IMSG175-25	645-34
			882-35
			941-41
	Telefunken	U175	977-79
			1221-67
1750	AMCC	Q1750C	4041-13
		Q1750D	4041-14
	Mikros	MKS1750/C	4711-24
		MKS1750/MO	4827-16
		MKS1750/M0	4827-17
		MKS1750/S0	4827-15
	Performance		
		PACE1750A	849-17
		P1750A-20CM	849-18
		P1750A-30CM	849-19
		P1750A-40CM	849-20
	UTMC	UT1750AR	888-28
1751	DataTrans	DT1751	4860-22
17524	Hitachi	HA17524	1216-57
17555	Hitachi	HA17555	1201-40
17558	Hitachi	HA17558	1179-30
176	**Inmos**	**IMSG176**	* **2796**
			636-116
	Telefunken	U176	977-80
			1221-68
1760	Cermetek	CH1760	1196-7
	UTMC	**UT1760A**	* **4331**
			1010-28
1761	Thomson	TEC1761C	1179-46
		TEC1761M	1176-8
1763	Cermetek	CH1763	1196-8
1765	AD	DRC1765	1227-72
	Cermetek	CH1765	1196-9
			¶ 433-7
1766	AD	DRC1766	1227-73
1767	Thomson	TDE1767	1004-99
		TDE1767A	1004-101
1770	Cermetek	CH1770	1196-10
	IPS	IP1770	1004-49
	SGS	TDA1770	1126-57
	Telefunken	TDA1770	1126-68
	Western	WD1770	884-2
1771	DataTrans	DT1771	4880-17
	National	INS1771	875-75
			884-56
17715	Hitachi	HA17715	1135-89
			1164-22
1772	VLSI Tech	VL1772-02	884-38
	Western	WD1772	884-43
17723	Hitachi	HA17723	1214-49
1773	Western	WD1773	884-44
17733	Hitachi	HA17733	1104-84
17741	Hitachi	HA17741	1163-1
1775	**CTI**	**CT1775**	* **2554**
			1010-43
1776	**Motorola**	**MC1776**	* **2921**
			* **2958**
			1133-56
			1134-15
			1160-13
		MC1776C	* **2920**
			* **2958**
			1133-57
			1134-16
	SGS	MC1776	1160-12
		MC1776C	1162-38
1777	DataTrans	DT1777	4880-15
	Thomson	TDE1777	1004-102
1778	DataTrans	DT1778	4880-16
178	Siemens	S178A	1123-83
	ZAX	ICD178/278	4721-2
17801001			
	NationalInst	17801001	4867-12
17804101			
	NationalInst	17804101	4880-19
17805	Hitachi	HA17805P	1203-39
17806	Hitachi	HA17806P	1204-43
17807	Hitachi	HA17807	1204-55
17808	Hitachi	HA17808	1204-109
17812	Hitachi	HA17812P	1206-62
17815	Hitachi	HA17815P	1207-79
17818	Hitachi	HA17818	1208-26
17824	Hitachi	HA17824P	1209-26
1787	Thomson	TDE1787	1004-98
		TDE1787A	1004-100
179	**Signetics**	**PLS179**	* **3155**
			* **3166**
			4079-3
17902	Hitachi	HA17902	1134-85
17903	Hitachi	HA17903	1112-37
17904	Hitachi	HA17904	1180-4
17904001			
	NationalInst	17904001	4880-20
1791	SMC	FDC1791	884-28
		FDC1791-02	875-76
			884-29
	Western	FD1791-02	875-78
			884-39
1792	SMC	FDC1792	884-30
1793	SMC	FDC1793	868-23
			869-109
			871-27
			872-53
			878-60
			884-31
		FDC1793-02	868-24
			869-110
			871-28
			872-54
			878-61
			884-32
	Western	FD1793-02	868-27
			869-113
			871-31
			872-57
			878-64
			884-40
1794	SMC	FDC1794	884-33
1795	SMC	FDC1795	884-34
		FDC1795-02	875-77
			884-35
	Western	FD1795-02	875-79
			884-41
1797	SMC	FDC1797	868-25
			869-111
			871-29
			872-55
			878-62
			884-36
		FDC1797-02	868-26
			869-112
			871-30
			872-56
			878-63
			884-37
	Western	FD1797-02	868-28
			869-114
			871-32
			872-58
			878-65
			884-42
18	**Apex**	**PA18**	* **2458**
			1162-21
		PA18A	* **2458**
			1148-32
	Dense-Pac	**DPN18**	* **2580**
			1309-42
			1351-87
	Lambda	LAS18U	1215-4
	LogicDev	LMU18	644-77
		LMU18C	604-69
		LMU18M	604-70
	TeledyneC	CDA18	906-18
	Wintek	**MCH18**	* **4913**
			4805-2
18A02	Lambda	LAS18A02	1209-53
18A05	Lambda	LAS18A05	1209-117
18A052	Lambda	LAS18A052	1210-26
18A06	Lambda	LAS18A06	1210-43
18A08	Lambda	LAS18A08	1210-80
18A10	Lambda	LAS18A10	1210-93
18A12	Lambda	LAS18A12	1211-33
18A15	Lambda	LAS18A15	1211-121
18A18	Lambda	LAS18A18	1212-37
18A20	Lambda	LAS18A20	1212-62
18A24	Lambda	LAS18A24	1212-89
18CP210			
	Gould	18CP210	4070-1
	ICT	PEEL18CP210-30	
			4070-44
18CP8	Hyundai	HY18CP8	4072-94
18CV8	Gould	PEEL 18CV8	4070-42
		18CV8	4070-2
	ICT	**PEEL18CV8-25**	
			* **4259**
			* **4266**
			4070-32
		PEEL18CV8-35	
			* **4259**
			* **4266**
			4070-33
		PEEL18CV8-40	
			* **4259**
			* **4266**
			4070-34
		PEEL18CV8-50	
			* **4259**
			* **4266**
			4070-35
		PEEL18CV8Z	* **4259**
			* **4266**
			4070-31
		18CV8	4071-21
18L4	MMI	HAL18L4C	4080-92
		HAL18L4M	4081-1
		PAL18L4C	4075-35
		PAL18L4M	4075-70
		ZHAL18L4A	4081-32
	National	PAL18L4C	4075-49
		PAL18L4M	4075-50
18P8	AMD	AMPAL18P8AC	4072-81
		AMPAL18P8ALC	
			4072-82
		AMPAL18P8ALM	
			4073-106
		AMPAL18P8AM	
			4073-107
		AMPAL18P8BC	4072-4
		AMPAL18P8BM	
			4072-55
		AMPAL18P8LC	4074-63
		AMPAL18P8QC	4074-64
		AMPAL18P8QM	
			4075-27
	Signetics	**PLHS18P8A**	* **3155**
			* **3173**
			4079-11
180	ACE	DPC180	4813-18
	Cherry	CS180	1230-118
	Codar	180	4868-15
	Exar	BETA180	4066-17
	GE/Intersil	**DG180A**	* **2679**
			903-42
			903-47
		DG180B	* **2679**
			903-43
			903-48
	Raytheon	RG180	670-93
	Siemens	UAA180	977-18
			1222-95
	SiliconSys	SSI180	1197-22
	Siliconix	DG180A	903-44
			903-49
	Telefunken	U180M	978-84
	UTMC	**UT180D**	* **4331**
			4063-19
	Zilog	**Z180-MPU**	* **3417**
			874-82
1800	Altera	EP1800-1C	4077-5
		EP1800-1M	4077-6
		EP1800-2C	4077-7
		EP1800-2M	4077-8
		EP1800-3C	4077-9
		EP1800-3M	4077-10
		EP1800C	4077-11

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
1800	Altera		(Cont'd)
		EP1800M	4077-12
	ArrayTech	DHS1800	4041-41
	CTI	**CT1800**	★ **2554**
			1010-46
	Inmos	**IMS1800-25**	★ **2790**
			1386-58
		IMS1800-35	★ **2790**
			1386-68
		IMS1800-35M	
			★ **2790**
			1386-69
		IMS1800-45	★ **2790**
			1387-8
		IMS1800-45M	
			★ **2790**
			1387-9
	MMI	MLA1800	4055-8
	Motorola	**BCA1800ETL**	★ **4285**
			4055-46
	National	LM1800	1121-131
1801	AdvLinear	ALD1801	947-14
	CTI	**CT1801**	★ **2554**
			1010-47
	National	LM1801	1127-73
	SingleBoard	MB1801	4839-2
1802	GE/RCA	CDP1802A	821-27
			864-84
			¶ 411-12
			¶ 412-30
			¶ 413-18
		CDP1802AC	★ **2639**
			821-28
			864-85
			¶ 411-12
			¶ 412-30
			¶ 413-18
		CDP1802B	864-86
			¶ 411-12
			¶ 412-30
			¶ 413-18
		CDP1802BC	★ **2639**
			821-29
			864-87
			¶ 411-12
			¶ 412-30
			¶ 413-18
	Hughes	HCMP1802A	864-91
		HCMP1802AC	864-92
		HCMP1802BC	864-93
		HMMP1802A	864-94
		HMMP1802AC	864-95
		HMMP1802BC	864-96
	Lambda	LAS1802	1209-54
18020101			
	NationalInst	18020101	4880-32
1804	GE/RCA	CDP1804A	864-88
			¶ 414-21
			¶ 416-1
		CDP1804AC	★ **2639**
			821-30
			864-82
			¶ 414-21
			¶ 416-1
		CDP1804PC	864-83
			¶ 414-21
			¶ 416-1
1805	GE/RCA	CDP1805A	864-89
			¶ 414-21
		CDP1805AC	★ **2639**
			821-31
			864-98
			¶ 414-21
	Lambda	LAS1805	1209-118
			¶ 441-19
18052	Lambda	LAS18052	1210-27
1806	GE/RCA	CDP1806A	864-90
		CDP1806AC	★ **2639**
			821-32
			864-97
	Lambda	LAS1806	1210-44
1808	Lambda	LAS1808	1210-81
181	Codar	181	4867-48
			4868-10
	GE/Intersil	**DGM181B**	★ **2679**
			902-78

(Continued)

Base Number	Source	Device	Page-Line
181	**GE/Intersil**		**(Cont'd)**
		DG181A	★ **2680**
			903-54
			903-58
		DG181B	★ **2680**
			903-65
			903-68
		IH181C	903-66
			903-69
		IH181M	903-55
			903-59
	National	AM181	903-56
			903-60
	Siliconix	DG181A	903-57
			903-61
			¶ 427-17
			¶ 427-20
	TI	TIL181	1223-65
1810	Lambda	LAS1810	1210-94
1812	Lambda	LAS1812	1211-34
	National	LM1812	1122-44
1814	Supertex	HV1814	913-24
1815	Lambda	LAS1815	1211-122
1816	Supertex	HV1816	913-27
1818	**Harris**	**HI1818A-2**	★ **2703**
			★ **2738**
			★ **2748**
			★ **2768**
			914-1
		HI1818A-5	★ **2703**
			★ **2738**
			★ **2748**
			★ **2768**
			914-2
		HI1818A-8	★ **2703**
			★ **2738**
			★ **2748**
			★ **2768**
			914-3
	Lambda	LAS1818	1212-38
	National	LM1818	1123-25
1819	National	LM1819	1219-44
182	Datel	VR182A	1225-84
		VR182B	1225-85
		VR182C	1225-86
	GE/Intersil	**DGM182A**	★ **2680**
			902-79
		DGM182B	★ **2680**
			903-13
		DG182A	★ **2680**
			903-77
			903-81
		DG182B	★ **2680**
			904-3
			904-6
		IH182C	904-4
			904-7
		IH182M	903-78
			903-82
	National	AM182	903-76
			903-80
	Siliconix	DG182A	903-79
			903-84
	TI	TL182C	904-10
		TL182I	904-11
1820	**CTI**	**CT1820**	★ **2554**
			1010-48
	Inmos	**IMS1820-25**	★ **2791**
			1382-88
		IMS1820-35	★ **2791**
			1383-23
		IMS1820-35M	
			★ **2791**
			1383-24
		IMS1820-45	★ **2791**
			1383-66
		IMS1820-45M	
			★ **2791**
			1383-67
	Lambda	LAS1820	1212-63

Base Number	Source	Device	Page-Line
1822	**GE/RCA**	**CDP1822**	★ **2643**
			864-131
			1350-30
			¶ 416-34
			¶ 448-6
		CDP1822C	★ **2643**
			864-132
			1350-56
			¶ 416-34
			¶ 448-6
	Hughes	HCMP1822C	864-133
		HMMP1822C	864-134
			1350-57
	National	LM1822	1126-97
1823	**GE/RCA**	**CDP1823**	★ **2643**
			864-129
			1348-59
		CDP1823C	★ **2643**
			864-130
			1348-65
	National	LM1823	1126-98
			¶ 436-17
	Unitrode	**UC1823**	★ **3323**
			1224-145
		UC1823/883B	
			★ **3323**
			1224-146
1824	**GE/RCA**	**CDP1824**	★ **2643**
			630-78
			864-123
			1348-36
			¶ 416-32
			¶ 448-5
		CDP1824C	★ **2643**
			630-79
			864-124
			1348-39
			¶ 416-32
			¶ 448-5
	Hughes	HCMP1824	630-82
			864-125
			1348-37
		HCMP1824C	630-83
			864-126
			1348-40
		HMMP1824	630-80
			864-127
			1348-38
		HMMP1824C	630-81
			1348-41
	Lambda	LAS1824	1212-90
1825	GE/RCA	CDP1825	1353-92
	Unitrode	**UC1825**	★ **3323**
			1220-23
		UC1825/883B	
			★ **3323**
			1220-24
1826	**GE/RCA**	**CDP1826C**	★ **2643**
			864-128
			1348-49
1828	**Harris**	**HI1828A-2**	★ **2703**
			★ **2738**
			★ **2748**
			★ **2768**
			912-44
		HI1828A-5	★ **2703**
			★ **2738**
			★ **2748**
			★ **2768**
			912-45
		HI1828A-8	★ **2703**
			★ **2738**
			★ **2748**
			★ **2768**
			912-46
18293	National	LM18293	1004-53
183	ACE	DPC183	4803-1
	GE/Intersil	**DG183A**	★ **2680**
			909-18
			909-21
		DG183B	★ **2680**
			909-19
			909-22
	SiliconSys	SSI183	1004-27
	Siliconix	DG183A	909-20
			909-23

Base Number	Source	Device	Page-Line
1830	**Inmos**	**IMS1830-25**	★ **2779**
			1378-25
		IMS1830-35	★ **2779**
			1378-32
		IMS1830-35M	
			★ **2779**
			1378-33
		IMS1830-45	★ **2779**
			1378-57
		IMS1830-45M	
			★ **2779**
			1378-58
	National	LM1830	1221-70
1831	**GE/RCA**	**CDP1831**	★ **2644**
			1389-3
			¶ 416-33
			¶ 448-21
	Hughes	HCMP1831	865-5
			1389-5
		HCMP1831C	865-6
			1389-10
		HMMP1831	865-9
			1389-7
		HMMP1831C	865-10
			1389-12
1832	**GE/RCA**	**CDP1832**	★ **2644**
			865-3
			1389-4
			¶ 416-33
			¶ 448-21
		CDP1832C	★ **2644**
			865-4
			1389-9
			¶ 416-33
			¶ 448-21
	Hughes	HCMP1832	865-7
			1389-6
		HCMP1832C	865-8
			1389-11
		HMMP1832	865-11
			1389-8
		HMMP1832C	865-12
			1389-13
1833	**GE/RCA**	**CDP1833**	★ **2644**
			865-13
			1389-17
			¶ 448-22
		CDP1833C	★ **2644**
			865-14
			1389-23
			¶ 448-22
	Hughes	HCMP1833	865-17
			1389-19
		HCMP1833C	865-18
			1389-25
		HMMP1833	865-21
			1389-21
		HMMP1833C	865-22
			1389-27
1834	**GE/RCA**	**CDP1834**	★ **2644**
			865-15
			1389-18
			¶ 448-22
		CDP1834C	★ **2644**
			865-16
			1389-24
			¶ 448-22
	Hughes	HCMP1834	865-19
			1389-20
		HCMP1834C	865-20
			1389-26
		HMMP1834	865-23
			1389-22
		HMMP1834C	865-24
			1389-28
	Unitrode	**UC1834**	★ **3324**
			1224-100
			¶ 442-3
		UC1834/883B	
			★ **3324**
			1224-101
			¶ 442-3

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
1835	**GE/RCA**	**CDP1835C**	⋆ **2644**
			865-25
			1389-36
	Hitachi	HA1835	889-71
	Hughes	HCMP1835	865-27
		HCMP1835C	865-28
		HMMP1835	865-29
		HMMP1835C	865-30
	Unitrode	**UC1835**	⋆ **3324**
			1227-22
1836	Hughes	HMMP1836	865-31
		HMMP1836C	865-32
	Unitrode	**UC1836**	⋆ **3324**
			1227-23
1837	**GE/RCA**	**CDP1837C**	⋆ **2644**
			865-26
			1389-105
	National	LM1837	1117-191
			1123-47
			¶ 435-21
	SGS	LM1837	1118-12
			1123-48
1838	Unitrode	UC1838	1222-116
184	**GE/Intersil**	**DG184A**	⋆ **2680**
			909-28
			909-32
		DG184B	⋆ **2680**
			909-38
			909-41
		IH184C	909-39
			909-42
		IH184M	909-29
			909-33
	National	AM184	909-30
			909-34
	SiliconSys	SSI184	1004-38
	Siliconix	DG184A	909-31
			909-35
1840	**Harris**	**HS1840RH**	⋆ **2702**
			⋆ **2718**
			915-66
	Intech	**VDAC1840**	⋆ **2799**
			949-24
	SGS	UC1840	1217-59
	SiliconG	SG1840	1224-131
	Unitrode	**UC1840**	⋆ **3323**
			1218-40
			¶ 440-13
		UC1840/883B	
			⋆ **3323**
			1218-41
			¶ 440-13
1841	**Unitrode**	**UC1841**	⋆ **3323**
			1225-16
1842	Cherry	CS1842A	1216-7
	DataTrans	DT1842	4860-14
	Intech	**VDAC1842**	⋆ **2799**
			949-25
	IPS	**IP1842**	⋆ **2854**
			⋆ **2856**
			1216-65
	Motorola	**UC1842A**	⋆ **2930**
			1218-65
	SGS	UC1842	1220-30
	Signetics	UC1842	1215-102
	SiliconG	SG1842	1220-33
	Unitrode	**UC1842**	⋆ **3323**
			1220-45
			¶ 441-11
		UC1842/883B	
			⋆ **3323**
			1218-42
			¶ 441-11
1843	Cherry	CS1843A	1216-8
	DataTrans	DT1843	4860-15
	IPS	**IP1843**	⋆ **2854**
			1216-66
	Motorola	**UC1843A**	⋆ **2930**
			1218-66
	SiliconG	SG1843	1220-34
	Unitrode	**UC1843**	⋆ **3323**
			1220-46
1844	**IPS**	**IP1844**	⋆ **2854**
			1216-67
	Unitrode	**UC1844**	⋆ **3323**
			1220-47

Base Number	Source	Device	Page-Line
1845	**IPS**	**IP1845**	⋆ **2854**
			⋆ **2856**
			1216-68
	Unitrode	**UC1845**	⋆ **3323**
			1220-48
1846	LinearTech	UC1846	1216-126
	SiliconG	SG1846	1220-35
	Unitrode	**UC1846**	⋆ **3323**
			1220-49
			¶ 421-26
			¶ 440-10
		UC1846/883B	
			⋆ **3323**
			1220-50
			¶ 421-26
			¶ 440-10
1847	LinearTech	UC1847	1216-127
	SiliconG	SG1847	1220-36
	Unitrode	**UC1847**	⋆ **3323**
			1220-51
		UC1847/883B	
			⋆ **3323**
			1220-52
185	**GE/Intersil**	**DG185A**	⋆ **2680**
			909-46
			909-50
		DG185B	⋆ **2680**
			909-55
			909-58
		IH185C	909-56
			909-59
		IH185M	909-47
			909-51
	LinearTech	LM185-1	1225-58
	National	AM185	909-45
			909-49
		LM185	1225-65
		LM185-1	1225-80
		LM185-2	1225-131
	Siliconix	DG185A	909-48
			909-52
	TI	TL185C	909-63
		TL185I	909-64
1850	AMD	AMMPA1850	4065-1
	Intech	**VDAC1850**	⋆ **2799**
			949-22
	Sertek	CPU1850A	4821-42
	Unitrode	**UC1850**	⋆ **3323**
			1220-2
		UC1850/883B	
			⋆ **3323**
			1220-3
1851	**GE/RCA**	**CDP1851**	⋆ **2642**
			864-117
			¶ 412-13
		CDP1851C	⋆ **2642**
			864-118
			¶ 412-13
	Hughes	HMMP1851	864-119
		HMMP1851C	864-120
	National	LM1851	1127-42
1852	**GE/RCA**	**CDP1852**	⋆ **2642**
			865-65
			¶ 412-14
			¶ 416-14
		CDP1852C	⋆ **2642**
			642-83
			¶ 412-14
			¶ 416-14
	Hughes	HCMP1852	642-88
			865-69
		HCMP1852C	642-89
			865-70
		HMMP1852	642-86
			865-71
		HMMP1852C	642-87
			865-72
	Intech	**VDAC1852**	⋆ **2799**
			949-23

Base Number	Source	Device	Page-Line
1853	**GE/RCA**	**CDP1853**	⋆ **2642**
			614-42
			864-111
		CDP1853C	⋆ **2642**
			614-43
			864-112
	Hughes	HCMP1853	614-46
			864-113
		HCMP1853C	614-47
			864-114
		HMMP1853	614-44
			864-115
		HMMP1853C	614-45
			864-116
1854	**GE/RCA**	**CDP1854A**	⋆ **2642**
			865-33
			¶ 412-15
		CDP1854AC	865-34
			1011-49
			¶ 412-15
	Hughes	HCMP1854A	865-37
		HCMP1854AC	865-38
		HMMP1854A	865-39
		HMMP1854AC	865-40
1855	**GE/RCA**	**CDP1855**	⋆ **2642**
			864-106
			¶ 416-31
	Hughes	HCMP1855	864-107
		HCMP1855C	864-108
		HMMP1855	864-109
		HMMP1855C	864-110
1856	Hughes	HCMP1856	865-45
		HCMP1856C	865-46
		HMMP1856	865-47
		HMMP1856C	865-48
1857	Hughes	HCMP1857	865-49
		HCMP1857C	865-50
		HMMP1857	865-51
		HMMP1857C	865-52
1858	Hughes	HCMP1858	865-53
		HCMP1858C	865-54
		HMMP1858	865-55
		HMMP1858C	865-56
1859	Hughes	HCMP1859	865-57
		HCMP1859C	865-58
		HMMP1859	865-59
		HMMP1859C	865-60
186	AdvDigital	Super 186	4833-30
	AMD	iAPX186	845-3
			875-80
	GE/Intersil	**DG186A**	⋆ **2680**
			906-60
			906-63
		DG186B	⋆ **2680**
			906-61
			906-64
	InnovRes	GDC186	4857-36
	Intel	iSBC186/03A	4823-12
		iSBC186/100	4837-27
		iSBC186/224A	4823-30
		iSBC186/410	4865-3
		iSBC186/530	4864-5
	InterconMicro		
		CPZ186	4833-7
	Lomas	Thunder 186	4833-31
	MicroInds	MIBII	
		186/101	4829-29
		MIBII	
		186/110A	4865-14
		MIBII	
		186/111	4829-32
			4864-23
		MIBII	
		186/112	4831-1
			4864-22
		MIBII	
		186/140	4831-3
			4864-18
		MIBII	
		186/141	4831-4
			4864-17
		MIBII	
		186/145	4864-19
		MIBII	
		186/150	4864-15
			4865-1

(Continued)

Base Number	Source	Device	Page-Line
186	MicroInds		(Cont'd)
		MIBII	
		186/152	4865-4
		MIBII	
		186/153	4864-2
		MIBII	
		186/154	4831-7
			4864-1
			4864-20
		MIBII	
		186/155	4864-26
			4864-3
		MIBII	
		186/170	4864-12
		MIBII	
		186/171	4864-13
	Siliconix	DG186A	906-62
			906-65
	Titan/SESCO		
		SECS186/48	4829-19
	Zendex	ZX186/30	4823-15
1860	**Unitrode**	**UC1860**	⋆ **3323**
			1227-92
186010	Titan/SESCO		
		SECS186010	4829-20
1861	Hughes	HMMP1861	865-41
		HMMP1861C	865-42
1863	National	LM1863	1120-9
			¶ 434-25
			¶ 434-28
			¶ 434-29
	SMC	COM1863	1011-37
	Western	TR1863-00	1011-47
		TR1863-02	1011-56
		TR1863-04	1011-66
1865	National	LM1865	1121-38
			¶ 434-25
	Western	TR1865-00	1011-48
			¶ 423-21
		TR1865-02	1011-57
			¶ 423-21
18651	Intel	iSBC18651	4858-11
1866	National	LM1866	1120-83
1868	National	LM1868	1120-66
1869	GE/RCA	CDP1869C	865-43
			¶ 414-17
			¶ 417-7
			¶ 446-4
187	**GE/Intersil**	**DG187A**	⋆ **2680**
			906-70
			906-74
		DG187B	⋆ **2680**
			906-80
			906-83
		IH187C	906-81
			906-84
		IH187M	906-71
			906-75
	National	AM187	906-72
			906-76
	Siemens	S187B	1191-15
	Siliconix	DG187A	906-73
			906-77
1870	National	LM1870	1121-132
	Signetics	LM1870	1121-152
1871	**GE/RCA**	**CDP1871A**	⋆ **2642**
			864-99
			984-13
		CDP1871AC	864-100
			984-12
	National	LM1871	1122-64
1872	**GE/RCA**	**CDP1872C**	⋆ **2642**
			865-66
	National	LM1872	1122-65
1874	**GE/RCA**	**CDP1874C**	⋆ **2642**
			642-84
			865-67
1875	**GE/RCA**	**CDP1875C**	⋆ **2642**
			642-85
			865-68
	National	LM1875	1116-138
1877	**GE/RCA**	**CDP1877**	⋆ **2642**
			864-121
		CDP1877C	⋆ **2642**
			864-122
	National	LM1877	1117-133

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
1878	**GE/RCA**	**CDP1878**	⋆ **2642**
			865-44
			¶ 404-14
1879	**GE/RCA**	**CDP1879**	⋆ **2642**
			865-1
			¶ 404-14
		CDP1879C-1	⋆ **2642**
			865-2
			¶ 404-14
188	Cherry	CS188	1219-94
	CompDyn	CPU188	4821-32
	GE/Intersil	**DG188A**	⋆ **2680**
			907-2
			907-6
		DG188B	⋆ **2680**
			907-11
			907-14
		IH188C	907-12
			907-15
		IH188M	907-3
			907-7
	Intel	iSBC188/48	4807-34
	National	AM188	907-1
			907-5
	Siliconix	DG188A	907-4
			907-8
	Slicer	SL188	4813-31
	TI	TL188C	907-17
		TL188I	907-18
	Vesta	DDS188	4894-35
		OEM188	4827-2
		Tiny188	4811-20
1880	National	LM1880	1125-15
1881	**GE/RCA**	**CDP1881**	⋆ **2642**
			864-101
		CDP1881C	⋆ **2642**
			864-102
	National	LM1881	1127-10
1882	**GE/RCA**	**CDP1882**	⋆ **2642**
			864-103
			865-61
		CDP1882C	⋆ **2642**
			864-104
			865-62
1883	**GE/RCA**	**CDP1883**	⋆ **2642**
			864-105
			865-63
		CDP1883C	⋆ **2642**
			865-64
1884	National	LM1884	1126-9
18856	Intel	iSBC18856	4857-2
1886	National	LM1886	1126-99
1889	National	LM1889	1126-100
			1127-29
189	Cherry	CS189	1127-103
	GE/Intersil	**DG189A**	⋆ **2680**
			907-80
			907-83
		DG189B	⋆ **2680**
			907-81
			907-84
	Siliconix	DG189A	907-82
			907-85
1890	GE/RCA	CA1890	1125-93
1893	National	LM1893	1219-102
1894	National	LM1894	1116-111
			¶ 435-13
			¶ 435-17
			¶ 435-23
1895	National	LM1895	1117-134
1896	National	LM1896	1117-135
1897	National	LM1897	1118-31
			¶ 430-22
			¶ 435-21
19	**Apex**	**PA19**	⋆ **2458**
			1155-12
		PA19A	⋆ **2458**
			1145-25
	Interdesign	ULA19DSA	4045-23
		ULA19DSB	4045-24
		ULA19DSC	4045-25
	Lambda	LAS19U	1213-32
	Wintek	**MRR19**	⋆ **4913**
			4865-34
19A05	Lambda	LAS19A05	1203-100
19A12	Lambda	LAS19A12	1206-88
19A15	Lambda	LAS19A15	1207-105
19G032	Toshiba	TC19G032	4062-13
19G042	Toshiba	TC19G042	4062-15
19G060	Toshiba	TC19G060	4062-19
19G080	Toshiba	TC19G080	4062-22
19G100	Toshiba	TC19G100	4062-25
19L8	**TI**	**TIBPALR19L8**	
			⋆ **4320**
			4072-41
		TIBPALT19L8	
			⋆ **4320**
			4072-45
19R4	**TI**	**TIBPALR19R4**	
			⋆ **4320**
			4072-42
		TIBPALT19R4	
			⋆ **4320**
			4072-46
19R6	**TI**	**TIBPALR19R6**	
			⋆ **4320**
			4072-43
		TIBPALT19R6	
			⋆ **4320**
			4072-47
19R8	**TI**	**TIBPALR19R8**	
			⋆ **4320**
			4072-44
		TIBPALT19R8	
			⋆ **4320**
			4072-48
190	Codar	190	4866-28
			4867-24
	GE/Intersil	**DG190A**	⋆ **2680**
			907-86
			907-91
		DG190B	⋆ **2680**
			907-87
			907-92
		IH190M	907-88
			907-93
	National	AM190	907-89
			907-94
	Raytheon	RG190	672-78
	SGS	M190	984-6
	Siliconix	DG190A	907-90
			907-95
1900	Fairchild	FGC1900	4044-20
	IntCirSys	**VGC1900**	⋆ **4256**
			4051-16
	ITT	SAA1900	1119-133
	Thomson	MN1900	645-116
	VLSI Tech	**VGC1900**	⋆ **4665**
			4064-4
1901	**Unitrode**	**UC1901**	⋆ **3324**
			1224-81
			¶ 440-8
			¶ 441-34
		UC1901/883B	
			⋆ **3324**
			1224-82
			¶ 440-8
			¶ 441-34
1903	**Unitrode**	**UC1903**	⋆ **3324**
			1224-83
1904	SGS	TDA1904	1117-60
1905	Lambda	LAS1905	1203-101
			¶ 441-26
		LAS1905B	1203-102
			¶ 441-26
	SGS	TDA1905	1117-101
1908	SGS	TDA1908	1117-102
		TDA1908A	1117-103
191	Cherry	CS191	1224-124
	GE/Intersil	**DG191A**	⋆ **2680**
			908-4
			908-8
		DG191B	⋆ **2680**
			908-11
			908-14
		IH191C	908-12
			908-15
		IH191M	908-5
			908-9
	National	AM191	908-3
			908-7
	SGS	M191	1125-78

(Continued)

Base Number	Source	Device	Page-Line
191			(Cont'd)
	Siliconix	DG191A	908-10
			908-6
	Telefunken	U191	1124-44
	TI	TL191C	908-17
		TL191I	908-18
1910	SGS	TDA1910	1117-104
19100	ILC-DDC	SDC19100	1227-71
1912	Lambda	LAS1912	1206-89
			¶ 441-26
		LAS1912B	1206-90
			¶ 441-26
1913	NEC	μPD1913	1122-48
1915	Lambda	LAS1915	1207-106
		LAS1915B	1207-107
19190	ILC-DDC	RDC19190	1227-82
19191	ILC-DDC	RDC19191	1227-85
19192	ILC-DDC	RDC19192	1227-87
19193	ILC-DDC	RDC19193	1227-89
19198	ILC-DDC	RDC19198	1227-88
19199	ILC-DDC	RDC19199	1227-90
192	National	LM192	1103-113
			1175-54
	SGS	M192	1125-79
19200	ILC-DDC	RDC19200	1227-91
	Thomson	SFF19200	1194-49
19202	Hitachi	HA19202	916-8
19203	Hitachi	HA19203	916-9
19209	Hitachi	HA19209	920-46
1921	National	LM1921	1004-111
19210	Hitachi	HA19210	920-47
19216	Hitachi	HA19216	917-18
1926	Analogic	MP1926A	973-10
		MP1926S	973-11
193	**Motorola**	**LM193**	⋆ **2925**
			1112-28
		LM193A	⋆ **2925**
			1111-27
	National	AM193	905-63
		LM193	1112-29
		LM193A	1111-28
	SGS	LM193	1112-30
		LM193A	1111-29
	Signetics	LM193	1112-31
		LM193A	1111-30
	TI	TLC193M	1112-55
	Thomson	LM193	1112-32
1935	VLSI Tech	VL1935	886-85
	Western	**WD1935A**	⋆ **3382**
			1011-11
1936	Analogic	MP1936	973-9
1937	NEC	μPD1937	1122-24
1938	NEC	MC1938	1193-43
194	National	AM194	905-75
		LM194	1106-116
1940	Telefunken	TDA1940	1125-37
1943	NEC	μPD1943	1122-49
	Western	WD1943	691-23
		WD1943-00	1009-40
		WD1943-05	1009-41
		WD1943-06	1009-42
1945	Western	WD1945	1009-53
1949	National	LM1949	1118-116
195	National	LM195	1219-97
	Unitrode	LM195	1107-3
		UC195	⋆ **3327**
			1003-113
1950	ITT	TDA1950	1125-27
	Telefunken	TDA1950	1125-38
196	Micropac	MLM196-05	1203-112
		MLM196-12	1206-94
		MLM196-15	1207-110
		MLM196N	1214-112
	National	LM196	1213-16
1962	NEC	μPD1962	1119-64
1963	NEC	μPD1963	1119-65
1965	National	LM1965	1121-83
198	AMD	LF198	1227-109
	Fairchild	μA198M	1228-7
	LinearTech	LF198	1228-43
		LF198A	1228-44
	National	LF198	1228-58
		LF198A	1228-59
	Signetics	LF198	1228-86
1986	NEC	μPD1986	1122-50
1987	NEC	μPD1987	1122-25
199	AD	HOS199SH	1102-58
	LinearTech	LM199	1226-75
		LM199A	1226-64
	National	LM199	1226-67
			¶ 442-4
		LM199A	1226-68
			¶ 442-4
1990	NEC	μPD1990A	888-87
2	AdvMicroSys		
		SM2	4871-25
		SM2A	4871-6
	Alcyon	WLM-2	4889-18
	Ampro	2VR	4870-2
	Bedford	BCS2	4811-16
	Burr-Brown	PWR2XX	1220-140
	Calmos	DMC2	4082-23
		SMC2.4	2-24
	CharlesRiver		
		CM2MB	4892-26
	Clearpoint	MV2RAM	4881-9
		SNX2RAM	4881-6
	CompDyn	CPU2	4821-5
	CompModules		
		LSBXCLOCK2	4863-33
			4865-20
	CIC	MSB2	4065-37
	Datel	FLJ-ACR2	692-110
		FLJ-D2	692-67
		FLTU2	⋆ **2577**
			1219-29
	Datricon	ACS2A	4817-24
	Ferranti	ZNPCM2	1193-61
	Force	AGC2	4881-24
		CPU2	4835-23
		RR2	4889-16
	GE/RCA	SOS-2	
		Library	4085-27
	Gordos	PAM2	4876-30
	HEI	PLC2	4850-12
	IntSolutions	IS-QIC2	4856-14
		VME-QIC2	4882-33
	Intel	SPC Link2	4831-16
			4847-56
	Interdesign	ULA2G	4066-23
	LMS	NVR2	1310-37
			1358-76
	Magnum	S-MEM2	4894-27
	Octagon	SYS2Z	4811-11
	PEP-Modular		
		BMU2	4852-20
		CIM2	4852-16
		PIM2A	4852-6
		UEP2	4852-22
	PlesseyMicro		
		PME DB2EA	4889-38
		PME DB2EP	4889-39
		PME 2SB	4889-13
	Plessey	PMEDB2EA	4890-34
		PMEDB2EP	4890-36
		PME2EP	4890-37
		PSM2A	4862-63
		PSM2DA	4862-61
		PSM2P	4862-62
	Qualogy	QE2	4833-2
			4866-11
	SBE	COM2	4839-5
	Signetics	EPL2	4086-7
	Supertex	SD2	1127-79
	Tektronix	QuickChip 2	646-69
			4069-16
		QuickChip 2K-30	4069-13
		QuickChip 2L	4069-18
		QuickChip 2S	646-70
			4069-14
	Thomson	MDX-CPU2A	4819-22
			¶ 415-19
	TLSI	TA2	4061-50
	VersaLogic	IPI-2	4875-5
		SIO-2A	4875-18
		SIO-2B	4875-17
	WinSystems	LPM-UMC2	4878-8
		LPMCPU2-A	4817-8
		MCM-CPU2A	4815-4
		MCM-UMC2	4878-9
		MCMSBC2	4815-6

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
2			(Cont'd)
	ZyMOS	ZyAT2	4851-4
2C02	Sharp	IR2C02	981-4
2C03	Sharp	IR2C03	1107-139
2C04	Sharp	IR2C04	1107-48
2C05	Sharp	IR2C05	1107-44
2C06	Sharp	IR2C06	1107-45
2C07	Sharp	IR2C07	978-62
2C08	Sharp	IR2C08	1003-40
2C09	Sharp	IR2C09	1003-41
2C10	Sharp	IR2C10	1003-43
2C11	Sharp	IR2C11	1003-44
2C12	Sharp	IR2C12	977-37
2C17	Sharp	IR2C17	1106-43
2C19	Sharp	IR2C19	1106-44
2C20	Sharp	IR2C20	1107-140
2C22	Sharp	IR2C22	1106-54
2C23	Sharp	IR2C23	1107-49
2C24	Sharp	IR2C24	1107-50
2C25	Sharp	IR2C25	1003-42
2C30	Sharp	IR2C30	1106-45
2C32	Sharp	IR2C32	1106-46
2C33	Sharp	IR2C33	1106-47
2C34	Sharp	IR2C34	1107-26
2C35	Sharp	IR2C35	1107-142
2C36	Sharp	IR2C36	1107-143
2D03	**IPS**	**IP2D03**	⋆ **2855**
			1004-64
2D08	**IPS**	**IP2D08**	⋆ **2854**
			1006-88
2D09	**IPS**	**IP2D09**	⋆ **2854**
			1006-89
2E01	Sharp	IR2E01	978-49
2E02	Sharp	IR2E02	978-57
2E03	Sharp	IR2E03	978-78
2E04	Sharp	IR2E04	978-79
2E05	Sharp	IR2E05	978-64
2E07	Sharp	IR2E07	978-65
2E09	Sharp	IR2E09	980-87
2E10	Sharp	IR2E10	978-66
2E11	Sharp	IR2E11	979-138
2E12	Sharp	IR2E12	981-20
2E13	Sharp	IR2E13	978-50
2E14	Sharp	IR2E14	980-83
2E15	Sharp	IR2E15	978-80
2E16	Sharp	IR2E16	978-67
2E17	Sharp	IR2E17	978-68
2E19	Sharp	IR2E19	978-58
2E20	Sharp	IR2E20	981-21
2E21	Sharp	IR2E21	978-51
2E22	Sharp	IR2E22	978-59
2E24	Sharp	IR2E24	978-52
2E25	Sharp	IR2E25	978-53
2E27	Sharp	IR2E27	980-60
2E28	Sharp	IR2E28	980-88
2E29	Sharp	IR2E29	978-60
2E30	Sharp	IR2E30	978-69
2E31	Sharp	IR2E31	978-54
		IR2E31A	978-55
2E32	Sharp	IR2E32N	978-56
2E33	Sharp	IR2E33	978-70
2E34	Sharp	IR2E34	980-84
2E35	Sharp	IR2E35	980-89
2E36	Sharp	IR2E36	978-71
2E37	Sharp	IR2E37	978-61
2E38	Sharp	IR2E38	978-72
2E40	Sharp	IR2E40	978-73
2E41	Sharp	IR2E41	978-74
2H16	Dense-Pac	DPS2H16	1358-92
2KF9	**VLSI Tech**	**VT2KF9**	⋆ **3356**
			1306-83
2MX8	**Performance**		
		PEP2MX8	⋆ **2962**
			1346-46
		PEP2MX8-100	
			⋆ **2962**
			1346-47
		PEP2MX8-120	
			⋆ **2962**
			1346-48
2M10	IPS	2M10	1003-76
2M20	IPS	2M20	1003-77
2OV12	Lambda	L2OV12	1223-90
2OV15	Lambda	L2OV15	1223-91
2OV18	Lambda	L2OV18	1223-92
2OV20	Lambda	L2OV20	1223-93
2OV24	Lambda	L2OV24	1223-94
2OV5	Lambda	L2OV5	1223-95
2OV6	Lambda	L2OV6	1223-96
2OV9	Lambda	L2OV9	1223-97
2P00	**IPS**	**IP2P00**	⋆ **2856**
			1215-115
2P01	**IPS**	**IP2P01**	⋆ **2856**
			1215-116
	Sharp	IR2P01	1127-17
2P02	Sharp	IR2P02	1127-18
2P125	**IPS**	**IP2P125**	⋆ **2856**
			1215-107
2R07	**IPS**	**IP2R07A**	⋆ **2854**
			1214-41
2R17	**IPS**	**IP2R17A-05**	⋆ **2854**
			⋆ **2857**
			1209-60
		IP2R17A-12	⋆ **2854**
			⋆ **2857**
			1210-97
		IP2R17A-15	⋆ **2854**
			⋆ **2857**
			1211-59
		IP2R17A-5.2	⋆ **2854**
			⋆ **2857**
			1210-18
2R18	**IPS**	**IP2R18A-05**	⋆ **2854**
			⋆ **2857**
			1202-8
		IP2R18A-12	⋆ **2854**
			⋆ **2857**
			1205-74
		IP2R18A-15	⋆ **2854**
			⋆ **2857**
			1206-104
2R19	**IPS**	**IP2R19A-05**	⋆ **2854**
			⋆ **2857**
			1209-63
		IP2R19A-12	⋆ **2854**
			⋆ **2857**
			1210-100
		IP2R19A-15	⋆ **2854**
			⋆ **2857**
			1211-62
		IP2R19A-5.2	⋆ **2854**
			⋆ **2857**
			1210-21
2S20	AD	MSC2S20	1227-35
		2S20	1227-48
2S50	AD	2S50/410	1222-114
		2S50/460	1222-112
		2S50/510	1222-115
		2S50/560	1222-113
2S54	AD	2S54	1220-6
2S56	AD	2S56	1220-7
2S80	AD	2S80	646-80
2S81	AD	2S81	646-81
2V56	Dense-Pac	DPD2V56	1339-22
2X04	Datel	RP2X04	1004-83
2X16	**Dense-Pac**	**DPP2X16**	⋆ **2584**
			1358-93
		DPS2X16	⋆ **2579**
			1358-94
2X18	**Dense-Pac**	**DPF2X18**	⋆ **2585**
			1306-97
2X24	**Dense-Pac**	**DPV2X24V**	⋆ **2584**
			1322-82
2X32	**Dense-Pac**	**DPP2X32**	⋆ **2584**
			1359-11
		DPS2X32	⋆ **2579**
			1359-10
		DPV2X32V	⋆ **2584**
			1322-83
2X36	**Dense-Pac**	**DPF2X36**	⋆ **2585**
			1306-98
2X40	Dense-Pac	DPS2X40	1359-13
2X8	**Dense-Pac**	**DPP2X8**	⋆ **2584**
			1355-73
2X80	Dense-Pac	DPS2X80	1359-14
2X9	**Dense-Pac**	**DPF2X9**	⋆ **2585**
			1306-88
20	Datel	ROJ20	1223-83
		SHM20C	⋆ **2577**
			1227-150
		SHM20M	1227-151
	ECISemi	S20C	4065-38
			(Continued)
20	ECISemi		(Cont'd)
		S20F	4065-43
		S20G	4065-41
		S20H	4065-40
		S20J	4065-39
		S20L	4065-42
		S20M	4065-44
	Ferranti	ULA20RD	4045-9
	Force	CPU20	4845-5
		CPU20A	4845-7
		CPU20B	4843-25
		CPU20S	4843-20
	Interconics	IMC20A	4067-16
		IMC20B	4067-22
		IMC20C	4067-13
		IMC20E	4067-18
		IMC20F	4067-24
		IMC20G	4067-19
		IMC20H	4067-20
		IMC20J	4067-17
		IMC20L	4067-23
		IMC20M	4067-26
		IMC20W	4067-25
	Interdesign	ULA20RA	4045-5
		ULA20RB	4045-6
		ULA20RC	4045-7
		ULA20RD	4045-8
	MCE	MCEA20A	4068-7
		MCEA20AS	4068-8
		MCEA20B	4068-19
		MCEA20BS	4068-20
		MCEA20C	4068-2
		MCEA20CS	4068-3
		MCEA20E	4068-11
		MCEA20ES	4068-12
		MCEA20F	4068-23
		MCEA20FS	4068-24
		MCEA20G	4068-13
		MCEA20GS	4068-14
		MCEA20H	4068-15
		MCEA20HS	4068-16
		MCEA20J	4068-9
		MCEA20JS	4068-10
		MCEA20L	4068-21
		MCEA20LS	4068-22
		MCEA20M	4068-26
		MCEA20MS	4068-27
		MCEA20WS	4068-25
		MCEP20A	4068-1
	NCR	ADP20	4869-26
	PMI	**DAC20C**	⋆ **2973**
			950-37
		OP20B	⋆ **2970**
			1133-5
			1134-69
			1140-51
		OP20C	⋆ **2970**
			1133-6
			1134-70
			1143-18
		OP20F	⋆ **2970**
			1133-7
			1134-71
		OP20G	⋆ **2970**
			1133-8
			1134-72
			1143-19
		OP20H	⋆ **2970**
			1133-9
			1134-73
			1144-32
	Raytheon	RF20	688-87
		RVG20	⋆ **4296**
			4059-9
	Ricoh	RSC20	4085-30
	SBE	MPU20	4839-12
	Tektronix	TKAD20C	917-24
		TKDA20H	957-7
	TI	TLC20	1228-143
	VLSI Tech	VP20PX	4080-13
	Wintek	**MAI20**	⋆ **4913**
			4865-27
	Ziatech	xSBX 20	4865-22
		zSBX20	4854-37
20CG10			
	ICT	**PEEL20CG10-25**	
			⋆ **4259**
			4070-37
		PEEL20CG10-35	
			⋆ **4259**
			4070-38
		PEEL20CG10Z	
			⋆ **4259**
			4070-36
20C03	**Western**	**WD20C03**	⋆ **3380**
			691-70
20C1	MMI	HAL20C1C	4080-93
		PAL20C1C	4075-36
		PAL20C1M	4075-71
		ZHAL20C1A	4081-33
	National	PAL20C1C	4075-51
		PAL20C1M	4075-52
20C18	**VLSI Tech**	**VT20C18**	⋆ **3347**
			1355-17
		VT20C18-20	⋆ **3347**
			1355-18
		VT20C18-25	⋆ **3347**
			1355-31
		VT20C18-35	⋆ **3347**
			1355-62
20C19	**VLSI Tech**	**VT20C19**	⋆ **3347**
			1355-19
		VT20C19-20	⋆ **3347**
			1355-20
		VT20C19-25	⋆ **3347**
			1355-32
		VT20C19-35	⋆ **3347**
			1355-63
20C68	**VLSI Tech**	**VT20C68**	⋆ **3349**
			1361-41
		VT20C68-20	⋆ **3349**
			1361-42
		VT20C68-25	⋆ **3349**
			1362-10
		VT20C68-35	⋆ **3349**
			1363-19
		VT20C68-45	⋆ **3349**
			1364-13
20C69	**VLSI Tech**	**VT20C69**	⋆ **3349**
			1361-43
		VT20C69-20	⋆ **3349**
			1361-44
		VT20C69-25	⋆ **3349**
			1362-11
		VT20C69-35	⋆ **3349**
			1363-20
		VT20C69-45	⋆ **3349**
			1364-14
20C78	**VLSI Tech**	**VT20C78**	⋆ **3351**
			1361-50
		VT20C78-20	⋆ **3351**
			1361-51
		VT20C78-25	⋆ **3351**
			1362-20
		VT20C78-35	⋆ **3351**
			1363-32
		VT20C78-45	⋆ **3351**
			1364-22
20C79	**VLSI Tech**	**VT20C79**	⋆ **3351**
			1361-52
		VT20C79-20	⋆ **3351**
			1361-53
		VT20C79-25	⋆ **3351**
			1362-21
		VT20C79-35	⋆ **3351**
			1363-33
		VT20C79-45	⋆ **3351**
			1364-23
20C98	**VLSI Tech**	**VT20C98-25**	⋆ **3352**
			1366-25
		VT20C98-35	⋆ **3352**
			1366-66
		VT20C98-45	⋆ **3352**
			1367-16
20C99	**VLSI Tech**	**VT20C99-25**	⋆ **3352**
			1366-26
		VT20C99-35	⋆ **3352**
			1366-67
		VT20C99-45	⋆ **3352**
			1367-17

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
20G10	**Cypress**	**PLDC20G10-25C**	
		⋆ **4218**	
			4077-13
		PLDC20G10-25WC	
		⋆ **4218**	
			4077-14
		PLDC20G10-30M	
		⋆ **4218**	
			4077-15
		PLDC20G10-30WM	
		⋆ **4218**	
			4077-16
		PLDC20G10-35C	
		⋆ **4218**	
			4077-17
		PLDC20G10-35WC	
		⋆ **4218**	
			4077-18
		PLDC20G10-40M	
		⋆ **4218**	
			4077-19
		PLDC20G10-40WM	
		⋆ **4218**	
			4077-20
20L10	MMI	HAL20L10AC	4080-40
		HAL20L10C	4081-3
		HAL20L10M	4081-16
		PAL20L10AC	4074-12
		PAL20L10C	4075-91
		PAL20L10M	4076-23
		ZHAL20L10A	4081-43
	National	PAL20L10C	4075-96
		PAL20L10M	4075-97
	TI	**TIBPAL20L10-20**	
		⋆ **4320**	
			4071-71
			4073-94
		TIBPAL20L10-25M	
		⋆ **4320**	
			4073-84
		TIBPAL20L10-30	
		⋆ **4320**	
			4077-37
20L2	MMI	HAL20L2C	4080-94
		HAL20L2M	4081-2
		PAL20L2C	4075-37
		PAL20L2M	4075-72
		ZHAL20L2A	4081-34
	National	PAL20L2C	4075-53
		PAL20L2M	4075-86
20L76	Raytheon	CGA20L76	4058-40
20L8	Fairchild	20L8B	4072-13
	MMI	HAL20L8AC	4080-32
		HAL20L8AM	4080-41
		HAL20L8BC	4080-20
		PALC20L8Z-35	4076-71
		PALC20L8Z-45	4076-80
		PAL20L8A-2C	4074-84
		PAL20L8AC	4073-5
		PAL20L8AM	4074-13
		PAL20L8B-2	4073-6
		PAL20L8BC	4072-25
		ZHAL20L8A	4081-35
	National	PAL20L8AC	4073-59
		PAL20L8AM	4073-60
	TI	PAL20L8A	4073-76
		TIBPAL20L8-15	
		⋆ **4320**	
			4072-37
		TIBPAL20L8-20M	
		⋆ **4320**	
			4072-63
		TIBPAL20L8-25	
		⋆ **4320**	
			4073-85
20P8	Fairchild	20P8B	4072-14
20RA10	**Cypress**	**PLDC20RA10-20**	
		⋆ **4218**	
			4070-14
		PLDC20RA10-25	
		⋆ **4218**	
			4081-47
		PLDC20RA10-30	
		⋆ **4218**	
			4081-48

(Continued)

Base Number	Source	Device	Page-Line
20RA10	**Cypress**		**(Cont'd)**
		PLDC20RA10-35	
		⋆ **4218**	
			4081-49
	MMI	HAL20RA10	4080-95
		PAL20RA10C	4074-14
		PAL20RA10M	4074-85
	National	PAL20RA10C	4072-56
		PAL20RA10M	4072-57
	SEEQ	**20RA10Z** ⋆ **2991**	
			4070-11
		20RA10Z-35	4071-22
		20RA10Z-45	4071-23
20RP4	Fairchild	20RP4B	4072-15
20RP6	Fairchild	20RP6B	4072-16
20RP8	Fairchild	20RP8B	4072-17
20RS10	MMI	HAL20RS10	4080-96
		PAL20RS10C	4074-86
		PAL20RS10M	4075-38
20RS4	MMI	HAL20RS4	4080-97
		PAL20RS4C	4074-87
		PAL20RS4M	4075-39
		ZHAL20RS4A	4081-36
20RS8	MMI	HAL20RS8	4080-98
		PAL20RS8C	4074-88
		PAL20RS8M	4075-40
		ZHAL20RS8A	4081-37
20R4	Fairchild	20R4B	4072-18
	MMI	HAL20R4AC	4080-33
		HAL20R4AM	4080-42
		HAL20R4BC	4080-21
		PALC20R4Z-35	4076-72
		PALC20R4Z-45	4076-81
		PAL20R4A-2C	4074-89
		PAL20R4AC	4073-7
		PAL20R4AM	4074-15
		PAL20R4B-2	4073-8
		PAL20R4B-2C	4074-90
		PAL20R4BC	4072-26
		ZHAL20R4A	4081-38
	National	PAL20R4AC	4073-61
		PAL20R4AM	4073-62
	TI	PAL20R4A	4073-77
		TIBPAL20R4-15	
		⋆ **4320**	
			4072-38
		TIBPAL20R4-20M	
		⋆ **4320**	
			4072-64
		TIBPAL20R4-25	
		⋆ **4320**	
			4073-86
20R510	MMI	ZHAL20R510A	4081-39
20R6	Fairchild	20R6B	4072-19
	MMI	HAL20R6AC	4080-34
		HAL20R6AM	4080-43
		HAL20R6BC	4080-22
		PALC20R6Z-35	4076-73
		PALC20R6Z-45	4076-82
		PAL20R6A-2C	4074-91
		PAL20R6AC	4073-9
		PAL20R6AM	4074-16
		PAL20R6B-2	4073-10
		PAL20R6B-2C	4074-92
		PAL20R6BC	4072-27
		ZHAL20R6A	4081-40
	National	PAL20R6AC	4073-63
		PAL20R6AM	4073-64
	TI	PAL20R6A	4073-78
		TIBPAL20R6-15	
		⋆ **4320**	
			4072-39
		TIBPAL20R6-20M	
		⋆ **4320**	
			4072-65
		TIBPAL20R6-25	
		⋆ **4320**	
			4073-87
20R8	Fairchild	20R8B	4072-20
	Lattice	RAL20R8-15	4071-15
	MMI	HAL20R8AC	4080-35
		HAL20R8AM	4080-44
		HAL20R8BC	4080-23
		PALC20R8Z-35	4076-74
		PALC20R8Z-45	4076-83
		PAL20R8A-2C	4074-93

(Continued)

Base Number	Source	Device	Page-Line
20R8	MMI		(Cont'd)
		PAL20R8AC	4073-11
		PAL20R8AM	4074-17
		PAL20R8B-2	4073-12
		PAL20R8B-2C	4074-94
		PAL20R8BC	4072-28
		ZHAL20R8A	4081-41
	National	PAL20R8AC	4073-65
		PAL20R8AM	4073-66
	TI	PAL20R8A	4073-79
		TIBPAL20R8-15	
		⋆ **4320**	
			4072-40
		TIBPAL20R8-20M	
		⋆ **4320**	
			4072-66
		TIBPAL20R8-25	
		⋆ **4320**	
			4077-36
20S10	MMI	HAL20S10	4080-99
		PAL20S10C	4074-95
		PAL20S10M	4075-41
20V8	Lattice	GAL20V8-10	4071-28
		¶	450-19
		¶	450-38
		¶	450-39
		GAL20V8-15L	4071-14
			4071-8
		¶	450-19
		¶	450-38
		¶	450-39
		GAL20V8-25L	4071-10
			4071-17
		¶	450-19
		¶	450-38
		¶	450-39
		GAL20V8-25Q	4071-31
		¶	450-19
		¶	450-38
		¶	450-39
		GAL20V8-30LM	4071-25
		¶	450-19
		¶	450-38
		¶	450-39
		GAL20V8-35L	4071-12
			4071-19
		¶	450-19
		¶	450-38
		¶	450-39
		GAL20V8-35Q	4071-34
		¶	450-19
		¶	450-38
		¶	450-39
	Signetics	PLC20V8	4070-28
	VLSI Tech	VP20V8E-25	4071-33
		VP20V8E-35	4071-36
20X10	MMI	HAL20X10AC	4080-45
		HAL20X10C	4081-4
		HAL20X10M	4081-17
		PAL20X10AC	4074-18
		PAL20X10C	4075-92
		PAL20X10M	4076-24
		ZHAL20X10A	4081-44
	National	PAL20X10C	4075-98
		PAL20X10M	4076-27
	TI	**TIBPAL20X10-20**	
		⋆ **4320**	
			4071-72
		TIBPAL20X10-25M	
		⋆ **4320**	
			4073-88
		TIBPAL20X10-30	
		⋆ **4320**	
			4074-39
20X4	MMI	HAL20X4AC	4080-46
		HAL20X4C	4081-5
		HAL20X4M	4081-18
		PAL20X4AC	4074-19
		PAL20X4C	4075-93
		PAL20X4M	4076-25
		ZHAL20X4A	4081-45
	National	PAL20X4C	4075-99
		PAL20X4M	4076-28
	TI	**TIBPAL20X4-20**	
		⋆ **4320**	
			4071-73

(Continued)

Base Number	Source	Device	Page-Line
20X4	**TI**		**(Cont'd)**
		TIBPAL20X4-25M	
		⋆ **4320**	
			4073-89
		TIBPAL20X4-30	
		⋆ **4320**	
			4074-40
20X8	MMI	HAL20X8AC	4080-47
		HAL20X8C	4081-6
		HAL20X8M	4081-19
		PAL20X8AC	4074-20
		PAL20X8C	4075-94
		PAL20X8M	4076-26
		ZHAL20X8A	4081-46
	National	PAL20X8C	4076-1
		PAL20X8M	4076-29
	TI	**TIBPAL20X8-20**	
		⋆ **4320**	
			4071-74
		TIBPAL20X8-25M	
		⋆ **4320**	
			4073-90
		TIBPAL20X8-30	
		⋆ **4320**	
			4074-41
20Z8	Lattice	ispGAL20Z8-15L	
			4071-2
		ispGAL20Z8-25L	
			4071-4
		ispGAL20Z8-35L	
			4071-6
200	AD	ADG200A	903-9
		ADG200B	903-31
		ADG200C	903-32
		HOS200A	1102-31
		HOS200S	1102-32
	Anasco	43-200	4888-30
	AT&T	**ALA200**	⋆ **4207**
			4065-7
	Barvon	BB200	4082-6
	Burr-Brown	**PGA200**	⋆ **2537**
			1103-17
	CalDevices	CHA200	4042-34
		DLM200	4042-35
	CMD ASIC	**CSC200**	⋆ **4216**
			4082-17
	Comlinear	CLC200AI	1161-33
			¶ 429-3
		CLC200AM	1104-72
			1130-112
			1131-3
			1136-19
			1161-34
			¶ 429-3
	Elantec	EHOS200AH	1129-9
			1169-27
		EHOS200SH	1129-1
			1169-16
	Exar	XRS200	1190-69
			¶ 439-15
		XR200	4044-3
	Fairchild	CET200	1194-47
	Galil	DMC200	4858-37
	GE/Intersil	**DG200**	⋆ **2679**
			903-15
		DG200C	⋆ **2679**
			903-29
		DG200M	⋆ **2679**
			903-7
		IH200C	903-27
		IH200M	903-16
	Harris	**HI200-2**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			903-10
		HI200-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			903-33
		HSC200	4084-3
	Kontron	KPS200	4711-3
	Micom Int	NP200	4866-15
	MicroPwr	MP200DIA	903-11
		MP200DIB	903-34
		MP200DIC	903-35
	Mitchell	M/E200A	4815-34

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
200	Mitchell		(Cont'd)
		MIE200	4815-18
	Motorola	HDS200	4713-1
	PMI	**OP200A**	⋆ **2970**
			⋆ **2972**
			1169-37
		OP200E	⋆ **2970**
			⋆ **2972**
			1169-38
		OP200F	⋆ **2970**
			⋆ **2972**
			1170-36
		OP200G	⋆ **2970**
			⋆ **2972**
			1171-13
	Raytheon	RF200	669-47
		RG200	671-86
	SBE	SBE200	4717-5
	SGS	L200	1213-28
			¶ 441-14
			¶ 441-28
	Sharp	SM200	813-34
			862-28
	Signetics	OM200	1116-38
	Siliconix	DG200AA	903-12
			¶ 427-20
	Thomson	TDA200	1213-110
	Western	ADSD200	4869-36
	Xycom	XVME200	4888-13
	Zendex	ZX200A	4857-30
2000	**AT&T**	**LS2000**	⋆ **4211**
			4041-44
		TE2000	⋆ **4211**
			4064-13
	Barvon	BC2000	4082-8
	CharlesRiver		
		VCP2000	4839-24
	Cherry	CS2000E	4065-11
	Clearpoint	MV2000	4881-5
	Exar	N2000	4082-28
	Fairchild	FGE2000	4044-21
	Fujitsu	**BC2000**	⋆ **4230**
			4046-26
		B2000	⋆ **4230**
			4046-27
		C2000AVB	⋆ **4229**
			⋆ **4231**
			4046-16
		C2000AVL	⋆ **4229**
			⋆ **4231**
			4046-18
	GoldStar	**GSC2000**	⋆ **4243**
			4083-10
	Gould	GA2000D	4048-37
		GB2000D	⋆ **4244**
			4048-38
	Honeywell	HE2000	4049-43
			¶ 449-17
			¶ 449-18
			¶ 449-29
	HyComp	M/DA2000	964-40
	Matra	MA2000	4054-9
	Matra-Harris		
		MB2000	4054-19
	Matrox	CP2000	4823-13
		FP2000	4823-14
		MAP2000	4841-24
		MB2000	4862-64
		NAP2000	4841-18
	NCM	2000 Series	4085-10
	NCR	NCRVS2000	4085-12
	Northern	NPX2000	4863-8
	Plessey	BAA2000	4068-50
	Siemens	TUA2000-4	1126-76
	Signetics	SMVME2000	4837-14
		TEA2000	1125-97
	Sophia	SA2000	4717-16
	Systech	MLP2000	4858-34
	Telefunken	U2000	1119-14
	TI	THCT2000	637-2
	Thomson	GB2000D	4055-18
		MKGA2000D	4055-17
		MKGB2000D	4055-19
	TLSI	TA2000	4062-1
		TA2000D	4062-2

(Continued)

Base Number	Source	Device	Page-Line
2000			(Cont'd)
	VTC	**VL2000**	⋆ **4338**
			4087-13
			¶ 452-12
20000	Burr-Brown	PCI20000Family	
			4850-3
	Fujitsu	**C20000UH**	⋆ **4229**
			⋆ **4232**
			4047-12
	GE/Intersil	ISC20000	4083-6
	Gould	**GC20000**	⋆ **4244**
			4048-50
	Honeywell	HC20000	4050-2
	ZyMOS	Zy20000	4087-31
2001	Exar	XR2001C	1107-55
	Mitsubishi	M2001	1107-78
	NCM	NCM2001Z	1126-42
		2001Z	1126-13
	SGS	ULN2001A	1002-14
	SiliconG	SG2001	1002-15
			1107-95
	Siliconix	VQ2001	1006-119
	Sprague	**ULN2001**	⋆ **3203**
			1002-19
			1107-101
		ULS2001	1002-23
			1107-121
	TI	ULN2001A	1002-28
	Western	WD2001	691-71
	Xicor	**X2001**	⋆ **3387**
			⋆ **3398**
			1308-61
		X2001-20	⋆ **3387**
			⋆ **3398**
			1308-57
		X2001-25	⋆ **3387**
			⋆ **3398**
			1308-78
2002	Aptek	AMS2002	1198-50
			¶ 424-19
			¶ 433-13
	Exar	XR2002C	1107-56
	Mitsubishi	M2002	1107-79
	National	LM2002	1117-77
		TDA2002	1117-81
		TDA2002A	1117-82
	NEC	μPC2002	1117-87
	SGS	TDA2002	1117-105
		TDA2002A	1117-106
		ULN2002A	1117-109
	SiliconG	SG2002	1002-35
			1107-96
	Sprague	**ULN2002**	⋆ **3203**
			1002-39
			1107-102
		ULS2002	1002-43
			1107-122
	TI	ULN2002A	1002-46
	Universal	USCL2002	888-16
	Western	WD2002	691-72
20023	Burr-Brown	PCI20023M-1	4849-1
2003	**Elantec**	**EL2003**	⋆ **2591**
			⋆ **2595**
			1104-120
			1129-7
			1169-19
		EL2003H	⋆ **2591**
			⋆ **2595**
			1104-121
		EL2003H-8	⋆ **2591**
			⋆ **2595**
			1104-122
	Exar	XR2003C	1107-57
		XR2003M	1001-103
	IPS	IP2003	1004-65
	Mitsubishi	M2003	1107-80
	National	TDA2003	1117-83
	SGS	TDA2003	1117-107
		ULN2003A	1001-109
	Signetics	ULN2003	1001-110
			1107-93
	SiliconG	SG2003	1001-111
			1107-97
	Sprague	**ULN2003**	⋆ **3203**
			1001-118
			1107-103

(Continued)

Base Number	Source	Device	Page-Line
2003	Sprague		(Cont'd)
		ULS2003	1002-1
			1107-123
	STI	**STI2003**	⋆ **3209**
			644-91
	Telefunken	TDA2003	1117-117
	TI	ULN2003A	1002-7
		ULN2003AM	1002-141
	Thomson	TDA2003	1117-122
20030	GE Semi	IGC20030	4047-19
2004	**Elantec**	**EL2004**	⋆ **2591**
			1165-42
		EL2004C	⋆ **2591**
			1168-35
	Exar	XR2004C	1107-58
	Fujitsu	ETM2004	4046-17
	MicroInds	PG2004	4835-2
		PG2004/10	4835-3
	MicroPwr	MP2004	1165-43
	Mitsubishi	M2004	1107-81
	SGS	TDA2004	1117-168
		ULN2004A	1001-90
	Signetics	ULN2004	1001-91
			1107-94
	SiliconG	SG2004	1001-92
	Siliconix	VQ2004	1006-120
	Sprague	**ULN2004**	⋆ **3203**
			1001-95
			1107-104
		ULS2004	1001-99
			1107-124
	TI	ULN2004A	1001-102
	Xicor	**X2004**	⋆ **3387**
			⋆ **3399**
			1309-30
		X2004-20	⋆ **3387**
			⋆ **3399**
			1309-13
		X2004-25	⋆ **3387**
			⋆ **3399**
			1309-21
		X2004M	⋆ **3387**
			⋆ **3399**
			1309-31
		X2004M-25	⋆ **3387**
			⋆ **3399**
			1309-22
20042	Burr-Brown	PCI20042T-1	4894-46
20043	Burr-Brown	PCI20043T-1	4894-47
20044	Burr-Brown	PCI20044T-1	4894-44
20045	Burr-Brown	PCI20045T-1	4894-45
2005	**Elantec**	**EL2005**	⋆ **2591**
			1158-9
		EL2005C	⋆ **2591**
			1165-17
	HyComp	M/DA2005	968-9
		M/D2005-1	953-7
	Maxim	EL2005	1128-29
		EL2005C	1128-34
	MicroInds	PG2005	4835-4
		PG2005/10	4835-5
	National	LM2005	1116-139
			1119-1
	NEC	μPC2005	1117-129
	SGS	TDA2005	1117-169
	Siemens	TUA2005	1126-31
	SiliconG	SG2005	1001-112
	Sprague	**ULN2005**	⋆ **3203**
			1001-119
			1107-105
		ULS2005	1002-2
			1107-125
2006	Aptek	AMS2006	1198-51
	Elantec	**EL2006**	⋆ **2591**
			1151-39
		EL2006A	⋆ **2591**
			1155-7
		EL2006AC	⋆ **2591**
			1155-43
		EL2006C	⋆ **2591**
			1159-4
	MicroInds	PG2006	4835-7
		PG2006/10	4835-8
	NEC	μPD2006	1119-66
	SGS	TDA2006	1117-108
	Siliconix	VQ2006	1006-121

(Continued)

Base Number	Source	Device	Page-Line
2006			(Cont'd)
	Telefunken	TDA2006	1117-118
	Thomson	TDA2006	1117-123
2007	**Elantec**	**EL2007**	⋆ **2591**
			1003-111
	MicroInds	PG2007	4835-9
		PG2007/10	4835-10
2008	MicroInds	PG2008	4835-12
		PG2008/10	4835-13
	SGS	TDA2008	1117-15
	Siemens	SDA2008	1122-15
			1222-83
2009	Dallas	DS2009-120	1305-26
		DS2009-35	1305-27
		DS2009-50	1305-28
		DS2009-65	1305-29
		DS2009-80	1305-30
	Fujitsu	ETM2009	4046-24
		ET2009M	⋆ **4230**
			4046-22
	iLSi	CA2009	4050-19
	MicroInds	PG2009	4835-14
		PG2009/10	4835-15
	NCM	2009Z	1119-81
	SGS	TDA2009	1117-16
	TRW-LSI	TMC2009	644-98
201	Abionics	MX201A	4855-37
	AD	ADG201A	904-38
		ADG201B	904-48
		ADG201C	904-49
		AD201A	1153-26
	Analogic	AH201-1	1116-68
		AH201-2	1116-70
		MP201A	1116-69
	Anasco	44-201	4825-26
	Burr-Brown	**OPA201A**	⋆ **2532**
			1147-2
		OPA201B	⋆ **2532**
			1143-21
		OPA201C	⋆ **2532**
			1141-5
		OPA201S	⋆ **2532**
			1143-22
		PGA201	1103-18
	Comlinear	CLC201AI	1147-14
		CLC201AM	1147-15
	Excelan	EXOS201	4857-28
			4857-4
	Fairchild	μA201AM	1153-28
		μA201C	1164-24
	GE/Intersil	**DG201C**	⋆ **2679**
			904-46
		DG201M	⋆ **2679**
			904-36
		IH201C	904-32
		IH201M	904-25
	GE/RCA	**CA201**	⋆ **2645**
			1163-42
		LM201	⋆ **2645**
			1163-43
	Gennum	**LA201**	⋆ **4239**
			4067-9
	Harris	**HI201-2**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			904-39
		HI201-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			904-57
		HI201HS-2	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			904-20
		HI201HS-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			904-21
	IoInc	IoVME201	4890-22
	LogicalDes	SBIO201	4887-6
	Maxim	DG201C	904-71
		DG201M	904-72

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
201			(Cont'd)
	MicroPwr	MP201DIA	904-30
		MP201DIB	904-31
	Motorola	**LM201A**	⋆ **2919**
			⋆ **2958**
			1153-31
		MVME201	4888-41
	National	CIM201	4846-29
		LM201	1164-25
		LM201A	1153-33
	PMI	**SW201B**	⋆ **2975**
			905-52
			905-82
		SW201F	⋆ **2975**
			905-54
			905-88
		SW201G	⋆ **2975**
			905-56
	SGS	LM201A	1153-14
	SiliconG	SG201	1164-26
		SG201A	1153-36
	Siliconix	DGP201AA	904-80
		DG201AA	904-76
	Solitron	OP201	1173-29
		OP201C	1178-39
		OP201E	1175-24
		OP201F	1175-25
		OP201G	1178-40
		OP201H	1173-30
	TI	LM201A	1153-12
	Thomson	LM201A	1153-37
	TopazSemi	**CDG201AK**	⋆ **3301**
			902-13
		CDG201B	⋆ **3301**
			905-51
		CDG201BJ	⋆ **3301**
			902-14
		CDG201BK	⋆ **3301**
			902-15
		CDG201CJ	⋆ **3301**
			902-16
	VTC	**VM201**	⋆ **3375**
			999-27
2010	Dallas	DS2010-12	1306-3
		DS2010-15	1306-4
	Faraday	FE2010A	885-96
	LogicDev	LMA2010C	604-101
		LMA2010M	604-102
	Marconi	MA2010	4053-41
		MA2010A	4053-40
	Micom Int	NI2010A	4866-16
	STI	**STI2010**	⋆ **3210**
			983-9
			1200-10
	Technitrol	MEDM2010	885-61
	VLSI Tech	VL2010	644-110
	Weitek	WTL2010	644-112
		WTL2010C	604-103
		WTL2010M	604-104
	Western	WD2010	887-19
20100	GE Semi	IGC20100	4047-22
2011	Bipolar	B2011	656-155
	Dallas	DS2011-12	1306-56
		DS2011-15	1306-57
	Exar	XR2011C	1107-59
	iLSi	CA2011	4050-20
	IPS	ULS2011	1002-11
	Motorola	MPC2011	1223-86
	NCM	NCM2011Z	1126-43
	SiliconG	SG2011	1002-16
	SSM	SSM2011	1103-105
			1118-21
	Sprague	**ULN2011A**	⋆ **3203**
			1002-20
			1107-106
		ULS2011	1002-24
			1107-126
20116	Sony	CX20116	921-46
2012	Cherry	CS2012	1223-66
	Exar	XR2012C	1107-60
	Motorola	MPC2012	1223-87
	SiliconG	SG2012	1002-36
	Sprague	**ULN2012A**	⋆ **3203**
			1002-40
			1107-107

(Continued)

Base Number	Source	Device	Page-Line
2012	Sprague		(Cont'd)
		ULS2012	1002-44
			1107-127
		ULS2012H	1002-25
	STI	**STEL2012**	⋆ **3210**
			982-6
2013	Exar	XR2013C	1107-61
	Marconi	MA2013	4053-42
	SiliconG	SG2013	1001-113
	SSM	SSM2013	1104-124
	Sprague	**ULN2013A**	⋆ **3203**
			1001-120
			1107-108
		ULS2013	1002-3
			1107-128
2014	Exar	XR2014C	1107-62
	Motorola	MPC2014	1223-88
	SiliconG	SG2014	1001-93
	SSM	SSM2014	1104-125
	Sprague	**ULN2014A**	⋆ **3203**
			1001-96
			1107-109
		ULS2014	1001-100
			1107-129
2015	Cherry	CS2015	1219-112
	CMD ASIC	**C2015**	⋆ **4214**
			4043-3
	Elantec	**EP2015**	⋆ **2591**
			⋆ **2596**
			1106-38
	iLSi	CA2015	4050-21
	Motorola	MPC2015	1223-89
	SiliconG	SG2015	1001-114
	SSM	SSM2015	1103-106
			1118-22
	Sprague	**ULN2015A**	⋆ **3203**
			1001-121
			1107-110
		ULS2015	1002-4
			1107-130
	STI	**STEL2015**	⋆ **3206**
			983-11
			1200-7
	Thomson	TEA2015	1126-71
2016	**Elantec**	**EN2016**	⋆ **2591**
			⋆ **2597**
			1106-36
	Marconi	MA2016	4053-46
		MA2016A	4053-44
	Motorola	MCM2016H-45	1356-14
		MCM2016H-55	1356-60
		MCM2016H-70	1357-5
	S-MOS	**SRM2016C-10**	
			⋆ **3201**
			1357-55
		SRM2016C-12	
			⋆ **3201**
			1357-74
		SRM2016C-15	
			⋆ **3201**
			1358-18
	SSM	SSM2016	1103-107
			1118-23
	STI	**STEL2016**	⋆ **3206**
			983-10
			1200-8
	Toshiba	TMM2016-2	1358-74
2017	**Elantec**	**EL2017**	⋆ **2591**
			1228-111
	iLSi	CA2017	4050-23
	S-MOS	**SRM2017C-12**	
			⋆ **3201**
			1357-75
	STI	**STEL2017**	⋆ **3206**
			1200-9
	Thomson	TEA2017	1125-20
			¶ 436-15
2018	Bipolar	B2018	657-125
	Elantec	**EL2018**	⋆ **2591**
			⋆ **2598**
			1110-8
	MMI	M2018	4055-7
	Motorola	MCM2018-35	1355-74
		MCM2018-45	1356-15

(Continued)

Base Number	Source	Device	Page-Line
2018			(Cont'd)
	S-MOS	**SRM2018C-12**	
			⋆ **3201**
			1357-76
	Thomson	TEA2018	1217-120
	Toshiba	TMM2018-35	1355-75
		TMM2018-45	1356-16
		TMM2018-55	1356-61
		TMM2018A-25	1355-34
		TMM2018A-35	1355-76
		TMM2018A-45	1356-17
	Xilinx	**XC2018**	⋆ **4346**
			4043-34
		XC2018-50PC68C	
			⋆ **4346**
			4071-42
		XC2018-50PC84C	
			⋆ **4346**
			4071-43
		XC2018-70	⋆ **4346**
			4064-10
			4081-55
2019	**Elantec**	**EL2019**	⋆ **2592**
			⋆ **2599**
			1110-40
	Thomson	TEA2019	1217-121
20190	GE Semi	IGC20190	4047-24
202	Abionics	MX202	4855-38
	AD	ADG202A	904-69
	Anasco	44-202	4825-27
	Excelan	EXOS202	4881-15
	GE/Intersil	IH202C	904-33
		IH202M	904-26
	Gennum	**LA202**	⋆ **4239**
			4067-7
	Maxim	DG202	904-12
	MicroInds	mSBC202	4857-22
	MicroLinear	ML202	1221-46
	Micro-Link	STD202	4833-23
	Motorola	MVME202	4888-42
	National	LM202	1128-37
	PMI	**SW202B**	⋆ **2975**
			905-53
			905-83
		SW202F	⋆ **2975**
			905-55
			905-89
	Siliconix	DG202A	904-77
	Xycom	XVME202	4882-31
2020	AD	AD2020	936-34
	Elantec	**EL2020**	⋆ **2592**
			⋆ **2600**
			1156-33
	Honeywell	HGG2020	652-77
	HybridSys	HS2020	1104-21
	iLSi	CA2020	4050-24
	MicroNet	MN2020	1104-22
	S-MOS	SED2020F	981-28
	Sharp	LZ2020	1222-106
	Technitrol	MEDM2020	885-62
2021	SiliconG	SG2021	1002-17
	Sprague	**ULN2021**	⋆ **3203**
			1002-21
			1107-111
		ULS2021	1002-26
			1107-131
	Thomson	TEA2021	1117-171
2022	**CMD ASIC**	**C2022**	⋆ **4214**
			4043-6
	Elantec	**EL2022**	⋆ **2592**
			1154-21
	iLSi	CA2022	4050-25
	SiliconG	SG2022	1002-37
	SSM	SSM2022	1103-49
			1119-135
	Sprague	**ULN2022**	⋆ **3203**
			1002-41
			1107-112
		ULS2022	1002-45
			1107-132
2023	SiliconG	SG2023	1001-115
	Sprague	**ULN2023**	⋆ **3203**
			1001-122
			1107-113
		ULS2023	1002-5
			1107-133

Base Number	Source	Device	Page-Line
2024	Marconi	MA2024	4043-31
		MA2024A	4053-47
	SiliconG	SG2024	1001-94
	SSM	SSM2024	1105-12
	Sprague	**ULN2024**	⋆ **3203**
			1001-97
			1107-114
		ULS2024	1001-101
			1107-134
	Thomson	TEA2024	1117-172
2025	SiliconG	SG2025	1001-116
	Sprague	**ULN2025**	⋆ **3203**
			1001-123
			1107-115
		ULS2025	1002-6
			1107-135
	Thomson	TEA2025	1117-146
20256	**S-MOS**	**SRM20256C-10**	
			⋆ **3201**
			1379-79
		SRM20256C-12	
			⋆ **3201**
			1380-19
20258	**S-MOS**	**SRM20258-45**	
			⋆ **3201**
			1383-59
		SRM20258-55	
			⋆ **3201**
			1383-89
2028	**CMD ASIC**	**C2028**	⋆ **4214**
			4043-10
2029	iLSi	CA2029	4050-27
	Telefunken	U2029	1118-114
20290	GE Semi	IGC20290	4047-25
203	Anasco	44-203	4825-28
	Comlinear	CLC203AI	1147-16
		CLC203AM	1147-17
	Excelan	EXOS203	4866-17
			4866-5
	MicroLinear	ML203	1221-89
	Micro-Link	STD203	4833-22
	National	CIM203	4846-30
	Xycom	XVME203	4891-31
2030	MicroInds	PG2030	4835-16
	SGS	TDA2030	1117-17
		TDA2030A	1117-18
	Telefunken	TDA2030	1117-21
	Thomson	TDA2030	1117-24
2031	iLSi	CA2031	4050-28
	MicroInds	PG2031	4835-17
	SSM	SSM2031	1230-67
2032	S-MOS	SED2032F	981-56
	Sprague	ULN2032A	1107-53
2033	**Elantec**	**EL2033**	⋆ **2592**
			1129-8
			1169-18
	SSM	SSM2033	1116-91
	Sprague	ULN2033A	1107-54
2035	MicroInds	PG2035	4835-20
	TeledyneP	2035	1102-59
2038	Marconi	MA2038	4053-53
		MA2038A	4053-50
	SSM	SSM2038	1118-92
2039	Aptek	AMS2039	1197-93
			¶ 433-21
	Elantec	**EL2039**	⋆ **2592**
			1153-53
204	Anasco	44-204	4825-29
	Excelan	EXOS204	4880-5
			4880-8
	Gennum	**LA204**	⋆ **4239**
			4067-6
	Intel	iSBC204	4852-33
	Motorola	MVME204-1	4889-27
		MVME204-2	4889-35
		MVME204-2F	4888-40
	National	LM204	1215-48
	SGS	LS204	1174-49
		LS204A	1174-50
		LS204C	1175-48
	SiliconG	SG204	1215-50
	Thomson	LM204	1215-53
		LS204	1175-47

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
2040	Aptek	AMS2040	1197-94
			¶ 433-21
	Elantec	**EL2040**	*** 2592**
			1153-52
	SGS	TDA2040	1117-19
	Siemens	PEB2040	1197-30
		SDA2040	870-59
	SSM	SSM2040	1116-89
2041	Aptek	AMS2041	1197-95
			¶ 433-21
	Elantec	**EL2041**	*** 2592**
			1154-1
	Raytheon	RC2041	1175-39
2042	Aptek	AMS2042	1197-96
			¶ 433-21
	iLSi	CA2042	4050-30
2043	Raytheon	RC2043	1175-41
2044	iLSi	CA2044	4050-32
	SSM	SSM2044	1116-90
	VLSI Tech	VL2044	644-111
	Weitek	WTL2044C	604-107
		WTL2044M	604-108
2045	**CMD ASIC**	**C2045**	*** 4214**
			4043-14
	Siemens	PEB2045	1197-40
	SSM	SSM2045	1116-88
	Sprague	ULS2045H	1106-33
20450	GE Semi	IGC20450	4047-26
2046	Sprague	ULN2046A	1106-31
2047	SGS	ULN2047B	1006-29
2048	CharlesRiver		
		CM2048	4892-27
		VEM2048	4889-40
	EG&G-Reticon		
		RL2048D	1222-17
		RL2048H	1222-39
	Sharp	LI2048	978-97
	Siemens	TDA2048	1126-118
20482	**Dense-Pac**	**DPS20482**	*** 2580**
			1388-32
			1388-33
20488	**Dense-Pac**	**DPZ20488**	*** 2585**
			1315-32
205	Exar	XR205	1191-54
	Excelan	EXOS205	4847-55
			4848-6
	Micro-Link	STD205	4821-4
	National	LM205	1214-75
	SiliconG	SG205	1214-77
	Thomson	LM205	1214-79
2050	Siemens	PEB2050	1197-41
	Technitrol	MEDM2050	885-63
2051	GIM	ER2051	1308-19
		ER2051HR	1308-20
	Siemens	PEB2051	1197-42
20510	MMI	ZHAL20510A	4081-42
2054	iLSi	CA2054	4050-34
	SGS	TDA2054	1123-52
2055	GIM	ER2055	1308-30
			¶ 446-5
2056	SSM	SSM2056	1116-92
2057	iLSi	CA2057	4050-35
206	Micro-Link	STD206	4833-26
	National	LM206	1109-38
	SGS	M206	1123-71
	TI	LM206	1109-39
2060	Siemens	PEB2060	1192-134
		SDA2060	870-60
	SSM	SSM2060	1119-109
2061	**CMD ASIC**	**C2061**	*** 4214**
			4043-17
	Sprague	**ULN2061**	*** 3203**
			1004-127
			1106-58
2062	**Sprague**	**ULN2062**	*** 3203**
			1004-128
			1106-59
20620	GE Semi	IGC20620	4047-27
2063	Toshiba	TC2063-10	1368-62
		TC2063-12	1369-21
		TC2063-15	1369-74
		TC2063-70	1367-91
		TC2063A-10	1368-63
		TC2063A-12	1369-22
		TC2063A-70	1367-92
		TMM2063-10	1368-66

(Continued)

Base Number	Source	Device	Page-Line
2063	Toshiba		(Cont'd)
		TMM2063-12	1369-25
		TMM2063-15	1369-76
2064	IPS	ULS2064	1006-17
	Matra-Harris		
		HM2064	1369-46
	Mitsubishi	M2064	1106-156
	MMI	M2064	4055-5
	S-MOS	**SRM2064C-15**	
			*** 3201**
			1369-57
	SGS	ULN2064B	1006-30
	SiliconG	SG2064	1006-41
			1106-136
	Sprague	**ULN2064**	*** 3203**
			1006-55
			1106-150
		ULS2064H	1006-61
	TI	ULN2064	1006-76
	Toshiba	TC2064-10	1368-64
		TC2064-12	1369-23
		TC2064-15	1369-75
		TC2064-70	1368-1
		TC2064A-10	1368-65
		TC2064A-12	1369-24
		TC2064A-70	1368-2
		TMM2064-10	1368-67
		TMM2064-12	1369-26
		TMM2064-15	1369-77
	Xilinx	**XC2064**	*** 4346**
			4043-33
		XC2064-50PC68C	
			*** 4346**
			4071-44
		XC2064-50PD48C	
			*** 4346**
			4071-45
		XC2064-70	*** 4346**
			4064-9
			4081-56
2065	IPS	ULS2065	1006-18
	Mitsubishi	M2065	1106-157
	National	LM2065	1121-82
	SGS	ULN2065B	1006-31
	SiliconG	SG2065	1006-42
			1106-137
	Sprague	**ULN2065**	*** 3203**
			1006-56
			1106-151
		ULS2065H	1006-62
	TI	ULN2065	1006-77
2066	iLSi	CA2066	4050-37
	IPS	ULS2066	1006-19
	SGS	ULN2066B	1006-32
	SiliconG	SG2066	1006-43
			1106-138
	Sprague	ULS2066H	1006-63
	TI	ULN2066	1006-78
2067	IPS	ULS2067	1006-20
	Mitsubishi	M2067	1106-158
	SGS	ULN2067B	1006-33
	SiliconG	SG2067	1006-44
			1106-139
	Sprague	ULS2067H	1006-64
	TI	ULN2067	1006-79
2068	IPS	ULS2068	1006-21
	Marconi	MA2068	4054-2
		MA2068A	4053-56
	Motorola	**ULN2068**	*** 2954**
			1106-133
	SGS	ULN2068B	1006-34
	SiliconG	SG2068	1006-45
			1106-140
	Sprague	**ULN2068**	*** 3203**
			1006-57
			1106-152
		ULS2068H	1006-65
	TI	ULN2068	1006-80
	Toshiba	TMM2068-35	1363-59
		TMM2068-55	1365-5
		TMM2068A-25	1365-45
		TMM2068A-35	1365-51
		TMM2068A-45	1365-56

Base Number	Source	Device	Page-Line
2069	IPS	ULS2069	1006-22
	SGS	ULN2069B	1006-35
	SiliconG	SG2069	1006-46
			1106-141
	Sprague	**ULN2069**	*** 3203**
			1006-58
			1106-153
		ULS2069H	1006-66
	TI	ULN2069	1006-81
207	AnalogSys	MA207	1156-1
	Datel	**ADC207MC**	*** 2571**
			*** 2575**
			917-1
		ADC207MM	*** 2571**
			*** 2575**
			917-2
	MicroPwr	MPOP207A	1170-16
		MPOP207B	1171-23
		MPOP207E	1170-17
		MPOP207F	1171-24
	National	LM207	1153-18
	PMI	**OP207A**	*** 2970**
			*** 2972**
			1140-54
		OP207B	*** 2970**
			*** 2972**
			1140-55
		OP207E	*** 2970**
			*** 2972**
			1143-15
		OP207F	*** 2970**
			*** 2972**
			1143-16
	SiliconG	SG207	1153-20
	Solitron	OP207A	1170-14
		OP207B	1171-21
		OP207E	1170-15
		OP207F	1171-22
	TI	LM207	1153-21
	Thomson	LM207	1153-23
2070	iLSi	CA2070	4050-38
	IPS	ULS2070	1006-23
	SGS	ULN2070B	1006-36
	Siemens	PEB2070	1195-74
	SiliconG	SG2070	1006-47
			1106-142
	Sprague	ULS2070H	1006-67
2071	IPS	ULS2071	1006-24
	SGS	ULN2071B	1006-37
	SiliconG	SG2071	1006-48
	Sprague	ULS2071H	1006-68
2072	SiliconG	SG2072	1006-49
			1106-143
2073	SiliconG	SG2073	1006-50
			1106-144
2074	IPS	ULS2074	1006-25
	Motorola	**ULN2074**	*** 2954**
			1106-134
	SiliconG	SG2074	1006-51
			1106-145
	Sprague	**ULN2074**	*** 3203**
			1006-59
			1106-154
		ULS2074H	1006-69
	TI	ULN2074	1006-82
2075	IPS	ULS2075	1006-26
	SGS	ULN2075B	1006-38
	SiliconG	SG2075	1006-52
			1106-146
	Sprague	**ULN2075**	*** 3203**
			1006-60
			1106-155
		ULS2075H	1006-70
	TI	ULN2075	1006-83
2076	IPS	ULS2076	1006-27
	SGS	ULN2076B	1006-39
	SiliconG	SG2076	1006-53
			1106-147
	Sprague	ULS2076H	1006-71
2077	**CTI**	**CT2077**	*** 2554**
			1011-17
	IPS	ULS2077	1006-28
	SGS	ULN2077B	1006-40
	SiliconG	SG2077	1006-54
			1106-148
	Sprague	ULS2077H	1006-72

Base Number	Source	Device	Page-Line
2078	Toshiba	TC2078-35	1363-60
		TMM2078-45	1364-44
		TMM2078-55	1365-4
		TMM2078A-25	1362-40
		TMM2078A-35	1363-61
		TMM2078A-45	1364-45
208	AD	AD208	1152-20
		AD208A	1146-15
	Anasco	42-208	4882-19
	Datel	**ADC208MC**	*** 2575**
			917-42
		ADC208MM	*** 2575**
			917-43
	Fairchild	μA208AM	1146-17
		μA208M	1152-22
	Intel	iSBC208	4852-29
	MicroPwr	MP208	1152-26
		MP208A	1146-21
	Motorola	**LM208**	*** 2919**
			*** 2958**
			1152-28
		LM208A	*** 2919**
			*** 2958**
			1146-23
	National	LM208	1152-30
		LM208A	1146-26
	PMI	**DAC208A**	*** 2973**
			950-39
		DAC208B	*** 2973**
			950-41
		DAC208E	*** 2973**
			950-40
		DAC208F	*** 2973**
			950-42
	Telefunken	U208	1228-102
	TI	LM208	1152-16
	Thomson	LM208	1152-34
		LM208A	1146-29
	TRW-LSI	TMC208	604-23
		TMC208-1	604-24
	Zendex	ZX208B	4857-33
2080	Siemens	PEB2080	1192-26
		SDA2080	870-63
2081	iLSi	CA2081	4050-40
	Sprague	ULN2081A	1107-145
2082	Siemens	SDA2082	870-64
	Sprague	ULN2082A	1107-137
2083	Sprague	ULN2083A	1107-33
		ULS2083H	1107-34
2084	**CMD ASIC**	**C2084**	*** 4214**
			4043-21
2085	iLSi	CA2085	4050-41
	Plessey	TDA2085A	1004-7
	Siemens	PEB2085	1195-76
2086	Sprague	ULN2086A	1106-32
2088	Hughes	HVGA2088	4050-5
	Toshiba	TMM2088-35	1366-73
		TMM2088-45	1367-23
2089	Toshiba	TMM2089-35	1370-19
		TMM2089-45	1370-26
		TMM2089-55	1370-28
209	Anasco	42-209	4882-12
	Cherry	CS209	1224-125
	Motorola	**LM209H**	*** 2926**
			1202-40
		LM209K	*** 2926**
			1202-89
	National	LM209H	1202-43
		LM209K	1202-92
	SiliconG	SG209K	1202-103
		SG209T	1202-48
	Telefunken	U209	1228-103
	Zendex	ZX209	4857-29
209X4	National	PAL209X4C	4076-2
2092	iLSi	CA2092	4050-42
2095	Siemens	PEB2095	1195-73
2096	iLSi	CA2096	4050-43
21	Analogic	ITGII21	4859-46
	Basicon	MC21	4803-14
	Burr-Brown	**OPA21E**	*** 2532**
			1141-6
		OPA21G	*** 2532**
			1147-1
		OP21G	1133-21
		UAF21	*** 2540**
			1219-22

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
21	**Burr-Brown**		**(Cont'd)**
		UAF21H	*** 2540**
			1219-23
	CentData	CD21/2014	4862-39
		CD21/2032	4863-1
		CD21/2035	4861-32
		CD21/2100	4862-57
		CD21/2110	4862-11
		CD21/2140	4862-56
		CD21/2510	4861-49
		CD21/2700	4861-28
		CD21/3038	4860-56
		CD21/3043	4860-57
		CD21/3044	4860-32
		CD21/3088	4860-50
		CD21/3100	4861-3
		CD21/3116	4861-7
		CD21/3518	4823-11
		CD21/4015	4858-42
		CD21/4029	4858-18
		CD21/4055	4858-40
		CD21/4130	4858-7
		CD21/4300	4858-16
		CD21/5232	4861-59
		CD21/7052	4858-5
		CD21/8286	4823-17
		CD21/8630	4823-23
		CD21/8635	4823-24
	Datel	**ADS21AC**	*** 2571**
			*** 2575**
			928-35
	Force	CPU21	4845-6
		CPU21A	4845-8
		CPU21B	4843-26
		CPU21S	4843-33
	GENROCO	RXV21	4866-14
	Polycore	MX21	4068-51
	PMI	**OP21A**	*** 2970**
			1143-8
		OP21B	*** 2970**
			1133-22
			1142-12
		OP21E	*** 2970**
			1143-9
		OP21F	*** 2970**
			1133-23
			1142-13
		OP21G	*** 2970**
			1133-25
			1143-24
	Toshiba	**TC21SC**	*** 4327**
			4086-28
	Zilog	Model 21	4721-12
21L41	AMD	AM21L41-12	1360-19
		AM21L41-15	1360-20
		AM21L41-20	1360-25
		AM21L41-25	1360-29
21L47	AMD	AM21L47-45	1359-62
		AM21L47-55	1359-75
		AM21L47-70	1360-2
21L48	AMD	AM21L48-45	1352-71
		AM21L48-55	1352-92
		AM21L48-70	1353-8
	Cypress	CY21L48-35C	1352-38
		CY21L48-45C	1352-58
		CY21L48-55C	1352-85
21L49	AMD	AM21L49-45	1352-72
		AM21L49-55	1352-93
		AM21L49-70	1353-9
	Cypress	CY21L49-35C	1352-39
		CY21L49-45C	1352-59
		CY21L49-55C	1352-86
210	AD	AD210A	1103-46
		AD210B	1103-47
	Anasco	41-210	4885-11
	Barvon	BC210	4042-8
	Exar	XR210	1190-20
			1196-57
			¶ 432-33
			¶ 439-15
		XR210M	1190-21
			1196-58
			¶ 432-33
			¶ 439-15
	Motorola	MVME210	4889-9
		MWA210	1104-36
			(Continued)

Base Number	Source	Device	Page-Line
210			(Cont'd)
	National	CIM210	4846-28
		COP210C	862-113
		LM210	1128-25
	PMI	**DAC210A**	*** 2974**
			955-19
		DAC210B	*** 2974**
			955-20
		DAC210E	*** 2974**
			955-21
		DAC210F	*** 2974**
			955-26
		DAC210G	*** 2974**
			955-23
	Raytheon	RF210	669-48
		RG210	670-60
	TI	LM210	1156-43
		TC210	1222-78
	VTC	**VT210**	*** 3375**
			886-89
	Xycom	XVME210	4888-14
210A171			
	Amtelco	210A171	4858-17
210A20	Amtelco	210A20B	4860-53
210A211			
	Amtelco	210A211	4862-8
210A212			
	Amtelco	210A212	4858-36
210A262			
	Amtelco	210A262	4857-11
210A296			
	Amtelco	210A296	4854-15
210A305			
	Amtelco	210A305	4854-9
210A318			
	Amtelco	210A318	4854-5
210A319			
	Amtelco	210A319	4854-8
2100	**AD**	**ADSP2100**	*** 2451**
			645-96
		ADSP2100J	*** 2451**
			645-97
		ADSP2100K	*** 2451**
			645-95
		ADSP2100S	*** 2451**
			645-98
	DSB Systems		
		DSB2100	4817-17
	Faraday	FE2100	884-51
	Sanyo	LA2100	1121-102
	Signetics	PCF2100	981-57
	SSM	SSM2100	1103-57
	Technitrol	MEDM2100	885-64
	TI	SE2100P	862-66
			864-8
	Thomson	SFC2100	1213-24
2101	DSB Systems		
		DSB2101	4817-18
	GE/Intersil	LH2101A	1174-33
	Raytheon	LH2101A	1174-34
	Samsung	KA2101	1125-127
	Sanyo	LA2101	1121-103
2102	Samsung	KA2102A	1125-128
2103	Exar	XR2103	1196-95
		XR2103A	1196-96
	Samsung	KA2103	1126-5
2104	iLSi	CA2104	4050-44
	Samsung	KA2104	1126-6
2105	**CMD ASIC**	**C2105**	*** 4214**
			4043-24
2106	DSB Systems		
		DSB2106	4817-19
2107	TeledyneC	2107BE	902-62
2108	DSB Systems		
		DSB2108	4817-20
	GE/Intersil	LH2108A	1172-5
	LinearTech	LH2108	1174-13
		LH2108A	1172-7
	MicroPwr	MP2108	1174-10
		MP2108A	1172-3
	PMI	**PM2108**	*** 2970**
			*** 2972**
			1174-12
		PM2108A	*** 2970**
			*** 2972**
			1172-6
	Raytheon	LH2108A	1133-36

Base Number	Source	Device	Page-Line
2109	Thomson	SFC2109	1202-50
		SFC2109M	1202-111
211	AD	AD211	1109-54
	Anasco	41-211	4885-12
	GE/Intersil	**DG211**	*** 2679**
			904-70
	Maxim	DG211C	904-73
	MicroInds	PG211X	4843-27
	Micro-Link	VME211	4835-26
	Motorola	**LM211**	*** 2925**
			*** 2958**
			1109-57
		MVME211	4888-37
	National	COP211C	862-114
		LM211	1109-59
	Signetics	LM211	1110-3
	SiliconG	SG211	1110-5
	Siliconix	DG211C	904-78
	Telefunken	U211B	1219-5
	TI	LM211	1111-3
		LP211	1110-45
		TC211	1222-79
	Thomson	LM211	1110-7
	TopazSemi	**CDG211C**	*** 3301**
			904-68
		CDG211CJ	*** 3301**
			902-17
		CDG211DY	*** 3301**
			902-18
	VTC	**VT211**	*** 3375**
			886-91
2110	Bipolar	B2110/20	656-156
	iLSi	CA2110	4050-45
	MicroLinear	ML2110	1221-64
	Sanyo	LA2110	1121-104
	Siemens	SDA2110	1123-77
	SSM	SSM2110	1116-56
	STI	**STEL2110**	*** 3212**
			1192-13
	TeledyneC	2110BE	902-59
	Thomson	SFC2110M	1156-42
	TRW-LSI	TMC2110	644-108
2111	**Burr-Brown**	**OPA2111AM**	*** 2532**
			1172-29
		OPA2111BM	*** 2532**
			1171-39
		OPA2111K	*** 2532**
			1173-39
		OPA2111S	*** 2532**
			1172-31
	GE/RCA	CA2111A	1121-23
	MicroLinear	ML2111	1221-65
	Raytheon	LH2111	1111-46
	Signetics	PCF2111	981-58
	Sprague	ULN2111A	1121-61
			1125-141
2112	Hitachi	HM2112	1351-24
		HM2112-1	1351-22
	Siemens	SDA2112-2	1190-44
	Signetics	PCF2112	981-55
2114	Intel	M2114A-4	1353-41
		M2114A-5	1353-52
		M2114AL-3	1353-30
		M2114AL-4	1353-42
		2114AL-1	1353-25
		2114AL-2	1353-28
		2114AL-3	1353-31
		2114AL-4	1353-43
	OKI	MSM2114	1353-87
		MSM2114-2	1353-44
		MSM2114-3	1353-68
	S-MOS	**SRM2114C-5**	*** 3201**
			1353-50
	Sharp	**LH2114-L2**	*** 2993**
			1353-45
		LH2114L-20	*** 2993**
			1353-36
2115	Burr-Brown	OPA2115M	1172-30
	Intel	2115A	1351-50
		2115A-2	1351-70
		2115AL	1351-51
		2115AL-2	1351-71
212	Anasco	41-212	4885-24
	Cherry	CS212	1228-106
	Fairchild	μA212A	1196-20
		μA212AT	1196-27
			(Continued)

Base Number	Source	Device	Page-Line
212			(Cont'd)
	Inmos	**IMSM212**	*** 2774**
			880-22
		IMST212	*** 2777**
			847-12
			880-18
		M212B-G17	880-19
		T212A-G17	880-20
		T212A-G22	880-21
	Micro-Link	VME212	4835-27
	National	LM212	1133-32
			1152-19
	SiliconSys	SSiK212U	1196-79
	Siliconix	DG212C	904-79
	Telefunken	U212	1228-104
	ThirdDomain		
		VLD212	1126-151
	UTMC	**UT212D**	*** 4331**
			4063-20
	Xycom	XVME212	4888-15
	Zendex	ZBX212	4853-37
2120	Exar	XR2120	1197-3
			¶ 432-25
	Siemens	SDA2120	1120-115
2121	**Exar**	**XR2121**	*** 2604**
			1196-16
2122	**Exar**	**XR2122**	*** 2604**
			1196-15
2123	Exar	XR2123	1196-69
			¶ 432-25
		XR2123A	1196-70
			¶ 432-25
	Western	WD2123	1011-46
2125	**Exar**	**XR2125**	*** 2605**
			1193-49
	Intel	2125A	1351-52
		2125A-2	1351-72
		2125AL	1351-53
		2125AL-2	1351-73
		2125H-1	1351-36
		2125H-2	1351-38
		2125H-3	1351-40
		2125H-4	1351-46
21256	**Sharp**	**LH21256-12**	*** 2993**
			1340-42
		LH21256-15	*** 2993**
			1340-82
		LH21256-20	*** 2993**
			1341-14
21257	**Sharp**	**LH21257-12**	*** 2993**
			1340-43
		LH21257-15	*** 2993**
			1340-83
		LH21257-20	*** 2993**
			1341-15
21258	**Sharp**	**LH21258-12**	*** 2993**
			1340-44
		LH21258-15	*** 2993**
			1340-84
		LH21258-20	*** 2993**
			1341-16
2126	**Exar**	**XR2126**	*** 2605**
			1196-81
	TeledyneC	2126BG	906-87
2127	**Exar**	**XR2127**	*** 2605**
			1196-89
2128	**Exar**	**XR2128**	*** 2605**
			1196-90
	OKI	MSM2128	1357-89
		MSM2128-15	1358-35
		MSM2128-20	1358-72
	Telefunken	U2128B	1118-115
	Thomson	ETL2128-3	1358-36
		ETL2128-4	1358-73
		ETL2128-5	1358-89
2129	**Exar**	**XR2129**	*** 2605**
			1196-82
213	Anasco	41-213	4884-37
		44-213-DB	4889-42
2130	AMD	AM2130-10	1354-43
	Exar	**XR2130**	*** 2603**
			1196-26
	iLSi	CA2130	4050-46
	VLSI Tech	**VM2130-15**	*** 3358**
			1354-58
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
2130	**VLSI Tech**		**(Cont'd)**
		VM2130-17	⋆ **3358**
			1354-63
		VM2130-20	⋆ **3358**
			1354-65
		VT2130	1354-41
		VT2130-10	1354-48
		VT2130-12	1354-56
		VT2130-15	1354-61
		VT2130-20	1354-68
2131	AMD	AM2131-10	1354-44
	Siemens	SDA2131	977-38
	VLSI Tech	VM2131-15	1354-59
		VM2131-17	1354-64
		VM2131-20	1354-66
		VT2131	1354-42
		VT2131-10	1354-49
		VT2131-12	1354-57
		VT2131-15	1354-62
		VT2131-20	1354-69
2134	SSM	SSM2134	1153-51
21350	GE Semi	IGC21350	4047-28
214	Anasco	41-214	4885-31
	Dataram	DR214	4880-22
	Intel	SBC 214	4823-9
	Motorola	MVME214	4889-8
	SiliconSys	SSI214DS	1196-78
	VTC	**VM214**	⋆ **3375**
			887-98
2140	Telefunken	TDA2140	1124-87
2142	Hitachi	HM2142	1359-19
2143	Western	WD2143-03	888-19
2147	AMD	AM2147-35	1359-51
		AM2147-45	1359-63
		AM2147-45M	1359-64
		AM2147-55	1359-76
		AM2147-55M	1359-77
		AM2147-70	1360-3
		AM2147-70M	1360-4
	Cypress	CY2147-35C	1359-41
		CY2147-45C	1359-55
		CY2147-45M	1359-56
		CY2147-55C	1359-70
		CY2147-55M	1359-71
	GE/Intersil	2147	1360-5
	Intel	M2147H	1360-6
		M2147H-2	1359-65
		M2147H-3	1359-78
		2147H	1360-7
		2147H-1	1359-52
		2147H-2	1359-66
		2147H-3	1359-79
		2147HL	1360-8
		2147HL-3	1359-80
	National	MM2147	1360-9
		MM2147-3	1359-81
		MM2147L	1360-10
		MM2147M	1360-16
		NMC2147H-4	1359-84
	Stantel-STC	STC2147-55	1356-40
		STC2147-70	1356-82
		STC2147-90	1357-28
		STC2147L-70	1356-83
		STC2147M-70	1360-13
	Thomson	ETL2147	1360-14
		ETL2147H-3	1359-85
		ET2147H-1	1359-53
		ET2147H-2	1359-68
		ET2147H-3	1359-86
	UMC	UM2147	1359-87
		UM2147-1	1359-88
		UM2147-2	1359-69
		UM2147L	1360-15
		UM2147L-1	1359-89
2148	AMD	AM2148-35	1352-52
		AM2148-45	1352-73
		AM2148-45M	1352-74
		AM2148-55	1352-94
		AM2148-55M	1352-95
		AM2148-70	1353-10
		AM2148-70M	1353-11
	Cypress	CY2148-35C	1352-40
		CY2148-45C	1352-60
		CY2148-45M	1352-61
		CY2148-55C	1352-87
		CY2148-55M	1352-88

(Continued)

Base Number	Source	Device	Page-Line
2148			(Cont'd)
	Intel	M2148H	1353-14
		2148H	1353-15
		2148H-2	1352-77
		2148H-3	1352-98
		2148HL	1353-16
		2148HL-3	1352-99
	National	MM2148H	1360-11
		MM2148H-L	1360-12
		MM2148H-2	1359-67
		MM2148H-3	1359-82
		MM2148H-3L	1359-83
		NMC2148H	1353-19
	UMC	UM2148	1353-20
		UM2148-1	1353-1
		UM2148-2	1352-79
		UM2148L	1353-21
		UM2148L-1	1353-2
2149	AMD	AM2149-35	1352-53
		AM2149-45	1352-75
		AM2149-45M	1352-76
		AM2149-55	1352-96
		AM2149-55M	1352-97
		AM2149-70	1353-12
		AM2149-70M	1353-13
	Cypress	CY2149-35C	1352-41
		CY2149-45C	1352-62
		CY2149-45M	1352-63
		CY2149-55C	1352-89
		CY2149-55M	1352-90
	Intel	2149H	1353-17
		2149H-1	1352-54
		2149H-2	1352-78
		2149H-3	1352-100
		2149HL	1353-18
	UMC	UM2149	1353-22
		UM2149-1	1353-3
		UM2149-2	1352-80
		UM2149L	1353-23
		UM2149L-1	1353-4
215	Dataram	DR215	4867-29
	Exar	XR215	1190-39
			¶ 435-2
			¶ 439-15
		XR215M	1190-40
			¶ 435-2
			¶ 439-15
	Intel	iSBC215	4852-30
	ITT	SAK215	1127-69
	LinearTech	OP215A	1173-9
		OP215C	1175-20
		OP215E	1173-10
		OP215G	1175-21
	Motorola	MVME215-1	4890-12
		MVME215-2	4890-17
		MVME215-3	4889-25
	PMI	**OP215A**	⋆ **2971**
			1173-11
		OP215B	⋆ **2971**
			1133-1
			1134-76
			1174-35
		OP215C	⋆ **2971**
			1133-2
			1134-77
			1175-55
		OP215E	⋆ **2971**
			1149-19
		OP215F	⋆ **2971**
			1133-3
			1134-78
			1174-36
		OP215G	⋆ **2971**
			1133-4
			1134-79
			1175-56
2150	iLSi	CA2150	4050-47
	Telefunken	TDA2150	1124-88
	TI	**TACT2150**	⋆ **3227**
			⋆ **3238**
			602-80
		TMS2150	⋆ **3227**
			678-46
			¶ 446-26

(Continued)

Base Number	Source	Device	Page-Line
2150	**TI**		**(Cont'd)**
		TMS2150-4	⋆ **3227**
			1219-104
			1351-18
			¶ 446-26
2151	Samsung	KA2151	1124-74
	Telefunken	TDA2151	1124-89
2153	Samsung	KA2153	1124-45
216	Dataram	DR216	4867-28
	Ferranti	ZNA216E	939-53
		ZNA216J	939-54
	GIM	SPO216	823-15
	InterconMicro		
		CPS216	4833-6
	LogicDev	LMU216C	604-63
	TRW-LSI	TMC216	604-41
		TMC216-1	604-42
		TMC216-2	604-43
		TMC216H	604-66
	VTC	**VM216**	⋆ **3375**
			887-97
2160	IndTech	2160	4850-32
	Telefunken	TDA2160	1124-90
2161	Telefunken	TDA2161	1124-91
2164	**Sharp**	**LH2164-12**	⋆ **2993**
			1337-69
		LH2164-15	⋆ **2993**
			1382-75
		LH2164-20	⋆ **2993**
			1382-77
2165	MCE	MCEL2165	1130-57
2167	AMD	AM2167-35	1371-21
		AM2167-45	1371-47
		AM2167-45M	1371-48
		AM2167-55	1371-73
		AM2167-55M	1371-74
		AM2167-70	1371-92
		AM2167-70M	1371-93
	Dallas	DS2167	645-90
			1192-4
	Stantel-STC	STC2167-45	1371-49
		STC2167-55	1371-76
		STC2167-70	1372-1
		STC2167L-70	1372-2
		STC2167M-55	1371-77
		STC2167M-70	1372-3
2168	AMD	AM2168-35	1363-56
		AM2168-45	1364-41
		AM2168-55	1364-84
		AM2168-55M	1364-85
		AM2168-70	1365-21
		AM2168-70M	1365-22
	Dallas	DS2168	645-91
			1192-3
	Stantel-STC	STC2168-35	1363-58
		STC2168-45	1364-43
		STC2168-55	1365-1
		STC2168-70	1365-27
		STC2168L-55	1365-2
		STC2168L-70	1365-28
		STC2168M-55	1365-3
		STC2168M-70	1365-29
2169	AMD	AM2169-35	1363-57
		AM2169-45	1364-42
		AM2169-55	1364-86
		AM2169-55M	1364-87
		AM2169-70	1365-23
		AM2169-70M	1365-24
217	**IPS**	**IP217**	⋆ **2854**
			1214-3
		IP217A	⋆ **2854**
			1214-4
		IP217AHV	⋆ **2854**
			1214-96
		IP217HV	⋆ **2854**
			1214-97
		LM217	1214-8
		LM217HV	1214-101
	Intel	iSBC217B	4853-2
	LogicDev	LMU217C	604-64
		LMU217M	604-65
	MCE	MCELM217	1214-16
	Motorola	**LM217**	⋆ **2929**
			1214-19
		LM217L	⋆ **2929**
			1213-112

(Continued)

Base Number	Source	Device	Page-Line
217			(Cont'd)
	National	LM217	1214-22
	SGS	LM217	1214-25
	SiliconG	SG217	1213-116
			1214-29
		SG217A	1213-117
			1214-30
	Telefunken	U217	1230-129
	TI	LM217	1214-33
	Unitrode	**UC217**	⋆ **3325**
			1214-38
	VTC	**VM217**	⋆ **3375**
			887-87
217R6	VTC	VM217R6	887-55
217R8	VTC	VM217R8	887-56
2170	IndTech	2170	4850-33
	Telefunken	U2170B	1126-69
2172	**STI**	**STEL2172**	⋆ **3208**
			650-113
		STI2172	650-112
			¶ 437-31
			¶ 437-32
2175	Dallas	DS2175	1199-149
2176	Dallas	DS2176	1200-3
	VTC	VM2176	887-65
2178	VTC	VM2178	887-67
218	Intel	iSBX218A	4854-2
	MicroInds	mBLX218	4857-31
	National	LM218	1157-9
	TI	LM218	1157-10
		TISP218A	1229-96
	Thomson	LM218	1157-12
	VTC	**VM218**	⋆ **3375**
			887-88
	Zendex	ZBX218B	4854-3
2180	Dallas	DS2180	1011-26
			1200-4
2181	Samsung	KA2181	1122-10
2182	Samsung	KA2182	1122-11
2183	Samsung	KA2183	1122-12
2186	VTC	VM2186	887-66
2188	VTC	VM2188	887-68
219	National	LM219	1112-4
	PMI	**PM219**	⋆ **2975**
			1111-42
	Signetics	LM219	1112-6
2190	**Elantec**	**EL2190**	⋆ **2592**
			1154-3
	Interphase	SMD2190	4858-24
2195	**Elantec**	**EL2195**	⋆ **2592**
			1154-2
22	AdvMicroSys		
		SMC22	4871-10
	CentData	CD22/3800	4829-25
			4864-4
		CD22/4500	4829-26
			4864-9
		CD22/6400	4829-27
		CD22/6410	4829-28
			4865-15
	Datel	**ADS22AC**	⋆ **2571**
			⋆ **2575**
			928-42
	Fairchild	μAV22	1196-40
	Force	CPU22	4843-22
	GENROCO	MWV22	4866-22
		SMV22	4866-20
	MicroSys	DS22/S	4711-10
	PMI	**OP22A**	⋆ **2970**
			1144-28
		OP22B	⋆ **2970**
			1146-47
		OP22E	⋆ **2970**
			1144-29
		OP22F	⋆ **2970**
			1146-48
		OP22H	⋆ **2970**
			1149-51
	TI	XDS22	4719-10
	Toshiba	**TC22SC**	⋆ **4327**
			4086-29
22CP210			
	Gould	22CP210	4070-3
	ICT	PEEL22CP210-30	
			4070-30

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
22CV10	Gould	22CV10	4070-4
	ICT	**PEEL22CV10-25**	
		*** 4259**	
			4070-39
		PEEL22CV10-35	
		*** 4259**	
			4070-41
		PEEL22CV10Z	
		*** 4259**	
		*** 4265**	
			4070-40
22LP00	**Signetics**	**ACE22LP00**	*** 4301**
			4060-49
22RX8	MMI	PAL22RX8A	4073-13
22T00	**Signetics**	**ACE22T00**	*** 4301**
			4060-48
22VP10	TI	TIBPAL22VP10-25M	
			4073-91
		TIBPAL22VP10A-20	
			4077-52
22V10	AMD	AMPAL22V10AC	
			4072-83
		AMPAL22V10AM	
			4074-1
		AMPAL22V10C	4074-65
		AMPAL22V10M	4075-28
	Atmel	AT22V10	4072-84
		AT22V10-25	4078-18
		AT22V10-30	4078-19
		AT22V10-35	4078-20
		AT22V10-40	4078-21
	Cypress	CYPAL22V10-25CC	
			4072-85
		CYPAL22V10-30MC	
			4074-2
		CYPAL22V10-35CC	
			4074-66
		CYPAL22V10-40MC	
			4074-67
		PALC22V10-25C	
		*** 4217**	
			4078-17
		PALC22V10-25M	
		*** 4217**	
			4078-6
		PALC22V10-25WC	
		*** 4217**	
			4078-7
		PALC22V10-25WM	
		*** 4217**	
			4078-8
		PALC22V10-30M	
		*** 4217**	
			4078-10
		PALC22V10-30WM	
		*** 4217**	
			4078-11
		PALC22V10-35C	
		*** 4217**	
			4078-12
		PALC22V10-35WC	
		*** 4217**	
			4078-13
		PALC22V10-40M	
		*** 4217**	
			4078-15
		PALC22V10-40WM	
		*** 4217**	
			4078-16
		PALC22V10L-25	
		*** 4217**	
			4070-22
		PALC22V10L-25C	
		*** 4217**	
			4078-9
		PALC22V10L-35C	
		*** 4217**	
			4078-14
	MMI	PALC22V10H-25	
			4076-62
		PALC22V10H-35	
			4076-75
	TI	**TIBPAL22V10A**	
		*** 3217**	
		*** 4320**	
			4077-53

(Continued)

Base Number	Source	Device	Page-Line
22V10	**TI**		**(Cont'd)**
		TIBPAL22V10AM	
			*** 4320**
			4073-92
220	Anasco	41-220	4886-20
	Comlinear	CLC220AI	1161-28
			¶ 429-3
		CLC220AM	1104-73
			1131-1
			1136-29
			1161-29
			¶ 429-3
	IPS	**IP220-12**	*** 2854**
			1211-22
		IP220-15	*** 2854**
			1211-110
		IP220-5	*** 2854**
			1209-106
		IP220A-12	*** 2854**
			1211-23
		IP220A-15	*** 2854**
			1211-111
		IP220A-5	*** 2854**
			1209-107
		LM220-12	1211-31
		LM220-15	1211-119
		LM220-5	1209-115
	Intel	iSBC220	4852-28
	MCE	MGA220	4054-24
	Motorola	MWA220	1104-37
	National	CIM220	4846-26
	PMI	**OP220**	*** 2970**
			*** 2972**
			1134-112
		OP220A	*** 2970**
			*** 2972**
			1170-44
		OP220B	*** 2970**
			*** 2972**
			1171-28
		OP220C	*** 2970**
			*** 2972**
			1172-27
		OP220E	*** 2970**
			*** 2972**
			1170-45
		OP220F	*** 2970**
			*** 2972**
			1171-29
		OP220G	*** 2970**
			*** 2972**
			1172-28
		OP220H	*** 2970**
			*** 2972**
			1173-15
	Raytheon	RG220	673-117
	SiliconG	SG220-05K	1210-4
		SG220-05P	1209-99
		SG220-05R	1210-5
		SG220-05T	1209-90
		SG220-12K	1211-41
		SG220-12P	1211-15
		SG220-12R	1211-42
		SG220-12T	1210-114
		SG220-15K	1212-5
		SG220-15P	1212-6
		SG220-15R	1211-103
		SG220-15T	1211-76
		SG220-5	1210-24
	Xycom	XVME220	4888-17
2200	AMCC	Q2200J	4041-15
	ArrayTech	DHS2200	4041-42
	Exar	XR2200	1001-79
		XR2200M	1001-80
	Faraday	FE2200	882-79
	Fujitsu	**C2200UHB**	*** 4229**
			*** 4233**
			4046-19
	MicroInds	PG2200	4890-10
	MicroLinear	ML2200	1220-67
		ML2200B	932-11
		ML2200C	934-27
	MicroNet	MN2200	1103-4
			¶ 438-9
		MN2200H	1103-5
			¶ 438-9

(Continued)

Base Number	Source	Device	Page-Line
2200			(Cont'd)
	Sanyo	LA2200	1229-72
	Signetics	ACE2200	4060-47
	Systech	VPC2200	4858-33
	Technitrol	MEDM2200	885-65
	TI	SE2200P	817-1
			864-7
	Thomson	SFC2200	1213-25
22001	Sierra	SC22001	1308-3
22002	Sierra	SC22002	1308-4
2201	Exar	XR2201	1002-8
			1107-63
		XR2201M	1002-9
			1107-64
	Samsung	KA2201	1117-41
	Xicor	**X2201A**	*** 3386**
			1309-39
22011	Sierra	SC22011	1308-32
22012	Sierra	SC22012	1308-33
2202	Exar	XR2202	1002-29
			1107-65
		XR2202M	1002-30
			1107-66
	TI	TCM2202	1195-66
2203	Exar	XR2203	1001-104
			1107-67
		XR2203M	1107-68
	TI	TCM2203	1195-69
2204	Exar	XR2204	1001-83
			1107-69
		XR2204M	1001-84
			1107-70
	Sprague	ULN2204A	1120-89
	TI	TCM2204A	1195-70
2205	MicroInds	PG2205	4890-27
22056	Sierra	SC22056	1309-40
22057	Sierra	SC22057	1311-35
2206	Exar	XR2206	1191-55
			1191-56
			1197-15
			1197-16
			¶ 423-25
			¶ 424-23
			¶ 424-32
		XR2206C	1191-57
			¶ 423-25
			¶ 424-23
			¶ 424-32
		XR2206M	1191-58
			¶ 423-25
			¶ 424-23
			¶ 424-32
	Samsung	KA2206	1117-158
2207	Exar	XR2207	1191-42
			¶ 424-23
			¶ 435-14
			¶ 439-10
		XR2207C	1191-43
			¶ 424-23
			¶ 435-14
			¶ 439-10
	Raytheon	XR2207C	1191-48
		XR2207M	1191-49
2208	Exar	XR2208	1223-16
			¶ 438-4
			¶ 439-10
			¶ 439-9
		XR2208M	1223-17
			¶ 438-4
			¶ 439-10
			¶ 439-9
	MicroPwr	MP2208	1174-11
		MP2208A	1172-4
	Siemens	SDA2208-2	1122-52
2209	Exar	XR2209C	1191-44
		XR2209M	1191-45
	Samsung	KA2209	1117-159
	Thomson	SFC2209	1202-51
221	AD	ADG221A	904-23
	Analogic	MP221	1103-65
	Anasco	41-221	4886-28
	Comlinear	CLC221AI	1147-18
		CLC221AM	1147-19
	MicroDesigns		
		µDX221	4855-33
	National	LM221	1104-7

(Continued)

Base Number	Source	Device	Page-Line
221	National		(Cont'd)
		LM221A	1104-8
	PMI	**OP221**	*** 2970**
			*** 2972**
			1134-113
		OP221A	*** 2970**
			*** 2972**
			1170-46
		OP221B	*** 2970**
			*** 2972**
			1171-32
		OP221C	*** 2970**
			*** 2972**
			1172-24
		OP221E	*** 2970**
			*** 2972**
			1170-47
		OP221F	*** 2970**
			*** 2972**
			1171-33
		OP221G	*** 2970**
			*** 2972**
			1172-25
	Siliconix	DG221A	904-44
			¶ 426-33
2210	Bipolar	B2210	690-109
	MicroInds	PG2210	4890-9
	Samsung	KA2210	1117-160
	STI	**STEL2210**	*** 3212**
			1192-14
	Thomson	SFC2210	1128-26
	TRW-LSI	TMC2210	644-109
		TMC2210-1	603-141
		TMC2210-2	603-142
		TMC2210-3	603-143
	Xicor	**X2210**	*** 3386**
			*** 3396**
			1308-24
		X2210/10	*** 3386**
			*** 3396**
			1308-25
		X2210/5	*** 3386**
			*** 3396**
			1308-26
		X2210M	*** 3386**
			*** 3396**
			1308-27
		X2210M/10	*** 3386**
			*** 3396**
			1308-28
		X2210M/5	*** 3386**
			*** 3396**
			1308-29
22100	**GE/RCA**	**CD22100**	*** 2638**
			911-55
			1193-30
	NEC	µPD22100	1193-33
	SGS	M22100	1193-34
	SiliconSys	SSI22100	911-67
22101	**GE/RCA**	**CD22101**	*** 2638**
			911-56
			1193-36
	SGS	M22101	642-71
	Sierra	SC22101	1308-58
		SC22101-1	1308-55
	SiliconSys	SSI22101	911-68
22102	**GE/RCA**	**CD22102**	*** 2638**
			911-57
			1193-37
	SGS	M22102	642-72
	Sierra	SC22102	1308-79
		SC22102-1	1308-77
	SiliconSys	SSI22102	911-69
22103	**GE/RCA**	**CD22103A**	*** 2637**
			1195-72
22104	GE/RCA	CD22104	616-153
		CD22104A	616-154
	Sierra	SC22104	1309-24
		SC22104-1	1309-8
22105	GE/RCA	CD22105	616-148
		CD22105A	616-149
22106	SiliconSys	SSI22106	911-70

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
2211	Exar	XR2211C	1190-22
			1191-19
			1198-120
			¶ 421-7
			¶ 423-25
			¶ 424-23
		XR2211M	1190-23
			1191-20
			1198-121
			¶ 421-7
			¶ 423-25
			¶ 424-23
	MicroInds	PG2211	4890-26
	Raytheon	XR2211C	1190-25
			1191-27
			1198-125
		XR2211M	1190-26
			1191-28
			1198-126
	Sanyo	LA2211	1229-87
	Siemens	SDA2211	1124-140
2212	Exar	XR2212M	1190-24
			¶ 435-2
			¶ 438-32
			¶ 439-2
	Fairchild	F2212	1196-23
	Fujitsu	MBM2212-20	1308-66
		MBM2212-25	1308-67
	Samsung	KA2212	1117-42
	Xicor	**X2212**	⋆ **3386**
			⋆ **3397**
			1308-68
		X2212/10	⋆ **3386**
			⋆ **3397**
			1308-69
		X2212/5	⋆ **3386**
			⋆ **3397**
			1308-70
		X2212M	⋆ **3386**
			⋆ **3397**
			1308-71
		X2212M/10	⋆ **3386**
			⋆ **3397**
			1308-72
		X2212M/5	⋆ **3386**
			⋆ **3397**
			1308-73
2213	Exar	XR2213C	1191-21
			¶ 439-9
		XR2213M	1191-22
			¶ 439-9
	Samsung	KA2213	1117-43
2214	**TopazSemi**	**CDG2214**	⋆ **3301**
			910-17
		CDG2214BJ	⋆ **3301**
			910-2
2216	Exar	XR2216	1193-16
22187	Sharp	LZ22187	1222-59
22188	Sharp	LZ22188	1222-60
222	AD	ADG222A	904-24
	Dataram	DR222	4880-34
	Fairchild	CCD222	1222-7
	Inmos	IMST222	847-13
2220	Samsung	KA2220	1118-25
	SGS	TDA2220	1118-63
	TRW-LSI	TMC2220	644-20
22202	**GE/RCA**	**CD22202**	⋆ **2636**
			1199-63
22203	**GE/RCA**	**CD22203**	⋆ **2636**
			1199-64
22204	**GE/RCA**	**CD22204E**	⋆ **2636**
			1199-65
2221	MicroInds	PG2221	4889-24
2222	MicroInds	PG2222	4889-33
	Samsung	KA2222	1118-36
	TI	TCM2222	1195-68
			¶ 442-12
22223	**GE/RCA**	**CD22223**	⋆ **2637**
			1196-44
2223	MicroInds	PG2223	4889-44
2224	Fairchild	F2224	1196-22
	MicroInds	PG2224	4889-45
	Samsung	KA2224	1118-53
2225	MicroInds	PG2225	4889-46
	Samsung	KA2225	1118-54

Base Number	Source	Device	Page-Line
22250	Sharp	LZ22250G	1222-63
22251	Sharp	LZ22251	1222-62
2226	MicroInds	PG2226	4889-50
	Samsung	KA2226	1118-55
2227	MicroInds	PG2227	4890-1
	Samsung	KA2227	1118-37
			1118-56
2228	Exar	XR2228	1223-18
			¶ 435-2
		XR2228M	1223-19
			¶ 435-2
	MicroInds	PG2228	4890-3
22291	Sharp	LZ22291	1222-61
223	Anasco	41-223	4886-27
	Dataram	DR223	4867-27
	Fairchild	μA223	1203-46
		SH223	1203-49
	IPS	**IP223**	⋆ **2854**
			1203-53
		IP223-12	⋆ **2854**
			1206-72
		IP223-15	⋆ **2854**
			1207-90
		IP223A	⋆ **2854**
			1203-54
		IP223A-12	⋆ **2854**
			1206-73
		IP223A-15	⋆ **2854**
			1207-91
		LM223	1203-58
	Motorola	**LM223**	⋆ **2927**
			1203-71
		LM223A	⋆ **2927**
			1203-72
	National	LM223	1203-81
		LM223A	1203-82
	SiliconG	SG223	1203-90
		SG223A	1203-91
2230	Exar	XR2230	1216-31
			1225-3
	MicroLinear	ML2230B	932-12
		ML2230C	934-28
22300	Sierra	SC22300	1224-59
22301	**GE/RCA**	**CD22301**	⋆ **2637**
			1197-38
	SiliconSys	SSI22301	1197-39
22302	GE/RCA	CD22302	1192-91
22303	GE/RCA	CD22303	1192-60
22304	Sierra	SC22304	1228-136
2232	LogicalDes	VME2232D	4888-24
2233	MicroLinear	ML2233B	927-45
		ML2233C	934-29
2235	Exar	XR2235	1216-32
22354	**GE/RCA**	**CD22354**	⋆ **2638**
			1192-148
22357	**GE/RCA**	**CD22357**	⋆ **2638**
			1192-36
224	Dataram	DR224	4880-35
	Fairchild	μA224	1135-7
	GE/RCA	**CA224**	⋆ **2645**
			1135-10
	Motorola	**LM224**	⋆ **2923**
			⋆ **2958**
			1135-15
	National	COP224C	862-87
		LM224	1135-18
		LM224A	1184-29
	SGS	LM224	1186-3
		LM224A	1183-44
	Signetics	LM224	1135-24
	SiliconG	SG224	1135-27
		SG224A	1184-30
	SiliconSys	SSIK224L	1196-67
	Systek	SBX224	4860-47
	TI	LM224	1185-4
2240	Exar	XR2240C	1201-14
			¶ 435-14
			¶ 442-19
		XR2240M	1201-15
			¶ 435-14
			¶ 442-19
	Fairchild	μA2240C	1201-16
	TI	μA2240C	1201-28
22401	GE/RCA	CD22401	978-63
			978-92
			1123-70

Base Number	Source	Device	Page-Line
22402	GE/RCA	CD22402	1126-38
2241	Sprague	ULN2241A	1120-90
22413	GE/RCA	CD22413A	1195-31
22414	GE/RCA	CD22414A	1195-32
2242	Exar	XR2242C	1201-79
		XR2242M	1201-80
2243	Exar	XR2243	1201-9
	Samsung	KA2243	1121-46
	Sprague	ULN2243A	1120-7
			1121-19
			1121-89
	TRW-LSI	TMC2243	645-75
2245	Weitek	WTL2245	644-113
		WTL2245C	604-105
		WTL2245M	604-106
2247	Exar	XR2247	1102-85
	Samsung	KA2247	1120-52
2248	Samsung	KA2248	1120-53
2249	Samsung	KA2249	1120-123
225	Anasco	41-225	4886-19
	Barvon	BC225	4042-19
	Excelan	EXOS225	4847-59
	Intel	iMDX225	4707-15
	National	COP225C	862-88
	Telefunken	U225	1195-79
2250	**Digital RF**	**DRFS2250-15**	
			⋆ **2586**
			646-96
		DRFS2250-20	
			⋆ **2586**
			646-97
		DRFS2250-25	
			⋆ **2586**
			646-98
	Technitrol	MEDM2250	885-66
2252	Digital RF	DRFS2252	646-93
2253	Digital RF	DRFS2253	646-94
	SiliconG	SG2253	1134-33
2254	Digital RF	DRFS2254	646-95
2256	Motorola	MBM2256	1337-3
226	National	COP226C	862-89
2260	MicroInds	PG2260	4890-4
2261	S-MOS	SRM2261C-55	1382-49
		SRM2261C-70	1382-66
	Samsung	KA2261	1121-137
2263	Samsung	KA2263	1121-138
2264	Exar	XR2264	1228-113
	S-MOS	**SRM2264C-10**	
			⋆ **3201**
			1368-47
		SRM2264C-12	
			⋆ **3201**
			1369-1
		SRM2264C-90	
			⋆ **3201**
			1368-20
	Samsung	KA2264	1121-139
2265	Exar	XR2265	1228-114
2266	Exar	XR2266	1228-115
2268	**S-MOS**	**SRM2268C-45**	
			⋆ **3201**
			1364-9
		SRM2268C-55	
			⋆ **3201**
			1364-67
		SRM2268C-70	
			⋆ **3201**
			1365-14
2269	TopazSemi	CDG2269CJ	906-5
		CDG2269CY	906-6
227	Analogic	MP227	1103-35
	LinearTech	OP227A	1170-1
		OP227B	1170-24
		OP227C	1171-1
		OP227E	1170-2
		OP227F	1170-25
		OP227G	1171-2
	MicroPwr	MPOP227A	1170-5
		MPOP227B	1170-26
		MPOP227C	1170-48
		MPOP227D	1170-49
		MPOP227E	1170-6
		MPOP227F	1170-27
		MPOP227G	1170-13

(Continued)

Base Number	Source	Device	Page-Line
227			(Cont'd)
	PMI	**OP227A**	⋆ **2970**
			⋆ **2972**
			1170-7
		OP227B	⋆ **2970**
			⋆ **2972**
			1170-28
		OP227C	⋆ **2970**
			⋆ **2972**
			1171-5
		OP227E	⋆ **2970**
			⋆ **2972**
			1170-8
		OP227F	⋆ **2970**
			⋆ **2972**
			1170-29
		OP227G	⋆ **2970**
			⋆ **2972**
			1171-6
	Solitron	OP227A	1170-9
		OP227B	1170-30
		OP227C	1171-7
		OP227E	1170-10
		OP227F	1170-31
		OP227G	1171-8
2270	IndTech	2270	4851-10
	SGS	TDA2270	1126-58
2271	Exar	XR2271	980-76
	MicroLinear	ML2271B	919-44
		ML2271C	924-8
2272	Exar	XR2272	980-75
	MicroLinear	ML2272B	919-45
		ML2272C	924-9
	TI	TLC2272M	1134-75
2274	MicroLinear	ML2274B	919-46
		ML2274C	924-10
	S-MOS	SRM2274C-35	1374-3
		SRM2274C-45	1375-2
		SRM2274C-55	1375-81
2275	S-MOS	SRM2275C-35	1374-32
		SRM2275C-45	1375-28
		SRM2275C-55	1376-1
2278	MicroLinear	ML2278B	919-47
		ML2278C	924-11
228	TI	LM228	1187-2
2280	Sprague	ULN2280B	1117-65
2281	Samsung	KA2281	980-56
2283	Samsung	KA2283	980-57
2284	Exar	XR2284	979-147
	Samsung	KA2284	980-54
2285	Samsung	KA2285	980-55
22859	**GE/RCA**	**CD22859**	⋆ **2637**
			1199-2
2286	Samsung	KA2286	980-52
2287	Samsung	KA2287	980-53
2288	Exar	XR2288	980-91
229	AT&T	N229CG	1194-100
		N229FB	1194-103
		N229GB	1194-101
		229JT	⋆ **2487**
			1194-110
	Siemens	TBA229-2	1121-22
	TI	TISP229A	1229-98
229A025			
	Amtelco	229A025	4841-20
23	AdvMicroSys		
		SMC23	885-85
	CentData	CD23/2200	4889-3
		CD23/3608	4825-13
	TeledyneC	CDA23	903-64
			906-24
	Toshiba	**TC23SC**	⋆ **4327**
			4086-27
23C1000			
	NCR	NCR23C1000	1392-59
	NEC	μPD23C1000	1392-60
23C128	NCR	NCR23C128-15	
			1391-1
		NCR23C128-20	
			1391-5
		NCR23C128-25	
			1391-17
	Panatech	RP23C128D	1391-18
		RP23C128E	1391-6
		RP23C128H	1390-108
	Rockwell	R23C128	1391-2

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
23C129	Panatech	RP23C129D	1391-19
		RP23C129E	1391-7
		RP23C129H	1390-109
23C2000			
	NEC	μPD23C2000	1392-62
23C256	NCR	NCR23C256-15	1391-54
		NCR23C256-20	1391-64
		NCR23C256-25	1391-87
	NEC	μPD23C256E	1391-65
		μPD23C256E-1	1391-55
	Panatech	RP23C256D	1391-88
		RP23C256E	1391-67
23C257	Panatech	RP23C257D	1391-89
		RP23C257E	1391-68
23C4000			
	NEC	μPD23C4000	1392-79
23C512	NCR	NCR23C512-15	1392-27
		NCR23C512-20	1392-31
		NCR23C512-25	1392-35
	NEC	μPD23C512E	1392-32
23C64	Hughes	HCMP23C64C	1390-49
	NCR	NCR23C64-15	1389-107
		NCR23C64-20	1389-110
		NCR23C64-25	1390-15
	Rockwell	R23C64-15	1389-109
		R23C64-25	1390-19
		R23C64-3	1390-51
		R23C64-35	1390-72
23C65	NCR	NCR23C65-15	1389-108
		NCR23C65-20	1389-111
		NCR23C65-25	1390-18
230	Dionics	DI230A	980-115
	Maxim	MAX230	986-12
	Motorola	MWA230	1104-38
	National	CIM230	4846-25
	Raytheon	RG230	671-51
2300	Kontron	2300	4711-4
	Sanyo	LA2300	1121-77
	SSM	SSM2300	889-73
			1228-92
	Thomson	SFC2300	1213-18
2301	AdvLinear	ALD2301	1113-24
		ALD2301A	1111-18
		ALD2301B	1112-15
		ALD2301C	1113-28
	Fujitsu	**C2301AVM**	★ **4229**
			★ **4231**
			4046-21
2302	Samsung	KA2302	1127-110
2303	Samsung	KA2303	1127-111
2308	GE/Intersil	LH2308A	1172-15
	MicroPwr	MP2308	1179-53
		MP2308A	1172-14
2309	Thomson	SFC2309	1202-52
231	Comlinear	CLC231AI	1149-45
		CLC231AM	1149-46
	Maxim	MAX231C	995-21
		MAX231E	995-22
		MAX231M	995-23
	National	LM231	1230-102
		LM231A	1230-103
	Siemens	SAS231W	1221-94
2310	GE/Intersil	LH2310	1128-32
	Thomson	SFC2310	1163-44
231000	**GoldStar**	**GM231000-20**	★ **2692**
			1392-51
		GM231000-25	★ **2692**
			1392-65
	Sharp	**LH231000**	★ **2994**
			1392-63
231024	**GoldStar**	**GM231024-20**	★ **2692**
			1392-52
		GM231024-25	★ **2692**
			1392-66
	Panatech	RP231024B	1392-70
		RP231024D	1392-67

(Continued)

Base Number	Source	Device	Page-Line
231024			(Cont'd)
	VLSI Tech	**VT231024**	★ **3363**
			1392-48
		VT231024-15	★ **3363**
			1392-49
		VT231024-20	★ **3363**
			1392-53
		VT231024-25	★ **3363**
			1392-68
231025	**VLSI Tech**	**VT231025-12**	★ **3364**
			1392-46
		VT231025-15	★ **3364**
			1392-47
		VT231025-20	★ **3364**
			1392-54
		VT231025-25	★ **3364**
			1392-69
2311	GE/Intersil	LH2311	1113-12
	Siemens	SDA2311	1124-132
23126	**Sharp**	**LH23126**	★ **2994**
			1391-22
23127	Sharp	LH23127	1391-32
23128	**Commodore**		
		23128	★ **2557**
			1391-24
	Gould	S23128A	1391-44
		S23128B	1391-27
		S23128C-200	1391-9
		S23128I-300	1391-36
		S23128M-300	1391-37
	NCR	NCR23128-15	1391-3
		NCR23128-20	1391-10
		NCR23128-25	1391-28
		NCR23128-30	1391-38
		NCR23128S-15	1391-4
		NCR23128S-20	1391-11
		NCR23128S-25	1391-29
		NCR23128S-30	1391-39
	Rockwell	R23128-25	1391-31
		R23128-3	1391-40
	Sharp	LH23128	1391-33
	UMC	UM23128	1391-48
		UM23128-1	1391-41
		UM23128-2	1391-12
		UM23128A	1391-49
		UM23128A-1	1391-42
		UM23128A-2	1391-13
2315	Thomson	SFC2315	1168-5
2316	Analogic	MP2316	928-25
	NCR	NCR2316-20	1389-33
		NCR2316-25	1389-35
		NCR2316-30	1389-38
	SGS	M2316	1389-48
	Toshiba	TSU2316E	1389-49
232	Cybernetic	CY232	885-95
			1010-59
	Dallas	DS232	1012-3
	Dionics	DI232	978-93
	Maxim	MAX232C	995-16
		MAX232E	995-17
		MAX232M	995-18
	PEP-Modular		
		RS232-PB	4886-43
	SBE	SERX232	4853-39
2320	SGS	TDA2320	1103-132
			1122-20
		TDA2320A	1118-45
2321	Analogic	MP2321	928-26
2325	**S-MOS**	**SMM2325**	★ **3201**
			1392-18
23256	Gould	S23256B	1391-98
		S23256C	1391-56
		S23256I-300	1392-7
		S23256M-300	1392-8
	NCR	NCR23256-15	1391-57
		NCR23256-20	1391-73
		NCR23256-25	1391-100
		NCR23256-30	1392-9
		NCR23256S-15	1391-58
		NCR23256S-20	1391-74
		NCR23256S-25	1391-101
		NCR23256S-30	1392-10
	Panatech	RP23256D	1392-1
		RP23256E	1391-78
	Signetics	23256A-20	1391-80
	Toshiba	TMM23256	1391-61

(Continued)

Base Number	Source	Device	Page-Line
23256			(Cont'd)
	UMC	UM23256	1392-22
		UM23256-1	1392-14
		UM23256-2	1391-81
		UM23256A	1392-23
		UM23256A-1	1392-15
		UM23256A-2	1391-82
23257	NCR	NCR23257-15	1391-59
		NCR23257-20	1391-75
		NCR23257-25	1391-102
		NCR23257-30	1392-11
		NCR23257S-15	1391-60
		NCR23257S-20	1391-76
		NCR23257S-25	1391-103
		NCR23257S-30	1392-12
	Panatech	RP23257D	1392-2
		RP23257E	1391-79
	Sharp	**LH23257**	★ **2994**
			1391-93
2326	**S-MOS**	**SMM2326**	★ **3201**
			1392-19
233	Cybernetic	CY233	1010-60
	Maxim	MAX233C	995-19
		MAX233E	995-20
2331	**Sharp**	**LH2331**	★ **2994**
			1389-99
		LH2331A	★ **2994**
			1389-87
2332	**Commodore**		
		2332	★ **2557**
			1389-53
	NCR	NCR2332-20	1389-56
		NCR2332-25	1389-65
		NCR2332-30	1389-75
	Rockwell	R2332A-2	1389-58
		R2332A-25	1389-67
		R2332A-3	1389-78
		R2332A-45	1389-98
	SGS	M2332	1389-59
	Sharp	**LH2332**	★ **2994**
			1389-100
		LH2332A	★ **2994**
			1389-88
	UMC	UM2332	1389-102
2333	Gould	S2333	1389-86
	NCR	NCR2333-20	1389-57
		NCR2333-25	1389-66
		NCR2333-30	1389-76
	SGS	M2333	1389-60
	UMC	UM2333	1389-103
234	Ferranti	ZNA234	1126-26
	LinearTech	LM234	1219-116
			1229-42
	Maxim	MAX234C	986-6
		MAX234E	986-7
		MAX234M	986-8
	National	LM234	1219-119
			1229-48
2341	National	COP2341	863-33
2342	National	COP2342	863-34
2344	Analogic	MP2344	937-30
235	Cherry	CS235	1127-71
	Maxim	MAX235C	986-9
		MAX235E	986-10
		MAX235M	986-11
2350	Gould	S2350	868-73
			1011-75
23512	**GoldStar**	**GM23512-10**	★ **2692**
			1392-25
		GM23512-15	★ **2692**
			1392-28
		GM23512-20	★ **2692**
			1392-33
	Panatech	RP23512B	1392-39
		RP23512D	1392-36
	VLSI Tech	**VT23512-15**	★ **3362**
			1392-29
		VT23512-20	★ **3362**
			1392-34
		VT23512-25	★ **3362**
			1392-37
236	Maxim	MAX236C	997-41
		MAX236E	997-42
		MAX236M	997-43
	National	LM236-2	1225-132
		LM236-5	1226-30

(Continued)

Base Number	Source	Device	Page-Line
236	National		(Cont'd)
		LM236A-2	1225-133
		LM236A-5	1226-31
2361	Sharp	LH2361	1390-44
2362	**Sharp**	**LH2362B**	★ **2994**
			1390-28
2363	Plessey	SL2363C	1106-67
	Sharp	LH2363	1390-97
		LH2363A	1390-83
2364	**Commodore**		
		2364	★ **2557**
			1390-2
	Gould	S2364A	1390-81
		S2364B	1390-35
		S2364B-250	1390-36
		S2364C-200	1390-5
		S2364I-250	1390-37
		S2364M-300	1390-65
	LMS	GR2364	1389-106
	NCR	NCR2364-20	1389-114
		NCR2364-25	1390-25
		NCR2364-30	1390-55
		NCR2364S-20	1389-115
			1390-39
		NCR2364S-25	1390-26
		NCR2364S-30	1390-56
	Plessey	SL2364C	1106-68
	Rockwell	R2364A-2	1389-116
		R2364A-25	1390-27
		R2364A-3	1390-58
		R2364B-2	1390-9
		R2364B-25	1390-42
		R2364B-3	1390-68
	S-MOS	**SMM2364**	★ **3201**
			1390-71
	SGS	M2364	1390-59
	Sharp	LH2364A	1390-78
	UMC	UM2364	1390-93
2365	MCE	MCETCA2365	1130-58
	NCR	NCR2365-20	1390-6
		NCR2365-25	1390-40
		NCR2365-30	1390-66
		NCR2365S-20	1390-7
		NCR2365S-25	1390-41
		NCR2365S-30	1390-67
	S-MOS	**SMM2365**	★ **3201**
			1390-73
	SGS	M2365	1390-43
	Siemens	TCA2365A	1166-50
2366	UMC	UM2366	1390-98
		UM2366-1	1390-69
		UM2366-2	1390-10
		UM2366A	1390-99
		UM2366A-1	1390-70
		UM2366A-2	1390-11
2367	**S-MOS**	**SRM2367C-35**	★ **3201**
			1371-16
		SRM2367C-45	★ **3201**
			1371-41
	Sharp	LH2367	1390-21
2369	**Sharp**	**LH2369**	★ **2994**
			1389-112
237	**IPS**	**IP237**	★ **2854**
			1215-13
		IP237A	★ **2854**
			1215-14
		IP237AHV	★ **2854**
			1215-60
		IP237HV	★ **2854**
			1215-61
		LM237	1215-18
		LM237HV	1215-65
	LinearTech	OP237A	1170-3
		OP237C	1171-3
		OP237E	1170-4
		OP237G	1171-4
	Maxim	MAX237C	996-3
		MAX237E	996-4
		MAX237M	996-5
	MCE	MCELM237	1215-25
	Motorola	**LM237**	★ **2929**
			1215-28
	National	LM237	1215-31
			1215-79

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
237	National		(Cont'd)
		LM237HV	1215-71
	SiliconG	SG237	1215-37
		SG237A	1215-38
		SG237HV	1215-73
	Solitron	OP237A	1170-11
		OP237B	1170-32
		OP237C	1171-9
		OP237E	1170-12
		OP237F	1170-33
		OP237G	1171-10
	Telefunken	U237B	977-21
	Unitrode	**UC237**	⋆ **3325**
			1215-45
			1215-84
238	Fairchild	μA238	1213-79
	IPS	**IP238**	⋆ **2854**
			1213-83
		IP238A	⋆ **2854**
			1213-84
		LM238	1213-88
	Maxim	MAX238C	997-38
		MAX238E	997-39
	National	LM238	1213-96
	SiliconG	SG238	1213-100
		SG238A	1213-101
239	Fairchild	μA239C	1114-33
	GE/RCA	**CA239**	⋆ **2647**
			1114-35
		CA239A	⋆ **2647**
			1113-53
	Maxim	MAX239	997-40
	Motorola	**LM239**	⋆ **2925**
			⋆ **2958**
			1114-38
		LM239A	⋆ **2925**
			⋆ **2958**
			1113-55
	National	LM239	1114-40
		LM239A	1114-2
	SGS	LM239	1114-45
		LM239A	1114-5
	Signetics	LM239A	1114-47
	TI	LM239A	1111-17
		LP239	1112-23
24	CentData	CD24/3530	4855-18
		CD24/8350	4855-5
		CD24/8351	4855-17
	CompDyn	RLY-24	4875-4
	DUAL	CLK-24C	4869-21
	PMI	**MUX24A**	⋆ **2975**
			912-70
		MUX24B	⋆ **2975**
			912-74
		MUX24E	⋆ **2975**
			912-71
		MUX24F	⋆ **2975**
			912-75
	TeledyneC	CAG24	903-53
	VersaLogic	MIO-24	4874-46
24C01	GIM	24C01	1308-52
24C02	GIM	24C02	1308-74
	Western	WD24C02	885-84
24C04	GIM	24C04	1309-2
	Xicor	**X24C04**	⋆ **3388**
			⋆ **3403**
			1309-1
24C128	**Commodore**		
		24C128	⋆ **2557**
			1391-14
24C16	**Xicor**	**X24C16**	⋆ **3388**
			⋆ **3404**
			1309-46
		X24C16M	⋆ **3388**
			⋆ **3404**
			1310-73
24C256	**Commodore**		
		24C256	⋆ **2557**
			1391-83
24H80	Fairchild	μA24H80	887-93
24L84	Raytheon	CGA24L84	4058-42
24S374	AMD	AM24S374	668-170
240	Comark	CBX-DI240	4855-6
	Exar	BETA240	4066-19
		XRC240	1197-45

(Continued)

Base Number	Source	Device	Page-Line
240			(Cont'd)
	Fujitsu	**B240**	⋆ **4230**
			4045-34
	Intech	ASH240	1228-32
	IPS	**IP240-12**	⋆ **2854**
			1206-13
		IP240-15	⋆ **2854**
			1207-41
		IP240-5	⋆ **2854**
			1202-120
		IP240A-12	⋆ **2854**
			1206-14
		IP240A-15	⋆ **2854**
			1207-42
		IP240A-5	⋆ **2854**
			1202-121
		LM240-12	1206-22
		LM240-15	1207-50
		LM240-5	1203-4
	SiliconG	SG240-05	1203-26
		SG240-06	1204-33
		SG240-08	1204-123
		SG240-12	1206-47
		SG240-15	1207-69
		SG240-18	1208-38
		SG240-20K	1208-79
	TI	TC240	1222-81
	Xycom	XVME240	4888-26
2400	AMCC	Q2400S	4041-16
	CalDevices	CHA2400	4042-41
	Elantec	EHA-2400	1164-45
	Exar	**XR2400**	⋆ **2603**
			1196-41
	Fairchild	FGC2400	4044-22
	Harris	**HA2400**	⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			1104-15
			1135-63
			1160-37
	IntCirSys	**VGC2400**	⋆ **4256**
			4051-17
	MMI	MLA2400	4055-9
	TI	SE2400P	862-67
			864-9
	VLSI Tech	**VGC2400**	⋆ **4665**
			4064-5
24002	**CMD Micro**	**G24002**	⋆ **2551**
			1198-79
2401	DataTrans	DT2401	4864-16
	Exar	XR2401C	1196-73
	Samsung	KA2401	1222-135
	SiliconG	SG2401	1104-111
24010	**CMD Micro**	**G24010**	⋆ **2551**
			1198-80
	HoneywellSPT		
		HCAL24010	1219-101
2402	Exar	XR2402C	1196-72
	Samsung	KA2402	1222-136
	Sharp	IR2402	1108-68
2403	Samsung	KA2403	1222-137
	Sharp	IR2403	1106-5
2404	Harris	HA2404	1104-16
			1135-64
			1160-38
	National	COP2404	805-30
	Xicor	**X2404**	⋆ **3388**
			⋆ **3402**
			1309-3
		X2404M	⋆ **3388**
			⋆ **3402**
			1309-23
24040	**HoneywellSPT**		
		HSCF24040	⋆ **2998**
			⋆ **3000**
			1195-56
2405	Harris	HA2405	1104-17
			1135-65
			1164-46
	Sharp	IR2405	1106-6
2406	Harris	HA2406-5	1104-18
			1135-66
			1164-47
	Sharp	IR2406	978-75
2409	Davidge	DSB2409	4879-17
241	TI	TC241	1222-82

Base Number	Source	Device	Page-Line
2410	Samsung	KA2410	1199-126
	Sharp	IR2410	1106-7
2411	Samsung	KA2411	1199-127
	Sharp	IR2411	1106-8
2412	Samsung	KA2412	1198-68
	Sharp	IR2412A	981-22
241203	SpaceResearch		
		SRT241203-I	982-56
24128	**Commodore**		
		24128	⋆ **2557**
			1391-25
	Toshiba	TMM24128A	1328-67
2413	Samsung	KA2413	1199-20
2416	National	DL2416	980-31
	Sharp	LH2416-12	1376-68
	Telefunken	U2416	1120-68
2418	Samsung	KA2418	1199-128
2419	Samsung	KA2419	1199-129
242	Dionics	DI242	978-94
2420	**Harris**	**HA2420-2**	⋆ **2703**
			⋆ **2737**
			⋆ **2742**
			⋆ **2747**
			⋆ **2768**
			1228-15
		HA2420/883	⋆ **2703**
			⋆ **2737**
			⋆ **2742**
			⋆ **2747**
			⋆ **2768**
			1228-16
	Samsung	KA2420	1198-7
	Sharp	IR2420	1106-48
2424	Sharp	IR2424	979-139
			1106-49
2425	**Harris**	**HA2425-5**	⋆ **2737**
			⋆ **2742**
			⋆ **2747**
			1228-17
	Sharp	IR2425	1106-50
24256	**Commodore**		
		24256	⋆ **2557**
			1391-95
	Toshiba	TMM24256A	1331-28
2426	Sharp	IR2426	1106-51
2427	Davidge	DSB2427	4873-50
	Sharp	IR2427	1106-52
2428	Davidge	DSB2428	4875-10
	Sharp	IR2428	1106-53
2429	Sharp	IR2429	981-19
	Sprague	ULN2429A	1118-119
			1221-71
243	Siliconix	DG243A	907-60
	Telefunken	U243	1118-118
2430	Davidge	DSB2430	4870-41
	Sprague	ULN2430M	1201-52
2431	Sharp	IR2431	978-30
2432	Sharp	IR2432	978-76
2433	Sharp	IR2433	978-77
2434	Davidge	DSB2434	4871-1
	Sharp	IR2434	979-137
2435	Sprague	ULN2435A	1118-101
24352	**CMD Micro**	**G24352**	⋆ **2550**
			1192-84
24353	**CMD Micro**	**G24353**	⋆ **2550**
			1192-85
24354	**CMD Micro**	**G24354**	⋆ **2550**
			1192-86
24357	**CMD Micro**	**G24357**	⋆ **2550**
			1192-55
244	Dataram	DR244	4880-23
	GE/RCA	TCC244	1350-31
	Telefunken	U244	977-22
2440	National	COP2440	805-31
			863-35
			¶ 433-5
		COP2440R	805-32
			862-105
			862-99
			¶ 433-5
	Siemens	TDA2440-2	1126-119
2441	National	COP2441	805-33
			863-36
		COP2441R	862-100
	Siemens	TDA2441	1126-120

Base Number	Source	Device	Page-Line
2442	National	COP2442	805-34
			863-37
2444	**Xicor**	**X2444**	⋆ **3388**
			⋆ **3400**
			1308-6
			¶ 409-37
		X2444/10	⋆ **3388**
			⋆ **3400**
			1308-7
			¶ 409-37
		X2444M	⋆ **3388**
			⋆ **3400**
			1308-13
			¶ 409-37
		X2444M/10	⋆ **3388**
			⋆ **3400**
			1308-8
			¶ 409-37
2445	Sprague	ULN2445A	1118-102
245	Analogic	MN245	1227-125
	Micro-Link	STD245	4821-29
	National	COP245C	862-90
24512	**Commodore**		
		24512	⋆ **2557**
			1392-38
	Toshiba	TMM24512	1333-50
2455	Sprague	ULN2455A	1118-103
2457	Sprague	ULN2457A	1222-86
246	Exar	XR246	1134-39
	National	LM246	1134-44
	Telefunken	U246	1103-99
2460	Fairchild	μA2460	887-33
2461	Fairchild	μA2461	887-34
2464	**Sharp**	**LH2464-12**	⋆ **2993**
			1338-62
		LH2464-15	⋆ **2993**
			1338-87
	Toshiba	TMM2464A	1326-62
2465	**Sharp**	**LH2465-12**	⋆ **2993**
			1338-63
		LH2465-15	⋆ **2993**
			1338-88
2469	Siemens	TBB2469	1121-112
247	Micro-Link	STD247	4821-3
	Telefunken	U247B	977-23
248	Fairchild	μA248C	1187-7
	LogicalDes	SBIO248	4887-8
	Motorola	**LM248**	⋆ **2923**
			1187-10
	National	LM248	1187-12
	PMI	PM248	1184-5
	Raytheon	LM248	1187-14
	TI	LM248	1187-4
2480	Fairchild	μA2480	887-94
			1105-10
2482	Fairchild	μA2482	887-69
			1105-3
		μA2482R	887-89
2483	Fairchild	μA2483	1105-4
2484	Fairchild	μA2484	887-70
			1105-5
2484x2	Fairchild	μA2484x2	887-90
2485	Fairchild	μA2485	887-71
			1105-6
2485x2	Fairchild	μA2485x2	887-91
2486	Fairchild	μA2486	887-72
			1105-7
2486x2	Fairchild	μA2486x2	887-73
2487	Fairchild	μA2487	1105-8
2488	Fairchild	μA2488	887-74
			1105-9
2488x2	Fairchild	μA2488x2	887-75
249	National	LM249	1187-17
2490	Fairchild	μA2490	887-26
2491	Fairchild	μA2491	887-27
2492	Fairchild	μA2492	887-28
25	Ferranti	REF25	1225-153
		REF25Z	1226-3
		SR25D	1227-20
	Force	CPU25	4843-23
	Interdesign	ELA25DSC	4045-28
		ULA25DSA	4045-26
		ULA25DSB	4045-27
	Siliconix	PWM25A	1217-107
		PWM25C	1217-108
25C17	WDC	WD25C17	1193-51

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
25HC04			
	Siliconix	SI25HC04C	604-151
25LS07	AMD	AM25LS07C	668-20
		AM25LS07M	668-21
25LS08	AMD	AM25LS08C	667-100
		AM25LS08M	667-101
25LS09	AMD	AM25LS09C	680-176
		AM25LS09M	680-177
25LS138			
	AMD	AM25LS138C	871-9
		AM25LS138M	871-10
25LS139			
	AMD	AM25LS139C	664-125
		AM25LS139M	664-126
25LS14	AMD	AM25LS14AC	657-110
		AM25LS14AM	657-111
		AM25LS14C	657-112
		AM25LS14M	657-113
25LS15	AMD	AM25LS15C	656-6
		AM25LS15M	656-7
25LS168			
	AMD	AM25LS168AC	663-63
		AM25LS168AM	663-64
25LS174			
	AMD	AM25LS174C	667-170
		AM25LS174M	667-171
25LS190			
	AMD	AM25LS190C	663-132
25LS192			
	AMD	AM25LS192C	663-101
		AM25LS192M	663-102
25LS22	AMD	AM25LS22C	658-44
		AM25LS22M	658-45
25LS23	AMD	AM25LS23C	684-18
			1394-73
		AM25LS23M	684-19
			1394-74
25LS2513			
	AMD	AM25LS2513C	690-16
			889-34
		AM25LS2513M	690-17
25LS2517			
	AMD	AM25LS2517C	657-39
		AM25LS2517M	657-40
25LS2518			
	AMD	AM25LS2518C	667-86
		AM25LS2518M	667-87
25LS2519			
	AMD	AM25LS2519C	667-118
		AM25LS2519M	667-119
25LS2520			
	AMD	AM25LS2520C	668-46
		AM25LS2520M	668-47
	GoldStar	**GD25LS2520**	**★ 2694**
			682-80
25LS2521			
	AMD	AM25LS2521C	656-101
		AM25LS2521M	656-102
25LS2535			
	AMD	AM25LS2535C	681-90
		AM25LS2535M	681-91
25LS2536			
	AMD	AM25LS2536C	665-87
		AM25LS2536M	665-88
25LS2537			
	AMD	AM25LS2537C	664-88
		AM25LS2537M	664-89
25LS2538			
	AMD	AM25LS2538C	665-89
		AM25LS2538M	665-90
25LS2539			
	AMD	AM25LS2539C	664-127
		AM25LS2539M	664-128
25LS2548			
	AMD	AM25LS2548C	665-57
	GoldStar	**GD25LS2548**	**★ 2694**
			665-60
25LS2568			
	AMD	AM25LS2568C	663-80
		AM25LS2568M	663-81
25LS2569			
	AMD	AM25LS2569C	662-3
		AM25LS2569M	662-4
25LS273			
	AMD	AM25LS273	668-101

Base Number	Source	Device	Page-Line
25LS2922			
	AMD	AM25LS2922C	681-92
		AM25LS2922M	681-93
25LS299			
	AMD	AM25LS299	661-24
25LS378			
	AMD	AM25LS378C	668-22
		AM25LS378M	668-23
25LS379			
	AMD	AM25LS379C	667-102
		AM25LS379M	667-103
25LS399			
	AMD	AM25LS399C	680-178
		AM25LS399M	680-179
25LS533			
	AMD	AM25LS533	677-174
25L2	TI	TLC25L2AC	1176-32
25L4	TI	TLC25L4AC	1185-8
		TLC25L4BC	1183-35
		TLC25L4C	1188-12
25M4	TI	TLC25M4AC	1185-17
		TLC25M4BC	1185-12
		TLC25M4C	1188-15
25S05	AMD	AM25S05C	657-105
		AM25S05M	657-106
25S07	AMD	AM25S07C	668-36
		AM25S07M	668-37
25S08	AMD	AM25S08C	667-114
		AM25S08M	667-115
25S09	AMD	AM25S09C	681-14
		AM25S09M	681-15
25S10	AMD	AM25S10	644-119
			¶ 402-5
		AM25S10C	689-127
			¶ 402-5
		AM25S10M	689-128
			¶ 402-5
	Signetics	N25S10	644-127
25S18	AMD	AM25S18C	667-91
		AM25S18M	667-92
25S373	AMD	AM25S373	677-133
25S374	AMD	AM25S374	668-171
25S533	AMD	AM25S533	678-3
25S534	AMD	AM25S534	668-86
25S557	AMD	AM25S557	644-37
		AM25S557C	657-99
25S558	AMD	AM25S558	644-38
250	Analogic	MP250M	1227-126
	Cybernetic	CY250	885-91
	Fairchild	μA250	1213-45
	Harris	**HSC250**	**★ 4248**
			4083-29
	Intech	ASH250	1228-33
	IPS	**IP250**	**★ 2854**
			1213-49
		IP250A	**★ 2854**
			1213-50
		LM250	1213-54
	Motorola	**LM250**	**★ 2929**
			1213-64
	National	LM250	1213-67
	Raytheon	RF250	669-45
	SBE	SBE250	4717-6
	SiliconG	SG250	1213-71
		SG250A	1213-72
	Telefunken	U250	1102-8
	Unitrode	**UC250**	**★ 3325**
			1213-76
2500	Atmel	ATV2500-35	4078-25
		ATV2500-40	4078-26
		ATV2500-45	4078-27
	Cherry	CS2500G	4065-12
	Elantec	**EHA2500**	**★ 2593**
			1160-35
	Fairchild	FGE2500	4044-23
	Harris	**HA2500**	**★ 2705**
			1160-36
		HSG2500RH	**★ 2721**
			4049-9
	Motorola	**MCA2500ECL**	
			★ 4282
			4055-49
	Technitrol	MEDM2500	885-67
	TLSI	TA2500	4062-3
25000	**Gould**	**GC25000**	**★ 4244**
			4048-51

Base Number	Source	Device	Page-Line
25001	Anadigics	ADA25001	1104-126
2501	SiliconG	SG2501A	1213-5
			¶ 442-1
	Telefunken	U2501B	1122-5
2502	AdvLinear	ALD2502	1201-82
	AMD	AM2502C	689-146
		AM2502M	689-147
	Elantec	**EHA2502**	**★ 2593**
			1164-39
	Harris	**HA2502**	**★ 2705**
			1164-41
	National	DM2502C	689-150
		DM2502M	689-151
	SiliconG	SG2502	1215-95
	TI	HCPL2502	1223-73
2503	AMD	AM2503C	689-148
		AM2503M	689-149
	SiliconG	SG2503	1225-146
2504	AdvLinear	ALD2504	1201-81
	AMD	AM2504C	690-93
		AM2504M	690-94
	National	DM2504C	690-95
		DM2504M	690-96
2505	**Elantec**	**EHA2505**	**★ 2593**
			1164-40
	Harris	HA2505	1164-42
	Raytheon	RM2505	657-104
2506	AMD	AM2506M	657-7
	Siemens	SDA2506	1308-54
		SDE2506	1127-116
2507	Western	WD2507	1011-5
25089	Gould	S25089	1199-5
251	**Gennum**	**LA251**	**★ 4239**
			4067-11
	Intel	iSBX251	4855-29
	Siemens	SAS251	692-79
	TI	TLC251AC	1157-45
			1157-48
			1157-49
			1157-50
		TLC251BC	1150-18
			1150-20
			1150-21
			1150-22
		TLC251C	1134-62
			1149-47
			1149-48
			1149-49
			1164-48
2510	**Elantec**	**EHA2510**	**★ 2593**
			1164-31
	Harris	**HA2510**	**★ 2705**
			1164-32
2511	**Western**	**WD2511A**	**★ 3385**
			1011-77
		WD2511F	**★ 3385**
			1009-87
		WD2511G	**★ 3385**
			1009-88
2512	**Elantec**	**EHA2512**	**★ 2593**
			1166-25
	Harris	**HA2512**	**★ 2705**
			★ 2768
			1166-26
	WDC	WD2512	1193-50
2513	GIM	RO3-2513	1302-7
2515	**Elantec**	**EHA2515**	**★ 2593**
			1166-30
	Harris	HA2515	1166-31
2516	Cherry	CS2516	1219-95
	LMS	GR2516	1389-30
	Siemens	SDA2516	1308-53
	Weitek	WTL2516	644-84
2517	Weitek	WTL2517	644-85
		WTL2517C	604-67
		WTL2517M	604-68
2519	Harris	HA2519	1160-33
252	**Gennum**	**LA252**	**★ 4239**
			4067-10
	Telefunken	U252	1123-68
	TI	TLC252AC	1176-23
		TLC252BC	1173-37
		TLC252C	1134-80

Base Number	Source	Device	Page-Line
2520	**Elantec**	**EHA2520**	**★ 2594**
			1164-34
	Harris	**HA2520**	**★ 2705**
			★ 2737
			★ 2747
			1131-56
			1164-33
2522	**Elantec**	**EHA2522**	**★ 2594**
			1166-28
	Harris	**HA2522**	**★ 2705**
			★ 2768
			1166-27
	Sprague	UDN2522A	689-16
2524	Cherry	CS2524	1216-9
		CS2524A	1216-10
	Exar	XR2524	1216-33
	Fairchild	μA2524A	1224-141
	GE/RCA	**CA2524**	**★ 2650**
			1216-53
			¶ 438-14
	IPS	IP2524	1216-69
		IP2524B	1216-70
	National	LM2524	1217-29
	SGS	SG2524	1217-53
		SG2524A	1217-54
	SiliconG	SG2524	1217-85
			¶ 438-15
			¶ 438-17
		SG2524B	1217-86
			¶ 438-15
			¶ 438-17
	TI	SG2524	1225-6
	Unitrode	**UC2524**	**★ 3323**
			1218-43
		UC2524A	**★ 3323**
			1218-44
2525	Cherry	CS2525A	1216-11
	Elantec	**EHA2525**	**★ 2594**
			1166-34
	Exar	**XR2525A**	**★ 2607**
			1216-34
	Harris	HA2525	1131-51
			1166-33
	IPS	IP2525A	1216-71
	Motorola	**SG2525A**	**★ 2931**
			1217-17
	SGS	SG2525A	1217-55
	SiliconG	SG2525A	1217-87
	TI	SG2525A	1225-7
	Unitrode	**UC2525A**	**★ 3323**
			1218-45
2526	**IPS**	**IP2526**	**★ 2856**
			1216-72
		IP2526A	**★ 2856**
			1216-73
	Motorola	**SG2526**	**★ 2931**
			1217-18
	Siemens	SDA2526	1308-76
	SiliconG	SG2526	1217-88
		SG2526A	1217-89
	Unitrode	**UC2526A**	**★ 3323**
			1218-46
2527	Cherry	CS2527A	1216-12
	Exar	**XR2527A**	**★ 2607**
			1216-35
	IPS	IP2527A	1216-74
	Motorola	**SG2527A**	**★ 2931**
			1217-19
	SGS	SG2527A	1217-56
	SiliconG	SG2527A	1217-90
	TI	SG2527A	1225-8
	Unitrode	**UC2527A**	**★ 3323**
			1218-47
2529	**Harris**	**HA2529**	**★ 2737**
			★ 2747
			1131-50
			1160-34
253	**Gennum**	**LA253**	**★ 4239**
			4067-8
	ICT	**PEEL253**	**★ 4259**
			★ 4264
			4070-12
	SiliconG	SG253-05	1203-92
		SG253-12	1206-85
		SG253-15	1207-103
2531	OEI	2531A	1103-52

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
2532	LMS	GR2532	1389-52
	SiliconG	SG2532	1214-86
2533	AMD	AM2533	1396-51
	Micrel	MIC2533	1396-45
2534	Micrel	MIC2534	1396-44
2535	Micrel	MIC2535	1396-40
2539	Elantec	EHA-2539-2	1167-8
		EHA-2539-5	1168-18
		EHA2539	⋆ **2594**
			1136-34
	Harris	**HA2539**	⋆ **2737**
			⋆ **2747**
			⋆ **2753**
			1131-16
			1136-35
		HA2539-2	⋆ **2737**
			⋆ **2747**
			⋆ **2753**
			1167-9
		HA2539-5	⋆ **2737**
			⋆ **2747**
			⋆ **2753**
			1168-19
254	Intel	iSBC254S	4853-8
	Telefunken	U254	977-24
	TI	TLC254AC	1185-15
		TLC254BC	1183-38
		TLC254C	1135-1
			1188-19
2540	Elantec	EHA-2540-2	1167-6
		EHA-2540-5	1168-15
		EHA2540	⋆ **2594**
			1136-31
	Harris	**HA2540**	⋆ **2737**
			⋆ **2747**
			⋆ **2752**
			1131-22
			1136-32
		HA2540-2	⋆ **2737**
			⋆ **2747**
			⋆ **2752**
			1167-7
		HA2540-5	⋆ **2737**
			⋆ **2747**
			⋆ **2752**
			1168-16
	National	TDA2540	1126-102
	SiliconG	SG2540	1228-129
	Sprague	**UDN2540B**	⋆ **3203**
			665-134
	Thomson	TDA2540	1126-143
2541	Elantec	EHA-2541-2	1154-4
		EHA-2541-5	1154-5
	Harris	**HA2541**	⋆ **2705**
			⋆ **2737**
			⋆ **2747**
			⋆ **2751**
			1130-133
			1131-43
			1135-67
		HA2541-2	⋆ **2705**
			⋆ **2737**
			⋆ **2747**
			⋆ **2751**
			1152-50
		HA2541-5	⋆ **2705**
			⋆ **2737**
			⋆ **2747**
			⋆ **2751**
			1152-51
	Thomson	TDA2541	1126-144
2542	**Harris**	**HA2542**	⋆ **2737**
			⋆ **2747**
			⋆ **2750**
			1130-113
			1131-28
			1135-99
		HA2542-2	⋆ **2737**
			⋆ **2747**
			⋆ **2750**
			1166-10
		HA2542-5	⋆ **2737**
			⋆ **2747**
			⋆ **2750**
			1166-11
	SiliconG	SG2542	1223-108
			(Continued)

Base Number	Source	Device	Page-Line
2542			(Cont'd)
	Thomson	TDA2542	1126-145
2543	Exar	XR2543	1224-69
	SiliconG	SG2543	1224-73
			¶ 441-2
	Sprague	**UDN2543B**	⋆ **3203**
			⋆ **3205**
			1006-108
	Unitrode	**UC2543**	⋆ **3324**
			1224-84
2544	**Harris**	**HA2544**	⋆ **2737**
			⋆ **2747**
			⋆ **2754**
			1127-1
			1131-57
			1135-68
			1168-13
	SiliconG	SG2544	1224-74
	Unitrode	**UC2544**	⋆ **3324**
			1224-85
2545	OEI	2545	1125-7
	Signetics	TDA2545A	1125-138
	Sprague	**UDN2545B**	⋆ **3203**
			1001-74
2546	Signetics	TDA2546A	1125-139
2549	Signetics	TDA2549	1126-149
	SiliconG	SG2549	1220-18
255	MCE	MGA255	4064-11
			4068-28
			4068-29
			4068-30
	National	LF255	1158-45
2555	Signetics	TDA2555	1124-124
2556	Exar	XR2556C	1201-108
		XR2556M	1201-109
2559	Gould	S2559E	1198-132
		S2559F	1199-6
256	AdvMicroSys		
		RAM256	4877-21
	Dense-Pac	DPS256KB	1377-67
		DPS256KU	1377-48
			1378-35
			1383-41
		DPX256KB-2	1377-73
		DPX256KU	1377-66
			1380-21
			1384-31
	ICI	CMOS256-03	1380-65
		CMOS256-03M	1380-59
	Lomas	LDP256K	4869-10
	Mitchell	MEM256-8	4877-40
		MEM256-8B	4877-41
	Morrow	BM256	4861-20
	National	LF256	1158-52
	Plessey	PME256EA	4890-39
	RELMS	rMEM256K-BE	4862-42
	Slicer	SEAT 256	4866-3
		SLAT256	4833-16
256x256			
	EG&G-Reticon		
		RA256x256B	1222-2
256K1	Lattice	SR256K1-35C	1386-64
		SR256K1-45C	1387-6
		SR256K1-55C	1387-18
256K4	Lattice	SR256K4-35C	1383-14
		SR256K4-45C	1383-57
		SR256K4-55C	1383-87
256K8	Lattice	SR256K8-35C	1378-31
		SR256K8-45C	1378-54
		SR256K8-55C	1379-1
256M4	**Dense-Pac**	**DPS256M4**	⋆ **2580**
			1387-31
256X32	**Dense-Pac**	**DPV256X32**	⋆ **2582**
			1335-46
		DPV256X32B	⋆ **2582**
			1335-47
256X8	**Dense-Pac**	**DPE256X8V**	⋆ **2583**
			1315-17
		DPS256X8V	⋆ **2583**
			1387-59
		DPV256X8V	⋆ **2584**
			1335-42
2560	Gould	S2560G	1193-68
	S-MOS	STC2560	1193-90

Base Number	Source	Device	Page-Line
25608S1			
	Mitsubishi	MH25608S1N-10	
			1387-67
		MH25608S1N-12	
			1387-69
		MH25608S1N-15	
			1387-71
		MH25608S1N-70	
			1387-64
		MH25608S1N-85	
			1387-66
25609	Mitsubishi	MH25609-12	1343-9
		MH25609-15	1343-54
2561	Gould	S2561	1199-122
25612	**Dense-Pac**	**DPS25612**	⋆ **2580**
			1387-73
25616	**Dense-Pac**	**DPS25616**	⋆ **2580**
			1387-75
			1388-16
			1388-4
		DPV25616	1335-45
25618	**Dense-Pac**	**DPS25618**	⋆ **2580**
			1387-79
			1388-12
25632	Dense-Pac	DPV25632	1335-48
			1335-60
			1335-62
			1336-1
2564	**Dense-Pac**	**DPO2564**	⋆ **2581**
			1342-45
		DPS2564	⋆ **2580**
			1387-32
		DPV2564	1341-69
2565	S-MOS	STC2565	1193-91
2566	**Dense-Pac**	**DPS2566**	⋆ **2580**
			1387-58
2567	Exar	XR2567	1198-110
			¶ 432-21
		XR2567C	1191-71
			¶ 432-21
		XR2567M	1191-72
			1198-111
			¶ 432-21
2568	**Dense-Pac**	**DPS2568**	⋆ **2580**
			1387-60
		DPV2568	1335-43
2569	**Dense-Pac**	**DPS2569**	⋆ **2580**
			1387-72
	Gould	S2569	1199-44
		S2569A	1199-45
257	**AT&T**	**N257AL**	⋆ **2488**
			1194-105
		N257AU	⋆ **2488**
			1194-104
	Dense-Pac	**DPS257**	⋆ **2578**
			1377-42
			1378-36
			1383-42
		DPX257	1377-43
			1378-37
	National	LF257	1158-37
	Telefunken	U257B	977-25
2570	S-MOS	STC2570C	1193-108
2577	Signetics	TDA2577A	1125-17
2578	Signetics	TDA2578A	1125-18
2579	Gould	S2579	1199-7
	Signetics	**TDA2579**	⋆ **3137**
			1126-24
258	**Burr-Brown**	**INA258U**	⋆ **2545**
			1182-32
		INA258V	⋆ **2545**
			1182-31
		INA258W	⋆ **2545**
			1182-30
	Cherry	CS258A	1127-65
	GE/RCA	**CA258**	⋆ **2645**
			1134-92
			1177-20
		CA258A	⋆ **2645**
			1175-26
	Motorola	**LM258**	⋆ **2922**
			⋆ **2958**
			1134-97
			1178-42
	National	LM258	1134-101
			1177-23
			(Continued)

Base Number	Source	Device	Page-Line
258	National		(Cont'd)
		LM258A	1134-102
			1175-27
	SGS	LM258	1186-4
		LM258A	1175-28
	Signetics	LM258	1134-106
			1177-26
	TI	LM258	1176-22
2580	Mitsubishi	M2580	1108-35
		M2580-1	1108-36
	S-MOS	STC2580C	1193-128
	Sprague	**UDN2580A**	⋆ **3203**
			1004-103
			1197-88
2582	Signetics	TDA2582	1125-82
			1219-122
2585	**Sprague**	**UDN2585A**	⋆ **3203**
			1004-104
			1197-84
2588	**Sprague**	**UDN2588A**	⋆ **3203**
			1004-105
			1197-85
2591	Telefunken	TDA2591	1125-39
2593	Signetics	TDA2593	1125-35
	Telefunken	TDA2593	1125-40
	Thomson	TDA2593	1125-42
2594	Signetics	TDA2594	1125-36
2595	**Signetics**	**TDA2595**	⋆ **3135**
			1125-19
	Sprague	**UDN2595A**	⋆ **3203**
			1002-130
2596	**Sprague**	**UDN2596A**	⋆ **3203**
			1002-88
2597	**Sprague**	**UDN2597A**	⋆ **3203**
			1002-89
2598	**Sprague**	**UDN2598A**	⋆ **3203**
			1002-118
2599	**Sprague**	**UDN2599A**	⋆ **3203**
			1002-119
26	Force	CPU26	4843-24
26C61	GE/Intersil	IM26C61	883-84
26C62	GE/Intersil	IM26C62	883-87
26LS29	AMD	AM26LS29C	985-34
			¶ 424-33
		AM26LS29M	985-36
			¶ 424-33
	GoldStar	**GD26LS29**	⋆ **2694**
			985-35
26LS30	AMD	AM26LS30C	985-30
			987-42
			¶ 424-33
		AM26LS30M	985-32
			987-43
			¶ 424-33
26LS31	AMD	AM26LS31C	988-50
			¶ 424-33
		AM26LS31M	988-51
			¶ 424-33
	AT&T	**AM26LS31C**	⋆ **2499**
			988-52
	Fairchild	μA26LS31	988-54
	GoldStar	**GD26LS31**	⋆ **2694**
			988-55
	Motorola	**AM26LS31**	⋆ **2952**
			989-2
			¶ 424-21
		AM26LS31C	⋆ **2952**
			989-3
			¶ 424-21
		AM26LS31M	⋆ **2952**
			989-4
			¶ 424-21
	National	DS26LS31C	989-5
		DS26LS31M	989-6
	Signetics	AM26LS31	989-7
	TI	AM26LS31C	989-8
26LS32	AMD	AM26LS32BC	992-21
			¶ 424-33
		AM26LS32BM	992-22
			¶ 424-33
		AM26LS32C	992-27
			¶ 424-33
		AM26LS32M	992-28
			¶ 424-33
	AT&T	**AM26LS32C**	⋆ **2500**
			992-29
			(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
26LS32			(Cont'd)
	Fairchild	µA26LS32C	992-31
		µA26LS32M	992-32
	GoldStar	**GD26LS32**	⋆ **2694**
			992-33
	Motorola	**AM26LS32**	⋆ **2952**
			992-34
			¶ 424-21
	National	DS26LS32AM	992-35
		DS26LS32C	992-36
		DS26LS32M	992-37
	TI	AM26LS32AC	992-38
		AM26LS32AM	992-39
26LS33	AMD	AM26LS33C	993-3
		AM26LS33M	993-4
	AT&T	**AM26LS33C**	⋆ **2500**
			993-5
	GoldStar	**GD26LS33**	⋆ **2694**
			993-7
	National	DS26LS33C	993-8
		DS26LS33M	993-9
	TI	AM26LS33AC	993-10
		AM26LS33AM	993-11
26LS34	AMD	AM26LS34C	992-23
		AM26LS34M	992-24
26LS38	AMD	AM26LS38	689-13
26S02	AMD	AM26S02C	682-64
		AM26S02M	682-65
26S10	AMD	AM26S10C	689-110
			995-52
		AM26S10M	689-111
			995-47
	Motorola	**MC26S10**	⋆ **2952**
			689-120
			995-55
			1010-61
	National	DS26S10C	689-121
			995-56
		DS26S10M	689-122
			995-50
	TI	AM26S10C	995-58
26S11	AMD	AM26S11C	689-112
			995-53
		AM26S11M	689-113
			995-48
	National	DS26S11C	689-123
			995-57
		DS26S11M	995-51
	TI	AM26S11C	995-59
26S12	AMD	AM26S12AC	689-114
			994-12
		AM26S12AM	689-115
			994-13
		AM26S12C	689-116
			995-41
		AM26S12M	689-117
			995-42
260	Analogic	MP260	1227-127
	National	LM260	1110-29
	Raytheon	RF260	669-46
	Xycom	XVME260	4888-16
2600	**Elantec**	**EHA2600**	⋆ **2594**
			1156-45
	Fujitsu	**C2600AV**	⋆ **4229**
			⋆ **4231**
			4046-23
	Harris	**HA2600**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1156-44
	Inmos	IMS2600-10M	1337-63
		IMS2600-12M	1337-72
		IMS2600-15M	1338-9
	Sanyo	LA2600	1116-52
26003	Sharp	LH26003	1308-14
2602	AMD	AM2602C	682-52
		AM2602M	682-53
	Elantec	**EHA2602**	⋆ **2594**
			1159-42
	Harris	**HA2602**	⋆ **2706**
			1159-48
26040	National	HPC26040	878-113
2605	**Elantec**	**EHA2605**	⋆ **2594**
			1159-43
	Harris	HA2605	1159-49
	NEC	µPC2605H	1118-129
			(Continued)

Base Number	Source	Device	Page-Line
2605			(Cont'd)
	SGS	L2605	1202-69
261	Analogic	MP261	1227-128
	National	LM261	1109-48
2610	NEC	µPC2610H	1118-130
	SGS	L2610	1205-59
2611	Signetics	TDA2611A	1117-113
	Unitrode	**UC2611**	⋆ **3324**
			1106-160
2615	ILC-DDC	2615-10	971-39
		2615-11	971-37
		2615-12	971-35
262	Cherry	CS262	1198-2
	Exar	XRC262	1197-46
2620	**Elantec**	**EHA2620**	⋆ **2594**
			1156-47
	Harris	**HA2620**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1136-11
			1156-48
2622	**Elantec**	**EHA2622**	⋆ **2594**
			1159-44
	Harris	**HA2622**	⋆ **2706**
			⋆ **2768**
			1136-17
			1160-1
2625	**Elantec**	**EHA2625**	⋆ **2594**
			1159-45
	Harris	HA2625	1136-18
			1160-2
2626	SiliconG	SG2626	1108-71
263	SiliconSys	SSI263A	1123-11
	Telefunken	U263	1230-130
2630	TI	HCPL2630	1223-77
2633	Unitrode	UC2633	1190-35
2634	Unitrode	UC2634	1190-36
2637	**Unitrode**	**UC2637**	⋆ **3326**
			1004-24
			¶ 426-5
264	GIM	SPO264	823-16
	Intel	iSBC264	4853-16
	Telefunken	U264	692-23
2640	**Harris**	**HA2640**	⋆ **2706**
			⋆ **2738**
			⋆ **2748**
			1131-79
			1156-50
2641	Signetics	SCN2641	865-76
			881-64
			1009-18
2645	Harris	HA2645	1131-80
			1162-25
26450	MicroNet	PH26450	1002-142
2649	National	HS2649	1339-48
2650	ArrayTech	DHS2650	4041-43
	Signetics	SCN2650A	865-73
		2650A-1	839-31
2651	National	INS2651	871-74
	Signetics	SCN2651C	865-81
			871-81
			1010-62
	SMC	COM2651	865-84
			871-85
			1010-63
2652	Motorola	MC2652	879-35
			¶ 416-24
	Signetics	SCN2652A	865-79
			871-63
			871-64
			881-97
			1010-52
			1010-55
2653	Signetics	SCN2653	983-6
		SCN2653A	865-80
			871-69
			885-100
			1197-63
		TDA2653	⋆ **3136**
			1126-61
		TDA2653A	⋆ **3136**
			1126-62
2658	DataTrans	DT2658	4866-30

Base Number	Source	Device	Page-Line
266	Cherry	CS266	1003-7
	Dense-Pac	**DPS266**	⋆ **2578**
			1377-49
	Telefunken	U266	692-45
2661	GIM	AY2661A	881-90
		AY2661B	881-91
		AY2661C	881-92
	Motorola	MC2661	879-36
			¶ 416-24
		MC2661A	882-1
			¶ 416-24
		MC2661B	882-2
			¶ 416-24
		MC2661C	882-3
			¶ 416-24
	Signetics	SCN2661A	865-82
			871-82
			881-93
			1009-74
		SCN2661B	865-83
			871-83
			881-94
			1009-75
		SCN2661C	871-84
			881-95
			1009-76
	SMC	COM2661	865-85
			881-96
			882-7
			1009-77
		COM2661-1	1009-78
		COM2661-2	1009-79
		COM2661-3	1009-80
	UMC	UM2661-1	1009-81
		UM2661-2	1009-82
		UM2661-3	1009-83
	VLSI Tech	VL2661	882-8
267	Telefunken	U267B	977-26
2670	Motorola	MC2670	883-62
2670AC3			
	Signetics	SC2670AC3	865-77
2670BC3			
	Signetics	SC2670BC3	865-78
2671	Motorola	MC2671	885-32
			984-21
2672	Motorola	MC2672	883-44
	Signetics	SCN2672	869-103
		SCN2672A	865-86
			882-83
26727	Signetics	SCN26727	888-98
2673	Motorola	MC2673	882-107
	Signetics	SCB2673A	865-87
			882-110
		SCB2673B	865-88
			882-111
2674	Motorola	MC2674	865-74
			882-27
	Signetics	**SCN2674**	⋆ **3046**
			865-75
			882-28
			¶ 416-18
		SCN2674T	⋆ **3046**
			888-99
			¶ 416-18
2675	Motorola	MC2675	882-36
	Signetics	**SCB2675**	⋆ **3048**
			881-89
			882-37
		SCB2675T	⋆ **3048**
			888-96
2677	Signetics	SCB2677A	882-112
		SCB2677B	882-113
268	Intel	iAPX268/10	847-17
	Interdesign	MOA268B	986-14
	National	LM268-10	1226-167
		LM268-5	1226-32
		LM268-6	1226-59
2681	**Motorola**	**MC2681**	⋆ **2898**
			1009-63
	Signetics	**SCN2681**	⋆ **3052**
			865-89
			1009-65
	UMC	UM2681-1	1009-70
		UM2681-2	1009-71
26810	Signetics	26810	1009-67
26814	Signetics	26814	1009-68

Base Number	Source	Device	Page-Line
26818	Signetics	26818	1009-69
2682	Motorola	MC2682	1012-1
2685	SGS	L2685	1205-23
2691	**Signetics**	**SCC2691**	⋆ **3056**
			1011-36
2698	**Signetics**	**SCC2698**	⋆ **3058**
			1012-6
27	AD	ADOP27A	1138-32
		ADOP27B	1139-43
		ADOP27C	1141-23
		ADOP27E	1138-33
		ADOP27F	1139-44
		ADOP27G	1141-24
	Burr-Brown	**OPA27A**	⋆ **2532**
			1132-55
			1138-45
		OPA27B	⋆ **2532**
			1139-45
		OPA27C	⋆ **2532**
			1141-46
		OPA27E	⋆ **2532**
			1132-56
			1138-46
		OPA27F	⋆ **2532**
			1139-46
		OPA27G	⋆ **2532**
			1141-47
		OPA27THT	⋆ **2532**
			1169-14
	Hitachi	HD27K	4049-12
		HD27L	4049-15
		HD27P	4049-19
		HD27Q	4049-26
	HybridSys	HSOP27A	1138-47
		HSOP27B	1140-3
		HSOP27C	1141-49
	LinearTech	OP27A	1132-73
		OP27C	1141-38
		OP27E	1132-74
		OP27G	1141-39
	Maxim	OP27A	1138-35
		OP27B	1139-47
		OP27C	1141-40
		OP27E	1138-36
		OP27F	1139-48
		OP27G	1141-41
	MicroPwr	MPOP27	1141-9
		MPOP27A	1138-37
		MPOP27B	1139-49
		MPOP27C	1141-42
		MPOP27E	1138-38
		MPOP27F	1139-50
		MPOP27G	1141-43
	Motorola	**OP27A**	⋆ **2920**
			1132-79
		OP27B	⋆ **2920**
			1139-51
		OP27C	⋆ **2920**
			1141-25
		OP27E	⋆ **2920**
			1132-80
		OP27F	⋆ **2920**
			1139-52
		OP27G	⋆ **2920**
			1141-26
	PMI	**OP27A**	⋆ **2970**
			1138-39
		OP27B	⋆ **2970**
			1139-53
		OP27C	⋆ **2970**
			1141-27
		OP27E	⋆ **2970**
			1138-40
		OP27F	⋆ **2970**
			1139-54
		OP27G	⋆ **2970**
			1141-28
	Raytheon	**OP27A**	⋆ **2979**
			1138-43
		OP27B	⋆ **2979**
			1139-55
		OP27C	⋆ **2979**
			1141-44
		OP27E	⋆ **2979**
			1138-44
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
27	**Raytheon**		**(Cont'd)**
		OP27F	*** 2979**
			1139-56
		OP27G	*** 2979**
			1141-45
	Siliconix	PWM27A	1217-109
		PWM27C	1217-110
	Solitron	OP27A	1138-41
		OP27B	1140-1
		OP27C	1141-29
		OP27E	1138-42
		OP27F	1140-2
		OP27G	1141-30
	TeledyneC	CAG27	903-40
		CAG27-10	903-41
	TI	OP27E	1138-24
		OP27G	1141-18
		TLC27LI	1180-25
27CP128			
	National	NMC27CP128-200	1328-73
		NMC27CP128-250	1329-29
		NMC27CP128-300	1329-55
27CX321			
	ICT	27CX321-35	1323-30
		27CX321-45	1323-36
		27CX321-55	1323-45
27CX322			
	ICT	27CX322-35	1323-31
		27CX322-45	1323-37
		27CX322-55	1323-46
27CX641			
	ICT	27CX641	1324-33
		27CX641-35	1324-28
		27CX641-45	1324-61
		27CX641-55	1325-38
27CX642			
	ICT	27CX642	1324-34
		27CX642-35	1324-29
		27CX642-45	1324-62
		27CX642-55	1325-39
27C010	Atmel	AT27C010-120	1334-53
		AT27C010-150	1334-55
		AT27C010-200	1334-62
		AT27C010-250	1335-6
		AT27C010-90	1335-29
	TI	SMJ27C010-20	1335-1
		SMJ27C010-25	1335-18
		TMS27C010-20	
			*** 3258**
			1334-61
		TMS27C010-200	
			*** 3258**
			1335-2
		TMS27C010-25	
			*** 3258**
			1335-19
		TMS27C010-250	
			*** 3258**
			1335-20
		TMS27C010-30	
			*** 3258**
			1335-27
		TMS27C010-300	
			*** 3258**
			1335-28
27C1000			
	Fujitsu	MBM27C1000-20	1334-64
		MBM27C1000-25	1335-8
	NEC	μPD27C1000-15	1334-59
		μPD27C1000-20	1334-71
		μPD27C1000-25	1335-16
27C1001			
	Fujitsu	**MBM27C1001**	
			*** 2620**
			1334-56
		MBM27C1001-20	
			*** 2620**
			1334-65

(Continued)

Base Number	Source	Device	Page-Line
27C1001			
	Fujitsu		**(Cont'd)**
		MBM27C1001-25	
			*** 2620**
			1335-9
	NEC	μPD27C1001-15	1334-60
		μPD27C1001-20	1334-72
		μPD27C1001-25	1335-17
27C101	Hitachi	HN27C101-20	1334-67
		HN27C101-25	1335-12
27C102	National	NMC27C102-90	1333-78
27C1024			
	AMD	AM27C1024	1334-38
		AM27C1024-2	1334-24
		AM27C1024-20	1334-25
		AM27C1024-25	1334-39
	Atmel	AT27C1024-120	1333-79
		AT27C1024-150	1334-2
		AT27C1024-200	1334-11
		AT27C1024-250	1334-28
		AT27C1024-90	1333-77
	Dense-Pac	**DPV27C1024A**	
			*** 2578**
			1334-54
		DPV27C1024B	
			*** 2578**
			1333-80
	Fujitsu	MBM27C1024	1334-3
		MBM27C1024-20	1334-12
		MBM27C1024-25	1334-29
	National	NMC27C1024-120	1333-82
		NMC27C1024-150	1334-5
		NMC27C1024-200	1334-16
	NEC	μPD27C1024-15	1334-6
		μPD27C1024-20	1334-17
		μPD27C1024-25	1334-31
27C1028			
	Fujitsu	MBM27C1028	1333-81
		MBM27C1028-15	1334-1
		MBM27C1028-20	1334-10
			1334-63
		MBM27C1028-25	1334-27
			1335-7
27C128	Fujitsu	MBM27C128-20	1328-63
		MBM27C128-25	1329-20
		MBM27C128-30	1329-50
	GE/RCA	CDM27C128-20	1313-32
		CDM27C128-25	1313-35
	GIM	27C128-12	1328-43
		27C128-15	1328-48
		27C128-17	1328-60
		27C128-20	1328-71
		27C128-25	1329-27
	OKI	MSM27C128-20	1329-1
		MSM27C128-25	1329-30
		MSM27C128-30	1329-56
	TI	**SMJ27C128-20**	
			*** 3220**
			1329-2

(Continued)

Base Number	Source	Device	Page-Line
27C128	**TI**		**(Cont'd)**
		SMJ27C128-30	
			*** 3220**
			1329-58
		TMS27C128	*** 3257**
			1329-32
		TMS27C128-1	
			*** 3257**
			1328-50
		TMS27C128-15	
			*** 3257**
			1328-51
		TMS27C128-2	
			*** 3257**
			1329-3
		TMS27C128-20	
			*** 3257**
			1329-4
		TMS27C128-25	
			*** 3257**
			1329-33
		TMS27C128-3	
			*** 3257**
			1329-59
		TMS27C128-30	
			*** 3257**
			1329-60
		TMS27C128-4	
			*** 3257**
			1329-79
		TMS27C128-45	
			*** 3257**
			1329-80
	VLSI Tech	VT27C128	1329-5
		VT27C128-17	1328-62
		VT27C128-20	1328-68
		VT27C128-25	1329-24
		VT27C128-30	1329-54
		VT27C128-45	1329-78
	Waferscale	**WS27C128F-120M**	
			*** 3376**
			1328-42
		WS27C128F-150M	
			*** 3376**
			1328-52
		WS27C128F-90M	
			*** 3376**
			1328-37
27C16	National	NMC27C16-45	1322-75
			¶ 446-16
27C210	TI	SMJ27C210-20	1334-18
		SMJ27C210-25	1334-32
		TMS27C210-20	
			*** 3258**
			1334-19
		TMS27C210-200	
			*** 3258**
			1334-20
		TMS27C210-25	
			*** 3258**
			1334-35
		TMS27C210-250	
			*** 3258**
			1334-33
		TMS27C210-30	
			*** 3258**
			1334-42
		TMS27C210-300	
			*** 3258**
			1334-43
27C256	Atmel	AT27C256-15	1330-56
		AT27C256-17	1331-8
		AT27C256-20	1331-31
		AT27C256-25	1331-79
	Dense-Pac	**DPV27C256**	*** 2578**
			1330-51
	Fujitsu	**MBM27C256-10**	
			*** 2619**
			1330-44
		MBM27C256-12	
			*** 2619**
			1330-48
		MBM27C256-20	
			*** 2619**
			1331-24

(Continued)

Base Number	Source	Device	Page-Line
27C256	**Fujitsu**		**(Cont'd)**
		MBM27C256-25	
			*** 2619**
			1331-72
		MBM27C256-25X	
			*** 2619**
			1331-73
		MBM27C256-30	
			*** 2619**
			1332-28
		MBM27C256-30W	
			*** 2619**
			1332-29
		MBM27C256-30X	
			*** 2619**
			1332-30
		MBM27C256A-20	
			*** 2619**
			1331-49
		MBM27C256A-20W	
			*** 2619**
			1331-50
		MBM27C256A-20X	
			*** 2619**
			1331-25
		MBM27C256A-25	
			*** 2619**
			1332-3
		MBM27C256A-25W	
			*** 2619**
			1332-4
	GE/RCA	CDM27C256-25	1314-20
		CDM27C256-30	1314-30
		CDM27C256-45	1314-42
	GIM	27C256-15	1330-58
		27C256-17	1331-10
		27C256-20	1331-33
		27C256-25	1331-81
	Hitachi	HN27C256	1330-59
		HN27C256-17	1331-11
		HN27C256-20	1331-34
		HN27C256-25	1331-82
		HN27C256-30	1332-35
		HN27C256FP-25	1331-74
		HN27C256H-7	1330-31
		HN27C256H-8	1330-40
	Intel	**27C256**	*** 2861**
			1332-5
			¶ 445-18
		27C256-1	*** 2861**
			1331-15
			¶ 445-18
		27C256-17	*** 2861**
			1331-16
			¶ 445-18
		27C256-2	*** 2861**
			1331-51
			¶ 445-18
		27C256-20	*** 2861**
			1331-52
			¶ 445-18
		27C256-25	*** 2861**
			1332-6
			¶ 445-18
		27C256-3	*** 2861**
			1332-43
			¶ 445-18
		27C256-30	*** 2861**
			1332-44
			¶ 445-18
	National	NMC27C256-E250	1331-84
		NMC27C256-M250	1331-85
		NMC27C256-M350	1332-62
		NMC27C256-17	1331-12
		NMC27C256-20	1331-35
		NMC27C256-25	1331-86

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
27C256	National		(Cont'd)
		NMC27C256-30	1332-36
		NMC27C256-45	1332-67
	NEC	μPD27C256-15	1330-61
		μPD27C256-20	1331-36
		μPD27C256-25	1331-87
		μPD27C256A-12	1330-53
		μPD27C256A-15	1330-62
		μPD27C256A-20	1331-37
	OKI	MSM27C256-07	1330-32
		MSM27C256-10	1330-45
		MSM27C256-12	1330-54
	Panatech	RD27C256-15	1330-63
		RD27C256-20	1331-38
		RD27C256-25	1331-88
		RD27C256-30	1332-37
	S-MOS	SPM27C256C-20	1331-39
	SEEQ	M27C256-25	1331-75
		M27C256-30	1332-31
		27C256-25	⋆ **2991** 1332-16
		27C256-3	⋆ **2991** 1332-53
	Signetics	27C256-17	1331-23
		27C256-20	1331-71
		27C256-25	1332-27
	TI	**SMJ27C256-20**	⋆ **3220** 1331-40
		SMJ27C256-30	⋆ **3220** 1332-38
		TMS27C256	⋆ **3257** 1331-90
		TMS27C256-1	⋆ **3257** 1331-13
		TMS27C256-17	⋆ **3257** 1331-14
		TMS27C256-2	⋆ **3257** 1331-41
		TMS27C256-20	⋆ **3257** 1331-42
		TMS27C256-25	⋆ **3257** 1331-91
		TMS27C256-3	⋆ **3257** 1332-39
		TMS27C256-30	⋆ **3257** 1332-40
		TMS27C256-4	⋆ **3257** 1332-68
		TMS27C256-45	⋆ **3257** 1332-69
	Thomson	TS27C256-20	1331-43
		TS27C256-25	1331-92
		TS27C256-30	1332-41
	VLSI Tech	VM27C256-20	1331-46
		VM27C256-25	1332-1
		VM27C256-35	1332-63
		VT27C256	1331-47
		VT27C256-17	1331-7
		VT27C256-20	1331-48
		VT27C256-25	1332-2
		VT27C256-30	1332-42
		VT27C256-45	1332-66
	Waferscale	**WS27C256F-120M**	⋆ **3376** 1330-55

(Continued)

Base Number	Source	Device	Page-Line
27C256	**Waferscale**		**(Cont'd)**
		WS27C256F-150M	⋆ **3376** 1330-66
		WS27C256F-90M	⋆ **3376** 1330-46
27C292	**TI**	**TMS27C292**	⋆ **3257** 1321-38
		TMS27C292-45	⋆ **3257** 1321-39
		TMS27C292-5	⋆ **3257** 1321-70
		TMS27C292-50	⋆ **3257** 1321-71
27C301	Hitachi	HN27C301-20	1334-68
		HN27C301-25	1335-13
27C32	National	NMC27C32-35	1324-1
		NMC27C32-45	1324-6
		NMC27C32B-200	1323-74
		NMC27C32B-350	1323-92 92
	Panatech	RD27C32-25	1323-80
		RD27C32-30	1323-87
		RD27C32-35	1323-93
27C512	Atmel	AT27C512-12	1332-80
		AT27C512-15	1333-2
		AT27C512-17	1333-5
		AT27C512-20	1333-14
		AT27C512-25	1333-33
	Dense-Pac	**DPV27C512**	⋆ **2578** 1332-81
	Fujitsu	MBM27C512-20	1333-10
		MBM27C512-25	1333-29
	GIM	27C512-12	1333-1
		27C512-15	1333-3
		27C512-17	1333-6
		27C512-20	1333-15
		27C512-25	1333-34
	National	NMC27C512-250	1333-35
		NMC27C512-300	1333-54
		NMC27C512-350	1333-67
	NEC	μPD27C512-15	1333-4
		μPD27C512-20	1333-16
		μPD27C512-25	1333-36
	Panatech	TMS27C512	1333-45
		TMS27C512-2	1332-79
		TMS27C512-3	1333-61
		TMS27C512-4	1333-68
	TI	**SMJ27C512-20**	⋆ **3220** 1333-17
		SMJ27C512-25	⋆ **3220** 1333-37
		SMJ27C512-30	⋆ **3220** 1333-55
		TMS27C512	⋆ **3257** 1333-38
		TMS27C512-2	⋆ **3257** 1333-18
		TMS27C512-20	⋆ **3257** 1333-19
		TMS27C512-25	⋆ **3257** 1333-39
		TMS27C512-3	⋆ **3257** 1333-56
		TMS27C512-30	⋆ **3257** 1333-57

(Continued)

Base Number	Source	Device	Page-Line
27C512	**TI**		**(Cont'd)**
		TMS27C512-4	⋆ **3257** 1333-71
		TMS27C512-45	⋆ **3257** 1333-72
	VLSI Tech	VT27C512	1333-41
		VT27C512-20	1333-13
		VT27C512-25	1333-32
		VT27C512-30	1333-53
		VT27C512-35	1333-66
27C513	Atmel	AT27C513-12	1328-41
		AT27C513-15	1328-47
		AT27C513-17	1328-59
		AT27C513-20	1328-70
		AT27C513-25	1329-26
27C515	Atmel	AT27C515-12	1330-49
		AT27C515-15	1330-57
		AT27C515-17	1331-9
		AT27C515-20	1331-32
		AT27C515-25	1331-80
27C58	National	NMC27C58	1319-88
27C64	Fujitsu	MBM27C64-20	1326-59 ¶ 446-7
		MBM27C64-25	1327-24 ¶ 446-7
		MBM27C64-25W	1327-19 ¶ 446-7
		MBM27C64-25X	1327-20 ¶ 446-7
		MBM27C64-30	1327-53 ¶ 446-7
		MBM27C64-30W	1327-54 ¶ 446-7
		MBM27C64-30X	1327-51 ¶ 446-7
	GE/RCA	CDM27C64-20	1312-22
		CDM27C64-25	1312-39
	GIM	27C64-12	1326-31
		27C64-15	1326-34
		27C64-17	1326-53
		27C64-20	1326-64
		27C64-25	1327-25
	Hitachi	HN27C64-20	1326-65
		HN27C64FP-20	1326-66
		HN27C64G-15	1326-35
	Hyundai	**HY27C64-15**	⋆ **2770** 1326-36
		HY27C64-20	⋆ **2770** 1326-67
		HY27C64-30	⋆ **2770** 1327-55
	Intel	27C64	1326-78
		27C64-1	1326-45
		27C64-15	1326-46
		27C64-2	1326-79
		27C64-20	1326-80
		27C64-25	1327-33
		27C64-250	1327-34
		27C64-3	1327-63
		27C64-30	1327-64
	ICT	27C64A-15	1326-38
	National	MNC27C64-200	1326-69
		MNC27C64-300	1327-57
		NMC27C64-E150	1326-39
		NMC27C64-E200	1326-70
		NMC27C64-M200	1326-71
		NMC27C64-M250	1327-26
		NMC27C64-150	1326-40
		NMC27C64-250	1327-27
	Panatech	RD27C64-28	1327-28
		RD27C64-30	1327-58
	Rockwell	R27C64-25	1327-21

(Continued)

Base Number	Source	Device	Page-Line
27C64	Rockwell		(Cont'd)
		R27C64-35	1327-78
	S-MOS	SPM27C64-15	1326-41
		SPM27C64-20	1326-72
		SPM27C64C-15	1331-89
	Signetics	27C64-20	1326-73
	TI	**TMS27C64**	⋆ **3257** 1327-30
		TMS27C64-1	⋆ **3257** 1326-42
		TMS27C64-15	⋆ **3257** 1326-43
		TMS27C64-2	⋆ **3257** 1326-74
		TMS27C64-20	⋆ **3257** 1326-75
		TMS27C64-25	⋆ **3257** 1327-31
		TMS27C64-3	⋆ **3257** 1327-60
		TMS27C64-30	⋆ **3257** 1327-61
		TMS27C64-4	⋆ **3257** 1327-81
		TMS27C64-45	⋆ **3257** 1327-82
	Thomson	TS27C64-20	1326-76
		TS27C64-25	1327-32
		TS27C64-30	1327-62
	VLSI Tech	VT27C64	1326-77
		VT27C64-15	1326-52
		VT27C64-17	1326-57
		VT27C64-20	1326-63
		VT27C64-25	1327-23
	Waferscale	**WS27C64F-120M**	⋆ **3376** 1326-30
		WS27C64F-150M	⋆ **3376** 1326-44
		WS27C64F-90M	⋆ **3376** 1326-26
27C64A25	Signetics	27C64A25	1327-29
27C64A30	Signetics	27C64A30	1327-59
27HC191	Atmel	AT27HC191L-55	1322-20
	GIM	27HC191-35	1320-83
		27HC191-45	1321-36
		27HC191-55	1322-13
27HC256	Atmel	AT27HC256-120	1330-47
		AT27HC256-55	1330-20
		AT27HC256-70	1330-28
		AT27HC256-90	1330-41
		AT27HC256L-120	1330-50
		AT27HC256L-70	1330-29
		AT27HC256L-90	1330-42
	GIM	27HC256-55	1330-23
		27HC256-70	1330-30
		27HC256-90	1330-43
27HC291	Atmel	AT27HC291L-45	1321-43
	GIM	27HC291-35	1320-84
		27HC291-45	1321-37
		27HC291-55	1322-14
27HC64	Atmel	AT27HC64-12	1326-29
		AT27HC64-55	1325-41
		AT27HC64-70	1326-1
		AT27HC64-90	1326-20
		AT27HC64L-55	1325-42
		AT27HC64L-70	1326-7

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
27HC64			
	Atmel		(Cont'd)
		AT27HC64L-90	1326-23
	GIM	27HC64-45	1324-65
		27HC64-55	1325-44
		27HC64-70	1326-9
27HC641			
	Atmel	AT27HC641-40	1324-37
		AT27HC641-45	1324-50
		AT27HC641-55	1325-27
		AT27HC641-70	1326-2
		AT27HC641-90	1326-24
		AT27HC641L-45	1324-51
		AT27HC641L-55	1325-28
		AT27HC641L-70	1326-3
	GIM	27HC641-45	1324-59
		27HC641-55	1325-36
		27HC641-70	1326-5
	Signetics	27HC641-55	1325-60
27HC642			
	Atmel	AT27HC642-40	1324-38
		AT27HC642-45	1324-64
		AT27HC642-55	1325-43
		AT27HC642-70	1326-8
		AT27HC642-90	1326-25
		AT27HC642L-45	1324-52
		AT27HC642L-55	1325-29
		AT27HC642L-70	1326-4
27LS00	AMD	AM27LS00AC	1348-76
		AM27LS00AM	1348-83
		AM27LS00C	1348-84
		AM27LS00LC	1348-99
		AM27LS00LM	1349-2
		AM27LS00M	1348-92
27LS01	AMD	AM27LS01AC	1348-80
		AM27LS01AM	1348-81
		AM27LS01LC	1348-98
		AM27LS01LM	1349-1
		AM27LS01M	1348-90
27LS02	AMD	AM27LS02C	1348-24
			1348-5
		AM27LS02M	1348-27
27LS03	AMD	AM27LS03C	1348-25
			1348-7
		AM27LS03M	1348-28
	Cypress	**CY27LS03C**	*** 2564**
			1348-4
		CY27LS03M	*** 2564**
			1348-22
27LS06	AMD	AM27LS06C	1348-6
		AM27LS06M	1348-10
27LS07	AMD	AM27LS07C	1348-8
		AM27LS07M	1348-17
27LS18	AMD	AM27LS18C	1316-43
27LS185			
	AMD	AM27LS185C	1320-17
		AM27LS185M	1320-23
27LS19	AMD	AM27LS19C	1316-47
		AM27LS19M	1316-52
27L2	TI	TLC27L2AC	1176-25
		TLC27L2AI	1176-33
		TLC27L2AM	1176-26
		TLC27L2BC	1173-32
		TLC27L2BI	1173-35
		TLC27L2C	1180-24
		TLC27L2I	1180-26
		TLC27L2M	1180-18
27L4	TI	TLC27L4AC	1185-7
		TLC27L4AI	1176-24
			1185-10
		TLC27L4AM	1185-9
		TLC27L4BC	1183-33
		TLC27L4BI	1173-31
			1183-36
		TLC27L4C	1188-11
		TLC27L4I	1180-17
			1188-10
		TLC27L4M	1188-13
27L7	TI	TLC27L7C	1173-26
		TLC27L7I	1171-40

(Continued)

Base Number	Source	Device	Page-Line
27L7	TI		(Cont'd)
		TLC27L7M	1172-18
27L71	TI	TLC27L71	1171-41
27L9	TI	TLC27L9C	1183-28
		TLC27L9I	1173-23
			1185-16
27M2	TI	TLC27M2AC	1176-27
		TLC27M2AI	1176-34
		TLC27M2AM	1176-28
		TLC27M2BC	1173-33
		TLC27M2BI	1173-36
		TLC27M2C	1180-27
		TLC27M2I	1180-28
		TLC27M2M	1180-19
27M4	TI	TLC27M4AC	1185-6
		TLC27M4AM	1188-16
		TLC27M4BC	1185-11
		TLC27M4C	1188-9
		TLC27M4M	1188-14
27M7	TI	TLC27M7C	1173-27
		TLC27M7I	1171-42
		TLC27M7M	1172-19
27M9	TI	TLC27M9C	1183-31
27PC010			
	TI	TMX27PC010-20	
			1334-66
		TMX27PC010-200	
			1334-51
		TMX27PC010-25	
			1335-10
		TMX27PC010-250	
			1335-11
		TMX27PC010-30	
			1335-25
		TMX27PC010-300	
			1335-26
27PC128			
	Panatech	TMX27PC128	1329-21
		TMX27PC128-2	
			1328-64
		TMX27PC128-3	
			1329-51
		TMX27PC128-4	
			1329-75
	TI	**TMS27PC128**	
		*** 3258**	
			1329-22
		TMS27PC128-1	
		*** 3258**	
			1328-45
		TMS27PC128-15	
		*** 3258**	
			1328-46
		TMS27PC128-2	
		*** 3258**	
			1328-65
		TMS27PC128-20	
		*** 3258**	
			1328-66
		TMS27PC128-25	
		*** 3258**	
			1329-23
		TMS27PC128-3	
		*** 3258**	
			1329-52
		TMS27PC128-30	
		*** 3258**	
			1329-53
		TMS27PC128-4	
		*** 3258**	
			1329-76
		TMS27PC128-45	
		*** 3258**	
			1329-77
27PC210			
	TI	TMX27PC210-20	
			1334-13
		TMX27PC210-200	
			1334-14
		TMX27PC210-25	
			1334-26
		TMX27PC210-250	
			1332-78
		TMX27PC210-30	
			1334-40
		TMX27PC210-300	
			1334-41

Base Number	Source	Device	Page-Line
27PC256			
	TI	**TMS27PC256**	
		*** 3258**	
			1331-76
		TMS27PC256-1	
		*** 3258**	
			1331-5
		TMS27PC256-17	
		*** 3258**	
			1331-6
		TMS27PC256-2	
		*** 3258**	
			1331-26
		TMS27PC256-20	
		*** 3258**	
			1331-27
		TMS27PC256-25	
		*** 3258**	
			1331-77
		TMS27PC256-3	
		*** 3258**	
			1332-32
		TMS27PC256-30	
		*** 3258**	
			1332-33
		TMS27PC256-4	
		*** 3258**	
			1332-65
27PC292			
	TI	TMS27PC292	1321-34
		TMS27PC292-45	
			1321-35
		TMS27PC292-5	
			1321-66
		TMS27PC292-50	
			1321-67
27PC512			
	TI	**TMS27PC512**	
		*** 3258**	
			1333-30
		TMS27PC512-2	
		*** 3258**	
			1333-11
		TMS27PC512-20	
		*** 3258**	
			1333-12
		TMS27PC512-25	
		*** 3258**	
			1333-31
		TMS27PC512-3	
		*** 3258**	
			1333-51
		TMS27PC512-30	
		*** 3258**	
			1333-52
		TMS27PC512-4	
		*** 3258**	
			1333-69
		TMS27PC512-45	
		*** 3258**	
			1333-70
27PC64	**TI**	**TMS27PC64**	*** 3258**
			1327-18
		TMS27PC64-1	
		*** 3258**	
			1326-32
		TMS27PC64-15	
		*** 3258**	
			1326-33
		TMS27PC64-2	
		*** 3258**	
			1326-60
		TMS27PC64-20	
		*** 3258**	
			1326-61
		TMS27PC64-25	
		*** 3258**	
			1327-22
		TMS27PC64-3	
		*** 3258**	
			1327-50
		TMS27PC64-30	
		*** 3258**	
			1327-52
		TMS27PC64-4	
		*** 3258**	
			1327-80

(Continued)

Base Number	Source	Device	Page-Line
27PC64	**TI**		**(Cont'd)**
		TMS27PC64-45	
		*** 3258**	
			1324-19
27PS181			
	AMD	AM27PS181	1318-88
27PS185			
	AMD	AM27PS185C	1320-18
		AM27PS185M	1320-24
27PS191			
	AMD	AM27PS191C	1321-87
		AM27PS191M	1322-36
27PS281			
	AMD	AM27PS281	1318-89
27PS291			
	AMD	AM27PS291AM	
			1322-37
		AM27PS291C	1321-88
27PS41	AMD	AM27PS41	1323-13
27S02	AMD	AM27S02AC	1347-59
		AM27S02AM	1347-66
		AM27S02C	1347-78
		AM27S02M	1347-90
27S03	AMD	AM27S03AC	1347-62
		AM27S03AM	1347-69
		AM27S03C	1347-85
		AM27S03M	1347-91
	Cypress	CY27S03AC	1347-52
		CY27S03AM	1347-53
		CY27S03C	1347-73
		CY27S03M	1347-74
27S06	AMD	AM27S06AC	1347-60
		AM27S06AM	1347-67
		AM27S06C	1347-61
		AM27S06M	1347-68
27S07	AMD	AM27S07AC	1347-63
		AM27S07AM	1347-70
		AM27S07C	1347-64
		AM27S07M	1347-71
	Cypress	CY27S07AC	1347-54
		CY27S07AM	1348-23
		CY27S07C	1347-75
		CY27S07M	1347-76
27S12	AMD	AM27S12AC	1317-8
		AM27S12AM	1317-15
		AM27S12C	1317-23
		AM27S12M	1317-34
27S13	AMD	AM27S13AC	1317-9
		AM27S13AM	1317-16
		AM27S13C	1317-25
		AM27S13M	1317-35
27S15	AMD	AM27S15C	1318-13
		AM27S15M	1318-26
27S18	AMD	AM27S18AC	1316-18
		AM27S18AM	1316-29
		AM27S18C	1316-39
		AM27S18M	1316-44
27S180	AMD	AM27S180AC	1319-6
		AM27S180AM	1319-38
		AM27S180C	1319-54
		AM27S180M	1319-71
27S181	AMD	AM27S181AC	1319-10
		AM27S181AM	1319-40
		AM27S181C	1319-56
		AM27S181M	1319-73
27S184	AMD	AM27S184AC	1319-95
		AM27S184AM	1319-99
		AM27S184C	1320-3
		AM27S184M	1320-9
27S185	AMD	AM27S185AC	1319-96
		AM27S185AM	1319-101
		AM27S185C	1320-4
		AM27S185M	1320-12
27S19	AMD	AM27S19AC	1316-23
		AM27S19AM	1316-35
		AM27S19C	1316-40
		AM27S19M	1316-48
27S190	AMD	AM27S190AC	1321-21
		AM27S190C	1321-84
		AM27S190M	1322-33
27S191	AMD	AM27S191	1321-89
		AM27S191A	1321-24
		AM27S191AM	1322-1
27S20	AMD	AM27S20AC	1316-66
		AM27S20AM	1316-71
		AM27S20C	1316-76

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
27S20	AMD		(Cont'd)
		AM27S20M	1316-88
27S21	AMD	AM27S21AC	1316-68
		AM27S21AM	1316-74
		AM27S21C	1316-78
		AM27S21M	1316-91
27S25	AMD	AM27S25AC	1317-44
		AM27S25AM	1317-51
		AM27S25C	1317-57
		AM27S25M	1317-59
27S27	AMD	AM27S27C	1317-56
		AM27S27M	1317-58
27S28	AMD	AM27S28AC	1317-66
		AM27S28AM	1317-84
		AM27S28C	1317-102
		AM27S28M	1318-16
27S280	AMD	AM27S280AC	1319-7
		AM27S280AM	1319-39
		AM27S280C	1319-55
		AM27S280M	1319-72
27S281	AMD	AM27S281AC	1319-11
		AM27S281AM	1319-41
		AM27S281C	1319-57
		AM27S281M	1319-74
27S29	AMD	AM27S29AC	1317-71
		AM27S29AM	1317-89
		AM27S29C	1318-1
		AM27S29M	1318-20
27S290	AMD	AM27S290AC	1321-22
		AM27S290AM	1321-85
		AM27S290C	1321-86
27S291	AMD	AM27S291	1322-2
		AM27S291A	1321-25
		AM27S291AM	1322-3
		AM27S291M	1322-38
27S31	AMD	AM27S31AC	1317-74
		AM27S31AM	1317-95
		AM27S31C	1318-2
		AM27S31M	1318-21
27S32	AMD	AM27S32AC	1318-44
		AM27S32AM	1318-53
		AM27S32C	1318-68
		AM27S32M	1318-78
27S33	AMD	AM27S33AC	1318-45
			1318-47
		AM27S33AM	1318-57
		AM27S33C	1318-70
		AM27S33M	1318-79
27S35	AMD	AM27S35AC	1318-90
		AM27S35AM	1318-91
		AM27S35C	1318-92
		AM27S35M	1318-93
27S37	AMD	AM27S37	1319-8
		AM27S37A	1318-94
27S41	AMD	AM27S41	1323-14
		AM27S41A	1323-2
		AM27S41AM	1323-15
		AM27S41M	1323-26
27S43	AMD	AM27S43	1323-42
		AM27S43A	1323-35
27S45	AMD	AM27S45	1321-47
		AM27S45A	1321-32
27S47	AMD	AM27S47	1321-48
		AM27S47A	1321-33
27S49	AMD	AM27S49AC	1324-42
		AM27S49AM	1325-53
		AM27S49C	1325-54
		AM27S49M	1325-73
27S65	AMD	AM27S65AC	1318-37
		AM27S65AM	1318-41
		AM27S65C	1318-42
		AM27S65M	1318-43
27S75	AMD	AM27S75AC	1319-90
		AM27S75AM	1319-92
		AM27S75C	1319-93
		AM27S75M	1319-94
27S85	AMD	AM27S85AC	1322-86
		AM27S85AM	1322-90
		AM27S85C	1322-91
		AM27S85M	1323-1
270	Analogic	MP270	1227-129
	Intech	ASH270	1228-34
	Intel	iSBX270	4854-13
	PMI	**OP270A**	⋆ **2970**
			⋆ **2972**
			1169-33
			(Continued)

Base Number	Source	Device	Page-Line
270	**PMI**		**(Cont'd)**
		OP270E	⋆ **2970**
			⋆ **2972**
			1169-34
		OP270F	⋆ **2970**
			⋆ **2972**
			1170-22
		OP270G	⋆ **2970**
			⋆ **2972**
			1171-14
	Raytheon	RG270	670-94
	Thomson	TPA270	1229-100
		TPB270	1229-102
		TPC270	1229-101
2700	AD	AD2700J	1226-98
		AD2700L	1226-99
		AD2700S	1226-100
		AD2700U	1226-101
	AMCC	Q2700C	4041-17
		Q2700D	4041-18
	HyComp	HC2700	1226-126
		HC2700-883	1226-127
	Matra	MA2700	4054-10
	Matra-Harris		
		MB2700	4054-20
	Maxim	AD2700J	1226-147
		AD2700L	1226-148
		AD2700S	1226-149
		AD2700U	1226-150
2701	AdvLinear	ALD2701	1165-9
			1181-7
		ALD2701A	1173-44
		ALD2701B	1178-10
	AD	AD2701J	1226-102
		AD2701L	1226-103
		AD2701S	1226-104
		AD2701U	1226-105
	HyComp	HC2701	1226-128
		HC2701-883	1226-129
	Maxim	AD2701J	1226-151
		AD2701K	1226-152
		AD2701L	1226-153
		AD2701S	1226-154
		AD2701U	1226-155
27010	**Intel**	**27010-200V05**	
			⋆ **2859**
			1335-5
			¶ 445-18
		27010-250V05	
			⋆ **2859**
			1330-8
			¶ 445-18
		27010-250V10	
			⋆ **2859**
			1330-9
			¶ 445-18
		27010-300V05	
			⋆ **2859**
			1330-12
			¶ 445-18
		27010-300V10	
			⋆ **2859**
			1330-13
			¶ 445-18
27011	**Intel**	**27011-200V05**	
			⋆ **2860**
			1330-5
			¶ 445-18
		27011-250V05	
			⋆ **2860**
			1330-6
			¶ 445-18
		27011-250V10	
			⋆ **2860**
			1330-7
			¶ 445-18
		27011-300V05	
			⋆ **2860**
			1330-10
			¶ 445-18
		27011-300V10	
			⋆ **2860**
			1330-11
			¶ 445-18
2702	AD	AD2702J	1225-27
		AD2702L	1225-28
			(Continued)

Base Number	Source	Device	Page-Line
2702	AD		(Cont'd)
		AD2702S	1225-29
		AD2702U	1225-30
	HyComp	HC2702	1225-36
		HC2702-883	1225-37
2703	**VTC**	**VA2703**	⋆ **3373**
			1174-14
2705	**VTC**	**VA2705**	⋆ **3374**
			1135-69
		VA2705J	⋆ **3374**
			1181-8
		VA2705K	⋆ **3374**
			1179-45
2706	AdvLinear	ALD2706	1180-32
		ALD2706A	1173-43
		ALD2706B	1176-36
	Cherry	CS2706	688-30
	VTC	**VA2706**	⋆ **3374**
			1135-70
		VA2706J	⋆ **3374**
			1181-43
		VA2706K	⋆ **3374**
			1181-38
2707	**VTC**	**VA2707**	⋆ **3374**
			1180-53
		VA2707J	⋆ **3374**
			1180-52
2708	OKI	MSM2708A	1319-87
	VTC	**VA2708**	⋆ **3374**
			1181-41
2709	Thomson	SFC2709A	1153-42
		SFC2709M	1161-18
271	Analogic	MP271	1227-130
	PMI	**OP271A**	⋆ **2971**
			1171-25
		OP271E	⋆ **2971**
			1171-26
		OP271F	⋆ **2971**
			1171-27
		OP271G	⋆ **2971**
			1172-32
	Siliconix	DG271B	904-22
	TI	TLC271AC	1157-46
			1157-51
		TLC271AI	1158-1
		TLC271AM	1157-47
			1157-52
		TLC271BC	1150-19
			1150-23
		TLC271BI	1150-25
		TLC271C	1134-65
			1156-35
			1164-49
		TLC271I	1164-52
		TLC271M	1134-66
			1157-33
			1164-50
2710	AD	AD2710K	1226-106
		AD2710L	1226-107
	HyComp	HC2710	1226-130
		HC2710-883	1226-131
	Maxim	AD2710L	1226-156
	Thomson	SFC2710	1109-43
2711	HyComp	HC2711	1226-132
		HC2711-883	1226-133
	Thomson	SFC2711	1112-36
2712	AD	AD2712K	1225-31
		AD2712L	1225-32
	DataTrans	DT2712	4873-3
	HyComp	HC2712	1225-38
		HC2712-883	1225-39
27128	AMD	AM27128A	1329-35
		AM27128A-1	1328-53
		AM27128A-15	1328-54
		AM27128A-2	1329-7
		AM27128A-20	1329-8
		AM27128A-20M	
			1329-9
		AM27128A-25	1329-36
		AM27128A-25M	
			1329-37
		AM27128A-3	1329-61
		AM27128A-30	1329-62
		AM27128A-30M	
			1329-63
		AM27128A-4	1329-81
			(Continued)

Base Number	Source	Device	Page-Line
27128	AMD		(Cont'd)
		AM27128AM	1329-38
	Fujitsu	MBM27128-20	1329-18
		MBM27128-25	1329-39
		MBM27128-25X	
			1329-40
		MBM27128-30	1329-64
		MBM27128-30W	
			1329-73
		MBM27128-30X	
			1329-74
	Hitachi	HN27128A-17	1328-61
		HN27128A-20	1329-10
		HN27128A-25	1329-41
	Intel	M27128	1329-11
		M27128-45	1329-82
		27128-25	1329-48
		27128-3	1329-65
		27128-30	1329-71
		27128-4	1329-87
		27128-45	1329-88
		27128A	1329-46
		27128A-1	1328-56
		27128A-2	1329-15
		27128A-20	1329-16
		27128A-25	1329-47
		27128A-3	1329-69
		27128A-30	1329-70
		27128B-110V05	
			1328-39
		27128B-135V05	
			1328-44
		27128B-150V05	
			1328-55
		27128B-150V10	
			1328-57
	LMS	GR27128	1328-5
	OKI	MSM27128A	1329-42
	SEEQ	M27128-25	1329-43
		M27128-45	1329-83
		27128-2	⋆ **2991**
			1329-12
		27128-20	⋆ **2991**
			1329-13
		27128-25	⋆ **2991**
			1329-44
		27128-3	⋆ **2991**
			1329-66
		27128-30	⋆ **2991**
			1329-67
		27128-4	⋆ **2991**
			1329-84
		27128-450	⋆ **2991**
			1329-85
	SGS	M27128A	1329-45
		M27128A-2	1329-14
		M27128A-3	1329-68
		M27128A-4	1329-86
	Toshiba	TMM27128A-150	
			1328-58
		TMM27128A-200	
			1329-19
27129	S-MOS	SPM27129C-25	
			1329-31
		SPM27129C-30	
			1329-57
2713	Analogic	MP2713C	936-35
	VTC	**VA2713**	⋆ **3373**
			1174-15
2714	Analogic	MP2714C	936-41
	Intech	**ADC2714**	⋆ **2799**
			936-42
2715	DataTrans	DT2715	4872-10
	VTC	**VA2715**	⋆ **3374**
			1135-71
2716	Intel	M2716	1322-72
		2716	1322-73
			¶ 408-23
		2716-1	1322-65
			¶ 408-23
		2716-2	1322-69
			¶ 408-23
		2716-5	1322-79
			¶ 408-23
		2716-6	1322-81
			¶ 408-23
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
2716			(Cont'd)
	LMS	GR2716	1320-35
	National	MM2716	1322-74
		MM2716-1	1322-66
		MM2716-2	1322-70
	OKI	MSM2716A	1322-76
	Rockwell	R2716-25	1323-79
		R2716-350	1323-91
	SGS	M2716	1322-77
		M2716-1	1322-67
	Thomson	ETC2716	1322-71
		ETC2716-5	1322-80
		ET2716	1322-78
		ET2716-1	1322-68
	VTC	**VA2716**	⋆ **3374**
			1135-72
2717	**VTC**	**VA2717J**	⋆ **3374**
			1181-10
		VA2717K	⋆ **3374**
			1179-49
		VA2717S	⋆ **3374**
			1179-50
2718	**VTC**	**VA2718J**	⋆ **3374**
			1181-9
		VA2718K	⋆ **3374**
			1179-47
		VA2718S	⋆ **3374**
			1179-48
272	Analogic	MP272	1227-131
	Cherry	CS272	1198-3
	Interdesign	MOB272	990-53
	SGS	L272	1181-39
		L272M	1181-40
	TI	TLC272AC	1176-29
		TLC272AI	1176-35
		TLC272AM	1176-30
		TLC272BC	1173-34
		TLC272BI	1173-38
		TLC272C	1134-83
			1180-20
		TLC272I	1180-29
		TLC272M	1134-111
			1180-21
2720	AD	AD2720	1225-33
		AD2720A	1226-108
		AD2720C	1226-109
		AD2720S	1226-110
		AD2720T	1226-111
	Harris	**HA2720**	⋆ **2737**
			⋆ **2747**
			1133-54
			1134-7
			1155-47
27210	**Intel**	**27210-150V05**	
			⋆ **2858**
			1334-7
			¶ 445-18
		27210-170V05	
			⋆ **2858**
			1334-8
			¶ 445-18
		27210-170V10	
			⋆ **2858**
			1334-9
			¶ 445-18
		27210-200	⋆ **2858**
			1334-22
			¶ 445-18
		27210-200V05	
			⋆ **2858**
			1334-23
			¶ 445-18
		27210-250	⋆ **2858**
			1334-36
			¶ 445-18
		27210-250V05	
			⋆ **2858**
			1334-37
			¶ 445-18
		27210-300V05	
			⋆ **2858**
			1334-44
			¶ 445-18

(Continued)

Base Number	Source	Device	Page-Line
27210	**Intel**		**(Cont'd)**
		27210-300V10	
			⋆ **2858**
			1334-45
			¶ 445-18
2722	DataTrans	DT2722	4873-54
2723	Thomson	SFC2723C	1214-65
		SFC2723EC	1214-66
2724	DataTrans	DT2724	4874-23
2725	DataTrans	DT2725	4874-20
	Harris	HA2725	1133-55
			1134-8
			1159-27
27256	AMD	AM27256	1332-10
		AM27256-1	1331-17
		AM27256-17	1331-18
		AM27256-2	1331-56
		AM27256-20	1331-57
		AM27256-20M	1331-58
		AM27256-25	1332-11
		AM27256-25M	1332-12
		AM27256-3	1332-49
		AM27256-30	1332-50
		AM27256-4	1332-70
	Fujitsu	MBM27256-17	1331-21
		MBM27256-20	1331-66
		MBM27256-25	1332-20
		MBM27256-25X	
			1332-21
		MBM27256-30	1332-56
		MBM27256-30W	
			1332-57
		MBM27256-30X	
			1332-58
	GIM	27256-15	1331-2
		27256-17	1331-22
		27256-20	1331-68
		27256-25	1332-24
	Hitachi	HN27256-25	1332-13
		HN27256-30	1332-51
	Intel	27256	1332-14
		27256-1	1331-20
		27256-2	1331-59
		27256-20	1331-64
		27256-25	1332-18
		27256-3	1332-54
		27256-30	1332-55
		27256-5	1332-19
		27256L-1	1331-19
		27256L-2	1331-60
		27256L-20	1331-61
	LMS	GR27256	1330-19
	NEC	μPD27256	1332-26
		μPD27256-3	1332-61
	OKI	MSM27256-20	1331-62
		MSM27256-25	1332-15
		MSM27256-30	1332-52
	SEEQ	M27256-25	1332-22
		M27256-30	1332-59
		27256-20	1331-67
		27256-25	1332-23
		27256-30	1332-60
	SGS	M27256	1332-17
		M27256-2	1331-63
		M27256-3	1332-48
	Toshiba	TMM27256a-150	
			1330-65
		TMM27256A-150	
			1331-4
		TMM27256A-200	
			1331-70
2726	DataTrans	DT2726	4872-14
2727	DataTrans	DT2727	4872-13
273	**ICT**	**PEEL273**	⋆ **4259**
			⋆ **4262**
			4070-13
2730	Unitrode	UC2730	1229-25
2731	SiliconG	SG2731	1004-18
			¶ 437-35
2732	AMD	AM2732A-25M	1323-81
		AM2732A-45M	1324-3
	Intel	M2732A-25	1323-85
		M2732A-45	1324-9
		2732A	1323-86
		2732A-2	1323-78
		2732A-20	1323-75

(Continued)

Base Number	Source	Device	Page-Line
2732	Intel		(Cont'd)
		2732A-25	1323-82
		2732A-3	1323-88
		2732A-30	1323-89
		2732A-4	1324-5
		2732A-45	1324-10
	LMS	GR2732	1323-28
	SGS	M2732A	1323-83
		M2732A-2	1323-76
		M2732A-3	1323-90
		M2732A-4	1324-7
	TI	**TMS2732A-17**	
			⋆ **3257**
			1323-73
		TMS2732A-20	
			⋆ **3257**
			1323-77
		TMS2732A-25	
			⋆ **3257**
			1323-84
		TMS2732A-45	
			⋆ **3257**
			1324-8
	Thomson	ETC2732-35	1323-94
		ETC2732-45	1324-2
		ETC2732-55	1324-12
2734	Analogic	MP2734	936-40
	DataTrans	DT2734	4873-4
2735	Analogic	MP2735-1	937-10
		MP2735-2	937-8
	DataTrans	DT2735	4874-16
	Intech	**ADC2735**	⋆ **2799**
			937-9
274	TI	TLC274AC	1185-14
		TLC274AI	1185-5
		TLC274AM	1185-13
		TLC274BC	1183-37
		TLC274BI	1183-34
		TLC274C	1135-4
			1188-17
		TLC274I	1188-8
		TLC274M	1135-40
			1188-18
2742	DataTrans	DT2742	4873-55
2744	DataTrans	DT2744	4874-24
2745	DataTrans	DT2745	4874-21
2747	Thomson	SFC2747C	1179-20
		SFC2747M	1177-35
275	Dataram	DR275	4880-37
	Intel	iSBX275	4854-14
2750	DataTrans	DT2750	4856-13
	MicroInds	PG2750	4891-19
2751	DataTrans	DT2751	4856-12
	MicroInds	PG2751	4891-20
27512	AMD	AM27512	1333-42
		AM27512-25	1333-43
		AM27512-3	1333-58
		AM27512-30	1333-59
		AM27512-30M	1333-60
		AM27512-45	1333-73
		AM27512-45M	1333-74
	Dense-Pac	DPV27512	1333-48
	Hitachi	HN27512-25	1333-65
	Intel	**27512**	⋆ **2862**
			1333-44
		27512-170V05	
			⋆ **2862**
			1333-7
		27512-170V10	
			⋆ **2862**
			1333-8
		27512-2	⋆ **2862**
			1333-22
		27512-20	⋆ **2862**
			1333-23
		27512-200V05	
			⋆ **2862**
			1333-24
		27512-200V10	
			⋆ **2862**
			1333-25
		27512-25	⋆ **2862**
			1333-47
		27512-3	⋆ **2862**
			1333-63

(Continued)

Base Number	Source	Device	Page-Line
27512	**Intel**		**(Cont'd)**
		27512-30	⋆ **2862**
			1333-64
	LMS	GR27512	1333-26
	SGS	M27512	1333-46
		M27512-2	1333-21
		M27512-3	1333-62
		M27512-4	1333-75
	Toshiba	TMM27512-20	1333-20
		TMM27512-25	1333-40
27513	**Intel**	**27513**	⋆ **2863**
			1330-1
			¶ 445-23
		27513-170V05	
			⋆ **2863**
			1329-89
			¶ 445-23
		27513-170V10	
			⋆ **2863**
			1329-90
			¶ 445-23
		27513-2	⋆ **2863**
			1329-91
			¶ 445-23
		27513-20	⋆ **2863**
			1329-92
			¶ 445-23
		27513-200V05	
			⋆ **2863**
			1329-93
			¶ 445-23
		27513-200V10	
			⋆ **2863**
			1329-94
			¶ 445-23
		27513-25	⋆ **2863**
			1330-2
			¶ 445-23
		27513-3	⋆ **2863**
			1330-3
			¶ 445-23
		27513-30	⋆ **2863**
			1330-4
			¶ 445-23
	LMS	GR27513	1329-95
2752	DataTrans	DT2752	4856-11
2757	DataTrans	DT2757	4856-3
2758	DataTrans	DT2758	4856-15
2761	Thomson	SFC2761C	1163-32
		SFC2761M	1157-21
2762	DataTrans	DT2762	4867-10
2764	AMD	AM2764-20M	1327-17
		AM2764-25M	1327-49
		AM2764-45M	1327-94
		AM2764A	1327-38
		AM2764A-1	1326-54
		AM2764A-15	1326-49
		AM2764A-2	1327-5
		AM2764A-20	1327-6
		AM2764A-20M	1327-7
		AM2764A-25	1327-39
		AM2764A-25M	1327-40
		AM2764A-3	1327-69
		AM2764A-30	1327-70
		AM2764A-4	1327-85
		AM2764A-45M	1327-86
	DataTrans	DT2764	4867-16
	Fujitsu	MBM2764-20	1327-8
		MBM2764-25	1327-41
		MBM2764-30	1327-71
		MBM2764-30X	1327-72
	Hyundai	HY2764-15	1326-37
		HY2764-20	1326-68
		HY2764-30	1327-56
	Intel	2764A	1327-46
		2764A-1	1326-58
		2764A-2	1327-13
		2764A-20	1327-14
		2764A-25	1327-47
		2764A-3	1327-76
		2764A-30	1327-77
		2764A-4	1327-92
		2764A-45	1327-93
	LMS	GR2764	1324-20
	OKI	MSM2764A	1327-87
	SEEQ	M2764-25	1327-42

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
2764	SEEQ		(Cont'd)
		M2764-45	1327-88
		2764-160	⋆ **2991**
			1326-51
		2764-2	⋆ **2991**
			1327-9
		2764-20	⋆ **2991**
			1327-10
		2764-25	⋆ **2991**
			1327-43
		2764-3	⋆ **2991**
			1327-73
		2764-30	⋆ **2991**
			1327-74
		2764-4	⋆ **2991**
			1327-79
		2764-45	⋆ **2991**
			1327-89
	SGS	M2764A	1327-44
		M2764A-1	1326-55
		M2764A-2	1327-11
		M2764A-3	1327-75
		M2764A-4	1327-90
	TI	**TMS2764-17**	⋆ **3257**
			1326-56
		TMS2764-20	⋆ **3257**
			1327-12
		TMS2764-25	⋆ **3257**
			1327-45
		TMS2764-45	⋆ **3257**
			1327-91
	Toshiba	TMM2764A-150	
			1326-50
		TMM2764A-200	
			1327-16
2765	DataTrans	DT2765	4867-15
2766	DataTrans	DT2766	4867-5
2767	DataTrans	DT2767	4867-4
2768	DataTrans	DT2768	4867-19
2769	DataTrans	DT2769	4856-21
277	Exar	XRC277	1197-47
	TI	TLC277C	1173-28
		TLC277I	1171-43
		TLC277M	1172-20
2772	DataTrans	DT2772	4866-6
2774	DataTrans	DT2774	4867-3
2775	DataTrans	DT2775	4867-14
278	Dataram	DR278	4880-36
	MicroInds	mSBX278	4854-22
2781	DataTrans	DT2781	4867-6
2782	DataTrans	DT2782	4867-8
2785	DataTrans	DT2785	4867-17
279	Cherry	CS279	884-99
			1004-63
	TI	TLC279C	1183-29
		TLC279I	1183-30
2791	TI	TMS2791	884-58
	Western	WD2791	884-64
		WD2791-02	884-45
2793	Siemens	SAB2793B	884-46
	TI	TMS2793	884-59
	VLSI Tech	VL2793	884-62
	Western	WD2793-02	884-65
2795	TI	TMS2795	884-60
	Western	WD2795-02	884-66
2797	Siemens	SAB2797B	884-47
	TI	TMS2797	884-61
	VLSI Tech	VL2797	884-63
	Western	WD2797-02	884-67
28	**Dense-Pac**	**DPN28**	⋆ **2580**
			1310-72
			1358-90
	PMI	**MUX28A**	⋆ **2975**
			914-75
		MUX28B	⋆ **2975**
			914-77
		MUX28E	⋆ **2975**
			914-76
		MUX28F	⋆ **2975**
			914-78
	TeledyneC	CDA28A	910-3
	TRW-LSI	TMC28	604-16
		TMC28-1	604-17
28c16	Atmel	at28c16-25	1310-41
28A13	Hitachi	HG28A13	4049-24
28A18	Hitachi	HG28A18	4049-29
28A25	Hitachi	HG28A25	4049-33
28CP256			
	GIM	28CP256A-15	1314-6
		28CP256A-20	1314-16
		28CP256A-25	1314-24
		28CP256B-10	1313-60
		28CP256B-12	1313-65
		28CP256B-15	1314-7
28CP64	GIM	28CP64A-15	1312-10
		28CP64A-20	1312-30
		28CP64A-25	1312-47
		28CP64B-10	1311-71
		28CP64B-12	1311-76
		28CP64B-15	1312-11
28C010	**Xicor**	**X28C010**	⋆ **3395**
			⋆ **3414**
			1386-44
28C04	Atmel	AT28C04-12	1309-4
		AT28C04-15	1309-5
		AT28C04-20	1309-10
		AT28C04-25	1309-15
	GIM	28C04-15	1309-6
		28C04-20	1309-11
		28C04-25	1309-16
		28C04A-15	1309-7
		28C04A-20	1309-12
		28C04A-25	1309-17
28C16	Atmel	AT28C16-12	1310-10
		AT28C16-15	1310-15
		AT28C16-20	1310-22
		AT28C16-25	1310-42
		AT28C16-30	1310-74
		AT28C16-35	1311-10
	GIM	28C16-15	1310-19
		28C16-20	1310-24
		28C16-25	1310-44
		28C16A-15	1310-20
		28C16A-20	1310-25
		28C16A-25	1310-45
28C17	Atmel	AT28C17-12	1310-11
		AT28C17-15	1310-16
		AT28C17-20	1310-23
		AT28C17-25	1310-43
		AT28C17-30	1310-75
		AT28C17-35	1311-11
	GIM	28C17A-15	1310-18
28C256	Atmel	AT28C256-15	1314-5
		AT28C256-20	1314-14
		AT28C256-25	1314-23
		AT28C256-35	1314-36
	EXEL	XL28C256-120	1314-2
	SEEQ	M28C256-250	1314-21
		28C256-200	⋆ **2991**
			1314-15
		28C256-250	⋆ **2991**
			1314-22
		28C256-300	⋆ **2991**
			1314-31
	Xicor	**X28C256**	⋆ **3394**
			⋆ **3413**
			1314-4
		X28C256-25	⋆ **3394**
			⋆ **3413**
			1314-25
		X28C256-35	⋆ **3394**
			⋆ **3413**
			1314-38
		X28C256M	⋆ **3394**
			⋆ **3413**
			1314-33
		X28C256M-25	
			⋆ **3394**
			⋆ **3413**
			1314-26
		X28C256M-35	
			⋆ **3394**
			⋆ **3413**
			1314-39
28C64	Atmel	AT28C64-15	1312-7
		AT28C64-20	1312-24
		AT28C64-25	1312-41
	EXEL	XL28C64-120	1312-5
		XL28C64-70	1311-63
		XL28C64-90	1311-70
	Fujitsu	MBM28C64-25	1313-24
		MBM28C64-35	1313-26
28C64			(Cont'd)
	GIM	28C64-15	1312-9
		28C64-20	1312-26
		28C64-25	1312-43
		28C64A-15	1312-12
		28C64A-20	1312-27
		28C64A-25	1312-44
	NEC	μPD28C64-25	1312-45
		μPD28C64-30	1312-66
	SEEQ	M28C64-250	1312-46
		28C64-200	⋆ **2991**
			1312-29
		28C64-250	⋆ **2991**
			1312-72
28C65	Fujitsu	MBM28C65-25	1313-25
		MBM28C65-35	1312-81
28E06	Hitachi	HG28E06	4049-16
28E08	Hitachi	HG28E08	4049-18
28E10	Hitachi	HG28E10	4049-22
28HC16			
	Atmel	AT28HC16-45	1309-51
		AT28HC16-55	1309-56
		AT28HC16-70	1309-66
		AT28HC16-90	1310-2
		AT28HC16L-55	1309-57
		AT28HC16L-70	1309-67
		AT28HC16L-90	1310-3
28HC191			
	Atmel	AT28HC191-35	1309-47
			1320-85
		AT28HC191-45	1309-54
			1321-44
		AT28HC191-55	1309-63
			1322-21
		AT28HC191-70	1309-71
			1322-42
		AT28HC191-90	1310-7
		AT28HC191L-45	
			1321-45
28HC256			
	Atmel	AT28HC256-120	
			1314-1
		AT28HC256-150	
			1314-8
		AT28HC256-200	
			1314-17
		AT28HC256-250	
			1314-29
		AT28HC256-70	1313-53
		AT28HC256-90	1313-59
	GIM	28HC256-70	1313-49
		28HC256-90	1313-56
28HC291			
	Atmel	AT28HC291-35	1309-48
			1320-86
		AT28HC291-45	1309-55
			1321-46
		AT28HC291-55	1309-64
			1322-22
		AT28HC291-70	1309-72
			1322-43
		AT28HC291-90	1310-6
		AT28HC291L-55	
			1322-23
28HC416			
	GIM	28HC416-55	1311-42
		28HC416-70	1311-43
		28HC416-90	1311-44
28HC64			
	Atmel	AT28HC64-120	1312-4
		AT28HC64-55	1-53
			1311-53
		AT28HC64-70	1311-62
		AT28HC64-90	1311-69
28PC64	Atmel	AT28PC64-15	1312-8
		AT28PC64-20	1312-25
		AT28PC64-25	1312-42
		AT28PC64-30	1312-65
		AT28PC64-35	1313-1
280	Dataram	DR-280	4894-30
	Zendex	ZBX280	4855-40
			4860-48
	Zilog	**Z280-MPU**	⋆ **3417**
			851-24
			874-85
2800	CalDevices	DLM2800	4042-42
	Cherry	CS2800	4065-10
	MicroInds	PG2800	4891-30
	Motorola	**MCA2800ALS**	⋆ **4282**
			4056-3
		MCA2800RAM	
			⋆ **4282**
			4055-47
2801	DataTrans	DT2801	4849-32
	IPS	ULS2801	1002-96
	Motorola	MCM2801	1308-12
		ULN2801	⋆ **2954**
			1002-99
	SGS	ULN2801A	1002-100
	SiliconG	SG2801	1108-37
	Sprague	**ULN2801**	⋆ **3203**
			1002-101
			1108-5
		ULS2801	1002-104
			1108-20
2802	AMD	AM2802C	1393-5
		AM2802M	1393-6
	IPS	ULS2802	1002-107
	Motorola	MCM2802	1308-21
		ULN2802	⋆ **2954**
			1002-110
	SGS	ULN2802A	1002-111
	SiliconG	SG2802	1108-38
	Sprague	**ULN2802**	⋆ **3203**
			1002-112
			1108-6
		ULS2802	1002-115
			1108-21
2803	AMD	AM2803C	1393-10
		AM2803M	1393-11
	DataTrans	DT2803	4850-13
	IPS	ULS2803	1002-64
	Mitsubishi	M2803	1107-149
	Motorola	**ULN2803**	⋆ **2954**
			1002-70
	Samsung	KA2803	1127-45
	SGS	ULN2803A	1002-73
	SiliconG	SG2803	1108-39
	Sprague	**ULN2803**	⋆ **3203**
			1002-76
			1108-7
		ULS2803	1002-82
			1108-22
2804	AMD	AM2804C	1393-14
		AM2804M	1393-15
	EXEL	XL2804A-250	1309-19
		XL2804A-300	1309-25
		XL2804A-350	1309-32
		XL2804A-450	1309-35
	IPS	ULS2804	1002-47
	Motorola	**ULN2804**	⋆ **2954**
			1002-50
	Samsung	KA2804	1127-120
	SEEQ	**2804A**	⋆ **2991**
			1309-18
	SGS	ULN2804A	1002-53
	SiliconG	SG2804	1108-40
	Sprague	**ULN2804**	⋆ **3203**
			1002-54
			1108-8
		ULS2804	1002-57
			1108-23
	Xicor	**X2804A**	⋆ **3389**
			⋆ **3405**
			1309-26
		X2804A-25	⋆ **3389**
			⋆ **3405**
			1309-20
		X2804A-35	⋆ **3389**
			⋆ **3405**
			1309-33
		X2804A-45	⋆ **3389**
			⋆ **3405**
			1309-36
		X2804AM	⋆ **3389**
			⋆ **3405**
			1309-27
		X2804AM-35	⋆ **3389**
			⋆ **3405**
			1309-34

(Continued)

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
2804	**Xicor**		(Cont'd)
		X2804AM-45	⋆ **3389**
			⋆ **3405**
			1309-37
2805	DataTrans	DT2805	4850-1
	Intech	**PS2805**	⋆ **2799**
			1221-12
	IPS	ULS2805	1002-65
	SGS	ULN2805A	1002-74
	Sprague	**ULN2805**	⋆ **3203**
			1002-77
			1108-9
		ULS2805	1002-83
			1108-24
2806	DataTrans	DT2806	4850-7
2808	DataTrans	DT2808	4850-15
	Thomson	μA2808	1204-100
281	LMS	GR281	1358-75
	MicroInds	mBLX281A	4863-18
	National	AM281	903-67
			903-70
			903-83
2810	GIM	ER2810	1309-44
			¶ 444-13
		ER2810HR	1309-45
			¶ 444-13
28101	OKI	MSM28101A	1302-20
2811	DataTrans	DT2811	4850-16
	IPS	ULS2811	1002-97
	SiliconG	SG2811	1108-41
	Sprague	**ULN2811A**	⋆ **3203**
			1002-102
			1108-10
		ULS2811	1002-105
			1108-25
2812	AMD	AM2812ADC	1304-20
		AM2812AL	1304-21
		AM2812C	1304-17
		AM2812L	1304-18
	IPS	ULS2812	1002-108
	Plessey	MJ2812	1304-19
	SiliconG	SG2812	1108-42
	Sprague	**ULN2812A**	⋆ **3203**
			1002-113
			1108-11
		ULS2812	1002-116
			1108-26
	Thomson	μA2812	1206-4
2813	AMD	AM2813AC	1304-26
		AM2813AL	1304-27
		AM2813C	1304-23
		AM2813L	1304-24
	IPS	ULS2813	1002-66
	Plessey	MJ2813	1304-25
	SiliconG	SG2813	1108-43
	Sprague	**ULN2813A**	⋆ **3203**
			1002-78
			1108-12
		ULS2813	1002-84
			1108-27
2814	IPS	ULS2814	1002-48
	Motorola	MCM2814	1308-75
	SiliconG	SG2814	1108-44
	Sprague	**ULN2814A**	⋆ **3203**
			1002-55
			1108-13
		ULS2814	1002-58
			1108-28
2815	**Intech**	**PS2815**	⋆ **2799**
			1221-13
	IPS	ULS2815	1002-67
	Sprague	**ULN2815A**	⋆ **3203**
			1002-79
			1108-14
		ULS2815	1002-85
			1108-29
2816	EXEL	XL2816A-250	1310-47
		XL2816A-350	1311-13
		XL2816A-450	1311-30
	National	NMC2816-25	1310-48
			¶ 444-24
			¶ 444-29
		NMC2816-35	1311-14
			¶ 444-24
			¶ 444-29
			(Continued)

Base Number	Source	Device	Page-Line
2816	National		(Cont'd)
		NMC2816-45	1311-31
			¶ 444-24
			¶ 444-29
		NMC2816E-25	1310-49
			¶ 444-24
			¶ 444-29
		NMC2816E-35	1311-15
			¶ 444-24
			¶ 444-29
		NMC2816E-45	1311-32
			¶ 444-24
			¶ 444-29
	OKI	MSM2816	1310-61
	Samsung	KM2816A	1310-77
		KM2816A-25	1310-51
		KM2816A-35	1311-17
	SEEQ	M2816A-250	1310-64
		M2816A-350	1311-27
		2816A-250	⋆ **2991**
			1310-52
		2816A-300	⋆ **2991**
			1310-80
		2816A-350	⋆ **2991**
			1311-18
		2816AH-250	⋆ **2991**
			1310-67
		2816AH-300	⋆ **2991**
			1311-4
	Xicor	**X2816A**	⋆ **3390**
			⋆ **3406**
			1310-82
		X2816A-25	⋆ **3390**
			⋆ **3406**
			1310-56
		X2816A-35	⋆ **3390**
			⋆ **3406**
			1311-20
		X2816A-45	⋆ **3390**
			⋆ **3406**
			1311-33
		X2816AM	⋆ **3390**
			⋆ **3406**
			1311-1
		X2816AM-35	⋆ **3390**
			⋆ **3406**
			1311-21
		X2816AM-45	⋆ **3390**
			⋆ **3406**
			1311-34
		X2816B	⋆ **3390**
			⋆ **3406**
			1310-14
		X2816B-25	⋆ **3390**
			⋆ **3406**
			1310-57
		X2816BM	⋆ **3390**
			⋆ **3406**
			1311-2
		X2816BM-25	⋆ **3390**
			⋆ **3406**
			1310-58
2817	AMD	AM2817A-2	1310-29
		AM2817A-20	1310-30
		AM2817A-25	1310-59
		AM2817A-3	1311-23
		AM2817A-35	1311-24
	Samsung	KM2817A-25	1310-62
		KM2817A-30	1311-3
		KM2817A-35	1311-26
	SEEQ	M2817A-200	1310-36
		M2817A-250	1310-68
		M2817A-300	1311-5
		2817A-200	⋆ **2991**
			1310-32
		2817A-250	⋆ **2991**
			1310-69
		2817A-300	⋆ **2991**
			1311-6
		2817AH-200	⋆ **2991**
			1310-33
		2817AH-250	⋆ **2991**
			1310-70
		2817AH-300	⋆ **2991**
			1311-7

Base Number	Source	Device	Page-Line
2818	DataTrans	DT2818	4850-11
	Thomson	μA2818	1208-23
282	Analogic	MP282A	1227-132
	National	AM282	904-5
			904-8
28201	OKI	MSM28201A	1302-21
2821	IPS	ULS2821	1002-98
	Mitsubishi	M2821	1107-150
	SiliconG	SG2821	1108-45
	Sprague	**ULN2821**	⋆ **3203**
			1002-103
			1108-15
		ULS2821	1002-106
			1108-30
2822	IPS	ULS2822	1002-109
	Mitsubishi	M2822	1107-151
	SGS	TDA2822M	1117-61
	SiliconG	SG2822	1108-46
	Sprague	**ULN2822**	⋆ **3203**
			1002-114
			1108-16
		ULS2822	1002-117
			1108-31
2823	IPS	ULS2823	1002-68
	Mitsubishi	M2823	1107-152
	SiliconG	SG2823	1108-47
	Sprague	**ULN2823**	⋆ **3203**
			1002-80
			1108-17
		ULS2823	1002-86
			1108-32
	Unitrode	**UC2823**	⋆ **3323**
			1225-1
2824	IPS	ULS2824	1002-49
	Mitsubishi	M2824	1107-153
	SiliconG	SG2824	1108-48
	Sprague	**ULN2824**	⋆ **3203**
			1002-56
			1108-18
		ULS2824	1002-59
			1108-33
	Thomson	μA2824	1209-2
2825	IPS	ULS2825	1002-69
	Sprague	**ULN2825**	⋆ **3203**
			1002-81
			1108-19
		ULS2825	1002-87
			1108-34
	Unitrode	**UC2825**	⋆ **3323**
			1220-25
28256	**Dense-Pac**	**DPE28256**	⋆ **2578**
			1313-64
	Xicor	**X28256**	⋆ **3393**
			⋆ **3412**
			1314-34
		X28256-25	⋆ **3393**
			⋆ **3412**
			1314-27
		X28256-35	⋆ **3393**
			⋆ **3412**
			1314-40
		X28256M	⋆ **3393**
			⋆ **3412**
			1314-35
		X28256M-25	⋆ **3393**
			⋆ **3412**
			1314-28
		X28256M-35	⋆ **3393**
			⋆ **3412**
			1314-41
2827	DataTrans	DT2827	4849-33
	Micrel	MIC2827	1393-20
2829	Telefunken	U2829B	1125-4
283	Cherry	CS283	884-110
	Dataram	DR283	4867-26
2831	**Motorola**	**MC2831**	⋆ **2959**
			1195-60
		MC2831A	⋆ **2939**
			⋆ **2959**
			1120-108
2833	AMD	AM2833C	1396-52
		AM2833M	1396-53
	Micrel	MIC2833	1396-46
		MIC2833A	1396-48
		MIC2833B	1396-49
		MIC2833C	1396-50
			(Continued)

Base Number	Source	Device	Page-Line
2833	Micrel		(Cont'd)
		MIC2833M	1396-47
	Motorola	**MC2833**	⋆ **2939**
			1120-109
	NEC	μPD2833	1190-41
	Sharp	**LH2833-15**	⋆ **2993**
			1337-51
2834	NEC	μPD2834	1190-42
	Unitrode	**UC2834**	⋆ **3324**
			1224-102
2835	**Unitrode**	**UC2835**	⋆ **3324**
			1227-24
			1227-25
2836	**Unitrode**	**UC2836**	⋆ **3324**
			1227-26
2838	Unitrode	UC2838	1222-117
284	National	AM284	909-40
			909-43
2840	SGS	UC2840	1217-60
	SiliconG	SG2840	1224-132
	Unitrode	**UC2840**	⋆ **3323**
			1218-48
	Western	WD2840A	885-50
2841	AMD	AM2841A	1304-32
		AM2841C	1304-29
		AM2841M	1304-30
	Plessey	MJ2841	1304-31
	SiliconG	SG2841	1006-12
	Sprague	UDN2841B	1106-149
	TI	UDN2841	1006-130
	Unitrode	**UC2841**	⋆ **3323**
			1225-17
2842	Cherry	CS2842A	1216-13
	Gennum	LS2842A	1220-16
	IPS	**IP2842**	⋆ **2856**
			1216-75
	Motorola	**UC2842A**	⋆ **2930**
			1218-67
	SGS	UC2842	1220-31
	Signetics	UC2842	1215-103
	SiliconG	SG2842	1220-37
	Siltronics	S2842	1193-60
	Unitrode	**UC2842**	⋆ **3323**
			1220-53
2843	Cherry	CS2843A	1216-14
	IPS	**IP2843**	⋆ **2856**
			1216-76
	Motorola	**UC2843A**	⋆ **2930**
			1218-68
	SiliconG	SG2843	1220-38
	Unitrode	**UC2843**	⋆ **3323**
			1220-54
2844	**IPS**	**IP2844**	⋆ **2856**
			1216-77
	Unitrode	**UC2844**	⋆ **3323**
			1220-55
2845	**IPS**	**IP2845**	⋆ **2856**
			1216-78
	TI	UDN2845	1006-131
	Unitrode	**UC2845**	⋆ **3323**
			1220-56
2846	SiliconG	SG2846	1220-39
	Unitrode	**UC2846**	⋆ **3323**
			1220-57
2847	AMD	AM2847C	1396-20
		AM2847M	1396-17
	Fairchild	F2847	1396-21
		F2847L	1396-22
		F2847LM	1396-18
		F2847M	1396-19
	SiliconG	SG2847	1220-40
	Unitrode	**UC2847**	⋆ **3323**
			1220-58
285	Motorola	LM285-1	1225-62
		LM285-2	1225-122
	National	AM285	909-57
			909-60
		LM285	1225-66
		LM285-1	1225-81
		LM285-2	1225-134
	SGS	LS285A	1198-69
			1198-76
2850	Siltronics	S2850	1127-48
	Unitrode	UC2850	1220-4
2851	DataTrans	DT2851	4849-12
2853	DataTrans	DT2853	4849-8

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
2855	AMD	AM2855	1396-30
2856	AMD	AM2856	1396-37
2857	AMD	AM2857C	1396-41
2858	DataTrans	DT2858	4849-4
286	AMD	iAPX286	845-4
	Comark	CAT286	4823-33
	Dataram	DR286	4881-1
	Den/Pas	DSB286/10A	4823-18
		DSB286/12	4823-19
	EdsunLabs	ACCELERATOR286	4850-42
		EL286-88	877-67
	Intel	iSBC286/10A	4823-20
		iSBC286/100A	4823-31
		iSBC286/12/14/16	4823-21
	Lomas	Lightning 286	4833-29
	Titan/SESCO		
		SECS286/010	4829-21
		SECS286/020	4829-22
	Zendex	ZX286/12	4823-10
2860	**Unitrode**	**UC2860**	* 3323 1227-93
2861	Thomson	SFC2861AM	1163-31
		SFC2861C	1167-3
		SFC2861M	1157-22
2862	Siltronics	S2862	1224-118
2864	**Dense-Pac**	**DPE2864**	* 2578 1311-75
		DPS2864	1369-16
		DPX2864	1369-72
	EXEL	XL2864A-250	1312-52
		XL2864A-300	1312-69
		XL2864A-350	1313-6
		XL2864A-450	1313-11
	National	NMH2864	1313-13
		NMH2864C	1313-14
	OKI	MSM2864A-25	1311-45
		MSM2864A-30	1311-47
		MSM2864A-35	1311-48
	Samsung	KM2864A	1312-31
	SEEQ	M2864-250	1312-58
		M2864H-250	1312-55
		M2864H-300	1313-22
		2864-250	* 2991 1312-59
		2864-300	* 2991 1312-79
		2864-350	* 2991 1312-60
		2864H-250	* 2991 1312-61
		2864H-300	* 2991 1312-80
	Xicor	**X2864A**	* 3391 * 3408 1312-77
		X2864A-25	* 3391 * 3408 1312-48
		X2864A-35	* 3391 * 3408 1313-2
		X2864A-45	* 3391 * 3408 1313-15
		X2864AM	* 3391 * 3408 1312-68
		X2864AM-25	* 3391 * 3408 1312-34
		X2864AM-35	* 3391 * 3408 1313-3
		X2864AM-45	* 3391 * 3408 1313-10
		X2864AT-35	* 3391 * 3408 1313-9
		X2864AT-45	* 3391 * 3408 1313-16

(Continued)

Base Number	Source	Device	Page-Line
2864	**Xicor**		**(Cont'd)**
		X2864B-12	* 3391 * 3408 1312-2
		X2864B-15	* 3391 * 3408 1312-13
		X2864B-18	* 3391 * 3408 1312-19
		X2864BM-12	* 3391 * 3408 1312-3
		X2864BM-15	* 3391 * 3408 1312-14
		X2864BM-18	* 3391 * 3408 1312-20
		X2864H-70	* 3391 * 3408 1311-60
		X2864H-90	* 3391 * 3408 1311-67
		X2864HM-70	* 3391 * 3408 1311-61
		X2864HM-90	* 3391 * 3408 1311-68
2865	EXEL	XL2865A-250	1312-53
		XL2865A-300	1312-70
		XL2865A-350	1313-7
		XL2865A-450	1313-12
	Samsung	KM2865A	1312-32
287	National	AM287	906-82 906-85
	TI	TL287C	1172-17
		TL287I	1172-2
2870	SGS	M2870	865-128
	Telefunken	U2870	865-122
	Thomson	MK2870	865-134
2872	SGS	M2872	865-129
2876	SGS	M2876	865-131
2877	National	LM2877	1117-136
2878	National	LM2878	1117-155
	Sprague	**UDN2878W**	* 3203 1006-16
2879	National	LM2879	1117-156
	Sprague	**UDN2879W**	* 3203 1006-84
288	**Dense-Pac**	**DPS288**	* 2578 1378-11
		DPS288KU	* 2578 1378-12 1380-79
		DPX288	1381-8
		DPX288KU	1378-13 1380-22
	National	AM288	907-13 907-16
	SGS	LS288	1198-27
	TI	TL288C	1175-16
		TL288I	1173-13
	Zendex	ZBX288	4860-49
28827	TI	SN28827	1228-122
28828	TI	SN28828	1228-123
2889	National	LM2889	1126-101
2895	National	LM2895	1117-33
2896	National	LM2896	1117-137
29	Force	CPU29	4843-21
	TeledyneC	CDA29A	908-53
	Wintek	**MRR29**	* 4913 4865-36
29C01	GE Semi	GE29C01	860-64
29C10	GE Semi	GE29C10	877-72
		GE29C10-16	877-93
29C128	**Calmos**	**CA29C128**	* 2553 637-1 883-54 888-106 ¶ 406-13
29C13	Intel	29C13	1192-126
	TI	TCM29C13	1192-82

Base Number	Source	Device	Page-Line
29C14	Intel	29C14	1192-1
	TI	TCM29C14	1192-135
29C16	Intel	29C16	1192-94
	TI	TCM29C16	1192-112
29C17	TI	TCM29C17	1192-74
29C18	TI	TCM29C18	646-74 1192-53
29C19	TI	TCM29C19	646-75 1192-54
29C50	Intel	29C50	1192-127
29C51	Intel	29C51	1192-128
29C512	EXEL	XL29C512	1314-50
29C520	LogicDev	L29C520	646-59
		L29C520C	637-20
		L29C520M	637-21
	MMI	29C520C	605-1
29C521	LogicDev	L29C521	646-60
		L29C521C	637-22
		L29C521M	637-23
	MMI	29C521C	605-2
29C53	Matra-Harris	29C53	882-12 1010-57 1199-142
29FCT52	**IDT**	**IDT29FCT52**	* 2808 642-62
		IDT29FCT52A	* 2808 642-63
29FCT520	**IDT**	**IDT29FCT520A**	* 2808 603-123
29FCT521	**IDT**	**IDT29FCT521A**	* 2808 603-124
29FCT53	**IDT**	**IDT29FCT53**	* 2808 642-64
		IDT29FCT53A	* 2808 642-65
29F52	Fairchild	29F52C	861-101
		29F52M	861-102
29F53	Fairchild	29F53C	861-103
		29F53M	861-104
29LS18	AMD	AM29LS18	667-88
29L509	AMD	AM29L509	657-129 861-36
29L510	AMD	AM29L510	657-130 861-38
29L516	AMD	AM29L516	644-63 861-41
29L517	AMD	AM29L517	644-64 861-42
29PCT520	Performance	P29PCT520	603-121
29PCT521	Performance	P29PCT521	603-122
29PCT818	Performance	P29PCT818	636-124
29PL141	**HiLevel**	**EM29PL141**	* 4752 4707-11
29VP864	Raytheon	29VP864	1326-17
29VS864	Raytheon	29VS864	1326-18
29V864	Raytheon	29V864	1311-74
		29V864A	1311-58
29X305	AMD	AM29X305A	819-19
290	National	AM290	908-1 908-2
	PMI	**OP290A**	* 2970 * 2972 1170-41
		OP290E	* 2970 * 2972 1170-40
		OP290F	* 2970 * 2972 1171-17

(Continued)

Base Number	Source	Device	Page-Line
290	**PMI**		**(Cont'd)**
		OP290G	* 2970 * 2972 1171-38
	SGS	L290	1221-81
2900	MicroInds	PG2900	4882-43
	Motorola	**LM2900**	* 2924 1135-47
		MCA2900ETL	4056-2
	National	LM2900	1135-49
	Raytheon	LM2900	1135-51
	TI	LM2900	1184-36
2901	AMD	AM2901	646-14
		AM2901AC	657-137
		AM2901AM	657-138
		AM2901B	817-31
		AM2901BC	657-139 860-48
		AM2901BM	657-140 860-49
		AM2901C	657-141 817-32
		AM2901M	657-142
	Cypress	CY2901	646-17
		CY2901BC	860-54
		CY2901BM	860-55
		CY2901C	819-4
		CY2901CC	860-56
		CY2901CM	860-57
	Fairchild	μA2901	1114-52
		2901	860-62
		2901-Cell	860-63
	GE Semi	2901	646-19
		2901-Cell	646-20 860-65
	GE/RCA	2901	646-21
	LSI Logic	2901	646-22
		2901-Cell	646-23 860-70
	Motorola	**LM2901**	* 2925 * 2958 1114-53
	National	ADM2901AC	657-146
		IDM2901	646-24
		IDM2901A-2	819-15 860-71
		IDM2901AC	860-72
		LM2901	1114-54
	NCR	NCR2901-Cell	646-25 860-73
	Raytheon	LM2901	1115-1
	SGS	LM2901	1115-2
	Signetics	LM2901	1115-3
	TI	LM2901	1113-1
		LP2901	1112-8
	Thomson	LM2901	1115-4
		SFC2901	646-26
		SFC2901B	657-149 819-17 860-74
		SFC2901C	819-18 860-75
		2901	646-28
		2901-Cell	646-29 860-77
	Unicorn	2901	646-30
	Unitrode	**UC2901**	* 3324 1224-86
	VLSI Tech	VSC2901-Cell	646-31 860-78
	Waferscale	**2901**	* 3376 646-32
		2901-Cell	* 3376 860-79
2901X4	IMI	2901X4	847-25 860-46
2902	AMD	AM2902AC	657-65 860-134
		AM2902AM	657-66 860-135
	Motorola	**LM2902**	* 2923 * 2958 1134-86
	National	IDM2902C	860-137
		IDM2902M	860-138
		LM2902	1134-88

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
2902	National		(Cont'd)
		LP2902	1189-4
	SGS	LM2902	1187-45
	TI	LM2902	1187-35
	Thomson	LM2902	1135-5
			1187-46
		SFC2902A	860-139
2903	AMD	AM2903	646-15
			819-1
		AM2903AC	860-50
		AM2903AM	860-51
		AM2903C	657-143
			860-52
		AM2903M	657-144
			860-53
	Motorola	**LM2903**	⋆ **2925**
			⋆ **2958**
			1113-2
	National	LM2903	1113-3
	SGS	LM2903	1113-4
	Signetics	LM2903	1113-5
	TI	LM2903	1113-6
	Thomson	LM2903	1113-7
		SFC-2903	819-16
		SFC2903	646-27
			860-76
	Unitrode	**UC2903**	⋆ **3324**
			1224-87
2904	AMD	AM2904C	860-125
		AM2904M	860-126
	GE/RCA	**CA2904**	⋆ **2645**
			1134-84
		LM2904	⋆ **2645**
			1180-7
	Hitachi	HD2904	985-27
	Motorola	**LM2904**	⋆ **2922**
			⋆ **2958**
			1134-87
	National	LM2904	1134-89
	Signetics	LM2904	1169-31
	Thomson	LM2904	1134-90
			1180-8
2905	AMD	AM2905C	860-80
			995-45
		AM2905M	860-81
			995-38
	Hitachi	HD2905	990-16
	National	LM2905	1201-11
2906	AMD	AM2906C	860-82
			995-46
		AM2906M	860-83
			995-39
	Unitrode	**UC2906**	⋆ **3324**
			1118-120
2907	AMD	AM2907C	860-84
			995-43
		AM2907M	860-85
			995-36
	Cherry	CS2907	1221-76
			1222-133
	National	LM2907	1127-106
			1221-79
	TI	LM2907	1221-86
2908	AMD	AM2908C	995-44
		AM2908M	995-37
2909	AMD	AM2909A	688-59
		AM2909AC	861-7
		AM2909C	688-60
			861-8
		AM2909M	688-61
	Cypress	CY2909AC	861-10
		CY2909AM	861-11
		CY2909C	861-12
		CY2909M	861-13
	National	IDM2909AC	688-66
			861-30
	TI	TCM2909	1193-10
	Thomson	SFC2909	688-71
			861-32
		SFC2909A	861-33
291	National	AM291	908-13
			908-16
	SGS	L291	1221-82
	Siemens	S291	1192-144

Base Number	Source	Device	Page-Line
2910	AMD	AM2910C	877-75
		AM2910M	877-76
	Intel	2910A	1193-1
	OEI	2910	1103-55
			1103-60
	TI	TCM2910A	1193-7
	Thomson	SFC2910	877-80
	VME-Microsys		
		VMIVME2910	4892-3
2911	AMD	AM2911A	688-62
			861-9
		AM2911C	688-63
		AM2911M	688-64
	Cypress	CY2911AC	861-14
		CY2911AM	861-15
		CY2911C	861-16
		CY2911M	861-17
	Intel	2911A-1	1192-37
	National	IDM2911AC	688-67
			861-31
	Samsung	KA2911	1126-110
	Thomson	SFC2911	861-34
		SFC2911A	688-72
			861-35
29112	AMD	AM29112	877-81
29116	AMD	AM29116	845-7
			¶ 409-7
			¶ 412-22
2912	AMD	AM2912C	860-86
			994-51
		AM2912M	994-52
	Hitachi	HD2912	999-121
	Intel	2912A	1195-37
			¶ 432-10
	Samsung	KA2912	1126-111
	TI	TCM2912B	1195-41
		TCM2912C	1195-42
2913	AMD	AM2913C	690-18
			861-56
			¶ 414-3
		AM2913M	690-19
			861-57
			¶ 414-3
	Intel	2913	1192-129
			¶ 432-14
	Samsung	KA2913	1126-77
	TI	TCM2913	1192-136
2914	AMD	AM2914C	861-53
			889-35
			¶ 414-3
		AM2914M	861-54
			889-36
			¶ 414-3
	Intel	2914	1192-130
			¶ 432-14
	Samsung	KA2914	1126-78
	TI	TCM2914	1192-137
	Thomson	SFC2914	861-55
			889-39
2915	AMD	AM2915AC	860-87
			994-35
		AM2915AM	860-88
			994-17
	Hitachi	HD2915	990-15
	Thomson	SFC2915A	860-99
			994-36
2916	AMD	AM2916AC	860-89
			994-37
		AM2916AM	860-90
			994-18
	Hitachi	HD2916	999-122
	Intel	2916	1192-95
	OKI	MSM2916	1389-47
	Samsung	KA2916	1126-112
	TI	TCM2916	1192-113
			1192-83
2917	AMD	AM2917AC	860-91
			994-38
		AM2917AM	860-92
			994-19
	Cherry	CS2917	1127-104
			1127-57
			1221-77
			1222-134
	Exar	XR2917	1127-105
			1221-78

(Continued)

Base Number	Source	Device	Page-Line
2917			(Cont'd)
	National	LM2917	1127-107
			1221-80
	TI	LM2917	1221-87
		TCM2917	1192-75
	Thomson	SFC2917	860-100
			994-39
2918	AMD	AM2918C	667-83
			861-73
		AM2918M	667-84
			861-74
	Thomson	SFC2918	667-85
			861-75
2919	AMD	AM2919C	667-81
			861-70
		AM2919M	667-82
			861-71
	Hitachi	HD2919	1004-84
	Thomson	SFC2919	861-72
292	National	LM292	1103-114
			1177-30
	SGS	L292	1221-83
	Unitrode	**L292**	⋆ **3326**
			1229-8
2920	AMD	AM2920C	668-48
			861-80
		AM2920M	668-49
			861-81
	Intel	2920	646-11
			1228-117
			¶ 406-11
			¶ 406-14
			¶ 406-26
	OEI	2920	1103-56
			1103-61
29203	AMD	AM29203	646-16
			819-2
2921	AMD	AM2921C	664-31
			861-94
		AM2921M	664-32
			861-95
	Intel	2921	646-12
			1228-118
			¶ 409-2
	Samsung	KA2921	1125-16
2922	AMD	AM2922C	681-94
			861-110
		AM2922M	681-95
			861-111
2923	AMD	AM2923C	681-139
			861-112
		AM2923M	681-140
	Hitachi	HD2923	1006-93
2924	AMD	AM2924C	665-47
			860-104
		AM2924M	665-48
	National	LM2924	1103-115
2925	AMD	AM2925C	860-101
		AM2925M	860-102
	National	LM2925	1202-82
2926	AMD	AM2926C	861-68
2927	AMD	AM2927C	860-93
2928	AMD	AM2928C	860-94
2929	AMD	AM2929C	861-69
293	**IPS**	**IP293**	⋆ **2854**
			1003-79
		IP293D	⋆ **2854**
			1003-78
		IP293DA	⋆ **2854**
			1004-90
		IP293E	⋆ **2854**
			1004-91
		IP293L	⋆ **2854**
			1001-42
	Motorola	**LM293**	⋆ **2925**
			⋆ **2958**
			1112-39
		LM293A	⋆ **2925**
			⋆ **2958**
			1111-32
	National	LM293	1112-41
		LM293A	1111-34
	SGS	LM293	1112-44
		LM293A	1111-37
		L293	1221-84
		L293E	1006-3

(Continued)

Base Number	Source	Device	Page-Line
293	SGS		(Cont'd)
		M293	1125-2
	Signetics	LM293	1112-46
		LM293A	1112-47
	SiliconG	SG293D	1006-4
	TI	LM293	1112-50
		L293	1003-82
		L293D	1003-83
	Unitrode	**L293**	⋆ **3326**
			1003-94
		L293D	⋆ **3326**
			1006-5
		L293E	⋆ **3326**
			1006-6
2930	National	LM2930-5	1202-44
		LM2930-8	1204-82
	OEI	2930	1103-53
	TI	LM2930-5	1202-35
		LM2930-8	1204-81
2931	**Motorola**	**LM2931-5**	⋆ **2926**
			⋆ **2929**
			⋆ **2958**
			1202-16
		LM2931A-5.0	⋆ **2926**
			⋆ **2929**
			⋆ **2958**
			1202-17
	National	LM2931	1213-19
		LM2931-5	1203-18
	Sprague	**UDN2931B**	⋆ **3203**
			1003-55
2932	OKI	MSM2932	1389-77
29323	AMD	AM29323	644-90
2933	**Sprague**	**UDN2933B**	⋆ **3203**
			1003-100
		UDS2933H	1003-62
			1003-98
2934	**Sprague**	**UDN2934B**	⋆ **3203**
			1003-104
		UDS2934H	1003-63
			1003-99
2935	National	LM2935	1202-83
			1212-105
	SGS	LM2935	1202-84
			1212-106
	Sprague	**UDN2935Z**	⋆ **3203**
			1003-56
2936	**Sprague**	**UDN2936W**	⋆ **3203**
			1003-95
2937	**Sprague**	**UDN2937W**	⋆ **3203**
			1003-96
2938	**Sprague**	**UDN2938W**	⋆ **3203**
			1003-101
2939	**Sprague**	**UDN2939B**	⋆ **3203**
			1003-102
2940	AMD	AM2940C	860-105
		AM2940M	860-106
	National	LM2940-12	1206-38
		LM2940-15	1207-62
		LM2940-5	1203-19
		LM2940C-12	1202-93
		LM2940C-15	1202-94
		LM2940C-5.0	1202-95
2941	**Sprague**	**UDN2941B**	⋆ **3203**
			1001-75
2942	AMD	AM2942C	860-107
		AM2942M	860-108
2943	**Sprague**	**UDN2943Z**	⋆ **3203**
			1003-57
2944	**Sprague**	**UDN2944W**	⋆ **3203**
			1006-101
			1006-87
2946	AMD	AM2946C	860-95
2947	AMD	AM2947C	860-96
2948	AMD	AM2948C	860-97
	Sprague	**UDN2948W**	⋆ **3203**
			1001-77
2949	AMD	AM2949C	860-98
	Sprague	UDN2949Z	1003-58
295	AD	AD295	1103-43
	National	LM295	1219-98
	SGS	L295	1005-153
	TI	LM295A	1111-40
	Unitrode	**L295**	⋆ **3326**
			1005-154

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
295	**Unitrode**		**(Cont'd)**
		UC295	★ **3327**
			1003-114
2950	AMD	AM2950C	861-106
		AM2950M	861-107
	National	LP2950A	1202-23
		LP2950C	1202-24
	Sprague	**UDN2950Z**	★ **3203**
			1003-59
	Unitrode	**UC2950**	★ **3326**
			1001-52
29501	AMD	AM29501	646-1
29509	AMD	AM29509	644-94
			861-37
2951	AMD	AM2951C	861-108
		AM2951M	861-109
	National	LP2951A	1202-25
		LP2951C	1202-26
	Sprague	**UDN2951**	★ **3203**
			1003-60
29510	AMD	AM29510	644-99
			861-39
29516	AMD	AM29516	644-65
29517	AMD	AM29517	644-66
2952	AMD	AM2952C	861-97
		AM2952M	861-98
29520	AMD	AM29520	646-55
29521	AMD	AM29521	646-56
2953	AMD	AM2953C	861-99
		AM2953M	861-100
	Sprague	**UDN2953B**	★ **3203**
			1003-47
			¶ 425-27
2954	AMD	AM2954C	669-1
			861-92
		AM2954M	669-2
	Sprague	**UDN2954W**	★ **3203**
			1003-48
29540	AMD	AM29540	646-104
2955	AMD	AM2955C	668-182
			861-93
		AM2955M	668-183
	Sprague	**UDN2955**	★ **3203**
			1003-61
2956	AMD	AM2956C	677-30
			861-84
		AM2956M	677-31
	Sprague	UDN2956A	1107-41
			1197-86
2957	AMD	AM2957C	677-28
			861-85
	Sprague	UDN2957A	1001-78
			1004-106
			1107-42
			1197-87
		UDQ2957R	1003-4
2958	AMD	AM2958C	861-78
2959	AMD	AM2959C	861-79
296	SGS	L296	1217-45
		L296P	1217-46
	Unitrode	**L296**	★ **3323**
			1217-125
2960	AMD	AM2960	982-28
		AM2960-1	860-124
			982-53
		AM2960C	860-120
		AM2960M	860-121
	Signetics	**2960**	★ **3085**
			982-43
2961	AMD	AM2961C	860-127
		AM2961M	860-128
2962	AMD	AM2962C	860-129
	Sprague	**UDN2962**	★ **3203**
			1005-152
29623	**Raytheon**	**29623**	★ **2985**
			1318-23
29631	**Raytheon**	**29631A**	★ **2985**
			1319-58
			1319-59
29633	**Raytheon**	**29633A**	★ **2985**
			1319-60
			1319-61
			1319-64
			1319-65
		29633C	★ **2985**
			1319-79

Base Number	Source	Device	Page-Line
2964	AMD	AM2964B	860-109
		AM2964BC	860-110
		AM2964BM	860-111
	Signetics	2964B	999-67
2965	AMD	AM2965C	861-86
			1000-21
		AM2965M	861-87
			1000-22
	OKI	MSM2965	1390-57
	Sprague	**UDN2965W-2**	
			★ **3203**
			1004-44
29651	**Raytheon**	**29651A**	★ **2985**
			1320-20
		29651C	★ **2985**
			1320-27
		29651M	★ **2985**
			1320-31
29653	**Raytheon**	**29653A**	★ **2985**
			1320-21
		29653C	★ **2985**
			1320-28
		29653M	★ **2985**
			1320-32
2966	AMD	AM2966C	861-88
			1000-23
		AM2966M	861-89
			1000-24
29671	**Raytheon**	**29671**	★ **2985**
			1323-63
			1323-64
			1323-69
			1323-70
		29671A	★ **2985**
			1323-61
			1323-62
			1323-65
			1323-66
29673	**Raytheon**	**29673**	★ **2985**
			1323-67
			1323-68
			1323-71
			1323-72
2968	AMD	AM2968	860-112
			999-66
29681	**Raytheon**	**29681**	★ **2985**
			1322-54
		29681A	★ **2985**
			1322-10
			1322-44
			1322-45
			1322-9
29683	**Raytheon**	**29683**	★ **2985**
			1322-56
		29683A	★ **2985**
			1322-11
			1322-12
			1322-46
			1322-47
2969	AMD	AM2969	861-1
			999-64
2970	AMD	AM2970	861-4
			999-65
	National	IDM2970C	1347-105
29704	AMD	AM29704C	678-115
		AM29704M	678-116
29705	AMD	AM29705C	678-117
			861-60
			1348-1
		AM29705M	678-118
			861-61
			1348-9
	National	F29705M	1348-2
		IDM29705	1348-3
		IDM29705AC	678-119
			861-67
		IDM29705C	678-120
			1347-100
		IDM29705M	678-121
29707	AMD	AM29707	861-62
2971	AMD	AM2971C	861-58
		AM2971M	861-59
29720	AMD	AM29720C	1348-82
		AM29720M	1348-91
29721	AMD	AM29721C	1348-85
		AM29721M	1348-93

Base Number	Source	Device	Page-Line
2976	AMD	AM2976C	999-31
		AM2976M	999-32
	Sprague	UDN2976W	1005-155
29760	AMD	AM29760AM	1316-89
298	AMD	LF298	1227-110
	Burr-Brown	**SHC298AM**	★ **2543**
			1227-134
	Fairchild	μA298C	1228-8
	National	LF298	1228-60
		LF298A	1228-61
	SGS	L298	1228-85
	Signetics	LF298	1228-87
	TI	L298	1003-80
	Unitrode	**L298**	★ **3326**
			1222-128
29803	AMD	AM29803AC	861-114
		AM29803AM	861-115
	National	IDM29803C	861-116
		IDM29803M	861-117
29806	AMD	AM29806	861-96
		AM29806C	665-122
		AM29806M	665-123
29809	AMD	AM29809	861-113
		AM29809C	656-141
		AM29809M	656-142
2981	Mitsubishi	M2981	1107-154
	Sprague	**UDN2981A**	★ **3203**
			1002-90
			1107-166
		UDS2981	1002-93
			1108-1
29811	AMD	AM29811AC	861-47
		AM29811AM	861-48
	National	IDM29811C	861-49
		IDM29811M	861-50
29818	AMD	AM29818	861-105
		AM29818C	682-74
		AM29818M	682-75
2982	Mitsubishi	M2982	1107-155
	Sprague	**UDN2982A**	★ **3203**
			1002-60
			1107-167
		UDS2982	1002-62
			1108-2
29821	AMD	AM29821	684-49
29822	AMD	AM29822	684-50
29823	AMD	AM29823	684-45
29824	AMD	AM29824	684-46
29825	AMD	AM29825	683-101
29826	AMD	AM29826	683-102
29827	AMD	AM29827	659-58
29828	AMD	AM29828	659-59
2983	Mitsubishi	M2983	1107-156
	Sprague	**UDN2983A**	★ **3203**
			1002-91
			1107-168
		UDS2983	1002-94
			1108-3
29833	AMD	AM29833	687-145
29834	AMD	AM29834	687-146
2984	Mitsubishi	M2984	1107-157
	National	LM2984C	1219-1
	Sprague	**UDN2984A**	★ **3203**
			1002-61
			1107-169
		UDS2984	1002-63
			1108-4
29841	AMD	AM29841	678-43
29842	AMD	AM29842	678-44
29843	AMD	AM29843	678-31
29844	AMD	AM29844	678-32
29845	AMD	AM29845	678-10
29846	AMD	AM29846	678-11
2985	**Sprague**	**UDN2985A**	★ **3203**
			1002-92
29853	AMD	AM29853	687-147
29854	AMD	AM29854	687-148
2986	**Sprague**	**UDN2986A**	★ **3203**
			1002-120
29861	AMD	AM29861	687-157
29862	AMD	AM29862	687-158
29863	AMD	AM29863	687-156
29864	AMD	AM29864	687-153
2987	**Sprague**	**UDN2987A**	★ **3203**
			1007-33

Base Number	Source	Device	Page-Line
299	Cherry	CS299D	1005-151
	National	LM299	1226-69
		LM299A	1226-70
29901	National	IDM29901C	861-82
		IDM29901M	861-83
29902	National	IDM29902C	861-51
		IDM29902M	861-52
29903	National	IDM29903C	861-120
29908	National	IDM29908C	861-76
		IDM29908M	861-77
2993	**Sprague**	**UDN2993B**	★ **3203**
			1003-49
2998	**Sprague**	**UDN2998W**	★ **3203**
			1003-50
3	AdvMicroSys		
		SM3	4871-41
	Burr-Brown	PWR3XX	1220-141
	Calmos	SMC3	4082-25
	Datel	FLJ-R3	1219-11
	Force	CPU3	4835-24
		RR3	4889-17
		SRAM3	4890-16
	Gordos	PAM3	4876-29
	Intelicom	STD-SX3-A	4878-44
		STD-WW3-A	4879-22
	Interdesign	ULA 3P	4066-36
		ULA3G	4066-24
		ULA3RA	4044-36
		ULA3RB	4044-37
		ULA3RC	4044-38
		ULA3RD	4044-39
	Magnum	S-MEM3	4894-28
	Matrix	CP3	4821-23
	Micro-Rel	D3 Library	4085-6
	Octagon	SYS3Z	4819-11
	PEP-Modular		
		CIM3	4852-17
	Sharp	SM3A	813-35
			862-27
	Sierra	CMOS 3	
		Micron	4086-4
	Siliconix	ISO-3 Library	4086-12
	Supertex	SD3A	1127-80
	Tektronix	QuickChip 3	646-71
			4069-15
	Thomson	MDX-CPU3	4819-32
	TLSI	TA3	4061-52
	VersaLogic	IPI-3	4875-27
	WinSystems	LPM-SBC3	4815-14
		LPMCPU3-2	4813-32
		MCMSBC3	4815-7
3B2	NationalInst	GPIB3B2	4827-8
3C01	Sharp	IR3C01	1001-27
3C02	Sharp	IR3C02	1001-28
		IR3C02A/N	1001-29
3C03	Sharp	IR3C03N	1003-67
3C05	Sharp	IR3C05	1001-30
3C07	Sharp	IR3C07/N	1222-87
3D03	**IPS**	**IP3D03**	★ **2854**
			1004-66
3D08	**IPS**	**IP3D08**	★ **2855**
			1006-90
		IP3D08A	★ **2855**
			1006-91
3D09	**IPS**	**IP3D09**	★ **2855**
			1006-92
3F01	Sharp	IR3F01	1180-50
3F02	Sharp	IR3F02	1179-40
3G01	Barvon	BC3G01	4065-9
3G02	Barvon	BC3G02	4065-8
3K01	Sharp	IR3K01	924-12
3K02	Sharp	IR3K02	944-12
3K03	Sharp	IR3K03	917-45
3K04	Sharp	IR3K04A	918-3
3K12	Sharp	IR3K12	967-22
3K16	Sharp	IR3K16A	974-20
		IR3K16B	973-29
		IR3K16BM	973-30
3K17	Sharp	IR3K17	976-13
3L06	Panatech	RF3L06	1123-75
3M01	Sharp	IR3M01	1217-63
3M011G2	ICDC	C3M011G2	4051-3
3M016G2	ICDC	C3M016G2	4051-6

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
3M02	**IPS**	**IP3M02**	⋆ **2854**
			1004-92
	Sharp	IR3M02	1217-64
		IR3M02A/N	1217-65
3M024G2			
	ICDC	C3M024G2	4051-8
3M03	Sharp	IR3M03A	1221-2
3M038G2			
	ICDC	C3M038G2	4051-10
3M05	**IPS**	**IP3M05**	⋆ **2854**
			1004-71
3M10	**IPS**	**IP3M10**	⋆ **2855**
			1003-74
3M11	**IPS**	**IP3M11**	⋆ **2855**
			1004-72
3M20	**IPS**	**IP3M20**	⋆ **2855**
			1003-75
3M21	**IPS**	**IP3M21**	⋆ **2855**
			1004-73
3N05	Sharp	IR3N05/N	1198-118
3N06	Sharp	IR3N06	1121-68
3N31	Sharp	IR3N31	1198-31
3N32	Sharp	IR3N32/N	1199-105
3N33	Sharp	IR3N33	1198-9
3N34	Sharp	IR3N34/N	1199-106
3N37	Sharp	IR3N37/N	1125-48
3N38	Sharp	IR3N38	1198-46
3N81	Sharp	IR3N81	1198-10
3N84	Sharp	IR3N84	1198-12
3P00	**IPS**	**IP3P00**	⋆ **2854**
			⋆ **2856**
			1215-117
3P01	**IPS**	**IP3P01**	⋆ **2854**
			1215-118
3P02	Sharp	IR3P02	1126-40
3P125	**IPS**	**IP3P125**	⋆ **2854**
			⋆ **2856**
			1215-108
3R07	**IPS**	**IP3R07**	⋆ **2854**
			⋆ **2857**
			1213-9
		IP3R07A	⋆ **2854**
			⋆ **2857**
			1213-10
3R17	**IPS**	**IP3R17A-05**	⋆ **2854**
			⋆ **2857**
			1209-61
		IP3R17A-12	⋆ **2854**
			⋆ **2857**
			1210-98
		IP3R17A-15	⋆ **2854**
			⋆ **2857**
			1211-60
		IP3R17A-5.2	⋆ **2854**
			⋆ **2857**
			1210-19
3R18	**IPS**	**IP3R18A-05**	⋆ **2854**
			⋆ **2857**
			1202-9
		IP3R18A-12	⋆ **2854**
			⋆ **2857**
			1205-75
		IP3R18A-15	⋆ **2854**
			⋆ **2857**
			1206-105
3R19	**IPS**	**IP3R19A-05**	⋆ **2854**
			⋆ **2857**
			1209-64
		IP3R19A-12	⋆ **2854**
			⋆ **2857**
			1210-101
		IP3R19A-15	⋆ **2854**
			⋆ **2857**
			1211-63
		IP3R19A-5.2	⋆ **2854**
			⋆ **2857**
			1210-22
3T20	Sharp	IR3T20	1122-38
3T21	Sharp	IR3T21	1122-39
3V20	Dense-Pac	DPD3V20	1339-33
30	Raytheon	RF30	688-88
	TeledyneC	CAG30	902-61
	Ziatech	zSBX 30	4865-23
		zSBX30	4854-38
30C30	Western	WD30C30	887-16
30L90	Raytheon	CGA30L90	4058-43
30S54	Fairchild	F30S54	1192-87
30S57	Fairchild	μA30S57	1192-56
30S64	Fairchild	F30S64	1192-88
30S67	Fairchild	F30S67	1192-58
30T00	**Signetics**	**ACE30T00**	⋆ **4301**
			⋆ **4303**
			4060-35
300	ArrayTech	DHS300	4041-32
		HCD300	4041-33
	AT&T	**ALA300**	⋆ **4208**
			4065-5
	CMD ASIC	**CSC300**	⋆ **4216**
			4082-15
	Comlinear	CLC300A	1166-3
	CompDyn	CDI300	4703-13
	Cybernetic	CY300	883-67
			980-61
	Datel	**ADC-B300E**	⋆ **2575**
			4894-54
		ADC300	⋆ **2572**
			⋆ **2575**
			917-44
	Dionics	DI300	980-116
	Exar	XR300	4044-7
	Harris	**HI300**	⋆ **2707**
			902-81
	Intel	iSBC300	4853-24
	ITT	SAJ300	1119-62
	LSIComp	**RED300/360**	⋆ **2867**
			633-75
			692-54
	Maxim	DG300AA	902-84
		DG300AB	902-85
		DG300AC	902-86
	Micom Int	NP300	4857-25
	Micro-Link	VME300	4889-22
	Mitchell	M/E300	4815-16
		M/E300A	4815-35
		M/E300C	4815-17
		M/E300CA	4817-7
	Motorola	**HDS300**	⋆ **4755**
			4713-2
		MVME300	4882-10
	NCM	NCM300XZ	4056-44
			4056-45
			4056-46
	Raytheon	RG300	674-107
	SBE	SBE300	4717-7
	Siliconix	DG300AA	903-1
			¶ 427-11
3000	**AT&T**	**TE3000**	⋆ **4211**
			4064-14
	Cherry	CS3000F	4065-18
		CS3000X	4065-14
	Exar	P3000	4082-29
	Faraday	FE3000A	881-71
	Fujitsu	**C3000UHB**	⋆ **4229**
			⋆ **4233**
			4046-25
		ET3000	⋆ **4230**
			4046-32
	Galil	MCC3000	1222-131
	GE/RCA	**CA3000**	⋆ **2647**
			1102-72
	Gould	GA3000D	4048-39
		GB3000D	⋆ **4244**
			4048-40
	Honeywell	HM3000/RAM	4049-44
	LSIComp	**RED3000/3600**	
			⋆ **2867**
			633-76
			692-57
	MicroNet	MN3000	946-50
		MN3000H	947-1
	Motorola	**MCA3000ECL**	
			⋆ **4287**
			4056-4
	NCR	NCRVS3000	4085-13
	SGS	L3000	1195-80
	Thomson	GB3000D	4055-21
		MKGA3000D	4055-20
		MKGB3000D	4055-22
	TLSI	TA3000D	4062-4
	TriQuint	**TQ3000**	⋆ **3309**
			4062-35
	Universal	USCL3000	885-68
			(Continued)
3000			(Cont'd)
	VTC	**VL3000**	⋆ **4336**
			4069-26
			¶ 452-13
30000	Fujitsu	C30000AU	4047-13
	Gould	**GC30000**	⋆ **4244**
			4048-52
3001	**GE/RCA**	**CA3001**	⋆ **2647**
			1104-80
	Intel	M3001	688-65
	MicroNet	MN3001	947-2
		MN3001H	947-3
	Motorola	MC3001	671-20
	Panasonic	MN3001	1118-65
			1219-52
	Signetics	N3001	688-68
			803-4
			860-44
			¶ 413-31
			¶ 413-35
		S3001	688-70
			860-45
	Siliconix	VQ3001	1006-122
	Supertex	VQ3001	1006-128
30015	Exar	30015	4044-2
3002	**CMD ASIC**	**C3002**	⋆ **4214**
			4042-52
	GE/RCA	**CA3002**	⋆ **2647**
			1121-7
	Intel	3002	657-145
	MicroNet	MN3002	947-4
		MN3002H	947-5
	Motorola	MC3002	675-71
	Panasonic	MN3002	1219-64
	Signetics	N3002	657-147
			803-5
			860-42
			¶ 413-17
			¶ 413-31
			¶ 413-35
		S3002	657-148
			860-43
	Siliconix	Si3002	906-19
3003	**Intech**	**DAC3003**	⋆ **2799**
			952-44
	MicroNet	MN3003	952-45
		MN3003H	952-46
	Motorola	MC3003	674-141
	Panasonic	MN3003	1219-53
30030	Exar	30030	4044-6
3004	**CMD ASIC**	**C3004**	⋆ **4214**
			4042-53
	Fujitsu	ETM3004	4046-33
		ET3004M	⋆ **4230**
			4046-29
	MicroNet	MN3004	953-1
		MN3004H	953-2
	Panasonic	MN3004	1219-65
	Signetics	SAA3004	1122-32
30045	Exar	30045	4044-9
3005	**GE/RCA**	**CA3005**	⋆ **2647**
			1121-8
			1122-41
			¶ 435-4
	MicroNet	MN3005	953-3
		MN3005H	953-4
	Panasonic	MN3005	1219-63
3006	**GE/RCA**	**CA3006**	⋆ **2647**
			1121-9
			1122-42
	MicroNet	MN3006	947-6
		MN3006H	947-7
	Panasonic	MN3006	1219-58
	Signetics	SAA3006	1122-53
3007	MicroNet	MN3007	953-5
		MN3007H	953-6
	Panasonic	MN3007	1219-55
3008	**CMD ASIC**	**C3008**	⋆ **4214**
			4043-2
	iLSi	CB3008	4050-18
	LMS	C3008	889-42
	MicroNet	MN3008	946-13
		MN3008H	946-14
	Panasonic	MN3008	1219-59
	RIFA	PBA3008	1201-1
30080	Exar	30080	4044-11
3009	MicroNet	MN3009	946-15
		MN3009H	946-16
	NCM	NCM3009Z	1125-77
	Panasonic	MN3009	1219-60
	RIFA	PBA3009	1201-2
301	Abionics	MX301	4855-8
	AD	AD301A	1164-11
		AD301AL	1146-54
	AT&T	**ALA301**	⋆ **4208**
			4065-6
	Datel	**ADC-B301E**	⋆ **2575**
			4895-1
		ADC301	⋆ **2572**
			⋆ **2575**
			917-30
	Excelan	EXOS301	4857-5
			4858-6
	Fairchild	μA301AC	1164-12
	GE/RCA	**CA301A**	⋆ **2645**
			1164-13
		GP301AD	862-9
		LM301A	⋆ **2645**
			1163-41
	Harris	**HI301**	⋆ **2707**
			906-33
	Intel	iSBC301	4853-19
	Maxim	DG301AA	906-36
		DG301AB	906-37
		DG301AC	906-38
	MicroInds	mSBC301	4861-55
	MicroPwr	MP301	1106-106
	Micro-Link	STD301	4877-13
	Motorola	**LM301A**	⋆ **2919**
			⋆ **2958**
			1164-14
	National	LM301A	1164-15
	NEC	μPC301A	1164-16
	Plessey	SL301L	1106-118
	SGS	LM301A	1164-3
	SiliconG	SG301A	1164-17
	Siliconix	DG301AA	906-46
			¶ 427-11
	Systek	SBX301	4860-46
	TeledyneC	CSR301	977-84
			1004-110
	TeledyneS	301A/C	654-33
		301B/M	654-34
	TI	LM301A	1164-2
	Thomson	LM301A	1164-18
3010	Faraday	FE3010	881-73
	GE/RCA	**CA3010**	⋆ **2645**
			1161-37
	Intech	3010	1219-46
	NCM	NCM3010Z	1125-45
	Panasonic	MN3010	1118-66
			1219-54
	Sharp	LI3010	863-69
30108	Analogic	AC30108	917-39
3011	Bipolar	B3011	647-2
	GE/RCA	CA3011	1104-81
			¶ 435-4
	National	LM3011	1121-39
	Panasonic	MN3011	1219-61
30110	Analogic	AC30110	927-13
30116	Analogic	AC30116	937-36
3012	GE/RCA	CA3012	1121-10
			¶ 435-4
	Panasonic	MN3012	1219-62
3013	GE/RCA	CA3013	1121-24
			¶ 435-4
	MicroNet	MN3013	947-8
		MN3013H	947-9
	Signetics	SAB3013	1124-119
	Sprague	UGN3013	692-80
			1221-95
3014	GE/RCA	CA3014	1121-25
			¶ 435-4
	MicroNet	MN3014	946-29
		MN3014H	946-30
3015	**CMD ASIC**	**C3015**	⋆ **4214**
			4043-4
	GE/RCA	**CA3015**	⋆ **2645**
			1135-79
			1161-46
30155	Exar	30155	4044-12

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
3016	Marconi	MA3016	4053-45
	Marinco	APB3016PC	4850-22
3017	iLSi	CB3017	4050-22
3018	Bipolar	B3018	647-14
	CMD ASIC	**C3018**	⋆ **4214**
			4043-5
	GE/RCA	**CA3018**	⋆ **2648**
			1106-1
			¶ 431-23
		CA3018A	⋆ **2648**
			1106-2
			¶ 431-23
3019	**GE/RCA**	**CA3019**	⋆ **2649**
			1108-56
			¶ 431-24
	Sprague	UGN3019	692-81
			1221-96
		UGS3019	692-85
			1221-100
302	Anasco	44-302	4890-14
	Datel	**ADC-B302E**	⋆ **2575**
			4895-2
		ADC302	⋆ **2572**
			⋆ **2575**
			917-28
	Dionics	DI302	980-117
	GE/RCA	GP302AD	862-10
	Harris	**HI302**	⋆ **2707**
			908-85
		HS302RH	⋆ **2719**
			909-15
	Intel	iSBC302	4853-21
	Maxim	DG302AA	908-88
		DG302AB	908-89
		DG302AC	908-90
	MicroPwr	MP302	1106-107
		MP302DIA	908-98
		MP302DIC	908-99
	National	LM302	1128-43
	Siliconix	DG302AA	908-100
			¶ 427-11
	TeledyneS	302A/C	654-29
		302B/M	654-30
3020	Aptek	AMS3020	1199-88
	Faraday	FE3020	881-70
	GE/RCA	**CA3020**	⋆ **2649**
			1117-27
		CA3020A	⋆ **2649**
			1104-82
	GoldStar	**GCL3020**	⋆ **4242**
			4047-29
		LL3020	4047-30
	HybridSys	HS3020B	946-33
		HS3020C	946-34
	HyComp	HC3020	1103-3
			1147-13
	Intech	3020	1219-47
	MicroNet	MN3020	946-35
		MN3020H	946-36
	National	TP3020	1193-2
	Sprague	UGN3020	692-82
		UGS3020	692-86
	Xilinx	**XC3020**	⋆ **4344**
			4043-35
			4081-50
30208	Analogic	AC30208	917-29
3021	Motorola	MC3021	676-5
	National	TP3021	1192-39
3022	Motorola	MC3022	676-83
3023	Aptek	AMS3023	1199-89
	iLSi	CB3023	4050-26
3024	Aptek	AMS3024	1199-90
	Marconi	MA3024	4053-48
	Marinco	APB3024AT	4850-21
		APB3024M	4861-14
3026	**CMD ASIC**	**C3026**	⋆ **4214**
			4043-9
	GE/RCA	**CA3026**	⋆ **2647**
			⋆ **2649**
			1106-60
	Motorola	MC3026	670-95
3027	Signetics	SAA3027	1122-33
3028	**GE/RCA**	**CA3028**	⋆ **2647**
			1121-11
		CA3028A	⋆ **2647**
			1102-69
			(Continued)

Base Number	Source	Device	Page-Line
3028	**GE/RCA**		**(Cont'd)**
		CA3028B	⋆ **2647**
			1102-70
	Signetics	SAA3028	1122-34
3029	**GE/RCA**	**CA3029**	⋆ **2645**
			1161-38
303	**Datel**	**ADCB303E**	⋆ **2575**
			917-27
		ADC303	⋆ **2572**
			⋆ **2575**
			917-26
	Harris	**HI303**	⋆ **2707**
			907-40
		HS303RH	⋆ **2719**
			907-31
	Maxim	DG303AA	907-43
		DG303AB	907-44
		DG303AC	907-45
	MicroPwr	MP303	1106-108
		MP303DIA	907-53
		MP303DIC	907-54
	Micro-Link	STD303	4878-12
	Siliconix	DGP303A	907-29
		DGP303D	907-30
		DG303AA	907-55
			¶ 427-11
	TeledyneS	303A/C	654-58
		303B/M	654-59
3030	Faraday	FE3030	881-72
	GE/RCA	**CA3030**	⋆ **2645**
			1135-80
			1161-47
	GoldStar	**GCL3030**	⋆ **4242**
			4047-31
		LL3030	4047-32
	Intech	3030	1219-45
	Sprague	UGN3030	692-83
			1221-97
		UGS3030	692-87
			1221-101
	Xilinx	**XC3030**	⋆ **4344**
			4043-36
			4081-51
30300	Exar	30300	4044-13
30308	Analogic	AC30308	917-25
3031	**CMD ASIC**	**C3031**	⋆ **4214**
			4043-11
	iLSi	CB3031	4050-29
3032	TRW-LSI	TMC3032	602-128
		TMC3032-1	602-127
3033	TRW-LSI	TMC3033	602-129
		TMC3033-1	602-130
3034	Telefunken	U3034	1122-83
3035	Signetics	SAB3035	1124-126
			1125-5
	Sprague	UGN3035U	1002-152
3036	Signetics	SAB3036	1124-127
	Telefunken	U3036	1122-84
3037	**GE/RCA**	**CA3037**	⋆ **2646**
			1161-39
	Signetics	SAB3037	1124-128
	Telefunken	U3037	1122-85
3038	**GE/RCA**	**CA3038**	⋆ **2646**
			1135-81
			1161-48
	Marconi	MA3038	4053-52
	Telefunken	U3038	1122-86
3039	**GE/RCA**	**CA3039**	⋆ **2649**
			1108-58
304	Abionics	MX304	4855-9
	CharlesRiver		
		TP304	4892-20
	Datel	ADC-B304E	4895-21
		ADCB304E	⋆ **2575**
			918-2
		ADC304	⋆ **2575**
			917-38
	Excelan	EXOS304	4880-6
			4880-9
	Harris	**HI304**	⋆ **2707**
			902-82
	Intel	iSBC304	4853-28
	Maxim	DG304AA	902-87
		DG304AB	902-88
		DG304AC	902-89
	MicroInds	mSBC304C	4861-56
			(Continued)

Base Number	Source	Device	Page-Line
304			(Cont'd)
	Micro-Link	STD304	4877-14
	National	LM304	1214-120
	SiliconG	SG304	1214-121
			1215-51
	Siliconix	DG304AA	903-2
			¶ 427-11
	TeledyneS	304A/C	654-70
		304B/M	654-71
	Thomson	LM304	1214-122
304D2	FujitsuA	FBC304D2A	4894-13
304M1	FujitsuA	FBC304M1A	4894-12
3040	**GE/RCA**	**CA3040**	⋆ **2647**
			1104-83
	GoldStar	**GCL3040**	⋆ **4242**
			4047-33
		LL3040	4047-34
	Intech	3040	1230-36
	MicroNet	MN3040	952-32
		MN3040H	952-33
	National	TP3040	1195-38
		TP3040A	1195-39
	Sprague	UGN3040	692-84
			1221-98
		UGN3040T	1002-153
		UGN3040U	1002-154
		UGS3040T	1002-157
		UGS3040U	1002-158
	Telefunken	U3040	984-11
			1124-133
3041	Intech	3041	1230-35
	iLSi	CB3041	4050-31
3042	Intel	iSBC3042	4853-29
	Sanyo	STK3042	1116-124
	Telefunken	U3042	1122-101
	Xilinx	**XC3042**	⋆ **4344**
			4043-37
			4081-52
3043	**GoldStar**	**GM3043**	⋆ **2700**
			1122-45
	Telefunken	U3043	1122-87
		U3043M	1102-9
3044	Aptek	AMS3044	1194-122
	GoldStar	**GM3044**	⋆ **2700**
			1122-46
3045	Aptek	AMS3045	1194-123
	GE/RCA	**CA3045**	⋆ **2648**
			1106-9
	National	LM3045	1106-17
	Plessey	SL3045	1106-21
	SGS	LM3045	1106-25
	SiliconG	SG3045	1106-27
3046	**GE/RCA**	**CA3046**	⋆ **2648**
			1106-10
	National	LM3046	1106-18
	Plessey	SL3046	1106-22
	SGS	CA3046	1106-24
		LM3046	1106-26
	SiliconG	SG3046	1106-28
	Thomson	TEA3046	1194-58
3047	Signetics	TDA3047	1103-133
			1122-21
			1122-26
3048	**GE/RCA**	**CA3048**	⋆ **2649**
			1102-1
			¶ 428-31
	Signetics	TDA3048	1122-27
3049	**GE/RCA**	**CA3049**	⋆ **2647**
			⋆ **2649**
			1106-63
			1122-43
305	Anasco	44-305	4890-24
	Barvon	BC305	4041-45
	Fairchild	μA305AC	1214-80
		μA305C	1213-33
	GE/Intersil	LM305	1213-34
	GE/RCA	GP305AD	862-11
	Harris	**HI305**	⋆ **2707**
			906-34
	Maxim	DG305AA	906-39
		DG305AB	906-40
		DG305AC	906-41
	National	LM305	1213-35
		LM305A	1214-81
	NEC	μPC305	1213-36
	Siemens	TCA305	1127-89
			(Continued)

Base Number	Source	Device	Page-Line
305			(Cont'd)
	SiliconG	SG305	1213-37
		SG305A	1214-82
	Siliconix	DG305AA	906-47
			¶ 427-11
	Thomson	LM305	1214-83
3050	Aptek	AMS3050	1199-95
			¶ 433-4
	GE/RCA	**CA3050**	⋆ **2647**
			1106-65
	Intech	3050	1219-2
3051	Aptek	AMS3051	1199-96
			¶ 433-4
	GE/RCA	**CA3051**	⋆ **2647**
			1106-66
	iLSi	CB3051	4050-33
	National	TP3051	1192-101
3052	**GE/RCA**	**CA3052**	⋆ **2649**
			1102-2
	National	TP3052	1192-102
		TP3052-1	1192-103
3053	**GE/RCA**	**CA3053**	⋆ **2647**
			1102-71
	National	TP3053	1192-104
		TP3053-1	1192-105
3054	Fairchild	F3054	1192-89
	GE/RCA	**CA3054**	⋆ **2647**
			⋆ **2649**
			1106-61
	GoldStar	**GM3054**	⋆ **2701**
			1192-46
	Motorola	**CA3054**	⋆ **2948**
			1106-62
	National	TP3054	1192-106
		TP3054-1	1192-107
3056	National	TP3056	1192-108
3057	Fairchild	μA3057	1192-57
	GoldStar	**GM3057**	⋆ **2701**
			1192-47
	National	TP3057	1192-68
		TP3057-1	1192-69
3058	GE/RCA	CA3058	1230-119
			¶ 427-14
3059	**GE/RCA**	**CA3059**	⋆ **2649**
			1230-120
			¶ 427-14
	Motorola	**CA3059**	⋆ **2932**
			1230-122
306	**Harris**	**HI306**	⋆ **2707**
			908-86
		HS306RH	⋆ **2719**
			909-16
	Maxim	DG306AA	908-91
		DG306AB	908-92
		DG306AC	908-93
	National	LM306	1110-33
	Siliconix	DG306AA	908-101
			¶ 427-11
	TeledyneS	306A/C	654-79
	TI	LM306	1110-34
3060	**GE/RCA**	**CA3060**	⋆ **2646**
			⋆ **2649**
			1134-27
			1182-5
		CA3060A	⋆ **2646**
			⋆ **2649**
			1134-28
		CA3060B	⋆ **2646**
			⋆ **2649**
			1134-29
	GoldStar	**GCL3060**	⋆ **4242**
			4047-35
		LL3060	4047-36
	Motorola	MC3060	667-3
	Telefunken	U3060M	1190-66
3061	Motorola	MC3061	669-108
3062	Motorola	MC3062	669-109
	Sanyo	STK3062	1116-125
3063	iLSi	CB3063	4050-36
3064	Aptek	AMS3064	1195-27
	National	TP3064	1192-109
	Xilinx	**XC3064**	⋆ **4344**
			4043-38
			4081-53

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
3065	Aptek	AMS3065	1195-28
	GE/RCA	CA3065	1121-26
			1125-111
3067	National	TP3067	1192-70
3068	GE/RCA	CA3068	1126-80
	Marconi	MA3068	4054-1
3069	Hughes	HNMV3069	1308-50
307	**GE/RCA**	**CA307**	* **2645**
			1164-4
		LM307	* **2645**
			1164-1
	Harris	**HI307**	* **2707**
			907-41
		HS307RH	* **2719**
			907-32
	iLSi	CB307	4050-39
	Intel	iSBC307	4853-30
	LinearTech	LM307	1164-5
	Maxim	DG307AA	907-46
		DG307AB	907-47
		DG307AC	907-48
	Motorola	**LM307**	* **2920**
			1164-6
	National	LM307	1164-7
	SiliconG	SG307	1164-8
	Siliconix	DG307AA	907-56
			¶ 427-11
	TeledyneS	307A/C	654-80
	TI	LM307	1164-10
	Thomson	LM307	1164-9
3070	GE/RCA	CA3070	1124-47
	Telefunken	U3070	1125-86
			1308-18
3071	GE/RCA	CA3071	1124-48
3072	GE/RCA	CA3072	1124-49
3075	GE/RCA	CA3075	1121-27
			1125-112
	Sprague	UGN3075	1002-148
		UGS3075	1002-150
3076	Sprague	UGN3076	1002-149
		UGS3076	1002-151
3077	**CTI**	**CT3077**	* **2554**
			1011-18
	Sprague	UGN3077	1002-146
		UGS3077	1002-147
3078	**CTI**	**CT3078**	* **2554**
			1011-19
	GE/RCA	**CA3078**	* **2646**
			1133-48
			1134-2
			1157-41
		CA3078A	* **2646**
			1133-49
			1134-3
3079	**GE/RCA**	**CA3079**	* **2649**
			1230-121
			¶ 427-14
	Motorola	**CA3079**	* **2932**
			1230-123
308	AD	AD308	1163-48
		AD308A	1146-37
	CharlesRiver		
		TP308	4892-21
	Fairchild	μA308AC	1146-38
	GE/Intersil	LM308	1163-49
		LM308A	1146-39
		LM308LN	1163-46
	LinearTech	LM308	1163-50
		LM308A	1146-40
	MicroLinear	FB308	4068-38
	MicroPwr	MP308	1163-51
		MP308A	1146-41
	Motorola	**LM308**	* **2919**
			* **2958**
			1163-52
		LM308A	* **2919**
			* **2958**
			1146-42
	National	LM308	1163-53
		LM308A	1146-43
	Octagon	308	4873-37
			4878-38
	Siliconix	DG308AA	904-65
			¶ 427-21
			¶ 427-23
	TI	LM308	1163-55
			(Continued)

Base Number	Source	Device	Page-Line
308			(Cont'd)
	Thomson	LM308	1163-54
		LM308A	1146-44
	TopazSemi	**CDG308**	* **3301**
			905-44
		CDG308AK	* **3301**
			902-19
		CDG308BJ	* **3301**
			902-20
		CDG308BK	* **3301**
			902-21
		CDG308CJ	* **3301**
			902-22
308C1	FujitsuA	FBC308C1A	4894-19
3080	**GE/RCA**	**CA3080**	* **2646**
			1117-188
			1132-39
			1157-54
		CA3080A	* **2646**
			1117-189
			1132-40
			1157-55
	GoldStar	**GCL3080**	* **4242**
			4047-37
		LL3080	4047-38
	National	LM3080	1117-192
		LM3080A	1117-193
3081	Aptek	AMS3081	1198-52
	GE/RCA	**CA3081**	* **2648**
			* **2653**
			1107-144
3082	Aptek	AMS3082	1198-53
	GE/RCA	**CA3082**	* **2648**
			* **2653**
			1107-136
	Sanyo	STK3082	1116-126
	Telefunken	U3082	978-83
3083	**GE/RCA**	**CA3083**	* **2648**
			1107-27
	SiliconG	SG3083	1107-30
	Telefunken	U3083	1122-6
		U3083M	1102-10
3085	**GE/RCA**	**CA3085**	* **2650**
			1213-20
			¶ 441-12
		CA3085A	* **2650**
			1213-104
			¶ 441-12
		CA3085B	* **2650**
			1214-84
			¶ 441-12
3086	**GE/RCA**	**CA3086**	* **2648**
			1106-11
	National	LM3086	1106-19
	SiliconG	SG3086	1106-29
3088	GE/RCA	CA3088	1120-12
3089	GE/RCA	CA3089	1121-28
			¶ 434-32
	National	LM3089	1121-40
	SGS	TCA3089	1121-51
	Signetics	CA3089	1121-56
3089D2	Signetics	CA3089D2	1121-57
309	Fairchild	μA309C	1202-86
	Motorola	**LM309H**	* **2926**
			1202-41
		LM309K	* **2926**
			1202-90
	National	LM309H	1202-45
		LM309K	1202-96
	SiliconG	SG309K	1202-104
		SG309T	1202-49
	Siliconix	DG309A	904-66
		DG309C	904-67
	TopazSemi	**CDG309**	* **3301**
			905-45
		CDG309AK	* **3301**
			902-23
		CDG309BJ	* **3301**
			902-24
		CDG309BK	* **3301**
			902-25
		CDG309CJ	* **3301**
			902-26
3090	**Xilinx**	**XC3090**	* **4344**
			4043-39
			4081-54

Base Number	Source	Device	Page-Line
3091	GE/RCA	CA3091	1223-22
3094	**GE/RCA**	**CA3094**	* **2647**
			1117-28
			1130-104
			1133-50
			1134-4
			1134-46
			¶ 428-24
			¶ 439-36
		CA3094A	* **2647**
			1133-51
			1134-5
			1134-50
			1161-19
			¶ 428-24
			¶ 439-36
		CA3094B	* **2647**
			1133-52
			1134-53
			1134-6
			1161-20
			¶ 428-24
			¶ 439-36
3096	**GE/RCA**	**CA3096**	* **2648**
			1107-6
		CA3096A	* **2648**
			1107-7
		CA3096C	* **2648**
			1107-8
3097	**GE/RCA**	**CA3097**	* **2648**
			1108-69
3098	**GE/RCA**	**CA3098**	* **2654**
			692-111
3099	GE/RCA	CA3099	692-112
			1219-115
31	AdvMicroSys		
		CPU31	4821-36
	AllenSys	CP31/535	4811-14
		DP31/535	
			4811-15
		FX31	4813-9
	Burr-Brown	UAF31	1219-24
	FujitsuA	FBM31CA	4894-18
		FBM31DB	1337-1
	Gordos	VSC31	4821-28
			4870-21
	NCR	ADP31S	4851-14
	Zilog	Model 31	4721-13
31L01	AMD	AM31L01C	1348-29
		AM31L01M	1348-30
310	Altera	EP310-1C	4078-40
		EP310-1M	4078-41
		EP310-2C	4078-46
		EP310-2M	4078-47
		EP310C	4078-56
		EP310M	4078-57
	Anasco	44-310	4889-30
	Barvon	BC310	4042-3
	Datel	**ADCB310E**	* **2575**
			927-37
		ADC310	* **2572**
			* **2575**
			927-36
	HyComp	HCS310	908-50
	Intronics	C310	1220-10
	Maxim	MAX310C	915-4
		MAX310E	915-5
		MAX310M	915-6
	MicroInds	mSBC310A	4861-16
	MicroPwr	MP310	1106-109
	Motorola	MVME310	4882-23
		MWA310	1104-28
	National	COP310C	862-115
		COP310L	862-116
		LM310	1128-33
	Raytheon	RG310	675-8
	TI	LM310	1163-45
	Xycom	XVME310	4882-21
3100	Cherry	CS3100	4065-15
	GE/RCA	**CA3100**	* **2646**
			1161-30
	ITT	UVC3100	646-73
	Plessey	CLA3100	4058-19
	Samsung	KSV3100A	925-19
			955-17
			(Continued)

Base Number	Source	Device	Page-Line
3100			(Cont'd)
	SMS	OMTI3100	4869-24
			4893-8
	SGS	L3100	1161-31
3101	AMD	AM3101	1348-11
		AM3101-1C	1347-79
		AM3101-1M	1347-92
		AM3101AC	1347-80
		AM3101AM	1347-93
	Aptek	AMS3101	1199-91
			¶ 433-38
	MicroInds	PG3101	4881-37
	Motorola	MC3101	671-21
	Panasonic	MN3101	1219-66
	SGS	L3101	1229-92
	Siemens	TLE3101	1224-42
	Signetics	N3101A	1347-84
		S3101A	1347-99
	TI	TCM3101	1196-5
		TL3101	1221-104
3102	**GE/RCA**	**CA3102**	* **2647**
			* **2649**
			1106-64
	Motorola	MC3102	675-72
	Siemens	TLE3102	1224-43
3103	Aptek	AMS3103	1199-92
			¶ 433-38
	Siemens	TLE3103	1224-44
	TI	TL3103C	1222-107
		TL3103I	1222-108
3104	Aptek	AMS3104	1199-93
			¶ 433-38
	Hughes	HNMV3104A	1309-29
	Siemens	TLE3104	1224-45
3105	TI	TCM3105	1196-6
3108	Hughes	HNVM3108A	1309-43
311	AD	AD311	1110-51
	DataTrans	DTX311	4854-26
		DTX311EX	4854-35
	Fairchild	μA311C	1110-52
	GE/RCA	CA311	1110-53
	Intronics	C311	1220-11
	LinearTech	LM311	1110-48
		LT311A	1109-25
	Maxim	MAX311C	912-78
		MAX311E	912-79
		MAX311M	912-80
	MicroInds	mSBX311	4854-24
	MicroPwr	MP311	1106-110
	Motorola	**LM311**	* **2925**
			* **2958**
			1110-54
	National	CIM311	4846-27
		COP311C	862-117
		COP311L	862-118
		LF311	1111-4
		LM311	1110-55
	NEC	μPC311	1110-56
	Robotrol	RBX311	4854-25
	Samsung	LM311	1110-49
	Signetics	LM311	1110-57
		PCD311	1199-25
	SiliconG	SG311	1111-1
	TeledyneS	311A/C	654-37
		311B/M	654-38
	TI	LM311	1110-50
		LP311	1110-46
	Thomson	LM311	1111-2
3110	Bipolar	B3110/20	647-3
	GoldStar	**GCL3110**	* **4242**
			4047-43
		LL3110	4047-44
	National	TP3110	1194-73
			¶ 433-37
	Sanyo	LA3110	1118-7
3112	National	TP3112	1194-74
	Siemens	SDA3112	1124-135
3114	AMD	TMS3114	1396-29
3115	Sanyo	LA3115	1118-38
3116	VME-Microsys		
		VMIVME3116	4883-41
3118	**GE/RCA**	**CA3118**	* **2648**
			1106-3
		CA3118A	* **2648**
			1106-4

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
3119	Sprague	UGN3119T	1221-105
		UGN3119U	1221-106
		UGS3119T	1221-111
		UGS3119U	1221-112
312	Anasco	44-312	4889-43
	Intronics	C312	1220-12
	Maxim	MAX312C	915-7
		MAX312E	915-8
		MAX312M	915-9
	MicroLinear	FB312	4068-41
	MicroPwr	MP312	1106-111
	National	LM312	1163-47
	PMI	**DAC312B**	**★ 2974**
			968-46
		DAC312E	**★ 2974**
			965-19
		DAC312F	**★ 2974**
			968-47
	TeledyneS	312A/C	654-40
		312B/M	654-41
3120	**GoldStar**	**GL3120**	**★ 2699**
			1125-106
	HybridSys	DAC3120B-0	969-27
		DAC3120C-0	969-28
		HS3120B-2	963-5
			¶ 420-2
		HS3120C-2	963-6
			¶ 420-2
	National	TP3120	1194-75
			¶ 433-37
	Sanyo	LA3120	1118-8
	Sprague	UGN3120T	1221-107
		UGN3120U	1221-108
		UGS3120T	1221-113
		UGS3120U	1221-114
3121	GE/RCA	CA3121	1124-50
	Motorola	MC3121	676-6
	SGS	L3121	1229-90
3122	Motorola	MC3122	676-84
	National	TP3122	1194-76
	Sanyo	LA3122	1118-39
	SGS	L3122	1229-91
3125	GE/RCA	CA3125	1124-51
3126	GE/RCA	CA3126	1124-52
	Motorola	MC3126	670-96
3127	**GE/RCA**	**CA3127**	**★ 2648**
			1107-35
			1121-124
	Plessey	SL3127	1107-38
313	Maxim	MAX313C	912-81
		MAX313E	912-82
		MAX313M	912-83
	MicroPwr	MP313	1106-112
	National	COP313C	862-91
		COP313CH	862-92
		LM313	1225-54
	TeledyneS	313A/C	654-42
		313B/M	654-43
3130	**GE/RCA**	**CA3130**	**★ 2646**
			1134-67
			1167-29
			¶ 430-4
		CA3130A	**★ 2646**
			1134-68
			1158-6
			¶ 430-4
	GoldStar	**GCL3130**	**★ 4242**
			4048-1
		GL3130	**★ 2699**
			1127-16
		LL3130	4048-2
	Sanyo	LA3130	1118-9
3131	Sprague	UGN3131T	1002-155
		UGN3131U	1002-156
		UGS3131T	1002-159
		UGS3131U	1002-160
3133	Sanyo	LA3133	1118-40
3134	GE/RCA	CA3134	1125-113
			¶ 436-4
3139	TRW-LSI	TMC3139	1305-25
314	MicroInds	mSBC314	4861-57
	VTC	**VM314**	**★ 3375**
			887-61
3140	**GE/RCA**	**CA3140**	**★ 2646**
			1130-30
			1134-51
			1167-28
		CA3140A	**★ 2646**
			1158-8
	HybridSys	HS3140B-3	972-31
			¶ 420-2
		HS3140B-4	972-4
			¶ 420-2
		HS3140C-3	972-32
			¶ 420-2
		HS3140C-4	972-5
			¶ 420-2
	MicroPwr	MP3140B-3	972-44
		MP3140B-4	972-29
		MP3140C-3	972-45
		MP3140C-4	972-30
	Sprague	UGN3140T	1221-109
		UGN3140U	1221-110
		UGS3140T	1221-115
		UGS3140U	1221-116
3141	**GE/RCA**	**CA3141**	**★ 2649**
			1108-59
31412	Crystal	CS31412	1229-85
3142	GE/RCA	CA3142	1125-101
3145	Plessey	SL3145	1106-23
3146	**GE/RCA**	**CA3146**	**★ 2648**
			1106-12
		CA3146A	**★ 2648**
			1106-13
	National	LM3146	1106-20
315	Barvon	BC315	4042-9
	MicroLinear	FB315	4068-45
	Motorola	MVME315	4882-8
3150	Sanyo	LA3150	1118-10
3151	GE/RCA	CA3151	1124-53
3154	GE/RCA	CA3154	1125-102
3155	Sanyo	LA3155	1118-41
3156	GE/RCA	CA3156	1124-54
316	Motorola	MVME316	4887-29
3160	**GE/RCA**	**CA3160**	**★ 2646**
			1130-31
			1167-27
		CA3160A	**★ 2646**
			1158-5
	HybridSys	HS3160B-3	976-21
			¶ 420-1
			¶ 420-2
		HS3160B-4	974-30
			¶ 420-1
			¶ 420-2
		HS3160C-3	976-22
			¶ 420-1
			¶ 420-2
		HS3160C-4	974-31
			¶ 420-1
			¶ 420-2
	Motorola	MC3160	667-4
	Sanyo	LA3160	1118-42
3161	**GE/RCA**	**CA3161**	**★ 2653**
			939-6
	Motorola	MC3161	669-110
	Sanyo	LA3161	1118-43
3162	**GE/RCA**	**CA3162**	**★ 2651**
			939-7
		CA3162A	**★ 2651**
			939-8
	Motorola	MC3162	669-111
3163	GE/RCA	CA3163	692-31
			1191-101
3168	**GE/RCA**	**CA3168**	**★ 2653**
			979-105
3169	**GE/RCA**	**CA3169**	**★ 2650**
			★ 2654
			1003-23
317	Fairchild	μA317C	1213-122
	GoldStar	**GL317**	**★ 2701**
			1213-123
	IPS	**IP317**	**★ 2854**
			1214-5
		IP317A	**★ 2854**
			1214-6
		IP317AHV	**★ 2854**
			1214-98
317	**IPS**		**(Cont'd)**
		IP317HV	**★ 2854**
			1214-99
		LM317	1214-9
		LM317HV	1214-102
	Lambda	LLM317	1214-10
	LinearTech	LM317	1214-12
		LM317AHV	1214-104
		LM317HV	1214-92
		LT317A	1214-14
		LT317AHV	1214-93
	MCE	MCELM317	1214-17
	Motorola	**LM317**	**★ 2929**
			1214-20
		LM317L	**★ 2929**
			1213-113
		LM317M	**★ 2929**
			1214-67
	National	LM317	1214-23
		LM317L	1213-114
	NEC	μPC317	1213-27
	SGS	LM317	1214-26
	SiliconG	SG317	1213-118
			1214-31
		SG317A	1213-119
			1214-32
	TI	LM317	1214-34
			¶ 442-5
		TL317	1213-41
	Thomson	LM317	1214-36
	Unitrode	**UC317**	**★ 3325**
			1214-39
3170	GE/RCA	CA3170	1124-55
	GoldStar	**GCL3170**	**★ 4242**
			4048-7
		LL3170	4048-8
	IndTech	3170	4831-14
	Sanyo	LA3170	1118-11
3171	Motorola	MHW3171	1124-5
3172	GE/RCA	CA3172	1124-56
	Motorola	MHW3172	1124-6
3176	**Unitrode**	**UC3176**	**★ 3326**
			1102-11
3179	GE/RCA	CA3179	1190-81
			1191-102
318	LinearTech	LM318	1166-40
		LT318A	1149-41
	MicroPwr	MP318	1106-92
	National	LM318	1166-41
	NEC	μPC318	1166-39
	Telefunken	U318	1122-88
	TI	LM318	1166-38
		TISP318A	1229-97
	Thomson	LM318	1166-42
3180	Davidge	DSB3180	4809-30
3181	Motorola	MHW3181	1124-11
3182	**Harris**	**HS3182**	**★ 2720**
			987-44
			1009-7
			¶ 424-35
	Motorola	MHW3182	1124-12
3183	**GE/RCA**	**CA3183**	**★ 2648**
			1107-28
		CA3183A	**★ 2648**
			1107-29
	SiliconG	SG3183	1107-31
		SG3183A	1107-32
3189	GE/RCA	CA3189	1121-29
	National	LM3189	1121-41
	SGS	TCA3189	1121-78
319	LinearTech	LM319	1113-14
		LT319A	1111-14
	Motorola	MVME319	4883-7
	National	LM319	1113-15
	NEC	μPC319	1113-16
	Signetics	LM319	1113-17
	Thomson	LM319	1113-18
3190	**Motorola**	**TDA3190P**	**★ 2948**
			1125-122
	SGS	TDA3190	1125-133
3193	**GE/RCA**	**CA3193**	**★ 2645**
			1146-57
		CA3193A	**★ 2645**
			1143-17
3194	GE/RCA	CA3194	1124-57
3195	GE/RCA	CA3195	1121-127
3199	GE/RCA	CA3199	651-6
			1190-84
32	AdvMicroSys		
		CPU32	4821-37
	AD	ADVFG32	1230-48
	AT&T	**WEDSP32**	**★ 2459**
			645-100
		WEDSP32C	**★ 2459**
			★ 2463
			645-101
	Burr-Brown	**VFC32**	**★ 2542**
			★ 2544
			1230-60
	CharlesRiver		
		CP32	4839-17
	DSP-Systems		
		VAP-32K	4890-6
	DUAL	VMPU32	4845-25
		VSMD32	4845-11
	Force	FOCUS32	4705-12
		FOCUS32/25U	4705-13
	FujitsuA	FBM32DA	1337-2
	LogicDev	LSH32	644-123
		LSH32-1C	602-76
		LSH32-1M	602-77
		LSH32C	644-124
		LSH32M	644-125
	Matrix	RPC-32	4877-26
	MCE	MCEVFC32	1230-96
	MicroPwr	MPVFC32B	1230-97
		MPVFC32K	1230-98
		MPVFC32S	1230-99
	National	ISE32	4713-12
		SYS32/20	4851-13
		VR32	4713-16
	NCR	ADP32	4860-33
		NCR/32-010	880-72
		NCR/32-020	880-73
		NCR/32-500	880-74
		NCR/32-580	880-76
		NCR/32-590	880-75
	Orion	UDL32	4715-4
	PMI	**OP32**	**★ 2970**
			1133-61
			1134-47
		OP32A	**★ 2970**
			1144-30
		OP32B	**★ 2970**
			1146-45
		OP32E	**★ 2970**
			1144-27
		OP32F	**★ 2970**
			1146-46
		OP32G	**★ 2970**
			1149-30
32B450	SiliconSys	SSI32B450A	886-46
32B545	**SiliconSys**	**SSI32B545**	**★ 3198**
			888-12
32C016	National	NS32C016	847-32
			880-40
		NS32C016RT-10	
			849-1
		NS32C016RT-15	
			849-2
		NS32C016RT-6	849-3
32C032	National	NS32C032	853-27
			880-41
		NS32C032-10	853-28
		NS32C032-15	853-29
		NS32C032-6	853-30
		32C032	881-7
32C116	Pacific	PD32C116	880-51
32C201	National	NS32C201	880-67
32C452	**SiliconSys**	**SSI32C452**	**★ 3198**
			886-82
32C453	**SiliconSys**	**SSI32C453**	**★ 3198**
			884-130
32D531	**SiliconSys**	**SSI32D531**	**★ 3198**
			999-14
32D532	**SiliconSys**	**SSI32D532**	**★ 3198**
			999-8
32D533	SiliconSys	SSI32D533	999-11
32D534	**SiliconSys**	**SSI32D534**	**★ 3198**
			999-9
32D535	**SiliconSys**	**SSI32D535**	**★ 3198**
			999-10

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
32HC01	Pacific	PD32HC01	880-49
32HC02	Pacific	PD32HC02	880-48
32H101	**SiliconSys**	**SSI32H101A**	* 3198 887-45
32H116	**SiliconSys**	**SSI32H116**	* 3198 887-46
32H567	**SiliconSys**	**SSI32H567**	* 3198 1003-110
32H568	**SiliconSys**	**SSI32H568**	* 3198 1003-109
32H569	**SiliconSys**	**SSI32H569**	* 3198 1003-112
32H8	**Dense-Pac**	**DPS32H8**	* 2579 1379-81
32K8	**Inova**	**S32K8-100CC**	* 2798 1379-65
		S32K8-100IC	* 2798 1379-66
		S32K8-100MC	* 2798 1379-67
		S32K8-45CC	* 2798 1378-50
		S32K8-45IC	* 2798 1378-51
		S32K8-55CC	* 2798 1378-70
		S32K8-55IC	* 2798 1378-71
		S32K8-55MC	* 2798 1378-72
		S32K8-70CC	* 2798 1379-18
		S32K8-70IC	* 2798 1379-19
		S32K8-70MC	* 2798 1379-20
32M590	**SiliconSys**	**SSI32M590**	* 3198 887-113
32M591	**SiliconSys**	**SSI32M591**	* 3198 887-114
32M593	**SiliconSys**	**SSI32M593**	* 3198 888-11
32P540	**SiliconSys**	**SSI32P540**	* 3198 887-117
32P541	**SiliconSys**	**SSI32P541**	* 3198 887-116
32R104	**SiliconSys**	**SSI32R104B**	* 3198 887-42
		SSI32R104BLN	* 3198 1004-123
32R114	**SiliconSys**	**SSI32R114**	* 3198 887-36
32R115	**SiliconSys**	**SSI32R115**	* 3198 887-43
32R117	**SiliconSys**	**SSI32R117**	* 3198 888-6
		SSI32R117A	* 3198 888-7
32R16	MMI	HAL32R16C	4081-63
		HAL32R16M	4081-64
		PAL32R16C	4075-42
		PAL32R16M	4080-14
32R188	**SiliconSys**	**SSI32R188**	* 3198 1004-93
32R501	**SiliconSys**	**SSI32R501**	* 3198 888-10
32R510	SiliconSys	SSI32R510A	888-8
32R511	**SiliconSys**	**SSI32R511**	* 3198 887-118
32R512	**SiliconSys**	**SSI32R512**	* 3198 887-120
32R514	**SiliconSys**	**SSI32R514**	* 3198 887-119
32R520	**SiliconSys**	**SSI32R520**	* 3198 888-13
32R521	**SiliconSys**	**SSI32R521**	* 3198 888-14
32R522	**SiliconSys**	**SSI32R522**	* 3198 887-121
32VX10	MMI	PAL32VX10	4074-21
		PAL32VX10A	4073-14
32X16	**Dense-Pac**	**DPE32X16V**	* 2583 1314-43
		DPP32X16	* 2584 1381-2
		DPS32X16V	* 2583 1381-1
		DPV32X16	* 2582 1332-72
		DPV32X16V	* 2582 * 2584 1332-71
32X18	**Dense-Pac**	**DPF32X18**	* 2585 1307-47
32X24	**Dense-Pac**	**DPE32X24V**	* 2583 1314-48
		DPS32X24V	* 2583 1381-9
		DPV32X24	* 2582 1331-1
		DPV32X24V	* 2582 * 2584 1332-74
32X32	**Dense-Pac**	**DPE32X32V**	* 2583 1314-49
		DPP32X32	* 2584 1381-11
		DPS32X32V	* 2583 1381-10
		DPV32X32	* 2582 1332-76
		DPV32X32V	* 2582 * 2584 1332-75
32X36	**Dense-Pac**	**DPF32X36**	* 2585 1307-48
32X8	**Dense-Pac**	**DPE32X8V**	* 2583 1313-54
		DPP32X8	* 2584 1378-41
		DPS32X8V	* 2583 1378-40
		DPV32X8V	* 2584 1330-35
	ICI	CMOS32X8-01	1380-49
32X9	**Dense-Pac**	**DPF32X9**	* 2585 1307-46
320	Altera	EP320-1C	4078-36
		EP320-2C	4078-37
		EP320C	4078-38
		EP320M	4078-39
	Amperex	OM320	1125-52
	AnalogSys	MZ320	1128-44
	Anasco	44-320	4890-8
	Barvon	BC320	4042-14
	Burr-Brown	**VFC320**	* 2542 1230-61
	Cherry	CS320	1220-27
	Dense-Pac	**DPS320**	* 2579 1384-36
	Exar	XR320	1201-6 ¶ 439-2 ¶ 439-4
	IPS	**IP320-12**	* 2854 1211-24
		IP320-15	* 2854 1211-112
		IP320-5	* 2854 1209-108
		IP320A	* 2854 1209-109
		IP320A-12	* 2854 1211-25
		IP320A-15	* 2854 1211-113
		LM320-12	1211-32
		LM320-15	1211-120
		LM320-5	1209-116
	ITT	DF320	1193-71
320	Motorola	MVME320	4883-6
		MWA320	1104-29
	National	COP320	862-119
		COP320L	862-120
	Raytheon	RG320	672-79
	SiliconG	SG320-05K	1210-6
		SG320-05P	1209-100
		SG320-05R	1210-7
		SG320-05T	1209-91
		SG320-08K	1210-71
		SG320-08P	1210-72
		SG320-08R	1210-73
		SG320-08T	1210-61
		SG320-12K	1211-43
		SG320-12P	1211-16
		SG320-12R	1211-44
		SG320-12T	1210-115
		SG320-15K	1212-7
		SG320-15P	1212-8
		SG320-15R	1211-104
		SG320-15T	1211-77
		SG320-18K	1212-45
		SG320-18P	1212-46
		SG320-18R	1212-47
		SG320-18T	1212-32
		SG320-5	1210-25
	TI	RTC/EVM320A-03	4831-10
		RTC/EVM320C-06	4831-11 4894-4
		TMS320	645-112 ¶ 408-29
320A2400	TI	TMS320A2400	645-73
320C10	GIM	DSP320C10	645-105
		DSP320C10-25	847-1
		DSP320C10-32	847-2
	TI	SMJ320C10	849-36
		TMS320C10	* 3221 851-5
		TMS320C10-25	* 3221 851-6
320C15	TI	TMS320C15	851-7
320C17	TI	TMS320C17	851-8
320C25	Pacific	TMS320C25	4715-7 4831-17
	TI	SMJ320C25	646-40
		TMS320C25	* 3221 851-9
320EE12	GIM	DSP320EE12	847-3
320E15	TI	SMJ320E15	646-41
		TMS320E15	851-10
320E17	TI	TMS320E17	851-11
320H12	National	LM320H12	1210-112
320H15	National	LM320H15	1211-74
320H5	National	LM320H5	1209-85
320K12	National	LM320K12	1211-9
320K15	National	LM320K15	1211-97
320K5	National	LM320K5	1209-122
320L05	National	LM320L05	1209-67
320L12	National	LM320L12	1210-104
320L15	National	LM320L15	1211-66
320ML05	National	LM320ML05	1209-74
320ML15	National	LM320ML15	1211-78
320MP12	National	LM320MP12	1211-2
320MP15	National	LM320MP15	1211-90
320MP5	National	LM320MP5	1209-86
320T12	National	LM320T12	1211-10
320T15	National	LM320T15	1211-98
320T5	National	LM320T5	1209-123
3200	CalDevices	CHA3200	4042-43
	Cherry	CS3200L	4065-16
	Davidge	DSB3200	4803-12
	Fairchild	FGC3200	4044-24
	IntCirSys	VGC3200	4051-18
	Interphase	V/SMD3200	4882-41
3200	MMI	MLA3200	4055-10
	National	TP3200	1198-81 ¶ 424-29
	TRW-LSI	TMC3200	602-121 642-67 645-86
	VLSI Tech	**VGC3200**	* 4665 4064-6
	VME-Microsys	VMIVME3200	4888-22
32000	National	DB32000	4713-8 4825-20 4894-41
32008	National	NS32008	835-24 880-45
	TI	TI32008	880-37
3201	Aptek	AMS3201	1199-61
	GoldStar	**GL3201**	* 2699 1125-114
	Ironics	IV3201	4843-32
	Sanyo	LA3201	1123-50
	TRW-LSI	TMC3201	637-7 645-87
32010	GIM	DSP32010	645-106
	TI	SMJ32010	645-111
		TMS32010	* 3221 645-113 851-12 ¶ 410-1
		TMS32010-14	* 3221 851-13 ¶ 410-1
		TMS32010-25	* 3221 851-14 ¶ 410-1
32011	TI	TMS32011	851-15
32016	National	DB32016	4713-9
		NS32016	849-4 880-78 ¶ 410-13 ¶ 414-33
		NS32016RT-10	849-5 ¶ 410-13 ¶ 414-33
		NS32016RT-6	849-6 ¶ 410-13 ¶ 414-33
	TI	TI32016	851-1 880-38
		TI32016T	855-10
3202	GE/RCA	CA3202	1125-8
	GoldStar	**GL3202**	* 2699 1126-7
	National	TP3202	1198-82 ¶ 424-29
	Siemens	SDA3202	1124-139
32020	MicroInds	MIBII 32020	4864-11
	Pacific	TMS32020	4715-8 4831-19
	TI	SMJ32020	646-42
		TMS32020	* 3221 645-114 851-16
32025	TI	TMS32025	645-115
3203	Siemens	SDA3203	1190-92
32032	Fairchild	F32032	880-35
	National	NS32032	853-31 880-43
	OwlComp	32032M	4841-19
		32032SDS	4715-5
		32032V	4845-10
	TI	TI32032	855-11 880-39
		TI32032T	855-12
3204	Ironics	IV3204	4843-31
	National	TP3204	1198-83 ¶ 424-29
	Panasonic	MN3204	1118-67 1219-56
32040	TI	TLC32040	645-20 646-76

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
3207	**GE/RCA**	**CA3207**	⋆ **2654**
			977-31
	Interphase	V/Ethernet 3207	4881-13
	Panasonic	MN3207	1118-68
			1219-57
	Signetics	3207A	1000-1
		3207A-1	1000-2
	Thomson	TDE3207	1001-65
3208	**GE/RCA**	**CA3208**	⋆ **2654**
			977-30
	Interphase	V/SIO 3208	4882-27
32081	National	NS32081	849-7
			880-47
		NS32081-10	880-52
		NS32081-15	880-53
		NS32081-6	880-54
	TI	TI32081	851-2
			880-55
32082	National	NS32082	849-8
			880-59
			¶ 408-30
	TI	TI32082	851-3
			880-61
3209	GE/RCA	CA3209	1121-30
	Interphase	VTAPE3209	4892-12
321	Amperex	OM321	1125-53
	AT&T	**WE321DM**	⋆ **2525**
			880-84
		WE321DS	⋆ **2525**
			4703-6
		WE321EB	⋆ **2526**
			4843-18
		WE321SB	⋆ **2526**
			4843-19
	Cherry	CS321	1220-28
	Fairchild	CCD321A	1229-117
			1393-7
	MicroInds	mBLX321	4859-44
	National	COP321	862-121
		COP321L	862-122
		LM321	1104-9
		LM321A	1104-10
	TeledyneS	321A/C	654-60
		321B/M	654-61
	Telefunken	U321	1122-89
	TI	TL321C	1134-110
			1179-55
		TL321I	1160-31
	VTC	**VM321**	⋆ **3375**
			999-25
3210	**AD**	**ADSP3210**	⋆ **2448**
			644-89
		ADSP3210J	⋆ **2448**
			603-153
		ADSP3210K	⋆ **2448**
			603-154
		ADSP3210S	⋆ **2448**
			603-155
		ADSP3210T	⋆ **2448**
			603-156
	Aptek	AMS3210	1199-59
	Bipolar	B3210	649-122
	GE/RCA	CA3210	1125-24
			¶ 436-5
	GoldStar	**GCL3210**	⋆ **4242**
			4048-9
		LL3210	4048-10
	Interphase	V/MIX 3210	4882-30
	Micom Int	NI3210	4857-27
		NI3210A	4857-26
	Sanyo	LA3210	1123-51
	TRW-LSI	TMC3210	602-126
	VME-Microsys		
		VMIVME3210	4886-38
32100	**AT&T**	**WE32100**	⋆ **2518**
			853-18
			880-81
			¶ 409-8
	Zilog	**Z32100-MPU**	⋆ **3418**
			855-14

Base Number	Source	Device	Page-Line
32101	**AT&T**	**WE32101**	⋆ **2519**
			881-4
			¶ 409-8
	Zilog	**Z32101-MMU**	
			⋆ **3419**
			881-16
32102	**AT&T**	**WE32102**	⋆ **2521**
			880-82
	Zilog	**Z32102-Clock**	
			⋆ **3419**
			881-12
32103	**AT&T**	**WE32103**	⋆ **2521**
			881-2
	Zilog	**Z32103-DRAM**	
			⋆ **3419**
			881-14
32104	**AT&T**	**WE32104**	⋆ **2520**
			881-1
			¶ 410-12
	Zilog	**Z32104-DMA**	⋆ **3419**
			881-13
32106	**AT&T**	**WE32106**	⋆ **2522**
			644-11
			881-3
			¶ 409-8
	Zilog	**Z32106-MAU**	⋆ **3419**
			881-15
3211	**AD**	**ADSP3211**	⋆ **2448**
			602-122
	Emulogic	ECL3211	4705-5
	Ironics	IV-3211-2MB	4889-36
		IV-3211-512K	4890-18
	SGS	L3211	1198-44
3212	AMD	AM3212	871-43
		M3212	871-44
	AD	**ADSP3212**	⋆ **2448**
			602-123
	Ironics	IV-3212-01	4889-10
	SGS	L3212	1198-41
32132	National	NS32132	880-44
3214	Ironics	IV3214	4888-44
3215	GE/RCA	CA3215	1121-31
3216	AMD	AM3216	870-108
		M3216	870-110
	Dense-Pac	**DPS3216**	⋆ **2579**
			1381-4
	National	DP3216	870-117
		ICM3216	4713-10
	Sanyo	LM3216	1119-112
3217	GE/RCA	CA3217	1124-58
			¶ 436-10
3219	**GE/RCA**	**CA3219**	⋆ **2650**
			1006-113
		CA3219A	⋆ **2650**
			⋆ **2654**
			1003-81
			1006-2
	RIFA	PBA3219	1004-55
322	AMD	OM322	1125-51
	AnalogSys	MA322	1156-29
	AT&T	**WE322DM**	⋆ **2525**
			880-83
	National	COP322L	862-123
		LM322	1201-12
	TeledyneS	322A/C	654-52
		322B/M	654-53
	TI	TL322C	1180-51
		TL322I	1180-15
	VTC	**VM322**	⋆ **3375**
			999-26
3220	**AD**	**ADSP3220**	⋆ **2448**
			644-12
		ADSP3220J	⋆ **2448**
			603-21
			604-147
		ADSP3220K	⋆ **2448**
			603-22
			604-148
		ADSP3220S	⋆ **2448**
			603-23
			604-149
		ADSP3220T	⋆ **2448**
			603-24
			604-150
	TRW-LSI	TMC3220	1304-22

(Continued)

Base Number	Source	Device	Page-Line
3220			(Cont'd)
	VME-Microsys		
		VMIVME3220	4891-14
32200	**AT&T**	**WE32200**	⋆ **2522**
			853-19
			880-68
32201	**AT&T**	**WE32201**	⋆ **2523**
			880-71
	National	NS32201	880-64
	TI	TI32201	803-3
			880-65
32202	National	NS32202	880-57
	TI	TI32202	851-4
			880-58
32203	National	NS32203	880-50
		NS32203-6	881-56
32204	**AT&T**	**WE32204**	⋆ **2523**
			880-69
32206	**AT&T**	**WE32206**	⋆ **2524**
			644-25
			880-70
3221	**AD**	**ADSP3221**	⋆ **2448**
			602-124
3222	**AD**	**ADSP3222**	⋆ **2448**
			602-125
	Motorola	MHW3222	1124-17
3223	GE/RCA	CA3223	1125-9
3224	GE/RCA	CA3224	1125-84
3226	AMD	AM3226	870-109
		M3226	870-111
	National	DP3226	870-118
3227	**GE/RCA**	**CA3227**	⋆ **2648**
			1107-36
3228	GE/RCA	CA3228	1004-3
			1118-123
323	Amperex	OM323	1125-54
		OM323A	1125-55
	Fairchild	μA323	1203-47
		SH323	1203-50
	IPS	**IP323**	⋆ **2854**
			1203-55
		IP323-12	⋆ **2854**
			1206-74
		IP323-15	⋆ **2854**
			1207-92
		IP323A	⋆ **2854**
			1203-56
		IP323A-12	⋆ **2854**
			1206-75
		IP323A-15	⋆ **2854**
			1207-93
		LM323	1203-59
	LinearTech	LM323	1203-65
		LM323A	1203-66
		LT323A	1203-68
	Motorola	**LM323**	⋆ **2927**
			1203-73
		LM323A	⋆ **2927**
			1203-74
	National	LM323	1203-83
		LM323A	1203-84
	Samsung	LM323	1203-85
	SiliconG	SG323	1203-93
		SG323A	1203-94
	TeledyneS	323A/C	654-64
		323B/M	654-65
	Thomson	LM323	1203-97
3230	**GoldStar**	**GL3230**	⋆ **2699**
			1118-93
	VME-Microsys		
		VMIVME3230	4888-6
32301	National	NS32301	880-66
3231	**CTI**	**CT3231**	⋆ **2554**
			1011-20
32310	National	NS32310	855-1
			880-46
3232	**CTI**	**CT3232**	⋆ **2554**
			1011-21
	Dense-Pac	DPS3232	1381-12
	GE/RCA	CA3232	651-16
32332	National	NS32332	855-2
			880-42
			¶ 410-5
		NS32332-10	855-3
			¶ 410-5

(Continued)

Base Number	Source	Device	Page-Line
32332	National		(Cont'd)
		NS32332-12	855-4
			¶ 410-5
		NS32332-15	855-5
			¶ 410-5
3237	GE/RCA	CA3237	1103-34
			1122-29
			1125-49
32381	National	NS32381	880-56
32382	National	NS32382	855-6
			880-60
		NS32382-10	880-62
		NS32382-15	880-63
324	AnalogSys	MA324	1163-40
	Fairchild	μA324C	1135-8
	GE/RCA	**CA324**	⋆ **2645**
			1135-11
		LM324	⋆ **2645**
			1187-42
	GoldStar	**GL324**	⋆ **2700**
			1135-12
		GL324A	⋆ **2700**
			1187-33
	MicroLinear	FB324	4068-40
	Motorola	**LM324**	⋆ **2923**
			⋆ **2958**
			1135-16
	National	COP324C	862-93
		LM324	1135-19
		LM324A	1184-34
		LP324	1188-7
	NEC	μPC324	1135-20
	Raytheon	LM324	1135-22
	Samsung	LM324	1184-31
		LM324A	1187-41
	SGS	LM324	1187-44
		LM324A	1184-32
	Signetics	LM324	1135-25
		LM324A	1182-22
	SiliconG	SG324	1135-28
		SG324A	1184-35
	TeledyneS	324A/C	654-62
		324B/M	654-63
	TI	LM324	1187-34
	Thomson	LM324	1187-47
		LM324A	1184-33
	Zendex	ZBX324	4854-29
3240	**GE/RCA**	**CA3240A**	⋆ **2646**
			1176-40
32405	National	NS32405	881-58
3242	**GE/RCA**	**CA3242**	⋆ **2650**
			⋆ **2654**
			1007-15
	Motorola	MC3242A	999-69
			¶ 448-17
3245	National	DS3245	999-112
3246	**GE/RCA**	**CA3246**	⋆ **2648**
			1107-37
325	National	COP325C	862-94
		LM325	1212-119
	TeledyneS	325A/C	654-66
		325B/M	654-67
3250	**Digital RF**	**DRFS3250-30**	
			⋆ **2586**
			646-99
		DRFS3250-35	
			⋆ **2586**
			646-100
		DRFS3250-40	
			⋆ **2586**
			646-101
	GE/RCA	**CA3250**	⋆ **2648**
			⋆ **2653**
			1108-51
	GoldStar	**GCL3250**	⋆ **4242**
			4048-15
		LL3250	4048-16
3251	**GE/RCA**	**CA3251**	⋆ **2648**
			⋆ **2653**
			1108-52
3252	**GE/RCA**	**CA3252**	⋆ **2650**
			⋆ **2654**
			1005-158
	Siemens	SDA3252	1190-75
3253	SiliconG	SG3253	1134-34

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
32532	National	NS32532	855-7
			880-79
3254	GE/RCA	CA3254	1126-14
3255	GE/RCA	CA3255	1126-15
326	National	COP326C	862-109
		LM326	1212-112
	TeledyneS	326A/C	654-68
		326B/M	654-69
3260	**GE/RCA**	**CA3260**	* **2646**
			1130-32
		CA3260A	* **2646**
			1176-37
		CA3260AE	* **2646**
			1176-38
		CA3260AT	* **2646**
			1176-39
3262	Fairchild	3262A	1123-78
		3262B	1123-79
	GE/RCA	**CA3262**	* **2650**
			* **2654**
			1006-1
			1006-151
3262211			
	TI	TMDS3262211	4719-5
3262221			
	TI	TMDS3262221	4719-6
3264	Marinco	APB3264AT	4843-12
			4850-23
3268821			
	TI	TMDS3268821	4831-12
327	Telefunken	U327	1122-90
3271	Burr-Brown	3271/25	1139-19
3272	Ironics	IV3272	4886-10
	Motorola	HSW3272A	1124-20
3273	**GoldStar**	**GL3273**	* **2700**
			1122-7
	Harris	**HS3273**	* **2720**
			1009-58
			¶ 424-34
	Ironics	IV3273	4883-1
3274	**GoldStar**	**GL3274**	* **2700**
			1122-8
3275	Ironics	IV3275	4882-39
3276	Ironics	IV3276	4883-3
328	Controlex	CM328	4878-7
	DataTrans	DTX328	4854-27
	MicroInds	mSBX328	4854-28
3280	**GE/RCA**	**CA3280**	* **2646**
			1175-42
		CA3280A	* **2646**
			1172-26
3281	LMS	GR3281	1380-55
3282	**Harris**	**HS3282**	* **2720**
			1009-8
			¶ 424-35
32828	National	NS32828	999-87
32829	National	NS32829	999-89
329	LinearTech	LM329	1226-63
	National	LM329	1226-71
			¶ 428-14
	TI	LM329	1112-51
3290	**GE/RCA**	**CA3290**	* **2647**
			1113-29
		CA3290A	* **2647**
			1113-26
		CA3290B	* **2647**
			1112-57
	IndTech	3290	4831-15
	MicroNet	MN3290	975-26
32900	National	LM32900	645-109
3291	Burr-Brown	3291	1132-105
33	NCR	ADP33	4883-33
	Samsung	KA33V	1127-115
33C92	Western	WD33C92	886-39
		WD33C92A	886-35
33C93	Western	WD33C93	886-40
		WD33C93A	886-36
330	**Datel**	**DAC330**	* **2572**
			* **2576**
			953-19
	Fujitsu	**C330UHB**	* **4229**
			* **4233**
			4045-31
	MicroLinear	FB330	4068-44
	Motorola	MVME330	4882-5
		MVME330-1	4881-17

(Continued)

Base Number	Source	Device	Page-Line
330	Motorola		(Cont'd)
		MVME330-2	4881-18
		MWA330	1104-30
	National	LM330-5	1202-46
	TI	LM330-5	1202-36
3300	AMCC	Q3300C	4041-19
		Q3300D	4041-20
	GE/RCA	CA3300	644-138
			916-41
	Hughes	HNVM3300	1308-17
	Plessey	CLA3300	4058-21
	Thomson	CRN3300	1198-92
		TDA3300	1124-95
3301	**Motorola**	**MC3301**	* **2924**
			1135-45
		TDA3301	* **2947**
			1124-66
	National	LM3301	1135-46
	NEC	μPD3301	869-102
			870-147
			872-34
	Sanyo	LA3301	1121-140
3302	Fairchild	μA3302	1115-15
	Motorola	**MC3302**	* **2925**
			1115-11
	National	LM3302	1115-16
	SGS	MC3302	1115-12
	Signetics	MC3302	1115-13
	TI	LM3302	1113-31
		MC3302	1187-51
	Thomson	TDF3302	1115-14
3303	Fairchild	μA3303C	1135-31
	Motorola	**MC3303**	* **2924**
			1135-33
		MPQ3303	1107-17
		TDA3303	* **2947**
			1124-67
	National	LM3303	1187-53
	Signetics	MC3303	1188-2
	TI	MC3303	1187-50
33030	**Motorola**	**MC33030**	* **2934**
			1003-34
33034P120			
	Motorola	MC33034P120	1003-32
33034P60			
	Motorola	**MC33034P60**	
			* **2934**
			1003-33
33039	**Motorola**	**MC33039**	* **2935**
			1003-28
3304	**GE/RCA**	**CA3304**	* **2651**
			916-4
		CA3304A	* **2651**
			916-1
3306	**GE/RCA**	**CA3306**	* **2651**
			644-139
			916-29
		CA3306A	* **2651**
			916-17
		CA3306C	* **2651**
			916-32
33060	**Motorola**	**MC33060A**	* **2930**
			1224-135
33063	IPS	IP33063	1216-79
	Motorola	**MC33063**	* **2930**
			1217-6
33071	**Motorola**	**MC33071**	* **2920**
			1157-17
		MC33071A	* **2920**
			1153-43
33072	**Motorola**	**MC33072**	* **2922**
			1176-4
		MC33072A	* **2922**
			1174-42
33074	**Motorola**	**MC33074**	* **2924**
			1135-37
			1185-1
		MC33074A	* **2924**
			1183-47
33077	**Motorola**	**MC33077**	* **2922**
			* **2959**
			1173-18
33078	**Motorola**	**MC33078**	* **2922**
			* **2959**
			1174-45

Base Number	Source	Device	Page-Line
33079	**Motorola**	**MC33079**	* **2924**
			* **2959**
			1184-19
331	HybridSys	DAC331B-10	952-29
		DAC331B-12	963-12
		DAC331B-14	972-7
		DAC331B-8	946-22
		DAC331C-10	952-30
		DAC331C-12	963-13
		DAC331C-14	972-8
		DAC331C-8	946-23
	Intel	iSBX331	4855-23
	Maxim	MAX331	904-74
	MicroInds	mBLX331	4855-26
		mSBC331	4855-27
	Motorola	MVME331	4887-45
	National	LM331	1230-104
		LM331A	1230-105
	Siliconix	DF331A	1193-14
	TeledyneS	331A/C	654-83
		331B/M	654-84
	TI	TL331C	1110-39
		TL331I	1110-38
3310	**GE/RCA**	**CA3310**	* **2651**
			927-16
		CA3310A	* **2651**
			926-27
3311	Signetics	PCD3311	1200-22
	Sprague	ULN3311D	1222-102
		ULN3311T	1222-103
3312	Signetics	PCD3312	1199-26
	Sprague	ULN3312D	1222-104
		ULN3312T	1222-105
33129	**Motorola**	**MC33129**	* **2930**
			1218-64
33171	**Motorola**	**MC33171**	* **2920**
			* **2959**
			1157-40
33172	**Motorola**	**MC33172**	* **2922**
			* **2959**
			1176-20
33174	**Motorola**	**MC33174**	* **2924**
			* **2959**
			1184-46
3318	**GE/RCA**	**CA3318C**	* **2651**
			924-49
			¶ 419-17
33181	**Motorola**	**MC33181**	* **2920**
			1156-37
33182	**Motorola**	**MC33182**	* **2922**
			1176-19
33184	**Motorola**	**MC33184**	* **2924**
			1189-14
332	AnalogSys	MA332	1161-24
		MA332C	1161-25
		MA332M	1161-26
	Intel	iSBX332	4855-24
	Maxim	MAX332	904-75
	MicroInds	mSBC332	4855-25
	National	DB332 +	4841-7
		DB332-Plus	4863-17
		ICM332-1	4841-6
	Siliconix	DF332A	1193-15
	TeledyneS	332A/C	654-5
		332B/M	654-6
3320	**GoldStar**	**GL3320**	* **2699**
			1124-59
	Motorola	MC3320	1116-121
33203	National	NS33203-10	883-56
		NS33203-8	881-57
3325	Motorola	MC3325	1118-128
33282	**Motorola**	**MC33282**	* **2922**
			1172-1
33284	**Motorola**	**MC33284**	* **2924**
			* **2959**
			1182-41
3329	Burr-Brown	3329	1102-39
			1130-108
333	AnalogSys	MA333	1165-13
	Motorola	MVME333	4885-25
	National	LM333	1215-8
	TeledyneS	333A/C	654-85
		333B/M	654-86
	Toshiba	TSU333-2	1389-101

Base Number	Source	Device	Page-Line
3330	**Motorola**	**TDA3330**	* **2947**
			1124-68
	Sprague	ULN3330	1222-100
3333	**Motorola**	**TDA3333**	* **2947**
			1124-69
3334	Motorola	MCCF3334	1118-113
		MC3334	1118-112
334	AnalogSys	MA334	1165-14
	LinearTech	LM334	1219-117
	National	LM334	1219-120
			1229-49
	TeledyneS	334A/C	654-12
	Telefunken	U334	1122-91
3340	**Motorola**	**MC3340**	* **2946**
			1119-111
			1120-105
3341	AMD	AM3341C	1304-28
	Cypress	**CY3341-2C**	* **2567**
			1304-36
		CY3341-2M	* **2567**
			1304-34
		CY3341C	* **2567**
			1304-33
		CY3341M	* **2567**
			1304-35
3342	Motorola	MHW3342	1124-22
3344	Motorola	MC3344	1118-125
			1221-75
3346	**Motorola**	**MC3346**	* **2948**
			* **2959**
			1106-15
3347	AMD	AM3347	1396-16
3348	MicroNet	MN3348	964-12
		MN3348H	964-13
3349	MicroNet	MN3349	964-15
		MN3349H	964-16
335	Amperex	OM335	1125-56
	Motorola	MVME335	4887-13
	National	LM335	1229-50
	TeledyneS	335A/C	654-11
3350	Motorola	MC3350	1107-5
	Sanyo	LA3350	1121-141
3356	**Motorola**	**MC3356**	* **2939**
			* **2959**
			1195-64
3357	Fairchild	F3357M	1396-23
	Motorola	**MC3357**	* **2939**
			* **2959**
			1121-121
3358	**Motorola**	**MC3358**	* **2922**
			1180-16
3359	**Motorola**	**MC3359**	* **2939**
			* **2959**
			1121-66
	Siemens	S3359	1199-24
336	Amperex	OM336	1125-57
	AnalogSys	MA336	1180-33
	HybridSys	DAC336B-1	946-44
		DAC336B-12	963-33
		DAC336B-8	946-37
		DAC336C-12	963-34
		DAC336C-8	946-38
	LinearTech	LM336-2	1225-106
	National	LM336-2	1225-135
		LM336-5	1226-33
		LM336B-5	1226-34
	Telefunken	U336	1122-92
3361	**GoldStar**	**GL3361**	* **2699**
			1126-79
	Motorola	**MC3361**	* **2939**
			* **2959**
			1121-67
	National	LM3361	1121-42
		LM3361A	1121-84
	Samsung	MC3361	1121-13
	Sanyo	LA3361	1121-142
3362	DataTrans	DT3362	4867-22
	Motorola	**MC3362**	* **2939**
			* **2959**
			1121-109
3363	**Motorola**	**MC3363**	* **2939**
			* **2959**
			1121-110
3364	**Motorola**	**MC3364**	* **2939**
			* **2959**
			1197-72

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
3365	Sanyo	LA3365	1121-143
3366	DataTrans	DT3366	4867-21
3367	**Motorola**	**MC3367**	⋆ **2939**
			⋆ **2959**
			1120-71
3368	DataTrans	DT3368	4856-6
3369	DataTrans	DT3369	4867-32
337	Amperex	OM337	1125-58
		OM337A	1125-59
	HybridSys	DAC337B-0	946-45
		DAC337B-2	946-46
		DAC337B-3	953-10
		DAC337B-4	952-40
		DAC337B-5	952-41
		DAC337B-6	947-10
		DAC337B-7	953-11
		DAC337C-0	946-47
		DAC337C-1	946-48
		DAC337C-2	946-49
		DAC337C-3	953-12
		DAC337C-4	952-42
		DAC337C-5	952-43
		DAC337C-6	947-11
		DAC337C-7	953-13
	IPS	**IP337**	⋆ **2854**
			1215-15
		IP337A	⋆ **2854**
			1215-16
		IP337AHV	⋆ **2854**
			1215-62
		IP337HV	⋆ **2854**
			1215-63
		LM337	1215-19
		LM337HV	1215-66
	Intel	iSBC337A	4861-17
	LinearTech	LM337	1215-21
		LM337HV	1215-55
			1215-68
		LT337A	1215-23
		LT337AHV	1215-57
			1215-70
	MCE	MCELM337	1215-26
	MicroInds	mSBC337	4855-28
	Motorola	**LM337**	⋆ **2929**
			1215-29
		LM337M	⋆ **2929**
			1215-9
	National	LM337	1215-32
			1215-80
		LM337HV	1215-72
		LM337L	1215-77
		LT337A	1215-34
	SiliconG	SG337	1215-39
		SG337A	1215-40
		SG337HV	1215-74
	Telefunken	U337	1122-93
	TI	LM337	1215-41
	Thomson	LM337	1215-43
			1215-82
	Unitrode	**UC337**	⋆ **3325**
			1215-46
			1215-85
	Ziatech	zSBC337	4850-27
3370	Sanyo	LA3370	1121-144
3371	**Motorola**	**MC3371**	⋆ **2939**
			⋆ **2959**
			1120-72
3373	**Motorola**	**MC3373**	⋆ **2948**
			1122-9
3374	**Harris**	**HS3374RH**	⋆ **2709**
			636-83
3375	Sanyo	LA3375	1121-145
3376	DataTrans	DT3376	4867-7
338	Fairchild	μA338	1213-80
	HybridSys	DAC338B-12-0	969-29
		DAC338B-12-1	968-2
		DAC338B-12-2	963-10
	IPS	**IP338**	⋆ **2854**
			1213-85
		IP338A	⋆ **2854**
			1213-86
		LM338	1213-89
	Lambda	LLM338	1213-90
	LinearTech	LM338	1213-92
		LT338A	1213-94
	National	LM338	1213-97
			(Continued)

Base Number	Source	Device	Page-Line
338			(Cont'd)
	SiliconG	SG338	1213-102
		SG338A	1213-103
	Telefunken	U338	1122-94
3380	Sanyo	LA3380	1121-146
33806	HybridSys	HS33806	963-39
3381	Sanyo	LA3381	1121-147
3382	DataTrans	DT3382	4867-9
	Motorola	MHW3382A	1124-23
3386	Motorola	MC3386	1106-16
3388	DataTrans	DT3388	4856-7
339	Amperex	OM339	1125-60
	Fairchild	μA339C	1114-34
	GE/RCA	**CA339**	⋆ **2647**
			1114-36
		CA339A	⋆ **2647**
			1113-54
	GoldStar	**GL339**	⋆ **2700**
			1229-120
	Motorola	**LM339**	⋆ **2925**
			⋆ **2958**
			1114-39
		LM339A	⋆ **2925**
			⋆ **2958**
			1114-1
	National	LM339	1114-41
		LM339A	1114-3
		LP339	1114-17
	NEC	μPC339	1114-42
	Raytheon	LM339	1114-44
	Samsung	LM339	1114-32
		LM339A	1113-52
	SGS	LM339	1114-46
		LM339A	1114-6
	Signetics	LM339	1114-48
	TI	LM339	1112-52
		LM339A	1111-39
		LP339	1112-24
		TLC339C	1114-10
		TLC339I	1114-11
		TLC339M	1114-12
	Thomson	LM339	1114-49
3390	Sanyo	LA3390	1121-148
	Sprague	ULN3390D	1223-67
		ULN3390T	1223-68
3393	Motorola	MC3393	1191-90
3396	Motorola	MC3396	1190-76
3397	Motorola	MC3397T	1229-89
3399	**Motorola**	**MC3399T**	⋆ **2933**
			1001-21
34	National	LM34	1229-51
		LM34C	1229-52
34B580	**SiliconSys**	**SSI34B580**	⋆ **3198**
			999-19
34C168	**Calmos**	**CA34C168**	⋆ **2553**
			889-40
			984-3
			¶ 406-15
34D441	**SiliconSys**	**SSI34D441**	⋆ **3198**
			999-15
34F19	Motorola	MC34F19	1198-61
		MC34F19A	1198-62
34P570	**SiliconSys**	**SSI34P570**	⋆ **3198**
			999-20
34R575	**SiliconSys**	**SSI34R575**	⋆ **3198**
			999-21
340	**IPS**	**IP340-12**	⋆ **2854**
			1206-15
		IP340-15	⋆ **2854**
			1207-43
		IP340-5	⋆ **2854**
			1202-122
		IP340A-12	⋆ **2854**
			1206-16
		IP340A-15	⋆ **2854**
			1207-44
		IP340A-5	⋆ **2854**
			1202-123
		LM340-12	1206-23
		LM340-5	1203-5
	Intel	iSBC340	4853-13
	Maxim	MAX340C	902-45
		MAX340E	902-46
		MAX340M	902-47
			(Continued)

Base Number	Source	Device	Page-Line
340			(Cont'd)
	Motorola	**LM340-12**	⋆ **2926**
			⋆ **2928**
			1206-29
		LM340-15	⋆ **2926**
			⋆ **2928**
			1207-55
		LM340-18	⋆ **2926**
			⋆ **2928**
			1208-30
		LM340-24	⋆ **2926**
			⋆ **2928**
			1209-9
		LM340-5	⋆ **2926**
			⋆ **2928**
			1203-10
		LM340-6	⋆ **2926**
			⋆ **2928**
			1204-23
		LM340-8	⋆ **2926**
			⋆ **2928**
			1204-113
		LM340A-12	⋆ **2926**
			⋆ **2928**
			1206-30
		MVME340	4888-25
	National	COP340	862-124
		LM340-12	1206-39
			¶ 442-4
		LM340-15	1207-63
			¶ 442-4
		LM340-5	1203-20
			¶ 442-4
		LM340A-12	1206-40
			¶ 442-4
		LM340A-15	1207-64
			¶ 442-4
		LM340A-5	1203-21
			¶ 442-4
		LM340LA-12	1205-82
			¶ 442-4
		LM340LA-15	1206-111
			¶ 442-4
	SiliconG	SG340-05K	1203-27
		SG340-05R	1203-28
		SG340-05T	1202-74
		SG340-06K	1204-34
		SG340-06R	1204-35
		SG340-06T	1204-5
		SG340-08K	1205-1
		SG340-08R	1205-2
		SG340-08T	1204-94
		SG340-12K	1206-48
		SG340-12P	1206-49
		SG340-12R	1206-50
		SG340-12T	1205-111
		SG340-18K	1208-39
		SG340-18R	1208-40
		SG340-18T	1208-6
		SG340-20P	1208-80
		SG340-20R	1208-81
		SG340-20T	1208-67
		SG340-24K	1209-16
		SG340-24P	1209-17
		SG340-24R	1209-18
		SG340-24T	1208-111
	Telefunken	U340	984-10
			1124-134
	TI	LM340-12	1206-58
		LM340-15	1207-77
		LM340-5	1203-35
3400	AMCC	Q3400J	4041-21
	GIM	ER3400	1309-41
			¶ 444-14
			¶ 444-18
			¶ 444-22
	Intech	RGBDAC3400	940-34
		VDAC3400S	⋆ **2799**
			941-4
34001	**Motorola**	**MC34001**	⋆ **2920**
			⋆ **2959**
			1165-34
		MC34001A	⋆ **2920**
			⋆ **2959**
			1151-42
			(Continued)

Base Number	Source	Device	Page-Line
34001	**Motorola**		**(Cont'd)**
		MC34001B	⋆ **2920**
			⋆ **2959**
			1159-20
34002	**Motorola**	**MC34002**	⋆ **2922**
			1180-36
		MC34002A	⋆ **2922**
			1174-9
		MC34002B	⋆ **2922**
			1176-51
34004	**Motorola**	**MC34004**	⋆ **2923**
			⋆ **2959**
			1188-44
		MC34004B	⋆ **2923**
			⋆ **2959**
			1185-35
3401	**GE/RCA**	**CA3401**	⋆ **2645**
			1135-41
	GoldStar	GL3401	1125-11
	Motorola	**MC3401**	⋆ **2923**
			⋆ **2959**
			1135-43
	National	LM3401	1135-44
		TP3401	1198-75
	SiliconG	SG3401	1104-112
			¶ 431-21
34010	**HoneywellSPT**		
		HDAC34010	⋆ **2997**
			645-25
			882-93
			940-11
	Motorola	**MC34010A**	⋆ **2941**
			1194-67
	TI	**SMJ34010**	⋆ **3221**
			855-9
		TMS34010	855-13
			¶ 410-2
34011	**Motorola**	**MC34011A**	⋆ **2941**
			⋆ **2959**
			1194-68
34012	**Motorola**	**MC34012**	⋆ **2942**
			⋆ **2959**
			1199-117
		MC34012-1	⋆ **2942**
			⋆ **2959**
			1199-123
		MC34012-2	⋆ **2942**
			⋆ **2959**
			1199-124
		MC34012-3	⋆ **2942**
			⋆ **2959**
			1199-125
34013	**Motorola**	**MC34013**	⋆ **2943**
			⋆ **2959**
			1198-45
34014	**Motorola**	**MC34014**	⋆ **2943**
			⋆ **2959**
			1198-22
34017	Cherry	CS34017	1199-116
	Motorola	**MC34017**	⋆ **2942**
			⋆ **2959**
			1199-118
34018	**Motorola**	**MC34018**	⋆ **2944**
			⋆ **2959**
			1198-1
			¶ 442-9
34020	**HoneywellSPT**		
		HDAC34020	⋆ **2997**
			645-26
			882-94
			940-12
3403	Exar	XR3403	1135-29
			¶ 428-1
	Fairchild	μA3403C	1135-32
	Motorola	**MC3403**	⋆ **2923**
			⋆ **2959**
			1135-34
	National	LM3403	1189-5
	NEC	μPC3403	1187-43
	Raytheon	RC3403	1135-36
		RC3403A	1187-21
	SGS	MC3403	1189-7
	Signetics	MC3403	1189-9
	Thomson	MC3403	1189-8
		TDC3403	1186-15
		TDF3403	1188-1

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
3404	**Intech**	**RGBDAC3404A**	
			⋆ **2799**
			941-1
	Sharp	IR3404	1160-39
3405	**Intech**	**RGBDAC3405**	
			⋆ **2799**
			941-2
		RGBDAC3405S	
			⋆ **2799**
			941-5
	Motorola	**MC3405**	⋆ **2925**
			1103-117
			1113-21
34050	**Motorola**	**MC34050**	⋆ **2953**
			994-34
34051	**Motorola**	**MC34051**	⋆ **2953**
			994-33
34060	**IPS**	**IP34060A**	⋆ **2854**
			1216-80
	Motorola	**MC34060**	⋆ **2930**
			⋆ **2960**
			1217-7
			1229-9
		MC34060A	⋆ **2930**
			⋆ **2960**
			1224-136
	TI	MC34060	1225-5
34061	Motorola	MC34061	1224-106
		MC34061A	1224-107
	TI	**SMJ34061**	⋆ **3221**
			882-43
		TMS34061	882-44
			883-32
			999-33
		TMS34061-12	886-111
34062	Motorola	MC34062	1223-103
34063	**IPS**	**IP34063**	⋆ **2854**
			1216-81
	Motorola	**MC34063**	⋆ **2930**
			⋆ **2960**
			1217-8
			¶ 441-10
			¶ 441-35
34070	TI	TMS34070	883-22
			940-26
		TMS34070-66	888-94
34071	**Motorola**	**MC34071**	⋆ **2920**
			⋆ **2960**
			1157-18
		MC34071A	⋆ **2920**
			⋆ **2960**
			1153-44
34072	**Motorola**	**MC34072**	⋆ **2922**
			⋆ **2960**
			1176-5
		MC34072A	⋆ **2922**
			⋆ **2960**
			1174-43
34074	**Motorola**	**MC34074**	⋆ **2923**
			⋆ **2960**
			1135-38
			1185-2
		MC34074A	⋆ **2923**
			⋆ **2960**
			1183-48
3408	**Intech**	**RGBDAC3408**	
			⋆ **2799**
			941-3
	Telefunken	U3408M	1219-9
34080	**Motorola**	**MC34080**	⋆ **2920**
			⋆ **2960**
			1150-15
		MC34080A	⋆ **2920**
			⋆ **2960**
			1146-9
34081	**Motorola**	**MC34081**	⋆ **2920**
			⋆ **2960**
			1149-15
		MC34081A	⋆ **2920**
			⋆ **2960**
			1146-7
34082	**Motorola**	**MC34082**	⋆ **2922**
			1175-43
		MC34082A	⋆ **2922**
			1173-19
34083	**Motorola**	**MC34083**	⋆ **2922**
			1175-45
			1175-46
		MC34083A	⋆ **2922**
			1173-21
			1173-22
34084	**Motorola**	**MC34084**	⋆ **2923**
			1188-38
		MC34084A	⋆ **2923**
			1185-31
34085	**Motorola**	**MC34085**	⋆ **2923**
			1188-40
		MC34085A	⋆ **2923**
			1185-33
341	Intel	iSBC341	4853-23
	Maxim	MAX341C	903-23
		MAX341E	903-24
		MAX341M	903-25
	MicroInds	mSBC341	4861-31
	National	COP341	862-125
		LM341-12	1205-104
			¶ 442-4
		LM341-15	1207-10
			¶ 442-4
		LM341-5	1202-65
			¶ 442-4
	TeledyneS	341A/C	654-75
		341B/M	654-76
3410	**GE/RCA**	**CA3410**	⋆ **2645**
			1189-17
		CA3410A	⋆ **2645**
			1187-52
	MicroLinear	FB3410	4068-42
	SGS	TDA3410	1118-13
	Signetics	MC3410	951-27
		MC3410C	953-20
34114	**Motorola**	**MC34114**	⋆ **2943**
			⋆ **2960**
			1198-40
34118	**Motorola**	**MC34118**	⋆ **2944**
			⋆ **2960**
			1198-11
3411804420			
	TI	TMDS3411804420	
			4841-4
			4851-27
34119	**Motorola**	**MC34119**	⋆ **2945**
			⋆ **2960**
			1104-55
			1192-6
3412	MicroNet	MN3412	964-36
34129	**Motorola**	**MC34129**	⋆ **2930**
			⋆ **2945**
			⋆ **2960**
			1217-9
			¶ 439-26
3416	Motorola	MC3416	911-64
			¶ 427-6
3417	Motorola	MC3417	1193-56
3418	Motorola	MC3418	1193-57
34181	**Motorola**	**MC34181**	⋆ **2920**
			⋆ **2960**
			1155-44
34182	**Motorola**	**MC34182**	⋆ **2922**
			⋆ **2960**
			1175-52
34184	**Motorola**	**MC34184**	⋆ **2923**
			⋆ **2960**
			1189-13
3419	Motorola	MC3419	1198-63
		MC3419A	1198-64
		MC3419C	1198-65
	Sharp	LR3419	1201-3
342	AnalogSys	MA342	1157-20
	Maxim	MAX342C	906-15
		MAX342E	906-16
		MAX342M	906-17
	National	COP342	862-110
		LM342-12	1205-92
		LM342-15	1206-121
		LM342-5	1202-53
	SGS	LS342	1197-26
	TeledyneS	342A/C	654-91
		342B/M	654-92
3420	**GE/RCA**	**CA3420**	⋆ **2645**
			1164-51
		CA3420A	⋆ **2645**
			1157-53
	Motorola	MC3420	1217-10
	National	TP3420	1195-75
	SGS	TDA3420	1118-14
3423	**Motorola**	**MC3423**	⋆ **2959**
			1223-104
	NEC	μPC3423	1223-106
	SiliconG	SG3423	1223-109
		SG3423A	1223-110
	TI	MC3423	1224-117
3425	Motorola	MC3425	1224-119
3428	Sharp	LR3428	1119-53
3429	Sharp	LR3429	1119-54
343	**Intech**	**SH343**	⋆ **2799**
			1228-38
	Maxim	MAX343C	907-34
		MAX343E	907-35
		MAX343M	907-36
	MicroNet	MN343	1228-47
		MN343H	1228-48
	National	LM343	1131-105
	SiliconG	SG343	1131-89
	TeledyneS	343A/C	654-1
		343B/M	654-2
3430	**Motorola**	**MC3430**	⋆ **2925**
			1008-23
			1113-41
3431	**Motorola**	**MC3431**	⋆ **2925**
			1008-24
			1113-42
3432	**Motorola**	**MC3432**	⋆ **2925**
			1008-25
			1113-43
3433	**Motorola**	**MC3433**	⋆ **2925**
			1008-26
			1113-44
3437	**Motorola**	**MC3437**	⋆ **2952**
			990-55
344	**Intech**	**SH344**	⋆ **2799**
			1228-39
	Intel	iPCX344A	4803-34
			4846-12
			4847-57
		iSBX344A	4803-35
			4847-58
			4849-27
		PCX344A	4807-1
	Maxim	MAX344C	908-67
		MAX344E	908-68
		MAX344M	908-69
	MicroNet	MN344	1228-49
		MN344H	1228-50
	National	COP344C	862-95
		LM344	1131-94
			1164-30
	TeledyneS	344A/C	654-72
3440	**GE/RCA**	**CA3440**	⋆ **2645**
			1165-8
		CA3440A	⋆ **2645**
			1158-7
	Motorola	**MC3440A**	⋆ **2952**
			994-28
3441	**Motorola**	**MC3441A**	⋆ **2952**
			994-29
	Sharp	LR3441	1119-80
3444	Intel	iSBX3444A	4846-11
3446	**Motorola**	**MC3446A**	⋆ **2952**
			994-16
	TI	MC3446	995-24
3447	**Motorola**	**MC3447**	⋆ **2952**
			997-26
3448	AMD	AM3448A	994-20
	Exar	**XR3448**	⋆ **2606**
			884-48
	Motorola	**MC3448A**	⋆ **2952**
			⋆ **2959**
			994-21
345	Amperex	OM345	1125-61
	AD	AD345	1004-76
	Maxim	MAX345C	909-10
		MAX345E	909-11
		MAX345M	909-12
	National	COP345C	862-96

(Continued)

Base Number	Source	Device	Page-Line
345			(Cont'd)
	Siemens	TCA345A	1229-70
345K5	National	LM345K5	1210-33
3450	**Burr-Brown**	**3450**	⋆ **2538**
			1103-39
	GE/RCA	**CA3450**	⋆ **2645**
			⋆ **2654**
			985-1
			1168-10
	Motorola	**MC3450**	⋆ **2952**
			⋆ **2959**
			992-15
	TI	MC3450	993-15
3451	**Burr-Brown**	**3451**	⋆ **2538**
			1103-40
3452	**Burr-Brown**	**3452**	⋆ **2538**
			1103-41
	Motorola	**MC3452**	⋆ **2952**
			⋆ **2959**
			992-18
	TI	MC3452	993-14
3453	**Motorola**	**MC3453A**	⋆ **2952**
			988-46
	TI	MC3453	988-47
3455	**Burr-Brown**	**3455**	⋆ **2538**
			1103-42
3456	**Burr-Brown**	**3456**	⋆ **2538**
			1103-44
	Motorola	MC3456	1201-92
3458	**Motorola**	**MC3458**	⋆ **2921**
			⋆ **2959**
			1180-49
34592	GIM	AY34592	984-20
346	AD	ADX346	1227-114
		AD346	1227-115
	Exar	XR346	1134-40
		XR346-2	1187-23
	HybridSys	HS346	1228-23
	Intech	**SH346**	⋆ **2799**
			1228-40
	MicroNet	MN346	1228-51
		MN346H	1228-52
	National	LM346	1134-45
	SGS	LS346	1197-62
	Thomson	LM346	1187-20
34611	Sharp	LR34611	1119-116
34621	Sharp	LR34621	1119-117
3464	Sharp	LR3464	1119-55
34651	Sharp	LR34651	1119-52
3467	Fairchild	FQ3467	1107-23
	Motorola	MC3467	1104-23
		MC3467L	⋆ **2950**
			1008-6
		MHQ3467	1107-25
3468	Fairchild	FQ3468	1107-24
3469	**Motorola**	**MC3469**	⋆ **2949**
			884-49
			999-50
34699	TI	TMDS34699-10000	
			4719-7
347	HybridSys	DAC347LPB-10B	
			952-36
		DAC347LPB-10U	
			952-37
		DAC347LPB-12U	
			964-32
		DAC347LPC-10B	
			952-38
		DAC347LPC-10U	
			952-39
		DAC347LPC-12B	
			964-33
		DAC347LPC-12U	
			964-34
		HAC347LPB-12B	
			964-35
	Intech	**SH347**	⋆ **2799**
			1228-41
	MicroNet	MN347	1228-53
		MN347H	1228-54
	Motorola	**LF347**	⋆ **2923**
			⋆ **2958**
			1189-1
		LF347B	⋆ **2923**
			⋆ **2958**
			1185-36

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
347			(Cont'd)
	National	LF347	1189-2
			¶ 428-33
		LF347B	1185-37
			¶ 428-33
	TeledyneS	347A/C	654-93
		347B/M	654-94
	TI	LF347	1188-42
3470	Cherry	CS3470A	884-5
	Exar	XR3470A	1102-80
		XR3470B	1102-81
	Motorola	**MC3470**	*** 2950**
			1102-82
		MC3470A	*** 2950**
			1102-83
	TI	MC3470	1102-84
3471	Cherry	CS3471	884-6
	Exar	XR3471	884-108
	Motorola	**MC3471**	*** 2949**
			884-50
			999-51
3471804000			
	TI	TMDS3471804000	
			4805-35
			4849-19
3472	Sharp	LR3472	1201-31
3476	**Motorola**	**MC3476**	*** 2920**
			1133-58
			1134-17
3479	**Motorola**	**MC3479**	*** 2935**
			1004-29
348	Fairchild	µA348C	1187-8
	GoldStar	**GL348**	*** 2700**
			1187-9
	HybridSys	DAC348B-10	952-34
		DAC348B-12	964-27
		DAC348C-10	952-35
		DAC348C-12	964-28
	Maxim	MAX348C	902-70
		MAX348E	902-71
	Motorola	**LM348**	*** 2923**
			*** 2958**
			1187-11
	National	LM348	1187-13
	Raytheon	LM348	1187-15
	Samsung	LM348	1187-16
	Thomson	LM348	1187-5
	Zendex	ZBX348	4855-39
3480	Motorola	MC3480	868-33
			999-68
			¶ 448-17
3481	**Motorola**	**MC3481**	*** 2952**
			986-3
3482	Motorola	MC3482A	868-97
		MC3482B	868-98
3484S2	**Motorola**	**MC3484S2**	*** 2933**
			1001-47
3484S4	**Motorola**	**MC3484S4**	*** 2933**
			1001-48
3484V2	Motorola	MC3484V2	1004-119
			1118-121
3484V4	Motorola	MC3484V4	1004-120
			1118-122
3485	**Motorola**	**MC3485**	*** 2952**
			986-4
3486	Fairchild	µA3486	992-40
	Motorola	**MC3486**	*** 2952**
			*** 2959**
			992-25
			¶ 424-21
			¶ 425-22
	National	DS3486	992-26
	TI	MC3486	990-17
			992-14
3487	Fairchild	µA3487	988-39
	Motorola	**MC3487**	*** 2952**
			*** 2959**
			988-40
			¶ 424-21
			¶ 425-22
	National	DS3487	988-41
	TI	MC3487	988-45
3488	**Motorola**	**MC3488A**	*** 2953**
			985-22
			¶ 424-21
			¶ 425-22

Base Number	Source	Device	Page-Line
349	HybridSys	DAC349B-12	964-29
		DAC349B-3D	971-29
		DAC349C-12	964-30
		DAC349C-3D	971-30
	National	LM349	1187-18
	TeledyneS	349A/C	655-5
	Zendex	ZBX349	4854-32
3493	**GE/RCA**	**CA3493**	*** 2645**
			1146-58
		CA3493A	*** 2645**
			1140-47
35	National	LM35	1229-53
		LM35C	1229-54
35LS190			
	AMD	AM35LS190M	663-133
35L12	Raytheon	CGA35L12	4058-45
35P550	**SiliconSys**	**SSI35P550**	*** 3198**
			1004-121
350	Amperex	OM350	1125-62
	DataTrans	DTX350	4854-34
	Fairchild	µA350	1213-46
	Fujitsu	**B350**	*** 4230**
			4045-37
		B350B	*** 4230**
			4045-35
		C350AVB	*** 4229**
			*** 4231**
			4045-32
		C350AVL	*** 4229**
			*** 4231**
			4045-33
	IPS	**IP350**	*** 2854**
			1213-51
		IP350A	*** 2854**
			1213-52
		LM350	1213-55
	Intel	iSBX350	4855-4
	Lambda	LLM350	1213-56
	LinearTech	LM350	1213-59
		LM350A	1213-60
		LT350A	1213-62
	MicroInds	mSBX350	4854-33
	MicroPwr	MP350	1106-130
	Motorola	**LM350**	*** 2929**
			1213-65
	National	LM350	1213-68
	SBE	SBE350	4717-8
	SiliconG	SG350	1213-73
		SG350A	1213-74
	TeledyneS	350A/C	654-89
	Unitrode	**UC350**	*** 3325**
			1213-77
	Zendex	ZBX350	4855-3
3500	AMD	AMMPA3500B	4065-3
	AMCC	Q3500S	4041-22
	Burr-Brown	3500A	1160-6
		3500B	1152-48
		3500C	1149-31
		3500E	1132-94
			1147-4
		3500MP	1174-21
		3500R	1160-7
		3500R/MIL	*** 2545**
			1160-8
		3500S	1152-49
		3500T	1149-32
		3500U/883B	*** 2545**
			1160-9
	Cherry	CS3500	4065-13
	Honeywell	HC3500R	4049-45
		HM3500(R)	4043-32
	Plessey	CLA3500	4058-23
	Sanyo	LB3500	1190-79
	SMS	OMTI3500	4869-39
35000	**Gould**	**GC35000**	*** 4244**
			4048-53
35001	**Motorola**	**MC35001**	*** 2921**
			1165-32
		MC35001A	*** 2921**
			1151-36
		MC35001B	*** 2921**
			1159-8
35002	**Motorola**	**MC35002**	*** 2922**
			1180-35
		MC35002A	*** 2922**
			1174-4

(Continued)

Base Number	Source	Device	Page-Line
35002	**Motorola**		**(Cont'd)**
		MC35002B	*** 2922**
			1177-1
35004	**Motorola**	**MC35004**	*** 2924**
			1188-45
		MC35004A	*** 2924**
			1182-40
		MC35004B	*** 2924**
			1185-28
3501	Aptek	AMS3501	1199-47
	Burr-Brown	3501A	1159-31
		3501B	1152-38
		3501C	1152-35
		3501R	1159-32
		3501S	1152-39
	National	ADD3501	939-31
	SiliconG	SG3501A	1213-6
			¶ 442-1
	Sprague	UGN3501	1221-99
	Toshiba	TD3501A	662-66
3502	SiliconG	SG3502	1215-96
	Toshiba	TD3502A	656-41
3503	Exar	XR3503	1135-30
	GoldStar	**GL3503**	*** 2699**
			1125-72
	Motorola	**MC3503**	*** 2924**
			1135-35
	SGS	MC3503	1186-14
	Signetics	MC3503	1186-16
	SiliconG	SG3503	1225-147
	Sprague	UGN3503U	1002-144
		UGS3503U	1002-145
	Toshiba	TD3503	1395-55
3504	**GoldStar**	**GL3504A**	*** 2699**
			1125-73
3505	**Motorola**	**MC3505**	*** 2925**
			1103-118
			1112-56
	Signetics	TDA3505	1124-79
	Toshiba	TD3505A	661-49
3506	Gould	S3506	1192-61
	Telefunken	TDA3506	1124-92
35060	**IPS**	**IP35060A**	*** 2854**
			1216-82
	Motorola	**MC35060**	*** 2930**
			1217-11
			1229-10
		MC35060A	*** 2930**
			1224-137
35061	Motorola	MC35061A	1224-108
35062	Motorola	MC35062	1224-105
35063	**IPS**	**IP35063**	*** 2854**
			1216-83
	Motorola	**MC35063**	*** 2930**
			1217-12
3507	**Burr-Brown**	**3507J**	*** 2535**
			1166-29
	Gould	S3507	1192-92
	Hitachi	MT3507	1192-93
35071	**Motorola**	**MC35071**	*** 2921**
			1157-19
		MC35071A	*** 2921**
			1153-45
35072	**Motorola**	**MC35072**	*** 2922**
			1176-6
		MC35072A	*** 2922**
			1174-44
35074	**Motorola**	**MC35074**	*** 2924**
			1135-39
			1185-3
		MC35074A	*** 2924**
			1183-49
3508	**Burr-Brown**	**3508J**	*** 2535**
			1160-3
35080	**Motorola**	**MC35080**	*** 2921**
			1149-16
		MC35080A	*** 2921**
			1146-10
35081	**Motorola**	**MC35081**	*** 2921**
			1149-14
		MC35081A	*** 2921**
			1146-8
35082	**Motorola**	**MC35082**	*** 2922**
			1175-44
		MC35082A	*** 2922**
			1173-20

Base Number	Source	Device	Page-Line
35083	**Motorola**	**MC35083**	*** 2923**
			1175-18
		MC35083A	*** 2923**
			1173-14
35084	**Motorola**	**MC35084**	*** 2924**
			1188-39
		MC35084A	*** 2924**
			1185-32
35085	**Motorola**	**MC35085**	*** 2924**
			1188-41
		MC35085A	*** 2924**
			1185-34
3509	SiliconG	SG3509	1219-43
351	CompDyn	PTR351	4871-15
	Intel	iSBX351	4855-15
	MicroInds	mSBX351	4855-11
	MicroPwr	MP351	1106-131
	Motorola	**LF351**	*** 2920**
			*** 2958**
			1130-33
			1165-31
	National	LF351	1130-35
			1165-41
	TeledyneS	351A/C	654-88
	TI	LF351	1165-30
	Thomson	LF351	1165-33
		LF351A	1152-5
		LF351B	1159-23
	Zendex	ZBX351	4855-13
3510	Burr-Brown	3510A	1143-7
		3510B	1132-95
			1142-18
		3510C	1132-22
			1132-49
			1139-40
		3510S	1132-96
			1142-19
		3510V	*** 2545**
			1142-20
	RIFA	PBD3510	1001-56
			1197-79
	Signetics	MC3510	951-28
3511	National	ADC3511	939-30
			¶ 419-34
	RIFA	PBD3511	1001-57
			1197-80
3513	RIFA	PBD3513	1005-8
			1197-81
3515	RIFA	PBD3515	1197-82
3516	Fairchild	F3516-35	1389-40
		F3516-45	1389-44
	Harris	HS3516RH	1156-14
3517	Motorola	MC3517	1193-58
	RIFA	PBD3517	1004-56
	Unitrode	**UC3517**	*** 3326**
			1004-32
			1222-138
35171	**Motorola**	**MC35171**	*** 2921**
			1157-39
35172	**Motorola**	**MC35172**	*** 2923**
			1176-21
35174	**Motorola**	**MC35174**	*** 2924**
			1184-47
3518	Motorola	MC3518	1193-59
35181	**Motorola**	**MC35181**	*** 2921**
			1157-38
35182	**Motorola**	**MC35182**	*** 2923**
			1177-7
35184	**Motorola**	**MC35184**	*** 2924**
			1189-16
352	Intel	iSBX352	4854-31
	MicroPwr	MP352	1106-132
3520	Motorola	MC3520	1217-13
	RIFA	PBD3520	1001-40
			1197-83
3521	Burr-Brown	3521H	1145-23
			¶ 428-35
		3521J	1144-3
			¶ 428-35
		3521K	1144-2
			¶ 428-35
		3521L	1132-97
			1143-43
			¶ 428-35
		3521R	1144-4
			¶ 428-35

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
35212	Gould	S35212	1196-83
		S35212A	1196-84
	Mitel	MT35212A	1196-85
35213	Gould	S35213	1196-11
			¶ 434-16
	Mitel	MT35213	1196-12
3522	Burr-Brown	3522J	1148-11
		3522K	1145-13
		3522L	1132-30
			1157-44
		3522S	1145-14
3523	Burr-Brown	3523J	1132-23
			1148-2
		3523K	1132-14
			1144-49
		3523L	1132-6
			1144-47
	Motorola	MC3523	1223-105
	RIFA	PBD3523-11	1002-13
			1107-86
		PBD3523-12	1001-88
			1107-87
		PBD3523-13	1001-108
			1107-88
		PBD3523-14	1002-34
			1107-89
	SiliconG	SG3523	1223-111
		SG3523A	1223-112
352301	RIFA	RBD352301	1107-90
352302	RIFA	RBD352302	1107-91
352303	RIFA	RBD352303	1107-92
352304	RIFA	PBD352304	1001-89
3524	Cherry	CS3524	1216-15
		CS3524A	1216-16
	Exar	XR3524	1216-36
	Fairchild	μA3524A	1202-38
			1224-142
	GE/RCA	**CA3524**	*** 2650**
			1216-54
			¶ 438-14
	Gould	S3524	1194-70
	IPS	**IP3524**	*** 2854**
			1216-84
		IP3524B	*** 2854**
			1216-85
	LinearTech	LT3524	1216-116
		SG3524	1216-123
	National	LM3524	1217-30
	SGS	SG3524	1113-27
			1224-109
		SG3524A	1113-19
			1224-110
		UC3524A	1113-20
			1224-111
	Signetics	SG3524	1217-78
	SiliconG	SG3524	1217-91
			¶ 438-15
			¶ 438-17
		SG3524B	1217-92
			¶ 438-15
			¶ 438-17
	Unitrode	**UC3524**	*** 3323**
			1218-49
		UC3524A	*** 3323**
			1218-50
3525	AMD	AMMPA3525	4065-4
	Cherry	CS3525A	1216-17
	Exar	**XR3525A**	*** 2607**
			1216-37
	Gould	S3525A	1195-2
	IPS	**IP3525A**	*** 2854**
			1216-86
	LinearTech	LT3525A	1216-117
		SG3525A	1216-124
	Motorola	**SG3525A**	*** 2931**
			1217-20
	RIFA	RL3525A	1217-42
	SGS	SG3525A	1217-57
	SiliconG	SG3525A	1217-93
	SiliconSys	S3525A	1195-5
		S3525B	1195-6
	TI	SG3525A	1225-9
	Unitrode	**UC3525A**	*** 3323**
			1218-51

Base Number	Source	Device	Page-Line
3526	Gould	S3526	1195-20
		S3526B	1195-46
	IPS	**IP3526**	*** 2854**
			*** 2856**
			1216-87
		IP3526A	*** 2854**
			*** 2856**
			1216-88
	LinearTech	LT3526	1216-118
	Motorola	**SG3526**	*** 2931**
			1217-21
	SiliconG	SG3526	1217-94
		SG3526A	1217-95
	Unitrode	**UC3526A**	*** 3323**
			1218-52
3527	Burr-Brown	3527A	1145-9
		3527B	1132-37
			1143-41
		3527C	1145-8
	Cherry	CS3527A	1216-18
	Exar	**XR3527A**	*** 2607**
			1216-38
	IPS	**IP3527A**	*** 2854**
			1216-89
	LinearTech	LT3527A	1216-119
		SG3527A	1216-125
	Motorola	**SG3527A**	*** 2931**
			1217-22
	SMS	OMTI3527	4869-40
	SGS	SG3527A	1217-58
	SiliconG	SG3527A	1217-96
	TI	SG3527A	1225-10
	Unitrode	**UC3527A**	*** 3323**
			1218-53
3528	Burr-Brown	3528A	1132-18
			1144-50
		3528B	1132-11
			1137-7
		3528C	1132-4
			1144-45
	Gould	S3528	1195-21
3529	Gould	S3529	1195-11
353	**Motorola**	**LF353**	*** 2921**
			*** 2958**
			1180-47
	National	LF353	1180-48
			¶ 428-33
	Siemens	S353	692-108
	SiliconG	SG353-05	1203-95
		SG353-12	1206-86
		SG353-15	1207-104
	TI	LF353	1180-37
	Thomson	LF353	1180-46
		LF353A	1174-3
		LF353B	1177-2
3530	Gould	S3530	1195-106
	Harris	**HS3530RH**	*** 2716**
			1156-3
	Mitel	MT3530	1195-107
			¶ 432-3
35300	ILC-DDC	IDC35300	1227-84
35316	Fairchild	F35316-25	1389-34
		F35316-30	1389-37
3532	Fairchild	F3532-30	1389-72
		F3532-35	1389-81
		F3532-45	1389-92
	SiliconG	SG3532	1214-70
3533	Fairchild	F3533-30	1389-73
		F3533-35	1389-82
		F3533-45	1389-93
3534	RIFA	PBD3534	1199-17
3535	RIFA	PBD3535	1199-18
	SGS	PDB3535	1194-112
3538	RIFA	PBD3538-11	1002-51
			1107-158
		PBD3538-12	1002-52
			1107-159
		PBD3538-13	1002-71
			1107-160
		PBD3538-14	1002-72
			1107-161
354	MicroInds	mSBX354	4855-10
	Zendex	ZBX354	4855-16
			4860-55
3540	SiliconG	SG3540	1228-130

Base Number	Source	Device	Page-Line
3542	AD	AD3542J	1168-22
	Burr-Brown	3542J	1168-23
		3542S	1168-24
	SiliconG	SG3542	1223-113
3543	Exar	XR3543	1224-70
	SiliconG	SG3543	1224-75
			¶ 441-2
	Unitrode	**UC3543**	*** 3324**
			1224-88
3544	RIFA	PBD3544	1001-55
	SiliconG	SG3544	1224-76
	Unitrode	**UC3544**	*** 3324**
			1224-89
3545	RIFA	PBD3545	1001-53
3547	Gould	S3547	1193-22
3548	RIFA	PBD3548	1001-54
3549	SiliconG	SG3549	1220-19
355	LinearTech	LF355A	1153-7
	MicroInds	MSBX355	4853-38
	MicroPwr	MP355A	1154-6
	Motorola	**LF355**	*** 2920**
			1165-21
		LF355B	*** 2920**
			1158-43
	National	LF355	1165-22
		LF355A	1150-37
		LF355B	1158-46
	TeledyneS	355A/C	655-3
			1201-53
		355B/M	1201-54
3550	AMD	AMMPA3550	4065-2
	Burr-Brown	**3550J**	*** 2535**
			1164-53
		3550K	*** 2535**
			1131-55
			1148-13
		3550S	*** 2535**
			1148-12
	Gould	S3550	1196-71
	TI	MC3550	992-8
35500	ILC-DDC	DDC35500	4859-15
3551	**Burr-Brown**	**3551J**	*** 2535**
			1131-41
			1135-77
			1148-44
		3551S	*** 2535**
			1131-42
			1135-78
			1148-45
	RIFA	PBD3551	1199-19
	SiliconG	SG3551	1008-22
3552	TI	MC3552	992-9
3553	**Burr-Brown**	**3553**	*** 2534**
			*** 2536**
			1102-50
			1128-16
			1130-91
	Maxim	BB3553	1102-51
			1128-17
			1130-95
	TI	MC3553	992-10
3554	AD	AD3554	1131-8
			1136-3
		AD3554A	1130-105
			1151-1
		AD3554B	1148-30
		AD3554S	1130-106
			1131-9
			1136-4
			1148-31
	Burr-Brown	**3554**	*** 2535**
			1131-10
		3554A	*** 2535**
			1130-109
			1135-94
			1151-35
		3554B	*** 2535**
			1130-110
			1135-95
			1148-38
		3554S	*** 2535**
			1130-111
			1135-96
			1148-39
	Maxim	AD3554A	1151-33
		AD3554B	1148-35

(Continued)

Base Number	Source	Device	Page-Line
3554	Maxim		(Cont'd)
		AD3554S	1148-37
		BB3554A	1151-32
		BB3554B	1148-34
		BB3554S	1148-36
	TeledyneP	TP3554	1130-115
		TP3554-HR	1151-34
3556	Motorola	MC3556	1201-93
3558	**Motorola**	**MC3558**	*** 2922**
			1177-33
356	**Burr-Brown**	**OPA356A**	*** 2532**
			1150-46
	HybridSys	DAC356B-12	964-46
		DAC356C-12	964-47
		DAC356LPB-12	965-1
		DAC356LPC-12	965-2
	LinearTech	LF356A	1153-9
	MicroPwr	MP356A	1154-7
	Micro-Link	VME356	4890-2
	Motorola	**LF356**	*** 2920**
			1165-23
		LF356B	*** 2920**
			1158-49
	National	LF356	1165-24
			¶ 429-35
		LF356A	1150-42
			¶ 429-35
		LF356B	1158-53
			¶ 429-35
	NEC	μPC356	1159-18
	SGS	LS356	1198-28
3560	**Harris**	**HS3560RH**	*** 2716**
			1109-7
	Telefunken	TDA3560A	1124-93
3562	Telefunken	TDA3562A	1124-94
3563	Signetics	TDA3563	1124-80
3564	Fairchild	F3564-25	1390-23
		F3564-35	1390-74
	Signetics	TDA3564	1126-125
3565	Fairchild	F3565-25	1390-32
		F3565-35	1390-75
3566	Fairchild	F3566-25	1390-45
		F3566-35	1390-84
3567	Signetics	TDA3567	1125-75
3568	Fairchild	F3568-25	1390-46
		F3568-35	1390-85
3569	Fairchild	F3569-25	1390-47
		F3569-35	1390-86
	Harris	**HS3569RH**	*** 2716**
			1174-22
357	MicroPwr	MP357A	1154-8
	Motorola	**LF357**	*** 2920**
			1165-19
		LF357B	*** 2920**
			1158-35
	National	LF357	1165-20
		LF357A	1150-34
		LF357B	1158-38
	NEC	μPC357	1159-19
3570	Fairchild	F3570-25	1390-48
		F3570-35	1390-87
	Western	ADS3570	887-99
3571	**Burr-Brown**	**3571A**	*** 2536**
			1130-82
			1131-77
			1151-46
3572	**Burr-Brown**	**3572A**	*** 2536**
			1130-63
			1131-78
			1151-47
3573	**Burr-Brown**	**3573**	*** 2536**
			1130-70
			1166-15
3578	National	LM3578	1217-31
358	CompDyn	WIN358	4871-5
	GE/RCA	**CA358**	*** 2645**
			1134-93
		CA358A	*** 2645**
			1175-34
		LM358	*** 2645**
			1180-6
	GoldStar	**GL358**	*** 2700**
			1134-94
		GL358A	*** 2700**
			1180-9
	Maxim	MAX358C	914-20

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
358	Maxim		(Cont'd)
		MAX358M	914-13
	MicroInds	mSBX358	4855-22
	MicroPwr	MP358	1106-125
	Motorola	**LM358**	⋆ **2921**
			⋆ **2958**
			1134-98
			1178-43
	National	LM358	1134-103
		LM358A	1134-104
			1175-35
	NEC	μPC358	1180-10
	Samsung	LM358A	1175-33
	SGS	LM358	1175-36
		LM358A	1175-37
	Signetics	LM358	1134-107
		LM358A	1169-32
	TI	LM358	1179-54
	Thomson	LM358	1180-11
3580	**Burr-Brown**	**3580J**	⋆ **2536**
			1130-120
			1131-92
			1165-7
3581	**Burr-Brown**	**3581J**	⋆ **2536**
			1130-131
			1131-69
			1154-29
3582	**Burr-Brown**	**3582J**	⋆ **2536**
			1131-64
			1154-28
3583	**Burr-Brown**	**3583**	⋆ **2536**
			1130-119
			1131-65
			1154-30
3584	**Burr-Brown**	**3584**	⋆ **2536**
			1131-66
			1154-31
359	Maxim	MAX359C	912-67
		MAX359M	912-62
	National	LM359	1169-29
	Siemens	S359	1200-21
36C16	SEEQ	M36C16-55	1322-15
		36C16-35	⋆ **2991**
			1309-49
		36C16-45	⋆ **2991**
			1309-52
		36C16-55	⋆ **2991**
			1309-61
36C32	SEEQ	M36C32-55	1323-47
		36C32-35	⋆ **2991**
			1311-36
		36C32-45	⋆ **2991**
			1311-38
		36C32-55	⋆ **2991**
			1311-40
360	Amperex	OM360	1125-63
	Cybernetic	CY360	884-115
			889-8
			1221-88
	Datel	**SHM360**	⋆ **2572**
			⋆ **2577**
			1227-152
	MicroPwr	MP360	1106-113
	National	LM360	1110-30
	Plessey	SL360	1106-119
3600	CalDevices	DLM3600	4042-44
	Cherry	CS3600	4065-20
	GE/RCA	**CA3600**	⋆ **2648**
			1108-53
	GIM	KB3600	984-14
	LSIComp	D3600	633-77
36000	Thomson	MKB36000-83	1390-29
		MKB36000-84	1390-60
3603	National	DS3603	991-31
			1008-21
36030	National	HPC36030	878-114
3604	Harris	HS3604	1120-35
	National	DS3604	991-17
			1008-19
36040	National	HPC36040	878-115
3605	National	DS3605	1008-31
3606	**Burr-Brown**	**3606**	⋆ **2537**
			1104-20
	National	DS3606	1008-32
3607	National	DS3607	1008-33
3608	National	DS3608	1008-34

Base Number	Source	Device	Page-Line
361	Amperex	OM361	1125-64
	Datel	**SHM361**	⋆ **2572**
			⋆ **2577**
			1227-153
	ILC-DDC	SDC361	1229-14
	MicroPwr	MP361	1106-114
	National	LM361	1110-22
	TeledyneS	361A/C	654-98
		361B/M	654-99
	Zendex	ZBX361	4860-54
3610	MicroLinear	FB3610	4068-37
	Unitrode	**UC3610**	⋆ **3326**
			1222-130
3611	National	DS3611	1005-37
	Sprague	**UDN3611M**	⋆ **3203**
			1005-38
		UDS3611H	1005-40
	Unitrode	**UC3611**	⋆ **3324**
			1106-161
3612	National	DS3612	1005-65
	Sprague	**UDN3612M**	⋆ **3203**
			1005-66
		UDS3612H	1005-68
3613	National	DS3613	1005-122
	Sprague	**UDN3613M**	⋆ **3203**
			1005-123
		UDS3613H	1005-125
3614	National	DS3614	1005-93
	Sprague	**UDN3614M**	⋆ **3203**
			1005-94
		UDS3614H	1005-96
36143	National	DS36143	999-113
36144	National	DS36144	1000-5
36149	National	DS36149	666-58
			1000-12
3615	**GoldStar**	**GL3615**	⋆ **2699**
			1123-69
	National	DS3615	999-3
3616	National	DS3616	999-2
3617	National	DS3617	999-6
36179	National	DS36179	666-59
			1000-13
3618	National	DS3618	999-4
362	AD	AD362K	1220-119
		AD362S	1220-120
	AnalogSys	MA362	1169-21
		MA362C	1140-48
		MA362M	1140-49
	HybridSys	HS362	1220-127
	ILC-DDC	SDC362	1229-15
	MicroPwr	MP362	1106-115
	Plessey	SL362	1106-120
			¶ 431-26
	TeledyneS	362A/C	654-101
		362B/M	654-102
3620	**GoldStar**	**GL3620**	⋆ **2699**
			1127-21
	MicroLinear	FB3620	4068-43
	Unitrode	**UC3620**	⋆ **3326**
			1003-103
3622	**Unitrode**	**UC3622**	⋆ **3326**
			1003-97
3623	Unitrode	UC3623	1001-31
3626	Burr-Brown	3626A	1102-110
		3626B	1102-111
		3626C	1102-112
	SiliconG	SG3626	1108-72
3627	**Burr-Brown**	**3627**	⋆ **2537**
			1103-33
	SiliconG	SG3627	1001-61
3628	National	DS3628	1000-36
3629	Burr-Brown	3629	1102-113
		3629A	1138-23
		3629B	1138-18
		3629C	1138-19
		3629S	1138-20
	National	DS3629	999-55
	SiliconG	SG3629	911-34
			1002-162
			1221-39
363	AD	AD363K	1220-69
		AD363S	1220-70
	Marconi	MA363	644-78
			644-79
	National	LM363	1103-11
			1143-25
			(Continued)

Base Number	Source	Device	Page-Line
363	National		(Cont'd)
		LM363A	1103-12
			1139-27
	TeledyneS	363A/C	655-1
		363B/M	655-2
3630	Burr-Brown	3630A	1102-114
		3630B	1102-115
		3630C	1103-1
		3630S	1103-2
	GoldStar	**GL3630**	⋆ **2699**
			1116-57
	MicroLinear	FB3630	4068-46
	National	DS3630	605-101
3631	National	DS3631	1005-31
3632	National	DS3632	1005-59
3633	National	DS3633	1005-116
	Unitrode	UC3633	1190-37
3634	National	DS3634	1005-86
	Unitrode	UC3634	1190-38
3635	SiliconG	SG3635	1003-54
3636	SiliconG	SG3636	1004-129
3637	SiliconG	SG3637	1001-76
	Unitrode	**UC3637**	⋆ **3326**
			1004-25
			¶ 426-5
			¶ 438-20
3638	SiliconG	SG3638	1001-67
		SG3638A	1001-68
3639	SiliconG	SG3639	1001-69
		SG3639A	1001-70
364	AD	AD364J	1220-71
		AD364K	1220-72
		AD364S	1220-73
		AD364T	1220-74
	Marconi	MA364	644-4
			644-5
3640	**GoldStar**	**GL3640**	⋆ **2699**
			1118-87
	SiliconG	SG3640	1001-45
36400	National	HPC36400	878-119
3641	SiliconG	SG3641	1001-46
3643	SiliconG	SG3643	1001-71
		SG3643A	1001-72
3645	National	DS3645	1000-19
3647	National	DS3647	999-116
3648	National	DS3648	999-119
3649	National	DS3649	1000-16
365	AD	AD365	1102-60
	MCE	MCETCA365	1130-59
	National	LP365	1219-107
	Raytheon	LP365	1114-50
		LP365A	1114-9
	Siemens	TCA365A	1166-49
3650	**Burr-Brown**	**3650HG**	⋆ **2538**
			1103-37
	National	DS3650	992-17
3651	National	DS3651	1008-29
	Signetics	**TDA3651**	⋆ **3138**
			1126-63
		TDA3651A	⋆ **3138**
			1126-64
3652	**Burr-Brown**	**3652HG**	⋆ **2538**
			1103-38
	National	DS3652	992-20
	Signetics	TDA3652	1126-65
3653	National	DS3653	1008-30
	Signetics	**TDA3653**	⋆ **3138**
			1126-66
3654	National	DS3654	1004-85
	Signetics	TDA3654	1126-73
3656	Burr-Brown	3656AG	1103-45
	National	DS3656	1006-86
			1118-132
3657	**Unitrode**	**UC3657**	⋆ **3326**
			1001-63
3658	National	DS3658	1006-95
3660	GIM	KB3660S	984-19
	MicroNet	MN3660	964-18
3661	GIM	KB3661	984-18
3662	National	DS3662	994-30
3666	National	DS3666	996-7
3667	**GoldStar**	**GL3667**	⋆ **2699**
			1123-67
	National	DS3667	997-17
3668	National	DS3668	1006-94
3669	National	DS3669	1006-96

Base Number	Source	Device	Page-Line
367	AD	AD367	1102-61
	AnalogSys	MA367	1169-20
	Marconi	MA367	1192-43
	TeledyneS	367A	990-47
		367A/C	655-6
		367B	990-51
		367B/M	655-7
		367C	990-52
		367M	990-48
3671	National	DS3671	977-32
3674	National	DS3674	1000-6
3675	National	DS3675	1000-20
3678	National	DS3678	999-120
3679	National	DS3679	1000-17
368	**AD**	**AD368**	⋆ **2427**
			928-24
	Maxim	MAX368C	914-21
		MAX368M	914-14
	National	LM368-10	1226-168
		LM368-2	1225-136
		LM368-5	1226-35
		LM368-6	1226-60
	TeledyneS	368A	990-49
		368A/C	655-8
		368C	990-50
3680	Fairchild	μA3680	1197-89
		μA3680C	1197-90
	National	DS3680	1006-109
			1197-91
	TI	DS3680	1006-110
3681	Sharp	LR3681	1118-78
3686	National	DS3686	1004-108
			1197-77
3687	National	DS3687	1004-109
			1197-78
3689	National	DS3689	993-1
369	**AD**	**AD369K**	⋆ **2427**
			1220-121
		AD369S	⋆ **2427**
			1220-122
	Maxim	MAX369C	912-63
		MAX369M	912-68
3690	**Marconi**	**MA3690**	⋆ **2881**
			1010-44
	National	DS3690	993-2
3691	**Marconi**	**MA3691**	⋆ **2881**
			1010-45
	National	DS3691	985-31
	Sharp	LH3691A	977-97
3692	National	DS3692	988-49
	Sharp	LR3692	977-98
3695	National	DS3695	997-44
3696	National	DS3696	997-45
3697	National	DS3697	997-46
3698	National	DS3698	997-47
37	AD	ADOP37A	1138-28
		ADOP37B	1140-8
		ADOP37C	1141-31
		ADOP37E	1138-29
		ADOP37F	1140-9
		ADOP37G	1141-32
	Burr-Brown	**OPA37A**	⋆ **2532**
			1132-57
			1138-51
		OPA37B	⋆ **2532**
			1140-10
		OPA37C	⋆ **2532**
			1141-50
		OPA37E	⋆ **2532**
			1132-58
			1138-52
		OPA37F	⋆ **2532**
			1140-11
		OPA37G	⋆ **2532**
			1141-51
		OPA37HT	⋆ **2532**
			1169-15
	HybridSys	HSOP37A	1139-5
		HSOP37B	1140-20
		HSOP37C	1142-9
	LinearTech	OP37A	1132-75
		OP37C	1142-3
		OP37E	1132-76
		OP37G	1142-4
	Maxim	OP37A	1139-1
		OP37B	1140-4
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
37	Maxim		(Cont'd)
		OP37C	1142-1
		OP37E	1139-2
		OP37F	1140-5
		OP37G	1142-2
	MicroPwr	MPOP37	1141-20
		MPOP37A	1139-3
		MPOP37B	1140-12
		MPOP37C	1142-5
		MPOP37E	1139-4
		MPOP37F	1140-13
		MPOP37G	1142-6
	PMI	**OP37A**	⋆ **2970**
			1138-30
		OP37B	⋆ **2970**
			1140-14
		OP37C	⋆ **2970**
			1141-33
		OP37E	⋆ **2970**
			1138-31
		OP37F	⋆ **2970**
			1140-15
		OP37G	⋆ **2970**
			1141-34
	Raytheon	**OP37A**	⋆ **2979**
			1138-26
		OP37B	⋆ **2979**
			1140-18
		OP37C	⋆ **2979**
			1141-21
		OP37E	⋆ **2979**
			1138-27
		OP37F	⋆ **2979**
			1140-19
		OP37G	⋆ **2979**
			1141-22
	Solitron	OP37A	1138-49
		OP37B	1140-6
		OP37C	1141-35
		OP37E	1138-50
		OP37F	1140-7
		OP37G	1141-36
	TI	OP37E	1138-25
		OP37G	1141-19
37C65	Western	WD37C65	884-106
37S64	OKI	MSM37S64A-15	
			1339-53
370	Amperex	OM370	1125-65
	HiLevel	**DS370**	⋆ **4752**
			4707-4
	HybridSys	DAC370B-16	973-16
		DAC370B-18	976-28
		DAC370C-16	973-17
		DAC370C-18	976-29
	MicroNet	MN370	965-5
		MN370H	965-6
	MicroPwr	MP370B-18	976-30
		MP370C-18	976-31
	National	COP370	863-45
	Raytheon	RG370	659-69
	TeledyneS	370A/C	654-35
		370B/M	654-36
3700	**HiLevel**	**DS3700/CSIBM-AT**	
			⋆ **4752**
			4707-5
		DS3700/CSIBM-PC	
			⋆ **4752**
			4707-6
		DS3700/CSIBM-XT	
			⋆ **4752**
			4707-7
		DS3700/CSTI-PC	
			⋆ **4752**
			4707-8
		DT3700	⋆ **4752**
			4707-9
	Plessey	CLA3700	4058-26
	SiliconG	SG3700	1001-66
	TI	TMS3700	
		SERIES	841-5
37000	Thomson	MKB37000-84	1390-30
		MKB37000-85	1390-61
3701	National	ADD3701	939-56
	Toko	KM3701	885-28
3702	Sharp	IR3702	1187-49
	TI	TLC3702C	1112-9

(Continued)

Base Number	Source	Device	Page-Line
3702	TI		(Cont'd)
		TLC3702I	1112-10
		TLC3702M	1112-11
	Toko	KM3702	886-67
3704	TI	TLC3704C	1114-13
		TLC3704I	1114-14
		TLC3704M	1114-15
	Unitrode	**UC3704**	⋆ **3327**
			1219-100
3705	National	AM3705	914-35
			914-36
	Siliconix	Si3705	915-17
	Unitrode	**UC3705**	⋆ **3324**
			⋆ **3326**
			1001-23
3706	Cherry	cs3706	688-29
	Unitrode	**UC3706**	⋆ **3324**
			⋆ **3326**
			1221-41
3707	**Unitrode**	**UC3707**	⋆ **3324**
			⋆ **3326**
			1221-43
3708	Fairchild	3708	914-37
371	AD	AD371J	964-45
		AD371K	968-10
		AD371S	968-11
	MicroNet	MN371	964-43
		MN371H	964-44
	TeledyneS	371A/C	654-18
		371B/M	654-19
3711	**GoldStar**	**GL3711**	⋆ **2699**
			1126-32
	National	ADC3711	939-55
			¶ 419-34
3712	Burr-Brown	3712T/R	1221-47
3713	Burr-Brown	3713T/R	1221-48
3714	Burr-Brown	3714T	1221-49
3715	Sharp	LR3715M	1122-35
3716	OKI	MSM3716-3	1337-27
3717	Cherry	CS3717A	1004-28
	IPS	IP3717	1004-50
		IP3717A	1004-51
	Plessey	TDA3717	1004-54
	RIFA	PBL3717	1004-57
	SGS	PBL3717A	1223-1
	TI	PBL3717A	1004-60
	Thomson	TEA3717	1004-62
	Unitrode	**UC3717**	⋆ **3326**
			1004-37
		UC3717A	⋆ **3326**
			1004-33
3718	Thomson	TEA3718	1003-68
372	Motorola	MVME372SET-1	
			4881-19
		MVME372SET-2	
			4881-20
		MVME372SET-3	
			4881-21
	TeledyneS	372A/C	654-14
		372B/M	654-15
	TI	TLC372C	1113-22
		TLC372M	1113-23
3720	Fujitsu	MB3720	1116-128
	Unitrode	**UC3720**	⋆ **3326**
			1228-119
3721	RIFA	PBL3721	1103-96
3722	**Unitrode**	**UC3722**	⋆ **3327**
			1004-74
3724	Fairchild	FQ3724	1107-9
	Sprague	TPQ3724	1107-20
3725	Fairchild	FQ3725	1107-10
	Motorola	MPQ3725	1107-18
		MPQ3725A	1107-19
	Sprague	TPQ3725	1107-21
		TPQ3725A	1107-22
37256	OKI	MSM37256-15	1340-97
		MSM37256-20	1341-22
3726	RIFA	PBL3726-X	1198-25
	SGS	PBL3726	1198-39
3727	Sharp	LR3727	1126-44
3728	**Unitrode**	**UC3728**	⋆ **3327**
			1003-108
373	MicroNet	MN373	1229-80
	TeledyneS	373A/C	654-20
		373B/M	654-21

Base Number	Source	Device	Page-Line
3730	Fujitsu	MB3730	1116-129
	Unitrode	UC3730	1229-26
3731	Fujitsu	MB3731	1116-130
	SiliconG	SG3731	1004-19
			¶ 437-35
3732	OKI	MSM3732-15	1337-49
		MSM3732-20	1337-50
3736	RIFA	PBL3736	1198-66
374	AnalogSys	MA374	1188-29
	TeledyneS	374A/C	654-16
	TI	TLC374C	1115-6
		TLC374I	1113-25
		TLC374M	1115-7
3741	Sharp	IR3741	1160-42
37450M2			
	Mitsubishi	M37450M2	829-2
3747	RIFA	PBL3747	1103-103
375	AD	AD375	928-45
	MicroNet	MN375A	1228-55
	TeledyneS	375A/C	654-96
			1393-28
		375B/M	654-97
			1393-29
3750	Sprague	ULN3750B	1117-145
3751	**Sprague**	**ULN3751Z**	⋆ **3203**
			1167-1
3753	Sprague	ULN3753	1181-4
3755	**Sprague**	**ULN3755**	⋆ **3203**
			1181-3
3759	Fujitsu	MB3759	1216-49
376	AD	AD376J	938-13
		AD376K	937-45
	Fairchild	μA376C	1214-68
	Intech	**SH376**	⋆ **2799**
			1227-108
	MicroNet	MN376	1229-81
	National	LM376	1214-69
	TI	TL376C	1004-61
3760	Fujitsu	MB3760	1216-50
3761	**Harris**	**HS3761RH**	⋆ **2717**
			1224-127
3762	RIFA	PBL3762	1198-67
3762210			
	TI	TMDS3762210	4719-8
3763	Sharp	LR3763	646-6
3764	OKI	MSM3764-12	1337-76
		MSM3764-15	1338-13
		MSM3764-20	1338-29
377	HybridSys	DAC377-18	976-32
			¶ 420-2
		DAC377B-18	976-33
			¶ 420-2
		DAC377C-18	976-34
			¶ 420-2
	Intech	**SH377**	⋆ **2799**
			1228-42
	MicroNet	MN377	1229-82
	MicroPwr	MP377B-18	976-35
		MP377C-18	976-36
	National	LM377	1117-138
3770	**IPS**	**IP3770A**	⋆ **2854**
			1004-52
	RIFA	PBL3770	1004-58
	Unitrode	UC3770	1223-2
3771	RIFA	PBL3771	1003-106
378	National	LM378	1117-139
3780	RIFA	PBL3780	1194-69
3781	RIFA	PBL3781	1198-26
3784	Sprague	ULN3784B	1117-114
379	MicroNet	MN379	1229-83
	NEC	μPD379	1011-13
3793	Sprague	ULN3793W	1103-119
3794	Sprague	ULN3794W	1103-120
38	Wintek	MCH38	4805-3
38ADP70			
	SGS	M38ADP70	865-109
38C16	**SEEQ**	**38C16-35**	⋆ **2991**
			1309-50
		38C16-45	⋆ **2991**
			1309-53
		38C16-55	⋆ **2991**
			1309-62
38C32	**SEEQ**	**38C32-35**	⋆ **2991**
			1311-37
		38C32-45	⋆ **2991**
			1311-39

(Continued)

Base Number	Source	Device	Page-Line
38C32	**SEEQ**		**(Cont'd)**
		38C32-55	⋆ **2991**
			1311-41
38C64	SEEQ	M38C64-60	1311-55
38L72	Fairchild	F38L72	865-112
38P70	Thomson	MK38P70	865-107
		MK38P70/02	865-108
38P74	SGS	M38P74	865-105
38P78	SGS	M38P78	865-106
38SB72	SGS	M38SB72	865-111
38SH72			
	SGS	M38SH72	865-115
38S03	TI	38S03X-30	1316-27
380	AD	AD380J	1135-59
		AD380K	1135-60
			1149-9
		AD380L	1135-61
			1149-10
		AD380S	1130-121
			1131-47
			1135-62
			1149-11
	CompDyn	FLP380	4871-3
	National	LM380	1117-34
	Raytheon	RG380	659-70
	Systek	SBX380	4858-19
	TeledyneS	380A/C	654-31
			979-112
		380B/M	654-24
			979-113
3800	**Intech**	**RGBDAC3800**	
			⋆ **2799**
			949-15
	Lambda	LAS3800	1216-101
38000	Thomson	MKB38000-84	1392-3
		MKB38000-85	1392-13
3801	Thomson	MK3801-6	886-65
38010	TI	TMS38010	880-13
3802	**Intech**	**VFC3802**	⋆ **2799**
			1230-63
38020	TI	TMS38020	880-14
3803	Sprague	ULN3803A	1120-91
38030	TI	TMS38030	880-17
3805	**Intech**	**VFC3805**	⋆ **2799**
			1230-64
38051	TI	TMS38051	880-16
38052	TI	TMS38052	880-15
3807	Thomson	MK3807	865-135
			¶ 411-11
			¶ 417-5
3808	**Intech**	**RGBDAC3808**	
			⋆ **2799**
			949-16
3809	Sprague	ULN3809A	1121-155
381	AD	AD381J	1148-29
		AD381K	1145-30
		AD381L	1144-15
		AD381S	1148-21
	Harris	**HI381**	⋆ **2707**
			902-83
	Maxim	DG381AA	902-90
		DG381AB	902-91
		DG381AC	902-92
	National	LM381	1118-32
	Siliconix	DG381AA	903-3
	TeledyneS	381A/C	654-22
			979-114
		381B/M	654-23
			979-115
3810	**Intech**	**VFC3810**	⋆ **2799**
			1230-65
	Signetics	TDA3810	1125-140
3812	**GoldStar**	**GL3812**	⋆ **2699**
			911-50
38128	OKI	MSM38128	1391-47
		MSM38128A	1391-30
3813	**GoldStar**	**GL3813**	⋆ **2699**
			1123-76
382	AD	AD382J	1148-28
		AD382K	1145-29
		AD382S	1130-122
			1148-20
	National	LM382	1118-33
	TeledyneS	382A/C	654-25
			979-118

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
382	TeledyneS		(Cont'd)
		382B/M	654-26
			979-119
3820	National	LM3820	1120-29
	Sprague	ULN3820A	1120-33
3821	SiliconG	SG3821	1106-30
3823	Sprague	ULN3823A	1121-156
	Unitrode	**UC3823**	★ **3323**
			1225-2
3825	**Unitrode**	**UC3825**	★ **3323**
			1220-26
38256	OKI	MSM38256	1391-104
		MSM38256A	1391-77
3829	VDA	V3829	884-91
383	National	LM383	1117-78
		LM383A	1117-79
	TeledyneS	383A/C	654-27
			979-56
		383B/M	654-28
			979-57
3834	**Unitrode**	**UC3834**	★ **3324**
			1224-103
3835	**Unitrode**	**UC3835**	★ **3324**
			1227-27
3836	**Unitrode**	**UC3836**	★ **3324**
			1227-28
3838	Unitrode	UC3838	1222-118
3839	Sprague	ULN3839A	1120-25
384	**Dense-Pac**	**DPS384**	★ **2579**
			1384-37
		DPX384	1384-38
	Harris	**HI384**	★ **2707**
			908-87
		HS384RH	★ **2719**
			909-17
	Maxim	DG384AA	908-94
		DG384AB	908-95
		DG384AC	908-96
	National	LM384	1117-80
	Siliconix	DG384AA	908-57
3840	Lambda	LAS3840	1216-102
			¶ 440-20
			¶ 440-21
			¶ 440-6
	SGS	UC3840	1217-61
	SiliconG	SG3840	1224-133
	Unitrode	**UC3840**	★ **3323**
			1218-54
3841	Sprague	ULN3841A	1120-28
	Unitrode	**UC3841**	★ **3323**
			1225-18
3842	Cherry	CS3842A	1220-29
	IPS	**IP3842**	★ **2854**
			★ **2856**
			1216-90
	Motorola	**UC3842A**	★ **2930**
			★ **2960**
			1218-69
	SGS	UC3842	1220-32
	Signetics	UC3842C	1215-104
	SiliconG	SG3842	1220-41
	Unitrode	**UC3842**	★ **3323**
			1220-59
			¶ 441-5
3843	Cherry	CS3843A	1216-19
	IPS	**IP3843**	★ **2854**
			★ **2856**
			1216-91
	Motorola	**UC3843A**	★ **2930**
			★ **2960**
			1218-70
	SGS	UC3843	1224-129
	SiliconG	SG3843	1220-42
	Unitrode	UC3843	1220-60
3844	**IPS**	**IP3844**	★ **2854**
			★ **2856**
			1216-92
	SGS	UC3844	1224-130
	Unitrode	**UC3844**	★ **3323**
			1220-61
3845	**IPS**	**IP3845**	★ **2854**
			★ **2856**
			1216-93
	SGS	UC3845	1224-52
	Unitrode	**UC3845**	★ **3323**
			1220-62
3846	Fairchild	F3846	1011-9
	LinearTech	UC3846	1216-128
	RIFA	RL3846	1217-43
	SiliconG	SG3846	1220-43
	Unitrode	**UC3846**	★ **3323**
			1220-63
3847	LinearTech	UC3847	1216-129
	SiliconG	SG3847	1220-44
	Unitrode	**UC3847**	★ **3323**
			1220-64
3848	**Dense-Pac**	**DPO3848**	★ **2581**
			1343-61
385	LinearTech	LM385-1	1225-59
		LM385-2	1225-107
	Motorola	**LM385-1**	★ **2958**
			1225-63
		LM385-2	★ **2958**
			1225-123
		LM385B-1	★ **2958**
			1225-64
		LM385B-2	★ **2958**
			1225-124
	National	LM385	1225-67
		LM385-1	1225-82
		LM385-2	1225-137
3850	MicroNet	MN3850	963-41
		MN3850H	963-42
	Thomson	MK3850	841-23
			873-75
	Unitrode	**UC3850**	★ **3323**
			1220-5
3851	SiliconG	SG3851	1002-18
			1107-98
	Thomson	MK3851	873-79
38510	Hitachi	HD38510	1119-4
38513	Hitachi	HD38513	1119-5
3852	SiliconG	SG3852	1002-38
			1107-99
	Thomson	MK3852	873-77
3853	SiliconG	SG3853	1001-117
			1107-100
	Thomson	MK3853	873-80
3854	Thomson	MK3854	873-76
38546	Hitachi	HD38546	1119-6
38550	Hitachi	HD38550	1119-7
38560	Hitachi	HD38560	1119-8
38570	Hitachi	HD38570	1119-9
38580	Hitachi	HD38580	1119-10
38585	Hitachi	HD38585	1119-11
3859	Sprague	ULN3859A	1121-69
386	AlArchitects	386HummingBoard	
			4841-5
	Comark	CAT386	4825-21
	CompModules		
		LSBX386I/O	4860-45
			4864-25
	Force	CPU386	4843-28
	GoldStar	**GL386**	★ **2699**
			1117-29
	Intel	iSBC386/116M01	
			4843-3
		iSBC386/116M02	
			4843-4
		iSBC386/116M04	
			4843-5
		iSBC386/116M08	
			4843-6
		iSBC386/120M01	
			4843-7
		iSBC386/120M02	
			4843-8
		iSBC386/120M04	
			4843-9
		iSBC386/120M08	
			4843-10
		iSBC386/21	4841-10
		iSBC386/22	4841-11
		iSBC386/24	4841-12
		iSBC386/28	4841-13
		iSBC386/31	4841-14
		iSBC386/32	4841-15
		iSBC386/34	4841-16
		iSBC386/38	4841-17
	MicroInds	MIBII 386/101	4843-11
		MIBII 386/171	4864-14
			(Continued)
386			(Cont'd)
	National	LM386	1117-35
	Samsung	LM386	1117-128
	ZyMOS	ZyAT386-32	4851-6
3860	AD	AD3860K	964-8
		AD3860S	964-9
	HybridSys	HS3860B	964-2
		HS3860C	964-3
	MicroNet	MN3860	963-43
		MN3860H	964-1
	Unitrode	**UC3860**	★ **3323**
			1227-94
3861	Thomson	MK3861	873-78
3862	Sprague	ULN3862A	1121-70
3864	OKI	MSM3864	1390-8
387	**Harris**	**HI387**	★ **2707**
			906-35
	Maxim	DG387AA	906-42
		DG387AB	906-43
		DG387AC	906-44
	National	LM387	1118-34
	SGS	L387	1118-44
	Siliconix	DG387AA	906-48
3870	Fairchild	F3870-PEP	4825-19
	Motorola	MC3870	831-28
			865-114
	SGS	M3870	865-121
	Telefunken	U3870	865-123
			¶ 437-26
	Thomson	MK3870	841-24
		MK3870/10	865-124
		MK3870/12	865-117
		MK3870/20	865-125
		MK3870/22	865-118
		MK3870/30	865-126
		MK3870/32	865-119
		MK3870/40	865-127
		MK3870/42	865-120
3872	Fairchild	F3872	865-113
	SGS	M3872	865-116
3873	Thomson	MK3873	841-25
3875	SGS	M3875	865-130
3876	SGS	M3876	865-132
3878	SGS	M3878	865-133
388	National	LM388	1117-36
	Robotrol	RBX388	4854-18
	SGS	LS388	1198-29
3880	Thomson	MKB3880-80	874-63
		MKB3880-84	874-64
		MK3880	841-26
		MK3880-6	874-65
3881	Thomson	MKB3881-80	875-6
		MKB3881-84	875-7
		MK3881	875-8
3882	Thomson	MKB3882-80	874-101
		MKB3882-84	874-102
		MK3882	874-103
3883	Thomson	MK3883	874-121
3884	Thomson	MK3884	875-42
			¶ 411-16
			¶ 414-7
3885	Thomson	MK3885	875-43
			¶ 411-16
3887	Thomson	MK3887	875-44
			¶ 411-16
389	AD	AD389	1229-73
	National	LM389	1102-27
			1117-37
			¶ 435-15
3890	National	DS3890	666-109
3892	National	DS3892	689-83
3898	National	DS3898	689-84
38980	Hitachi	HD38980	1119-24
38991	Hitachi	HD38991C	1119-25
38999XX05			
	Motorola	SXP38999XX05	
			4895-10
39	AD	AD39KT	964-21
	Lambda	LAS39U	1213-15
39A05	Lambda	LAS39A05	1203-107
		LAS39A05K	1203-108
39C01	**IDT**	**IDT39C01C**	★ **2801**
			817-26
			860-66
			¶ 410-14
		IDT39C01D	★ **2801**
			817-27
			¶ 410-14
		IDT39C01E	★ **2801**
			819-10
			¶ 410-14
39C02	**IDT**	**IDT39C02A**	★ **2801**
			860-136
39C03	**IDT**	**IDT39C03A**	★ **2801**
			817-28
			860-67
		IDT39C03B	★ **2801**
			819-11
39C09	**IDT**	**IDT39C09A**	★ **2801**
			861-26
		IDT39C09B	★ **2801**
			861-27
39C10	**IDT**	**IDT39C10B**	★ **2801**
			877-73
		IDT39C10C	★ **2801**
			877-74
39C11	**IDT**	**IDT39C11A**	★ **2801**
			861-28
		IDT39C11B	★ **2801**
			861-29
39C203	**IDT**	**IDT39C203**	★ **2801**
			817-29
			860-68
		IDT39C203A	★ **2801**
			819-12
			860-69
39C60	**IDT**	**IDT39C60**	★ **2801**
			860-115
			982-21
			¶ 426-23
		IDT39C60-1	★ **2801**
			860-116
			¶ 426-23
		IDT39C60A	★ **2801**
			877-92
			982-22
			¶ 426-23
39C705	**IDT**	**IDT39C705A**	★ **2801**
			861-63
			1347-40
		IDT39C705B	★ **2801**
			861-64
			1347-41
39C707	**IDT**	**IDT39C707**	★ **2801**
			861-65
			1347-42
		IDT39C707A	★ **2801**
			861-66
			1347-43
39C828	IDT	IDR39C828	607-110
39VP864			
	Raytheon	39VP864	1325-58
39V18	Lattice	GAL39V18	4071-26
390	AD	AD390J	965-9
		AD390K	964-11
		AD390S	965-10
		AD390T	965-11
	Harris	**HI390**	★ **2707**
			907-42
		HS390RH	★ **2719**
			907-33
	Intech	**DAC390**	★ **2799**
			965-12
	Maxim	DG390AA	907-49
		DG390AB	907-50
		DG390AC	907-51
	MicroNet	MN390	971-7
	Motorola	MVME390	4882-17
		MVME390A	4884-24
	National	LM390	1117-38
	Siliconix	DG390AA	907-57
	TeledyneS	390	654-47
		390A/C	1005-156

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
3900	**Fujitsu**	**C3900AV**	⋆ **4229**
			⋆ **4231**
			4046-28
	MicroInds	PG3900	4887-41
	Motorola	**LM3900**	⋆ **2923**
			⋆ **2958**
			1135-48
	National	LM3900	1135-50
	Plessey	CLA3900	4058-30
	Raytheon	LM3900	1135-52
	TI	LM3900	1182-21
3901	Thomson	MK3901M-10	1392-41
		MK3901M-12	1392-45
	Unitrode	**UC3901**	⋆ **3324**
			1224-90
3903	**Unitrode**	**UC3903**	⋆ **3324**
			1224-91
3905	Lambda	LAS3905	1203-109
			¶ 441-26
		LAS3905K	1203-110
			¶ 441-26
	National	LM3905	1201-13
3906	Unitrode	UC3906	1219-93
			¶ 441-20
3909	National	LM3909	978-82
			1221-66
391	HybridSys	DAC391B-12	957-25
		DAC391C-12	957-26
	MicroInds	mBLX391	4855-34
	National	LM391	1116-122
	TeledyneS	391	654-46
		391A/C	1004-124
	Zendex	ZBX391	4855-35
3910	MicroInds	PG3910	4855-12
	RIFA	PBM3910	1198-6
3911	MicroInds	PG3911	4855-2
	National	LM3911	1229-55
3914	National	LM3914	977-8
	OKI	MSM3914A	984-22
3915	National	LM3915	977-9
	RIFA	PBM3915	1193-127
3916	National	LM3916	977-28
3917	**GoldStar**	**GL3917**	⋆ **2699**
			1198-96
392	**AD**	**AD392**	⋆ **2402**
			963-36
	HybridSys	DAC392B-12	960-13
		DAC392C-12	960-14
	National	LM392	1103-116
			1177-31
	TeledyneS	392	654-48
		392A/C	1004-130
3920	**GoldStar**	**GL3920**	⋆ **2699**
			1126-39
393	**GoldStar**	**GL393A**	⋆ **2700**
			1111-31
	Motorola	**LM393**	⋆ **2925**
			⋆ **2958**
			1112-40
		LM393A	⋆ **2925**
			⋆ **2958**
			1111-33
	National	LM393	1112-42
		LM393A	1111-35
	NEC	μPC393	1112-54
	Samsung	LM393	1112-43
		LM393A	1111-36
	SGS	LM393	1112-45
		LM393A	1111-38
	Signetics	LM393A	1112-48
	TeledyneS	393	654-77
		393A/C	1005-1
	TI	LM393	1112-53
		LM393A	1111-41
		TLC393C	1112-12
		TLC393I	1112-13
		TLC393M	1112-14
	Thomson	LM393	1112-49
3931	National	LM3931-5	1202-34
394	AD	AD394	964-22
		AD394K	964-23
		AD394T	964-24
	National	LM394	1106-117
	TeledyneS	394	654-78
		394A/C	1004-131
3941	Motorola	MC3941	980-14
395	AD	AD395	964-25
		AD395K	964-26
	National	LM395	1219-99
	TeledyneS	395	654-51
		395A/C	1005-157
	Unitrode	LM395	1107-4
		UC395	⋆ **3327**
			1003-115
3953	OKI	MSM3953	1196-45
3954	MicroPwr	MP3954	1106-69
		MP3954A	1106-70
3955	MicroPwr	MP3955	1106-71
3956	MicroPwr	MP3956	1106-72
3958	MicroPwr	MP3958	1106-73
396	AD	AD396K	972-48
		AD396S	972-49
		AD396T	973-1
	Micropac	MLM396-05	1203-113
		MLM396-12	1206-95
		MLM396-15	1207-111
		MLM396N	1214-113
	National	LM396	1213-17
	TeledyneS	396AC	654-100
3960	RIFA	PBL3960	1003-105
397	HybridSys	DAC397B-12	957-27
		DAC397C-12	957-28
398	AMD	LF398	1227-111
	LinearTech	LF398	1228-45
		LF398A	1228-46
	National	COP398	863-41
		LF398	1228-62
		LF398A	1228-63
	NEC	μPC398	1228-71
	Signetics	LF398	1228-88
399	LinearTech	LM399	1226-76
		LM399A	1226-65
	National	COP399	863-43
		LM399	1226-72
		LM399A	1226-73
3999	National	LM3999	1226-74
4	AdvMicroSys		
		sm4	4871-26
		CHG-4	4879-20
		CHG4P	4870-34
		PCHG4P	4871-17
		SM4	4871-27
	Burr-Brown	**MPC4D**	⋆ **2543**
			912-58
		PWR4XX	1220-143
	CAN-TRON	LN4	4895-20
	CharlesRiver		
		CM4MB	4892-28
	Chrislin	CI-MIV4	4867-45
		CI-VAX4	4881-4
	CompModules		
		LSBXRAM4	4862-20
			4865-11
		LSBXSERIAL4	4857-12
			4864-7
	Computrol	LQ-4	4866-18
	DSP-Systems		
		AP4	4861-19
	DUAL	SIO4-DMA	4833-10
		VIC4-20	4868-31
		VMPU4M	4845-9
	Force	CPU4	4835-25
		SRAM4	4890-11
	IndComp	PRC4-PC	4850-28
	Intech	**RGBDAC4E**	⋆ **2799**
			940-32
	Interdesign	ULA4G	4066-25
	PEP-Modular		
		PIO4	4852-7
		SIO4	4852-12
		SIO4N	4852-15
	Performance		
		PEPMX4Z-80	1345-34
	Plessey	PSM-4VA	4892-34
		PSM-4VP	4892-35
	Qualogy	QS4	4833-3
			4866-12
	SBE	COM4	4839-6
	Sharp	SM4A	813-36
			862-38
	Tektronix	QuickChip 4	4069-17
	TeledyneC	CDA4A	906-27

(Continued)

Base Number	Source	Device	Page-Line
4	TeledyneC		(Cont'd)
		CLD4	979-146
	Thomson	MDX-CPU4	4819-33
	TLSI	TA4	4061-53
	VersaLogic	IPI-4	4874-17
	WinSystems	MCMSBC4	4817-5
4c169	Performance		
		p4c169-12c	1360-86
4C1024	MicronTech	MT4C1024-10	1344-72
		MT4C1024-12	1345-4
		MT4C1024-15	1345-19
		MT4C1024-8	1344-61
		MT4C1024C-10/883C	1388-28
		MT4C1024C-12/883C	1388-29
		MT4C1024C-15/883C	1388-30
	TI	SMJ4C1024-12	1345-13
		SMJ4C1024-15	1345-20
		TMS4C1024-10	⋆ **3259**
			1345-26
		TMS4C1024-12	⋆ **3259**
			1345-27
		TMS4C1024-15	⋆ **3259**
			1345-28
4C1025	**TI**	**TMS4C1025-10**	⋆ **3259**
			1345-23
		TMS4C1025-12	⋆ **3259**
			1345-24
		TMS4C1025-15	⋆ **3259**
			1345-25
4C1027	TI	SMJ4C1027-12	1345-14
		SMJ4C1027-15	1339-51
		TMS4C1027-10	⋆ **3259**
			1345-29
		TMS4C1027-12	⋆ **3259**
			1345-30
		TMS4C1027-15	⋆ **3259**
			1345-31
4C1050	TI	TMS4C1050-3	1342-37
4C116	Performance		
		P4C116-15C	1355-6
		P4C116-17M	1355-8
		P4C116-20C	1355-13
		P4C116-20M	1355-14
		P4C116-25C	1355-27
		P4C116-25M	1355-28
		P4C116-30C	1355-39
		P4C116-30M	1355-40
		P4C116-35M	1355-60
		P4C116L-15C	1355-7
		P4C116L-17M	1355-9
		P4C116L-20C	1355-15
		P4C116L-20M	1355-16
		P4C116L-25C	1355-29
		P4C116L-25M	1355-30
		P4C116L-30C	1355-41
		P4C116L-30M	1355-42
		P4C116L-35M	1355-61
4C164	Performance		
		P4C164-20C	1366-19
		P4C164-25C	1366-21
		P4C164-25M	1366-22
		P4C164-30C	1366-34
		P4C164-30M	1366-35
		P4C164-35C	1366-60
		P4C164-35M	1366-61
		P4C164-45M	1367-9
		P4C164L-20C	1366-20
		P4C164L-25C	1366-23
		P4C164L-25M	1366-24
		P4C164L-30C	1366-36
		P4C164L-30M	1366-37
		P4C164L-35C	1366-62
		P4C164L-35M	1366-63
		P4C164L-45M	1367-10
4C168	Performance		
		P4C168-12C	1360-87
		P4C168-15C	1361-12
		P4C168-20C	1361-13
		P4C168-20M	1361-34
		P4C168-25C	1361-86
		P4C168-25M	1362-1
		P4C168-30C	1362-46
		P4C168-30M	1362-47
		P4C168-35C	1363-9
		P4C168-35M	1363-10
		P4C168-45M	1364-6
		P4C168L-12C	1360-88
		P4C168L-15C	1361-14
		P4C168L-20C	1361-35
		P4C168L-20M	1361-36
		P4C168L-25C	1362-2
		P4C168L-25M	1362-3
		P4C168L-30C	1362-48
		P4C168L-30M	1362-49
		P4C168L-35C	1363-11
		P4C168L-35M	1363-12
		P4C168L-45M	1364-7
4C1681	Performance		
		P4C1681-15C	1361-23
		P4C1681-20C	1361-58
		P4C1681-20M	1361-59
		P4C1681-25C	1362-32
		P4C1681-25M	1362-33
		P4C1681-30C	1362-57
		P4C1681-30M	1362-58
		P4C1681-35C	1363-48
		P4C1681-35M	1363-49
		P4C1681-45M	1364-37
		P4C1681L-15C	1361-24
		P4C1681L-20C	1361-60
		P4C1681L-20M	1361-61
		P4C1681L-25C	1362-34
		P4C1681L-25M	1362-35
		P4C1681L-30C	1362-59
		P4C1681L-30M	1362-60
		P4C1681L-35C	1363-50
		P4C1681L-35M	1363-51
		P4C1681L-45M	1364-38
4C1682	Performance		
		P4C1682-15C	1361-25
		P4C1682-20C	1361-62
		P4C1682-20M	1361-63
		P4C1682-25C	1362-36
		P4C1682-25M	1362-37
		P4C1682-30C	1362-61
		P4C1682-30M	1362-62
		P4C1682-35C	1363-52
		P4C1682-35M	1363-53
		P4C1682-45M	1364-39
		P4C1682L-15C	1361-26
		P4C1682L-20C	1361-64
		P4C1682L-20M	1361-65
		P4C1682L-25C	1362-38
		P4C1682L-25M	1362-39
		P4C1682L-30C	1362-63
		P4C1682L-30M	1362-64
		P4C1682L-35C	1363-54
		P4C1682L-35M	1363-55
		P4C1682L-45M	1364-40
4C169	Performance		
		P4C169-15C	1361-15
		P4C169-20C	1361-37
		P4C169-20M	1361-38
		P4C169-25C	1362-4
		P4C169-25M	1362-5
		P4C169-30C	1362-50
		P4C169-30M	1362-51
		P4C169-35C	1363-66
		P4C169-35M	1363-13
		P4C169-45M	1364-8

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4C170	Performance		
		P4C170-12C	1361-2
		P4C170-15C	1361-17
		P4C170-20C	1361-45
		P4C170-20M	1361-46
		P4C170-25C	1362-15
		P4C170-25M	1362-16
		P4C170-30C	1362-53
		P4C170-30M	1362-54
		P4C170-35C	1363-27
		P4C170-35M	1363-28
		P4C170-45M	1364-19
4C187	Performance		
		P4C187-12C	1381-18
		P4C187-15C	1381-23
		P4C187-15M	1381-24
		P4C187-20C	1381-31
		P4C187-20M	1381-32
		P4C187-25C	1381-45
		P4C187-25M	1381-46
		P4C187-30M	1381-61
		P4C187-35C	1381-76
		P4C187-35M	1381-77
		P4C187L-12C	1381-19
		P4C187L-15C	1381-25
		P4C187L-15M	1381-26
		P4C187L-20C	1381-33
		P4C187L-20M	1381-34
		P4C187L-25C	1381-47
		P4C187L-25M	1381-48
		P4C187L-30M	1381-62
		P4C187L-35M	1381-78
4C188	Performance		
		P4C188-17C	1372-26
		P4C188-20C	1372-31
		P4C188-25C	1372-63
		P4C188-25M	1372-64
		P4C188-30C	1373-27
		P4C188-30M	1373-28
		P4C188-35C	1373-87
		P4C188-35M	1373-88
		P4C188-45C	1374-92
		P4C188-55M	1375-79
		P4C188L-17C	1372-27
		P4C188L-20C	1372-32
		P4C188L-25C	1372-65
		P4C188L-25M	1372-66
		P4C188L-30C	1373-29
		P4C188L-30M	1373-30
		P4C188L-35C	1374-1
		P4C188L-35M	1374-2
		P4C188L-45C	1374-93
		P4C188L-45M	1375-1
		P4C188L-55M	1375-80
4C198	Performance		
		P4C198-20C	1372-37
		P4C198-25C	1372-80
		P4C198-25M	1372-81
		P4C198-30C	1373-39
		P4C198-30M	1373-40
		P4C198-35C	1374-24
		P4C198-35M	1374-25
		P4C198-45C	1375-20
		P4C198-45M	1375-21
		P4C198-55M	1375-92
		P4C198A-20C	1372-38
		P4C198A-25C	1372-82
		P4C198A-25M	1372-83
		P4C198A-30C	1373-41
		P4C198A-30M	1373-42
		P4C198A-35C	1374-26
		P4C198A-35M	1374-27
		P4C198A-45C	1375-22
		P4C198A-45M	1375-23
		P4C198A-55M	1375-93
		P4C198AL-20C	1372-39
		P4C198AL-25C	1372-84
		P4C198AL-25M	1372-85
		P4C198AL-30C	1373-43
		P4C198AL-30M	1373-44
		P4C198AL-35C	1374-28
		P4C198AL-35M	1374-29
		P4C198AL-45C	1375-24

(Continued)

Base Number	Source	Device	Page-Line
4C198	Performance		(Cont'd)
		P4C198AL-45M	1375-25
		P4C198AL-55M	1375-94
		P4C198L-20C	1372-40
		P4C198L-25C	1372-86
		P4C198L-25M	1372-87
		P4C198L-30C	1373-45
		P4C198L-30M	1373-46
		P4C198L-35C	1374-30
		P4C198L-35M	1374-31
		P4C198L-45C	1375-26
		P4C198L-45M	1375-27
		P4C198L-55M	1375-95
4C1981	Performance		
		P4C1981-20C	1372-41
		P4C1981-25C	1372-88
		P4C1981-25M	1372-89
		P4C1981-30C	1373-59
		P4C1981-30M	1373-60
		P4C1981-35C	1374-53
		P4C1981-35M	1374-54
		P4C1981-45C	1375-52
		P4C1981-45M	1375-53
		P4C1981-55M	1376-17
		P4C1981L-20C	1372-42
		P4C1981L-25C	1372-90
		P4C1981L-25M	1372-91
		P4C1981L-30C	1373-61
		P4C1981L-30M	1373-62
		P4C1981L-35C	1374-55
		P4C1981L-35M	1374-56
		P4C1981L-45C	1375-54
		P4C1981L-45M	1375-55
		P4C1981L-55M	1376-18
4C1982	Performance		
		P4C1982-20C	1372-43
		P4C1982-25C	1372-92
		P4C1982-25M	1372-93
		P4C1982-30C	1373-63
		P4C1982-30M	1373-64
		P4C1982-35C	1374-57
		P4C1982-35M	1374-58
		P4C1982-45C	1375-56
		P4C1982-45M	1375-57
		P4C1982-55M	1376-19
		P4C1982L-20C	1372-44
		P4C1982L-25C	1372-94
		P4C1982L-25M	1372-95
		P4C1982L-30C	1373-65
		P4C1982L-30M	1373-66
		P4C1982L-35C	1374-59
		P4C1982L-35M	1374-60
		P4C1982L-45C	1375-58
		P4C1982L-45M	1375-59
		P4C1982L-55M	1376-20
4C381	LogicDev	L4C381	644-1
			¶ 406-18
			¶ 406-22
		L4C381-1C	602-69
			¶ 406-18
			¶ 406-22
		L4C381-1M	602-70
			¶ 406-18
			¶ 406-22
		L4C381C	644-2
			¶ 406-18
			¶ 406-22
		L4C381M	644-3
			¶ 406-18
			¶ 406-22
4C422	Performance		
		P4C422-10C	1349-25
		P4C422-12C	1349-33
		P4C422-15C	1349-38
		P4C422-15M	1349-39

(Continued)

Base Number	Source	Device	Page-Line
4C422	Performance		(Cont'd)
		P4C422-20M	1349-48
		P4C422-25C	1349-55
		P4C422-25M	1349-56
		P4C422-35M	1349-64
		P4C422-8C	1349-24
4C4256	MicronTech	MT4C4256-10	1341-48
		MT4C4256-10/883C	1387-51
		MT4C4256-12	1341-78
		MT4C4256-12/883C	1387-52
		MT4C4256-15	1342-22
		MT4C4256-15/883C	1387-55
		MT4C4256-8	1341-36
4H16	**Dense-Pac**	**DPS4H16**	★ **2578** 1365-74
4MX1	**Performance**		
		PEP4MX1-100	★ **2962** 1346-54
		PEP4MX1-120	★ **2962** 1346-56
		PEP4MX1-80	★ **2962** 1346-52
		PEP4MX1Z-100	★ **2962** 1346-53
		PEP4MX1Z-120	★ **2962** 1346-55
		PEP4MX1Z-80	★ **2962** 1346-51
4M010G2	ICDC	C4M010G2	4051-4
4M012G2	ICDC	C4M012G2	4051-7
4M024G2	ICDC	C4M024G2	4051-9
4M038G2	ICDC	C4M038G2	4051-11
4M068G2	ICDC	C4M068G2	4051-12
4M8	**Dense-Pac**	**DPD4M8**	★ **2581** 1346-49
4N03	Sharp	IR4N03	1127-108
4N05	Sharp	IR4N05	1001-51
4R101	TeledyneC	CS4R101A	902-60
4X16	**Dense-Pac**	**DPP4X16**	★ **2584** 1365-81
		DPS4X16	★ **2578** 1365-75
		DPS4X16V	★ **2578** ★ **2583** 1365-80
4X18	**Dense-Pac**	**DPF4X18**	★ **2585** 1307-31
4X24	**Dense-Pac**	**DPS4X24V**	★ **2583** 1366-13
		DPV4X24V	★ **2584** 1324-17
4X2901	IMI	4X2901B	646-47 847-26 860-47
4X32	**Dense-Pac**	**DPP4X32**	★ **2584** 1366-17
		DPS4X32	1366-14
		DPS4X32V	★ **2583** 1366-16
		DPV4X32V	★ **2584** 1324-18
		DP4X32	★ **2578** 1366-15
4X36	**Dense-Pac**	**DPF4X36**	★ **2585** 1307-32
4X8	**Dense-Pac**	**DPP4X8**	★ **2584** 1365-50
		DPS4X8V	★ **2583** 1365-49
4X9	**Dense-Pac**	**DPF4X9**	★ **2585** 1307-28

Base Number	Source	Device	Page-Line
40	**Datel**	**SHM40MC**	★ **2572** ★ **2577** 1227-154
		SHM40MM	★ **2572** ★ **2574** ★ **2577** 1227-155
	Interconics	IMC40A	4067-15
		IMC40B	4067-21
		IMC40D	4067-14
	MCE	MCEA40AS	4068-6
		MCEA40BS	4068-18
		MCEA40D	4068-4
		MCEA40DS	4068-5
		MCEP40A	4068-17
	National	INS40U	835-5
	Onset	PAR40	4846-17
	Polycore	MX40	4068-53
	Raytheon	RG40	672-1
	WinSystems	LPM-SBC40	4815-2
		MCM-SBC40	4815-3
40E12	**Raytheon**	**CGA40E12**	★ **4298** 4059-4
40HC390	Toshiba	TC40HC390	613-18
40H000	Sharp	LR40H000	623-112
	Toshiba	TC40H000	623-113
40H002	Toshiba	TC40H002	625-168
40H004	Sharp	LR40H004	608-61
	Toshiba	TC40H004	608-62
40H008	Sharp	LR40H008	622-96
	Toshiba	TC40H008	622-97
40H010	Sharp	LR40H010	623-43
	Toshiba	TC40H010	623-44
40H011	Sharp	LR40H011	622-39
	Toshiba	TC40H011	622-40
40H020	Toshiba	TC40H020	622-165
40H021	Sharp	LR40H021	621-178
	Toshiba	TC40H021	621-179
40H027	Sharp	LR40H027	625-98
	Toshiba	TC40H027	625-99
40H032	Sharp	LR40H032	624-167
	Toshiba	TC40H032	624-168
40H042	Sharp	LR40H042	614-98
	Toshiba	TC40H042	614-99
40H051	Sharp	LR40H051	624-37
	Toshiba	TC40H051	624-38
40H074	Sharp	LR40H074	617-114
	Toshiba	TC40H074	617-115
40H076	Sharp	LR40H076	621-47
	Toshiba	TC40H076	621-48
		TC40H076A	621-49
40H107	Sharp	LR40H107	621-144
	Toshiba	TC40H107	621-145
		TC40H107A	621-146
40H138	Sharp	LR40H138	615-116
	Toshiba	TC40H138	615-117
40H139	Sharp	LR40H139	615-27
	Toshiba	TC40H139	615-29
40H147	Toshiba	TC40H147	637-3
40H148	Toshiba	TC40H148	637-4
40H151	Toshiba	TC40H151	632-38
40H153	Sharp	LR40H153	630-116
	Toshiba	TC40H153	630-117

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
40H155			
	Sharp	LR40H155	615-28
	Toshiba	TC40H155	615-30
40H157			
	Sharp	LR40H157	631-64
	Toshiba	TC40H157	631-65
40H158			
	Sharp	LR40H158	631-101
	Toshiba	TC40H158	631-102
40H160			
	Toshiba	TC40H160	612-56
40H161			
	Toshiba	TC40H161	609-48
40H162			
	Toshiba	TC40H162	612-12
40H163			
	Toshiba	TC40H163	608-165
40H164			
	Sharp	LR40H164	635-63
	Toshiba	TC40H164	635-64
40H166			
	Toshiba	TC40H166	635-23
40H174			
	Sharp	LR40H174	618-112
	Toshiba	TC40H174	618-113
40H175			
	Sharp	LR40H175	618-11
	Toshiba	TC40H175	618-12
40H192			
	Sharp	LR40H192	612-112
	Toshiba	TC40H192	612-113
40H193			
	Sharp	LR40H193	609-142
	Toshiba	TC40H193	609-143
40H194			
	Sharp	LR40H194	634-162
	Toshiba	TC40H194	634-163
40H240			
	Sharp	LR40H240	639-80
	Toshiba	TC40H240	639-81
40H241			
	Toshiba	TC40H241	640-22
40H242			
	Toshiba	TC40H242	605-39
			638-49
40H243			
	Toshiba	TC40H243	605-40
			638-73
40H244			
	Toshiba	TC40H244	640-23
40H245			
	Toshiba	TC40H245	642-6
40H259			
	Toshiba	TC40H259	629-42
40H273			
	Toshiba	TC40H273	618-165
40H365			
	Toshiba	TC40H365	606-103
40H366			
	Toshiba	TC40H366	606-149
40H367			
	Sharp	LR40H367	606-102
	Toshiba	TC40H367	606-104
40H368			
	Sharp	LR40H368	606-148
	Toshiba	TC40H368	605-98
			606-146
40H373			
	Toshiba	TC40H373	628-31
40H374			
	Toshiba	TC40H374	620-99
40H375			
	Sharp	LR40H375	626-157
	Toshiba	TC40H375	626-158
40H386			
	Toshiba	TC40H386	626-74
40H390			
	Toshiba	TC40H390	612-171
40H393			
	Toshiba	TC40H393	610-26
400	AnalogSys	MA400	1165-15
	CMD ASIC	**CSC400**	⋆ **4216**
			4082-14
	CompDyn	CDI400	4703-14
	Exar	XR400	4066-20
	Fujitsu	**BC400**	⋆ **4230**
			4045-40
	Maxim	MAX400C	1137-44
			(Continued)

Base Number	Source	Device	Page-Line
400	Maxim		(Cont'd)
		MAX400E	1137-45
		MAX400M	1137-37
	Motorola	HDS400	4713-3
		MVME400	4886-34
	National	LF400	1165-44
			¶ 429-33
			¶ 429-35
	PMI	**OP400/883**	⋆ **2970**
			⋆ **2972**
			1182-26
		OP400A	⋆ **2970**
			⋆ **2972**
			1182-23
		OP400B	⋆ **2970**
			⋆ **2972**
			1182-33
		OP400E	⋆ **2970**
			⋆ **2972**
			1182-24
		OP400F	⋆ **2970**
			⋆ **2972**
			1182-34
	SBE	SBE400	4717-9
	Siliconix	DG400A	902-29
	Sprague	**UHP400**	⋆ **3203**
			665-142
			1006-141
	Xycom	XVME400	4887-16
4000	Barvon	BC4000	4082-9
	Cherry	CS4000	4065-21
	Conway	CE4000-2	4875-31
	Fairchild	FGC4000	4044-25
	GE/RCA	**CD4000A**	⋆ **2633**
			624-169
		CD4000AE	⋆ **2633**
			624-170
		CD4000B	⋆ **2633**
			624-171
		CD4000BE	⋆ **2633**
			624-172
		CD4000UB	⋆ **2633**
			624-173
		CD4000UBE	⋆ **2633**
			624-174
	GoldStar	**GSC4000**	⋆ **4243**
			4083-11
	Gould	GA4000D	4048-41
		GB4000D	⋆ **4244**
			4048-42
	HyComp	DA4000	968-40
		HC4000	957-29
		HC4000-883	957-30
	IntCirSys	**VGC4000**	⋆ **4256**
			4051-19
	Matra	MA4000	4054-11
	Matra-Harris		
		MB4000	4054-21
	Micrel	CD4000A	624-175
	MMI	MLA4000	4055-11
	Motorola	**BCA4000ETL**	⋆ **4285**
			4056-7
		MC4000	679-11
	National	CD4000C	625-1
		CD4000M	625-2
	NCM	4000 Series	4085-11
	Novix	NB4000	4831-20
		ND4000	4713-20
	Plessey	CLA4000	4058-31
	SGS	HCC4000B	625-3
		HCF4000B	625-4
	Signetics	HEF4000B	625-5
	SMC	SMC4000-PC	4848-27
	Systech	HTC4000	4858-14
	Thomson	GB4000D	4055-24
		MKGA4000D	4055-23
		MKGB4000D	4055-25
		UAA4000	1122-28
	TLSI	TA4000D	4062-5
	Toshiba	**TC4000B**	⋆ **3308**
			625-7
	VLSI Tech	**VGC4000**	⋆ **4665**
			4064-7
40000	Fujitsu	C40000AU	4047-14
	ZyMOS	Zy40000	4087-33

Base Number	Source	Device	Page-Line
4001	Fairchild	F4001BC	625-139
		F4001BM	625-140
	GE/RCA	**CD4001A**	⋆ **2633**
			625-141
			¶ 402-7
		CD4001AE	⋆ **2633**
			625-142
			¶ 402-7
		CD4001B	⋆ **2633**
			625-143
			¶ 402-7
		CD4001BE	⋆ **2633**
			625-144
			¶ 402-7
		CD4001UB	⋆ **2633**
			625-145
			¶ 402-7
		CD4001UBE	⋆ **2633**
			625-146
			¶ 402-7
	GoldStar	**GD4001B**	⋆ **2697**
			625-147
	Micrel	CD4001A	625-148
		CD4001B	625-149
	Motorola	MC4001	664-35
		MHQ4001A	1107-13
	National	CD4001A	625-154
		CD4001BC	625-155
		CD4001BM	625-156
		LH4001	1102-30
	NCM	NCM4001Z	1126-41
		4001Z	1125-83
	Panasonic	MN4001B	625-157
	Sanyo	LC4001B	625-158
	SGS	HCC4001B	625-159
		HCF4001B	625-160
	Siemens	TDA4001	1120-22
	Signetics	HEF4001B	625-161
		HEF4001UB	625-162
	Thomson	UAA4001	1217-122
			¶ 440-16
			¶ 440-33
	Toshiba	**TC4001B**	⋆ **3308**
			625-165
		TC4001UB	⋆ **3308**
			625-166
40014	Fairchild	F40014AM	638-146
		F40014BC	638-147
	GoldStar	**GD40014B**	⋆ **2698**
			638-150
4002	Fairchild	F4002BC	625-28
		F4002BM	625-29
	Fujitsu	**C4002AVM**	⋆ **4229**
			⋆ **4231**
			4046-30
	GE/RCA	**CD4002A**	⋆ **2633**
			625-30
		CD4002AE	⋆ **2633**
			625-31
		CD4002B	⋆ **2633**
			625-32
		CD4002BE	⋆ **2633**
			625-33
		CD4002UB	⋆ **2633**
			625-34
		CD4002UBE	⋆ **2633**
			625-35
	GoldStar	**GD4002B**	⋆ **2697**
			625-36
	Micrel	CD4002A	625-37
		CD4002B	625-38
	Motorola	MHQ4002A	1107-14
	National	CD4002A	625-43
		CD4002BC	625-44
		CD4002BM	625-45
		LH4002	1102-33
		LH4002C	1102-34
	NCM	NCM4002Y	1125-46
		4002Y-A	1125-47
			1190-27
	Panasonic	MN4002B	625-46
	SGS	HCC4002B	625-47
		HCF4002B	625-48
	Signetics	HEF4002B	625-49
			(Continued)

Base Number	Source	Device	Page-Line
4002			(Cont'd)
	Thomson	UAA4002	1001-20
			1221-37
			¶ 440-22
	Toshiba	**TC4002B**	⋆ **3308**
			625-51
4003	NCM	4003Z	1125-50
	SMC	SMC4003-PC	4848-33
	Thomson	UAA4003	1217-123
4004	Motorola	MC4004	678-67
			1347-36
	NCM	4004Z	1126-28
			1127-112
	SMC	SMC4004-PC	4848-16
	Thomson	UAA4004	1003-38
4005	Motorola	MC4005	678-68
			1347-37
4006	Fairchild	F4006BC	636-16
			1394-47
		F4006BM	636-17
		F4006M	1394-49
	GE/RCA	**CD4006A**	⋆ **2634**
			636-18
		CD4006AE	⋆ **2634**
			636-19
		CD4006B	⋆ **2634**
			636-20
		CD4006BE	⋆ **2634**
			636-21
			1394-48
	GoldStar	**GD4006B**	⋆ **2697**
			636-22
	Micrel	CD4006A	636-23
	Motorola	MC4006	664-27
	National	CD4006A	636-26
			1394-50
		CD4006BC	636-27
		CD4006BM	636-28
	NCM	4006Z	1124-111
	SGS	HCC4006B	636-29
		HCF4006B	636-30
	Signetics	HEF4006B	636-31
	Thomson	UAA4006	1217-124
			¶ 440-7
	Toshiba	**TC4006B**	⋆ **3308**
			636-33
40061	GE/RCA	CD40061	630-71
		CD40061A	630-72
			1349-6
4007	Fairchild	F4007UBC	607-116
		F4007UBM	607-117
	GE/RCA	**CD4007A**	⋆ **2633**
			607-118
		CD4007AE	⋆ **2633**
			607-119
		CD4007UB	⋆ **2633**
			607-120
		CD4007UBE	⋆ **2633**
			607-121
	GoldStar	**GD4007UB**	⋆ **2697**
			607-122
	Micrel	CD4007A	607-123
		CD4007UB	607-124
	Motorola	MC4007	664-91
	National	CD4007C	607-127
		CD4007M	607-128
	Panasonic	MN4007UB	607-129
	SGS	HCC4007UB	607-130
		HCF4007UB	607-131
	Signetics	HEF4007UB	607-132
	Thomson	UAA4007	1228-97
	Toshiba	**TC4007UB**	⋆ **3308**
			607-134
4008	Fairchild	F4008BC	602-51
		F4008BM	602-52
	GE/RCA	**CD4008A**	⋆ **2636**
			602-53
			¶ 402-7
		CD4008AE	⋆ **2636**
			602-54
			¶ 402-7
		CD4008B	⋆ **2636**
			602-55
			¶ 402-7
			(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
4008	**GE/RCA**		**(Cont'd)**
		CD4008BE	⋆ **2636**
			602-56
			¶ 402-7
	GoldStar	**GD4008B**	⋆ **2697**
			602-57
	Micrel	CD4008A	602-58
		CD4008B	602-59
	Motorola	MC4008	689-143
	National	CD4008BC	602-62
		CD4008BM	602-63
	SGS	HCC4008B	602-64
		HCF4008B	602-65
	Signetics	HEF4008B	602-66
	Thomson	UAA4008	1228-98
	Toshiba	**TC4008B**	⋆ **3308**
			602-68
40085	Fairchild	F40085BC	603-105
		F40085BM	603-106
	GoldStar	**GD40085B**	⋆ **2698**
			603-111
4009	**GE/RCA**	**CD4009A**	⋆ **2633**
			605-107
			¶ 402-23
		CD4009AE	⋆ **2633**
			605-108
			¶ 402-23
		CD4009UB	⋆ **2633**
			605-109
			¶ 402-23
		CD4009UBE	⋆ **2633**
			605-110
			¶ 402-23
	Micrel	CD4009A	605-111
	National	CD4009AC	605-112
		CD4009AM	605-113
	Thomson	UAA4009	1122-55
	Toshiba	**TC4009UB**	⋆ **3308**
			605-115
40097	Fairchild	F40097BC	606-91
		F40097BM	606-92
	GoldStar	**GD40097B**	⋆ **2698**
			606-95
	Signetics	HEF40097B	606-101
40098	Fairchild	F40098BC	608-81
		F40098BM	608-82
	GoldStar	**GD40098B**	⋆ **2698**
			608-83
	Signetics	HEF40098B	608-84
401	Bit3Comp	401	4849-38
	Brooktree	BT401	1351-2
	Gennum	**LR401**	⋆ **2686**
			1127-8
	MicroLinear	ML401	887-110
	Micro-Link	STD401	4874-1
		VME401	4887-36
	National	COP401L	805-35
		COP401L-R13	805-36
		COP401L-X13	807-1
		LF401	1146-49
		LF401A	1143-20
	Recognition	AS401V	4884-32
		DS401V	4884-33
		PX401V	4884-34
	Siliconix	DG401A	902-67
	Telefunken	U401	1123-36
	ThirdDomain		
		RCS401	1124-112
	VTC	**VC401J**	⋆ **3373**
			1230-33
		VC401S	⋆ **3373**
			1230-34
	Xycom	XVME401	4887-17
401M3	FujitsuA	FBC401M3	4894-5
4010	**GE/RCA**	**CD4010A**	⋆ **2633**
			605-161
			¶ 402-23
		CD4010AE	⋆ **2633**
			605-162
			¶ 402-23
		CD4010B	⋆ **2633**
			605-163
			¶ 402-23
		CD4010BE	⋆ **2633**
			605-164
			¶ 402-23
			(Continued)

Base Number	Source	Device	Page-Line
4010			(Cont'd)
	Hughes	HCTR4010	613-50
	Micrel	CD4010A	605-165
	Motorola	MC4010	688-115
	National	CD4010A	605-166
	Siemens	TDA4010	1119-138
	Toshiba	**TC4010B**	⋆ **3308**
			605-168
40100	**GE/RCA**	**CD40100B**	⋆ **2634**
			636-36
		CD40100BE	⋆ **2634**
			636-37
	SGS	HCC40100B	636-38
		HCF40100B	636-39
40101	**GE/RCA**	**CD40101B**	⋆ **2636**
			604-115
		CD40101BE	⋆ **2636**
			604-116
	SGS	HCC40101B	604-117
		HCF40101B	604-118
40102	**GE/RCA**	**CD40102B**	⋆ **2635**
			612-124
		CD40102BE	⋆ **2635**
			612-125
	SGS	HCC40102B	612-126
		HCF40102B	612-127
	Toshiba	**TC40102B**	⋆ **3308**
			612-128
40103	**GE/RCA**	**CD40103B**	⋆ **2635**
			609-145
		CD40103BE	⋆ **2635**
			609-146
	SGS	HCC40103B	609-147
		HCF40103B	609-148
	Toshiba	**TC40103B**	⋆ **3308**
			609-149
40104	**GE/RCA**	**CD40104B**	⋆ **2634**
			634-55
	SGS	HCC40104B	634-69
		HCF40104B	634-71
	Toshiba	**TC40104B**	⋆ **3308**
			634-76
40105	**GE/RCA**	**CD40105B**	⋆ **2634**
			630-7
			1304-1
		CD40105BE	⋆ **2634**
			630-8
			1304-2
	SGS	HCC40105B	630-9
		HCF40105B	630-10
40106	**GE/RCA**	**CD40106B**	⋆ **2633**
			638-148
		CD40106BE	⋆ **2633**
			638-149
	Micrel	CD40106B	638-151
	National	CD40106BC	638-155
		CD40106BM	638-156
	SGS	HCC40106B	638-159
		HCF40106B	638-160
	Signetics	HEF40106B	638-161
40107	**GE/RCA**	**CD40107B**	⋆ **2633**
			622-105
		CD40107BE	⋆ **2633**
			622-106
	SGS	HCC40107B	622-107
		HCF40107B	622-108
	Toshiba	TC40107B	622-109
40108	**GE/RCA**	**CD40108B**	⋆ **2634**
			⋆ **2636**
			630-11
		CD40108BE	⋆ **2634**
			⋆ **2636**
			630-12
40109	**GE/RCA**	**CD40109B**	⋆ **2633**
			636-72
		CD40109BE	⋆ **2633**
			636-73
	SGS	HCC40109B	636-74
		HCF40109B	636-75
4011	Fairchild	F4011BC	623-83
		F4011BM	623-84
	GE/RCA	**CD4011A**	⋆ **2633**
			623-85
			¶ 402-7
			(Continued)

Base Number	Source	Device	Page-Line
4011	**GE/RCA**		**(Cont'd)**
		CD4011AE	⋆ **2633**
			623-86
			¶ 402-7
		CD4011B	⋆ **2633**
			623-87
			¶ 402-7
		CD4011BE	⋆ **2633**
			623-88
			1348-33
			¶ 402-7
		CD4011UB	⋆ **2633**
			623-89
			¶ 402-7
		CD4011UBE	⋆ **2633**
			623-90
			¶ 402-7
	GoldStar	**GD4011B**	⋆ **2697**
			623-91
	Micrel	CD4011A	623-92
		CD4011B	623-93
	National	CD4011AC	623-98
		CD4011AM	623-99
		CD4011BC	623-100
		CD4011BM	623-101
	NCM	NCM4011Z	1125-95
	Panasonic	MN4011B	623-102
	Sanyo	LC4011B	623-103
	SGS	HCC4011B	623-104
		HCF4011B	623-105
	Signetics	HEF4011B	623-106
		HEF4011UB	623-107
	Toshiba	**TC4011B**	⋆ **3308**
			623-110
		TC4011UB	⋆ **3308**
			623-111
40110	**GE/RCA**	**CD40110B**	⋆ **2635**
			612-143
		CD40110BE	⋆ **2635**
			612-144
40114	GE/RCA	CD40114B	630-48
			1348-34
40115	**GE/RCA**	**CD40115**	⋆ **2633**
			636-84
40116	**GE/RCA**	**CD40116**	⋆ **2633**
			636-85
40117	**GE/RCA**	**CD40117B**	⋆ **2633**
			638-12
	Toshiba	**TC40117B**	⋆ **3308**
			637-123
4012	Fairchild	F4012BC	622-141
		F4012BM	622-142
	GE/RCA	**CD4012A**	⋆ **2633**
			622-143
		CD4012AE	⋆ **2633**
			622-144
		CD4012B	⋆ **2633**
			622-145
		CD4012BE	⋆ **2633**
			622-146
		CD4012UB	⋆ **2633**
			622-147
		CD4012UBE	⋆ **2633**
			622-148
	GoldStar	**GD4012B**	⋆ **2697**
			622-149
	Micrel	CD4012A	622-150
		CD4012B	622-151
	Motorola	MC4012	682-126
			1393-98
	National	CD4012A	622-156
		CD4012BC	622-157
		CD4012BM	622-158
	Panasonic	MN4012B	622-159
	SGS	HCC4012B	622-160
		HCF4012B	622-161
	Signetics	HEF4012B	622-162
	Toshiba	**TC4012B**	⋆ **3308**
			622-164
40128	**Dense-Pac**	**DPE40128**	⋆ **2582**
			1313-29
		DPS40128	1377-19

Base Number	Source	Device	Page-Line
4013	Fairchild	F4013BC	617-94
		F4013BM	617-95
	GE/RCA	**CD4013A**	⋆ **2634**
			617-96
			¶ 402-7
		CD4013AE	⋆ **2634**
			617-97
			¶ 402-7
		CD4013B	⋆ **2634**
			617-98
			¶ 402-7
		CD4013BE	⋆ **2634**
			617-99
			¶ 402-7
	GoldStar	**GD4013B**	⋆ **2697**
			617-100
	Micrel	CD4013A	617-101
		CD4013B	617-102
	Motorola	MHQ4013	1107-15
	National	CD4013BC	617-105
		CD4013BM	617-106
	Panasonic	MN4013B	617-107
	Sanyo	LC4013B	617-108
	SGS	HCC4013B	617-109
		HCF4013B	617-110
	Signetics	HEF4013B	617-111
	Toshiba	**TC4013B**	⋆ **3308**
			617-113
4014	Fairchild	F4014BC	635-114
			1395-15
		F4014BM	635-115
			1395-22
	GE/RCA	**CD4014A**	⋆ **2634**
			635-116
		CD4014AE	⋆ **2634**
			635-117
		CD4014B	⋆ **2634**
			635-118
			1395-24
		CD4014BE	⋆ **2634**
			635-119
			1395-17
	GoldStar	**GD4014B**	⋆ **2697**
			635-120
	Micrel	CD4014A	635-121
		CD4014B	635-122
			1395-26
	Motorola	MHQ4014	1107-16
	National	CD4014A	635-125
			1395-20
		CD4014BC	635-126
		CD4014BM	635-127
	SGS	HCC4014B	635-128
		HCF4014B	635-129
	Signetics	HEF4014B	635-130
	Toshiba	**TC4014B**	⋆ **3308**
			635-132
40147	**GE/RCA**	**CD40147B**	⋆ **2633**
			643-58
		CD40147BE	⋆ **2633**
			643-59
4015	Fairchild	F4015BC	633-125
			1394-28
		F4015BM	633-126
			1394-32
	GE/RCA	**CD4015A**	⋆ **2634**
			633-127
		CD4015AE	⋆ **2634**
			633-128
		CD4015B	⋆ **2634**
			633-129
			1394-33
		CD4015BE	⋆ **2634**
			633-130
			1394-29
	GoldStar	**GD4015B**	⋆ **2697**
			633-131
	Micrel	CD4015A	633-132
		CD4015B	633-133
			1394-34
	Motorola	MC4015	667-30
	National	CD4015A	1394-31
		CD4015AC	633-136
		CD4015BC	633-137
		CD4015BM	633-138
	Panasonic	MN4015B	633-139
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4015			(Cont'd)
	SGS	HCC4015B	633-140
		HCF4015B	633-141
	Signetics	HEF4015B	633-142
	Toshiba	**TC4015B**	*** 3308**
			633-144
4016	Fairchild	F4016C	905-18
		F4016M	905-19
	GE/RCA	**CD4016A**	*** 2635**
			905-20
		CD4016AE	*** 2635**
			905-21
		CD4016B	*** 2635**
			905-22
		CD4016BE	*** 2635**
			905-23
	GoldStar	**GD4016B**	*** 2697**
			905-24
	Micrel	CD4016A	905-25
		CD4016B	905-26
	Motorola	MC4016	664-7
			¶ 439-8
	National	CD4016BC	905-31
		CD4016BM	905-32
	Novix	NC4016	849-15
	Panasonic	MN4016B	905-37
	SGS	HCC4016B	905-38
		HCF4016B	905-39
	Signetics	HEF4016	905-40
		HEF4016B	905-41
	TI	TLC4016	902-4
		TLC4016M	902-12
	Toshiba	**TC4016B**	*** 3308**
			905-17
40160	Fairchild	F40160BC	612-41
		F40160BM	612-42
	GE/RCA	**CD40160B**	*** 2635**
			612-43
		CD40160BE	*** 2635**
			612-44
	GoldStar	**GD40160B**	*** 2698**
			612-45
	Micrel	CD40160B	612-46
	National	CD40160BC	612-49
		CD40160BM	612-50
	SGS	HCC40160B	612-51
		HCF40160B	612-52
	Signetics	HEF40160B	612-53
	Toshiba	**TC40160B**	*** 3308**
			612-55
40161	Fairchild	F40161BC	609-32
		F40161BM	609-33
	GE/RCA	**CD40161B**	*** 2635**
			609-34
		CD40161BE	*** 2635**
			609-35
	GoldStar	**GD40161B**	*** 2698**
			609-36
	Micrel	CD40161B	609-37
	National	CD40161BC	609-40
		CD40161BM	609-41
	Panasonic	MN40161B	609-42
	SGS	HCC40161B	609-43
		HCF40161B	609-44
	Signetics	HEF40161B	609-45
	Toshiba	**TC40161B**	*** 3308**
			609-47
40162	Fairchild	F40162BC	611-169
		F40162BM	611-170
	GE/RCA	**CD40162B**	*** 2635**
			611-171
		CD40162BE	*** 2635**
			612-1
	GoldStar	**GD40162B**	*** 2698**
			612-2
	Micrel	CD40162B	612-3
	National	CD40162BC	612-6
		CD40162BM	612-7
	SGS	HCF40162B	612-8
	Signetics	HEF40162B	612-9
	Toshiba	**TC40162B**	*** 3308**
			612-11
40163	Fairchild	F40163BC	608-150
		F40163BM	608-151
	GE/RCA	**CD40163B**	*** 2635**
			608-152
			(Continued)

Base Number	Source	Device	Page-Line
40163	**GE/RCA**		**(Cont'd)**
		CD40163BE	*** 2635**
			608-153
	GoldStar	**GD40163B**	*** 2698**
			608-154
	Micrel	CD40163B	608-155
	National	CD40163BC	608-158
		CD40163BM	608-159
	SGS	HCC40163B	608-160
		HCF40163	608-161
	Signetics	HEF40163B	608-162
	Toshiba	**TC40163B**	*** 3308**
			608-164
4017	Fairchild	F4017BC	611-122
		F4017BM	611-123
	GE/RCA	**CD4017A**	*** 2635**
			611-124
			¶ 404-9
		CD4017AE	*** 2635**
			611-125
			¶ 404-9
		CD4017B	*** 2635**
			611-126
			¶ 404-9
		CD4017BE	*** 2635**
			611-127
			¶ 404-9
	GoldStar	**GD4017B**	*** 2697**
			611-128
	Micrel	CD4017A	611-129
		CD4017B	611-130
	Motorola	MC4017	664-8
	National	CD4017BC	611-133
		CD4017BM	611-134
	Panasonic	MN4017B	611-135
	Sanyo	STK4017	1117-94
	SGS	HCC4017B	611-136
		HCF4017B	611-137
	Signetics	HEF4017B	611-138
	Toshiba	**TC4017B**	*** 3308**
			611-140
40174	Fairchild	F40174BC	618-97
		F40174BM	618-98
	GE/RCA	**CD40174B**	*** 2634**
			618-99
		CD40174BE	*** 2634**
			618-100
	GoldStar	**GD40174B**	*** 2698**
			618-101
	Micrel	CD40174B	618-102
	National	CD40174BC	618-105
		CD40174BM	618-106
	SGS	HCC40174B	618-107
		HCF40174B	618-108
	Signetics	HEF40174B	618-109
	Toshiba	**TC40174B**	*** 3308**
			618-111
40175	Fairchild	F40175BC	618-1
		F40175BM	618-2
	GE/RCA	**CD40175B**	*** 2634**
			618-3
		CD40175BE	*** 2634**
			618-4
	GoldStar	**GD40175B**	*** 2698**
			618-5
	National	CD40175B	618-8
	Signetics	HEF40175B	618-9
	Toshiba	**TC40175B**	*** 3308**
			618-10
4018	Fairchild	F4018BC	613-142
		F4018BM	613-143
	GE/RCA	**CD4018A**	*** 2635**
			613-144
			¶ 404-12
		CD4018AE	*** 2635**
			613-145
			¶ 404-12
		CD4018B	*** 2635**
			613-146
			¶ 404-12
		CD4018BE	*** 2635**
			614-1
			¶ 404-12
	GoldStar	**GD4018B**	*** 2697**
			614-2
	Micrel	CD4018A	614-3
			(Continued)

Base Number	Source	Device	Page-Line
4018	Micrel		(Cont'd)
		CD4018B	614-4
	Motorola	MC4018	664-2
	National	CD4018BC	614-7
		CD4018BM	614-8
	SGS	HCC4018B	614-9
		HCF4018B	614-10
	Signetics	HEF4018B	614-11
	Toshiba	**TC4018B**	*** 3308**
			614-13
40181	**GE/RCA**	**CD40181B**	*** 2636**
			603-39
		CD40181BE	*** 2636**
			603-40
	SGS	HCC40181B	603-45
		HCF40181B	603-46
40182	**GE/RCA**	**CD40182B**	*** 2636**
			603-72
		CD40182BE	*** 2636**
			603-73
	SGS	HCC40182	603-77
		HCF40182	603-78
4019	Fairchild	F4019BC	624-3
		F4019BM	624-4
	GE/RCA	**CD4019A**	*** 2633**
			*** 2635**
			624-5
			¶ 402-7
		CD4019AE	*** 2633**
			*** 2635**
			624-6
			¶ 402-7
		CD4019B	*** 2633**
			*** 2635**
			624-7
			¶ 402-7
		CD4019BE	*** 2633**
			*** 2635**
			624-8
			¶ 402-7
	GoldStar	**GD4019B**	*** 2697**
			624-9
	Micrel	CD4019A	624-10
		CD4019B	624-11
	Motorola	MC4019	664-3
	National	CD4019BC	624-12
		CD4019BM	624-13
	Sanyo	STK4019	1117-95
	SGS	HCC4019B	624-14
		HCF4019B	624-15
	Signetics	HEF4019B	624-16
	Toshiba	**TC4019B**	*** 3308**
			624-18
40192	Dense-Pac	DEP40192	1313-44
		DPE40192	*** 2582**
			1313-42
		DPS40192	1378-21
	Fairchild	F40192BC	612-84
		F40192BM	612-85
	GE/RCA	**CD40192B**	*** 2635**
			612-88
		CD40192BE	*** 2635**
			612-89
	GoldStar	**GD40192B**	*** 2698**
			612-92
	Micrel	CD40192B	612-94
	National	CD40192BC	612-98
		CD40192BM	612-99
	SGS	HCC40192B	612-102
		HCF40192B	612-104
	Signetics	HEF40192B	612-106
	Toshiba	**TC40192B**	*** 3308**
			612-110
40193	Fairchild	F40193BC	609-115
		F40193BM	609-116
	GE/RCA	**CD40193B**	*** 2635**
			609-119
		CD40193BE	*** 2635**
			609-120
	GoldStar	**GD40193B**	*** 2698**
			609-123
	Micrel	CD40193B	609-125
	National	CD40193BC	609-129
		CD40193BM	609-130
	Signetics	HEF40193B	609-136
			(Continued)

Base Number	Source	Device	Page-Line
40193			(Cont'd)
	Toshiba	**TC40193B**	*** 3308**
			609-140
40194	Fairchild	F40194BC	634-38
			1394-11
		F40194BM	634-39
			1394-3
	GE/RCA	**CD40194B**	*** 2634**
			634-56
	GoldStar	**GD40194B**	*** 2698**
			634-40
	SGS	HCC40194B	634-43
		HCF40194B	634-44
	Signetics	HEF40194B	634-73
	Toshiba	TC40194B	634-45
40195	Fairchild	F40195BC	634-100
			1394-12
		F40195BM	634-101
			1394-4
	GoldStar	**GD40195B**	*** 2698**
			634-102
	National	CD40195BC	634-103
		CD40195BM	634-104
	Signetics	HEF40195B	634-105
402	Bit3Comp	402	4849-36
	Brooktree	BT402	1351-1
	Hitachi	HMCS402AC	805-8
		HMCS402C	805-9
		HMCS402CL	805-10
	IoInc	IoVME402	4891-33
	MicroLinear	ML402	887-111
	Micro-Link	STD402	4875-57
	National	COP402	807-2
			862-111
		COP402M	807-3
			862-101
	Siliconix	DG402A	906-10
	Sprague	**UHP402**	*** 3203**
			666-21
			1007-13
	Xycom	XVME402	4881-26
402M3	FujitsuA	FBC402M3	4894-6
4020	Fairchild	F4020BC	611-32
		F4020BM	611-33
	GE/RCA	**CD4020A**	*** 2634**
			611-34
		CD4020AE	*** 2634**
			611-35
		CD4020B	*** 2634**
			611-36
		CD4020BE	*** 2634**
			611-37
	GoldStar	**GD4020B**	*** 2697**
			611-38
	Micrel	CD4020A	611-39
		CD4020B	611-40
	National	CD4020BC	611-43
		CD4020BM	611-44
	SGS	HCC4020B	611-45
		HCF4020B	611-46
	Signetics	HEF4020B	611-47
	Toshiba	**TC4020B**	*** 3308**
			611-49
40208	**GE/RCA**	**CD40208B**	*** 2634**
			*** 2636**
			630-13
		CD40208BE	*** 2634**
			*** 2636**
			630-14
	SGS	HCC40208B	630-17
		HCF40208B	630-18
4021	Fairchild	F4021BC	634-106
			1395-16
		F4021BM	634-107
			1395-23
	GE/RCA	**CD4021A**	*** 2634**
			634-108
		CD4021AE	*** 2634**
			634-109
		CD4021B	*** 2634**
			634-110
			1395-25
		CD4021BE	*** 2634**
			634-111
			1395-18
			(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
4021			(Cont'd)
	GoldStar	**GD4021B**	*** 2697**
			634-112
	Micrel	CD4021A	613-122
		CD4021B	613-123
	Motorola	MC4021	656-37
	National	CD4021A	634-115
			1395-21
		CD4021BC	634-116
		CD4021BM	634-117
	Sanyo	STK4021	1117-10
	SGS	HCC4021B	634-118
		HCF4021B	634-119
	Signetics	HEF4021B	634-120
	Toshiba	**TC4021B**	*** 3308**
			634-122
4022	Fairchild	F4022BC	613-115
		F4022BM	613-116
	GE/RCA	**CD4022A**	*** 2635**
			613-117
		CD4022AE	*** 2635**
			613-118
		CD4022B	*** 2635**
			613-119
		CD4022BE	*** 2635**
			613-120
	GoldStar	**GD4022B**	*** 2697**
			613-121
	Micrel	CD4022A	613-124
		CD4022B	613-125
	Motorola	MC4022	656-38
	National	CD4022BC	613-128
		CD4022BM	613-129
	SGS	HCC4022B	613-130
		HCF4022B	613-131
	Signetics	HEF4022B	613-132
	Toshiba	**TC4022B**	*** 3308**
			613-134
4023	Fairchild	F4023BC	623-20
		F4023BM	623-21
	GE/RCA	**CD4023A**	*** 2633**
			623-22
		CD4023AE	*** 2633**
			623-23
		CD4023B	*** 2633**
			623-24
		CD4023BE	*** 2633**
			623-25
		CD4023UB	*** 2633**
			623-26
		CD4023UBE	*** 2633**
			623-27
	GoldStar	**GD4023B**	*** 2697**
			623-28
	Micrel	CD4023A	623-29
		CD4023B	623-30
	Motorola	MC4023	664-16
	National	CD4023BC	623-35
		CD4023BM	623-36
	Panasonic	MN4023B	623-37
	Sanyo	STK4023	1117-11
	SGS	HCC4023B	623-38
		HCF4023B	623-39
	Signetics	HEF4023B	623-40
	Toshiba	**TC4023B**	*** 3308**
			623-42
4024	Fairchild	F4024BC	610-81
		F4024BM	610-82
	GE/RCA	**CD4024A**	*** 2634**
			610-83
			¶ 404-9
		CD4024AE	*** 2634**
			610-84
			¶ 404-9
		CD4024B	*** 2634**
			610-85
			¶ 404-9
		CD4024BE	*** 2634**
			610-86
			¶ 404-9
	GoldStar	**GD4024B**	*** 2697**
			610-87
	Micrel	CD4024A	610-88
		CD4024B	610-89
	Motorola	MC4024	682-68
			¶ 439-8
			(Continued)

Base Number	Source	Device	Page-Line
4024			(Cont'd)
	National	CD4024BC	610-92
		CD4024BM	610-93
	Panasonic	MN4024B	610-94
	SGS	HCC4024B	610-95
		HCF4024B	610-96
	Signetics	HEF4024B	610-97
	Toshiba	**TC4024B**	*** 3308**
			610-99
40240	Signetics	HEF40240B	639-79
40244	Signetics	HEF40244B	640-21
40245	Signetics	HEF40245B	642-5
4025	AMD	MM4025	1393-17
	Burr-Brown	4025	1223-82
	Fairchild	F4025BC	625-74
		F4025BM	625-75
	GE/RCA	**CD4025A**	*** 2633**
			625-76
		CD4025AE	*** 2633**
			625-77
		CD4025B	*** 2633**
			625-78
		CD4025BE	*** 2633**
			625-79
		CD4025UB	*** 2633**
			625-80
		CD4025UBE	*** 2633**
			625-81
	GoldStar	**GD4025B**	*** 2697**
			625-82
	Micrel	CD4025A	625-83
		CD4025B	625-84
	National	CD4025A	625-89
		CD4025BC	625-90
		CD4025BM	625-91
	Panasonic	MN4025B	625-92
	Sanyo	STK4025	1117-12
	SGS	HCC4025B	625-93
		HCF4025B	625-94
	Signetics	HEF4025B	625-95
	Toshiba	**TC4025B**	*** 3308**
			625-97
	Western	WD4025A-PCD	4847-62
40250	**GE/RCA**	**PA40250**	*** 2659**
			4059-10
40256	**Dense-Pac**	**DPE40256**	*** 2582**
			1314-9
		DPS40256	1379-82
40257	**GE/RCA**	**CD40257B**	*** 2635**
			631-130
		CD40257BE	*** 2635**
			631-131
	SGS	HCC40257B	631-132
		HCF40257B	631-133
4026	AMD	MM4026	1393-18
	GE/RCA	**CD4026A**	*** 2635**
			611-93
			¶ 402-23
		CD4026AE	*** 2635**
			611-94
			¶ 402-23
		CD4026B	*** 2635**
			611-95
			¶ 402-23
		CD4026BE	*** 2635**
			611-96
			¶ 402-23
	SGS	HCC4026B	611-101
		HCF4026B	611-102
4027	AMD	MM4027	1393-19
	Fairchild	F4027BC	621-28
		F4027BM	621-29
	GE/RCA	**CD4027A**	*** 2634**
			621-30
		CD4027AE	*** 2634**
			621-31
		CD4027B	*** 2634**
			621-32
		CD4027BE	*** 2634**
			621-33
	GoldStar	**GD4027B**	*** 2697**
			621-34
	Micrel	CD4027A	621-35
		CD4027B	621-36
	National	CD4027BC	621-39
		CD4027BM	621-40
			(Continued)

Base Number	Source	Device	Page-Line
4027			(Cont'd)
	Panasonic	MN4027B	621-41
	SGS	HCC4027B	621-42
		HCF4027B	621-43
	Signetics	HEF4027B	621-44
	Stantel-STC	STC4027-3	1337-7
		STC4027-4	1337-12
		STC4027M-3	1337-8
		STC4027M-4	1337-10
	Thomson	MKB4027-83	1337-9
		MKB4027-84	1337-11
	Toshiba	**TC4027B**	*** 3308**
			621-46
4028	Fairchild	F4028BC	614-79
		F4028BM	614-80
	GE/RCA	**CD4028A**	*** 2633**
			614-81
		CD4028AE	*** 2633**
			614-82
		CD4028B	*** 2633**
			614-83
		CD4028BE	*** 2633**
			614-84
	GoldStar	**GD4028B**	*** 2697**
			614-85
	Micrel	CD4028A	614-86
		CD4028B	614-87
	National	CD4028BC	614-90
		CD4028BM	614-91
	Panasonic	MN4028B	614-92
	SGS	HCC4028B	614-93
		HCF4028B	614-94
	Signetics	HEF4028B	614-95
	Toshiba	**TC4028B**	*** 3308**
			614-97
4029	Fairchild	F4029BC	614-14
		F4029BM	614-15
	GE/RCA	**CD4029A**	*** 2635**
			614-16
		CD4029B	*** 2635**
			614-17
		CD4029BE	*** 2635**
			614-18
	GoldStar	**GD4029B**	*** 2697**
			614-19
	Micrel	CD4029A	614-20
		CD4029B	614-21
	National	CD4029BC	614-24
		CD4029BM	614-25
	Panasonic	MN4029B	614-26
	SGS	HCC4029B	614-27
		HCF4029B	614-28
	Signetics	HEF4029B	614-29
	Toshiba	**TC4029B**	*** 3308**
			614-31
403	Bit3Comp	403	4849-37
	Brooktree	BT403	1350-90
	Gennum	**LC403**	*** 2687**
			1102-3
		LD403	1102-4
	IoInc	IoVME403	4891-34
	MicroLinear	ML403	887-112
	Micro-Link	STD403	4873-23
		VME403	4887-37
	Siliconix	DG403A	907-23
	Sprague	**UHP403**	*** 3203**
			666-22
			1007-14
4030	Fairchild	F4030BC	626-42
		F4030BM	626-43
	GE/RCA	**CD4030A**	*** 2633**
			*** 2636**
			626-46
		CD4030AE	*** 2633**
			*** 2636**
			626-47
		CD4030B	*** 2633**
			*** 2636**
			626-48
		CD4030BE	*** 2633**
			*** 2636**
			626-49
	GoldStar	**GD4030B**	*** 2697**
			626-52
	Micrel	CD4030A	626-54
	National	CD4030A	626-58
			(Continued)

Base Number	Source	Device	Page-Line
4030			(Cont'd)
	Panasonic	MN4030B	626-63
	SGS	HCC4030B	626-65
		HCF4030B	626-67
	Signetics	HEF4030B	626-69
	Toshiba	**TC4030B**	*** 3308**
			626-73
4031	Fairchild	F4031BC	636-43
			1395-98
		F4031BM	636-44
			1395-100
	GE/RCA	**CD4031A**	*** 2634**
			636-45
		CD4031AE	*** 2634**
			636-46
		CD4031B	*** 2634**
			636-47
			1395-101
		CD4031BE	*** 2634**
			636-48
			1395-99
	GoldStar	GD4031B	636-49
	Micrel	CD4031A	636-50
		CD4031B	636-51
			1395-102
	National	CD4031BC	636-52
			1396-1
		CD4031BM	636-53
			1396-2
	SGS	HCC4031B	636-54
		HCF4031B	636-55
	Signetics	HEF4031B	636-56
4032	**GE/RCA**	**CD4032A**	*** 2636**
			602-20
		CD4032AE	*** 2636**
			602-21
		CD4032B	*** 2636**
			602-22
		CD4032BE	*** 2636**
			602-23
	SGS	HCF4032B	602-26
	Toshiba	**TC4032B**	*** 3308**
			602-27
4033	**GE/RCA**	**CD4033A**	*** 2635**
			611-97
			¶ 402-23
		CD4033AE	*** 2635**
			611-98
			¶ 402-23
		CD4033B	*** 2635**
			611-99
			¶ 402-23
		CD4033BE	*** 2635**
			611-100
			¶ 402-23
	SGS	HCF4033B	611-103
4034	Fairchild	F4034BC	634-123
		F4034BM	634-124
	GE/RCA	**CD4034A**	*** 2634**
			*** 2636**
			634-125
		CD4034AE	*** 2634**
			*** 2636**
			634-126
		CD4034B	*** 2634**
			*** 2636**
			634-127
			1394-87
		CD4034BE	*** 2634**
			*** 2636**
			634-128
	GoldStar	**GD4034B**	*** 2697**
			634-129
	Micrel	CD4034B	634-130
			1394-88
	National	CD4034BC	634-133
			1394-89
		CD4034BM	634-134
			1394-90
	SGS	HCC4034B	634-135
		HCF4034B	634-136
	Toshiba	**TC4034B**	*** 3308**
			634-138
			1394-92

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4035	Fairchild	F4035BC	634-53
			1394-13
		F4035BM	634-54
			1394-5
	GE/RCA	**CD4035A**	⋆ **2634**
			634-57
		CD4035AE	⋆ **2634**
			634-58
		CD4035B	⋆ **2634**
			634-59
			1394-14
		CD4035BE	⋆ **2634**
			634-60
			1394-6
	GoldStar	**GD4035B**	⋆ **2697**
			634-61
	Micrel	CD4035A	634-62
		CD4035B	634-63
			1394-15
	National	CD4035BC	634-66
			1394-8
		CD4035BM	634-67
			1394-17
	Panasonic	MN4035B	634-68
	SGS	HCC4035B	634-70
		HCF4035B	634-72
	Signetics	HEF4035B	634-74
	Toshiba	TC4035B	634-77
4036	**Toshiba**	**TC4036B**	⋆ **3308**
			630-29
40368	Toshiba	TC40368	606-147
4037	GE/RCA	CD4037A	624-1
		CD4037AE	624-2
40373	Signetics	HEF40373B	628-30
40374	Signetics	HEF40374B	620-98
4038	**GE/RCA**	**CD4038A**	⋆ **2636**
			602-11
		CD4038AE	⋆ **2636**
			602-12
		CD4038B	⋆ **2636**
			602-13
		CD4038BE	⋆ **2636**
			602-14
	Motorola	MC4038	664-25
	SGS	HCC4038B	602-17
		HCF4038B	602-18
	Toshiba	**TC4038B**	⋆ **3308**
			602-19
4039	Marconi	MA4039	4053-54
	Motorola	MC4039	979-44
	Toshiba	**TC4039B**	⋆ **3308**
			630-30
404	Bit3Comp	404	4849-39
			4860-23
	Brooktree	BT404	1350-89
	Burr-Brown	**OPA404A**	⋆ **2533**
			1189-47
		OPA404B	⋆ **2533**
			1189-46
		OPA404K	⋆ **2533**
			1184-1
		OPA404S	⋆ **2533**
			1183-27
	Ferranti	ZN404	1225-87
	FujitsuA	FBM-u404	4894-14
	Gennum	**LR404**	⋆ **2686**
			1127-9
	Hitachi	HMCS404AC	805-11
		HMCS404C	805-12
		HMCS404CL	805-13
	MicroLinear	ML404	886-92
	Micro-Link	VME404	4887-33
	National	COP404	862-112
		COP404LP	807-4
		COP404LS	807-5
	PMI	**CMP404A**	⋆ **2975**
			1113-39
		CMP404B	⋆ **2975**
			1113-50
		CMP404E	⋆ **2975**
			1113-40
		CMP404F	⋆ **2975**
			1113-51
	SGS	LS404	1184-6
		LS404C	1186-12
	Siliconix	DG404	908-54

(Continued)

Base Number	Source	Device	Page-Line
404			(Cont'd)
	Siltronics	S404	1121-122
404C3	FujitsuA	FBC404C3A	4894-21
		FBC404C3S	4894-20
404D3	FujitsuA	MDC404D3	4894-23
404M3	FujitsuA	FBC404M3	4894-8
		MBC404M3T	4879-40
4040	Fairchild	F4040BC	610-160
		F4040BM	610-161
	GE/RCA	**CD4040A**	⋆ **2634**
			610-162
		CD4040AE	⋆ **2634**
			610-163
		CD4040B	⋆ **2634**
			611-1
		CD4040BE	⋆ **2634**
			611-2
	GoldStar	**GD4040B**	⋆ **2697**
			611-3
	Micrel	CD4040A	611-4
		CD4040B	611-5
	Motorola	MC4040	664-33
	National	CD4040BC	611-8
		CD4040BM	611-9
	Panasonic	MN4040B	611-10
	S-MOS	SMC4040C	813-8
	SGS	HCC4040B	611-11
		HCF4040B	611-12
	Signetics	HEF4040B	611-13
	Toshiba	**TC4040B**	⋆ **3308**
			611-15
4041	Fairchild	F4041BC	605-76
		F4041BM	605-77
	GE/RCA	**CD4041A**	⋆ **2633**
			605-78
		CD4041AE	⋆ **2633**
			605-79
		CD4041UB	⋆ **2633**
			605-80
		CD4041UBE	⋆ **2633**
			605-81
	GoldStar	**GD4041B**	⋆ **2697**
			605-82
	Micrel	CD4041A	605-83
	Motorola	MC4041	983-13
	National	CD4041C	605-84
		CD4041M	605-85
	S-MOS	SMC4041C	813-9
	SGS	HCC4041UB	605-86
		HCF4041UB	605-87
	Signetics	HEF4041B	605-88
4042	Fairchild	F4042BC	627-1
		F4042BM	627-2
	GE/RCA	**CD4042A**	⋆ **2634**
			627-3
		CD4042AE	⋆ **2634**
			627-4
		CD4042B	⋆ **2634**
			627-5
		CD4042BE	⋆ **2634**
			627-6
	GoldStar	**GD4042B**	⋆ **2697**
			627-7
	Micrel	CD4042A	627-8
		CD4042B	627-9
	Motorola	MC4042	665-135
			1000-8
	National	CD4042BC	627-12
		CD4042BM	627-13
	SGS	HCC4042B	627-14
		HCF4042B	627-15
	Signetics	HEF4042B	627-16
	Toshiba	**TC4042B**	⋆ **3308**
			627-18
4043	Fairchild	F4043BC	627-37
		F4043BM	627-38
	GE/RCA	**CD4043A**	⋆ **2634**
			627-39
		CD4043AE	⋆ **2634**
			627-40
		CD4043B	⋆ **2634**
			627-41
		CD4043BE	⋆ **2634**
			627-42
	GoldStar	**GD4043B**	⋆ **2697**
			627-43

(Continued)

Base Number	Source	Device	Page-Line
4043			(Cont'd)
	Micrel	CD4043A	627-44
		CD4043B	627-45
	Motorola	MC4043	999-100
	National	CD4043A	627-48
		CD4043BC	627-49
		CD4043BM	627-50
	SGS	HCC4043B	627-51
		HCF4043B	627-52
	Signetics	HEF4043B	627-53
	Toshiba	**TC4043B**	⋆ **3308**
			627-55
4044	AMD	AM4044C	1360-47
	Davidge	DSB4044	4803-4
	Fairchild	F4044BC	627-19
		F4044BM	627-20
	GE/RCA	**CD4044A**	⋆ **2634**
			627-21
		CD4044AE	⋆ **2634**
			627-22
		CD4044B	⋆ **2634**
			627-23
	GoldStar	**GD4044B**	⋆ **2697**
			627-24
	Micrel	CD4044A	627-25
		CD4044B	627-26
	Motorola	MC4044	688-81
			¶ 439-8
	National	CD4044A	627-29
		CD4044BC	627-30
		CD4044BM	627-31
	SGS	HCC4044B	627-32
		HCF4044B	627-33
	Signetics	HEF4044B	627-34
	Toshiba	**TC4044B**	⋆ **3308**
			627-35
4045	Burr-Brown	OPA4045	1189-48
	GE/RCA	**CD4045A**	⋆ **2634**
			633-93
		CD4045AE	⋆ **2634**
			633-94
		CD4045B	⋆ **2634**
			633-95
		CD4045BE	⋆ **2634**
			633-96
	GoldStar	**GD4045B**	⋆ **2697**
			633-97
	SGS	HCC4045B	633-98
		HCF4045B	633-99
40450	**GE/RCA**	**PA40450**	⋆ **2659**
			4059-11
4046	Fairchild	F4046BC	637-44
			1190-49
		F4046BM	637-45
			1190-50
	GE/RCA	**CD4046A**	⋆ **2635**
			637-46
			1190-51
		CD4046AE	⋆ **2635**
			637-47
			1190-52
		CD4046B	⋆ **2635**
			637-48
			1190-53
		CD4046BE	⋆ **2635**
			637-49
			1190-54
	GoldStar	**GD4046B**	⋆ **2697**
			637-50
	Micrel	CD4046B	637-51
	National	CD4046BC	637-54
			1190-57
		CD4046BM	637-55
			1190-58
	SGS	HCC4046B	637-56
		HCF4046B	637-57
	Signetics	HEF4046B	637-58
4047	Fairchild	F4047BC	632-141
		F4047BM	632-142
	GE/RCA	**CD4047A**	⋆ **2634**
			632-143
			¶ 404-1
		CD4047AE	⋆ **2634**
			632-144
			¶ 404-1

(Continued)

Base Number	Source	Device	Page-Line
4047	**GE/RCA**		**(Cont'd)**
		CD4047B	⋆ **2634**
			632-145
			¶ 404-1
		CD4047BE	⋆ **2634**
			632-146
			¶ 404-1
	GoldStar	**GD4047B**	⋆ **2697**
			632-147
	Micrel	CD4047B	632-148
	National	CD4047BC	632-149
		CD4047BM	632-150
	SGS	HCC4047B	632-151
		HCF4047B	632-152
	Signetics	HEF4047B	632-153
	Toshiba	**TC4047B**	⋆ **3308**
			632-155
4048	**GE/RCA**	**CD4048A**	⋆ **2633**
			626-117
		CD4048AE	⋆ **2633**
			626-118
		CD4048B	⋆ **2633**
			626-119
		CD4048BE	⋆ **2633**
			626-120
	Micrel	CD4048A	626-121
		CD4048B	626-122
	Motorola	MC4048	664-26
	National	CD4048BC	626-123
		CD4048BM	626-124
	SGS	HCC4048B	626-125
		HCF4048B	626-126
4049	Fairchild	F4049BC	605-138
		F4049BM	605-139
	GE/RCA	**CD4049A**	⋆ **2633**
			605-140
		CD4049AE	⋆ **2633**
			605-141
		CD4049UB	⋆ **2633**
			605-142
		CD4049UBE	⋆ **2633**
			605-143
	GoldStar	**GD4049B**	⋆ **2697**
			605-144
	Micrel	CD4049A	605-145
		CD4049UB	605-146
	National	CD4049UB	605-149
	Panasonic	MN4049B	605-150
	SGS	HCC4049UB	605-151
		HCF4049UB	605-152
	Signetics	HEF4049B	605-153
	Toshiba	**TC4049B**	⋆ **3308**
			605-155
405	Barvon	BC405	4041-46
			4041-47
	Gennum	**LD405**	⋆ **2687**
			1224-96
		LS405	1224-97
	MicroLinear	ML405	885-99
			1190-72
	National	NS405	883-68
	Signetics	**PLUS405**	⋆ **3174**
			4080-1
	Siliconix	DG405A	908-75
	Xycom	XVME405	4882-24
4050	Fairchild	F4050BC	606-13
		F4050BM	606-14
	GE/RCA	**CD4050A**	⋆ **2633**
			606-15
		CD4050AE	⋆ **2633**
			606-16
		CD4050B	⋆ **2633**
			606-17
		CD4050BE	⋆ **2633**
			606-18
	GoldStar	**GD4050B**	⋆ **2697**
			606-19
	Micrel	CD4050A	606-20
		CD4050B	606-21
	Motorola	MC4050	664-14
	National	CD4050BC	606-24
		CD4050BM	606-25
	Panasonic	MN4050B	606-26
	SGS	HCC4050B	606-27
		HCF4050B	606-28
	Siemens	TDA4050B	1104-1

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4050			(Cont'd)
	Signetics	HEF4050B	606-29
	Toshiba	**TC4050B**	*** 3308**
			606-31
4051	Fairchild	F4051BC	913-32
		F4051BM	913-33
	GE/RCA	**CD4051B**	*** 2635**
			913-34
		CD4051BE	*** 2635**
			913-35
	GoldStar	**GD4051B**	*** 2697**
			913-40
	Micrel	CD4051A	913-41
		CD4051B	913-42
	S-MOS	SMC4051C	813-10
	SGS	HCC4051B	913-56
		HCF4051B	913-57
	Signetics	HEF4051B	913-58
		HEF4051BD	913-59
	Toshiba	**TC4051B**	*** 3308**
			913-65
4052	Fairchild	F4052BC	911-88
		F4052BM	911-89
	Fujitsu	MB4052	921-40
	GE/RCA	**CD4052B**	*** 2635**
			911-90
		CD4052BE	*** 2635**
			911-91
	GoldStar	**GD4052B**	*** 2697**
			912-4
	Micrel	CD4052A	912-7
		CD4052B	912-8
	National	CD4052BC	912-15
		CD4052BM	912-16
	Panasonic	MN4052B	912-21
	S-MOS	SMC4052C	813-11
	SGS	HCC4052B	912-23
		HCF4052B	912-24
	Signetics	HEF4052B	913-60
		HEF4052BD	913-61
	Toshiba	**TC4052B**	*** 3308**
			912-28
4053	Fairchild	F4053BC	908-19
		F4053BM	908-20
	Fujitsu	MB4053	925-18
			925-24
	GE/RCA	**CD4053B**	*** 2635**
			908-21
		CD4053BE	*** 2635**
			908-22
	GoldStar	**GD4053B**	*** 2697**
			908-27
	Micrel	CD4053A	908-28
		CD4053B	908-29
	National	CD4053BC	908-36
		CD4053BM	908-37
	Panasonic	MN4053B	908-38
	S-MOS	SMC4053C	813-12
	SGS	HCC4053B	908-40
		HCF4053B	908-41
	Signetics	HEF4053B	908-43
		HEF4053BD	908-44
	Toshiba	**TC4053B**	*** 3308**
			908-46
4054	**GE/RCA**	**CD4054B**	*** 2635**
			616-156
			980-38
		CD4054BE	*** 2635**
			616-157
	SGS	HCC4054B	616-158
		HCF4054B	616-159
	Toshiba	**TC4054B**	*** 3308**
			616-160
			980-39
40547	Fujitsu	MB40547-7	924-40
		MB40547-8	921-45
4055	AMD	AM4055	1396-31
	GE/RCA	**CD4055B**	*** 2635**
			616-116
			979-70
		CD4055BE	*** 2635**
			616-117
			979-71
	Marconi	MA4055	4053-55
	SGS	HCC4055B	616-120
		HCF4055B	616-122
			(Continued)

Base Number	Source	Device	Page-Line
4055			(Cont'd)
	Toshiba	**TC4055B**	*** 3308**
			616-124
			979-72
4056	AMD	AM4056	1396-38
	Fujitsu	MB4056	924-38
	GE/RCA	**CD4056B**	*** 2635**
			616-118
			979-94
		CD4056BE	*** 2635**
			616-119
			979-95
	Motorola	MC4056	656-1
	SGS	HCC4056B	616-121
		HCF4056B	616-123
	Telefunken	U4056B	1198-36
	Toshiba	**TC4056B**	*** 3308**
			616-125
			979-102
4056B1	Telefunken	U4056B1	1198-37
4057	AMD	AM4057	1396-42
	GE/RCA	CD4057A	603-41
40576	Fujitsu	MB40576	916-52
4058	TeledyneP	4058	963-7
		4058HR	963-11
4059	**GE/RCA**	**CD4059A**	*** 2635**
			613-100
			¶ 439-1
		CD4059AE	*** 2635**
			613-101
			¶ 439-1
	Signetics	HEF4059B	613-102
406	National	NS406	882-62
	Siltronics	S406	1121-123
	Sprague	**UHP406**	*** 3203**
			665-143
			1006-142
4060	**GE/RCA**	**CD4060A**	*** 2634**
			611-69
		CD4060AE	*** 2634**
			611-70
		CD4060B	*** 2634**
			611-71
		CD4060BE	*** 2634**
			611-72
	IMI	G4060	4051-31
	Motorola	MC4060	688-20
	National	CD4060BC	611-74
		CD4060BM	611-75
	SGS	HCC4060B	611-76
		HCF4060B	611-77
	Siemens	TDA4060	1127-46
	Signetics	HEF4060B	611-78
4061	NEC	μPC4061	1165-16
	Siemens	TDA4061	1127-47
		TDE4061	1127-117
4062	**GE/RCA**	**CD4062A**	*** 2634**
			633-118
	NEC	μPC4062	1180-34
	Telefunken	U4062B	1121-6
4063	Fujitsu	MB4063	924-46
	GE/RCA	**CD4063B**	*** 2636**
			603-107
		CD4063BE	*** 2636**
			603-108
	SGS	HCC4063B	603-115
		HCF4063B	603-116
	Toshiba	**TC4063B**	*** 3308**
			603-119
4064	Davidge	DSB4064	4803-6
	Dense-Pac	DPE4064	1312-15
		DPS4064	1368-55
	NEC	μPC4064	1188-30
4064EC4			
	Performance		
		PEP4064EC4-120	
			*** 2962**
			1338-71
		PEP4064EC4-150	
			*** 2962**
			1339-3
		PEP4064EC4-200	
			*** 2962**
			1339-15

Base Number	Source	Device	Page-Line
4064EC5			
	Performance		
		PEP4064EC5-120	
			*** 2962**
			1339-30
		PEP4064EC5-200	
			*** 2962**
			1339-32
4064EL8			
	Performance		
		PEP4064EL8-120	
			*** 2962**
			1339-37
		PEP4064EL8-150	
			*** 2962**
			1339-39
		PEP4064EL8-200	
			*** 2962**
			1339-40
4064EL9			
	Performance		
		PEP4064EL9-120	
			*** 2962**
			1339-45
		PEP4064EL9-200	
			*** 2962**
			1339-49
4065	TeledyneP	4065	957-31
		4065HR	957-32
			957-35
40650	**GE/RCA**	**PA40650**	*** 2659**
			4059-13
4066	Fairchild	F4066BC	904-81
		F4066BM	904-82
	GE/RCA	**CD4066A**	*** 2635**
			904-83
		CD4066AE	*** 2635**
			904-84
		CD4066B	*** 2635**
			904-85
		CD4066BE	*** 2635**
			904-86
	GoldStar	**GD4066B**	*** 2697**
			904-88
	Micrel	CD4066A	904-90
		CD4066B	904-91
	National	CD4066BC	904-96
		CD4066BM	904-97
	Panasonic	MN4066B	904-100
	SGS	HCC4066B	905-2
		HCF4066B	905-3
	Signetics	HEF4066B	905-5
		HEF4066BD	905-6
		N4066A	905-7
	TI	TLC4066	902-5
		TLC4066M	902-9
	Toshiba	**TC4066B**	*** 3308**
			905-10
4067	Fairchild	F4067BC	915-24
		F4067BM	915-25
	GE/RCA	**CD4067B**	*** 2635**
			915-26
		CD4067BE	*** 2635**
			915-27
	GoldStar	**GD4067B**	*** 2697**
			915-32
	MicronTech	MT4067	1338-47
		MT4067-10	1338-53
		MT4067-10/883C	
			1384-30
		MT4067-12	1338-76
		MT4067-12/883C	
			1384-32
		MT4067-15	1339-6
		MT4067-15/883C	
			1384-33
		MT4067-20/883C	
			1384-34
		MT4067-8	1338-48
	SGS	HCC4067B	915-33
		HCF4067B	915-34
	Signetics	HEF4067B	915-35
		HEF4067BD	915-36
4068	Fairchild	F4068BC	623-162
		F4068BM	623-163
	GE/RCA	**CD4068B**	*** 2633**
			623-164
			(Continued)

Base Number	Source	Device	Page-Line
4068	**GE/RCA**		**(Cont'd)**
		CD4068BE	*** 2633**
			623-165
	GoldStar	**GD4068B**	*** 2697**
			623-166
	SGS	HCC4068B	623-169
		HCF4068B	623-170
	Signetics	HEF4068B	623-171
	Toshiba	**TC4068B**	*** 3308**
			623-173
4069	Fairchild	F4069UBC	608-42
		F4069UBM	608-43
	GE/RCA	**CD4069UB**	*** 2633**
			608-44
		CD4069UBE	*** 2633**
			608-45
	GoldStar	**GD4069UB**	*** 2697**
			608-46
	Micrel	CD4069A	608-47
		CD4069UB	608-48
	National	CD4069C	608-51
		CD4069M	608-52
	Panasonic	MN4069UB	608-53
	Sanyo	LC4069UB	608-54
	SGS	HCC4069UB	608-55
		HCF4069UB	608-56
	Signetics	HEF4069UB	608-57
	Toshiba	**TC4069UB**	*** 3308**
			608-60
407	**Sprague**	**UHP407**	*** 3203**
			666-5
			1006-149
	Telefunken	U407	1123-37
4070	Fairchild	F4070BC	626-44
		F4070BM	626-45
	GE/RCA	**CD4070B**	*** 2633**
			*** 2636**
			626-50
		CD4070BE	*** 2633**
			*** 2636**
			626-51
	GoldStar	**GD4070B**	*** 2697**
			626-53
	Micrel	CD4070B	626-55
	National	CD4070BC	626-59
		CD4070BM	626-60
	Panasonic	MN4070B	626-64
	SGS	HCC4070B	626-66
		HCF4070B	626-68
	Signetics	HEF4070B	626-70
4071	Fairchild	F4071BC	624-150
		F4071BM	624-151
	GE/RCA	**CD4071B**	*** 2633**
			624-152
		CD4071BE	*** 2633**
			624-153
	GoldStar	**GD4071B**	*** 2697**
			624-154
	Micrel	CD4071B	624-155
	National	CD4071BC	624-158
		CD4071BM	624-159
	NEC	μPC4071	1165-18
	Panasonic	MN4071B	624-160
	Sanyo	LC4071B	624-161
	SGS	HCC4071B	624-162
		HCF4071B	624-163
	Signetics	HEF4071B	624-164
	Toshiba	TC4071B	624-166
4072	Fairchild	F4072BC	624-64
		F4072BM	624-65
	Fujitsu	MB4072	947-33
	GE/RCA	**CD4072B**	*** 2633**
			624-66
		CD4072BE	*** 2633**
			624-67
	GoldStar	**GD4072B**	*** 2697**
			624-68
	Micrel	CD4072B	624-69
	National	CD4072BC	624-72
		CD4072BM	624-73
	NEC	μPC4072	1180-38
	Panasonic	MN4072B	624-74
	SGS	HCC4072B	624-75
		HCF4072B	624-76
	Signetics	HEF4072B	624-77
	Toshiba	TC4072B	624-79

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4073	Fairchild	F4073BC	622-23
		F4073BM	622-24
	GE/RCA	**CD4073B**	* **2633**
			622-25
		CD4073BE	* **2633**
			622-26
	GoldStar	**GD4073B**	* **2697**
			622-27
	Micrel	CD4073B	622-28
	National	CD4073BC	622-31
		CD4073BM	622-32
	Panasonic	MN4073B	622-33
	SGS	HCC4073B	622-34
		HCF4073B	622-35
	Signetics	HEF4073B	622-36
	Toshiba	TC4073B	622-38
4074	NEC	μPC4074	1188-33
40748	Fujitsu	MB40748-8	954-15
		MB40748-9	953-9
4075	Fairchild	F4075BC	624-99
		F4075BM	624-100
	GE/RCA	**CD4075B**	* **2633**
			624-101
		CD4075BE	* **2633**
			624-102
	GoldStar	**GD4075B**	* **2697**
			624-103
	Marconi	MA4075	4054-3
	Micrel	CD4075B	624-104
	National	CD4075BC	624-107
		CD4075BM	624-108
	Panasonic	MN4075B	624-109
	SGS	HCC4075B	624-110
		HCF4075B	624-111
	Signetics	HEF4075B	624-112
	Toshiba	TC4075B	624-114
4076	Fairchild	F4076BC	618-41
		F4076BM	618-42
	GE/RCA	**CD4076B**	* **2634**
			618-43
		CD4076BE	* **2634**
			618-44
	GoldStar	**GD4076B**	* **2697**
			618-45
	Micrel	CD4076B	618-46
	National	CD4076BC	618-49
		CD4076BM	618-50
	Panasonic	MN4076B	618-51
	SGS	HCC4076B	618-52
		HCF4076B	618-53
	Signetics	HEF4076B	618-54
	Toshiba	**TC4076B**	* **3308**
			618-56
4077	Fairchild	F4077BC	626-92
		F4077BM	626-93
	GE/RCA	**CD4077B**	* **2633**
			* **2636**
			626-94
		CD4077BE	* **2633**
			* **2636**
			626-95
	GoldStar	**GD4077B**	* **2697**
			626-96
	SGS	HCC4077B	626-99
		HCF4077B	626-100
	Signetics	HEF4077B	626-101
	Toshiba	**TC4077B**	* **3308**
			626-90
			626-91
40776	Fujitsu	MB40776	941-37
40778	Fujitsu	MB40778	948-17
4078	Fairchild	F4078BC	625-182
		F4078BM	625-183
	GE/RCA	**CD4078B**	* **2633**
			625-184
		CD4078BE	* **2633**
			625-185
	GoldStar	**GD4078B**	* **2697**
			625-186
	Panasonic	MN4078B	625-189
	SGS	HCC4078B	625-190
		HCF4078B	625-191
	Signetics	HEF4078B	625-192
	Toshiba	**TC4078B**	* **3308**
			626-4
40788	Fujitsu	MB40788	954-16

Base Number	Source	Device	Page-Line
408	GoldStar	GD408B	622-82
	Hitachi	HMCS408AC	805-14
		HMCS408C	855-17
		HMC408CL	805-27
	Siltronics	S408	1121-118
			¶ 424-26
	Sprague	**UHP408**	* **3203**
			666-6
			1006-150
	Systek	SBX408	4859-9
	Telefunken	U408	1123-38
408D3	FujitsuA	FBC408D3	4894-22
4080	TeledyneP	4080	958-1
		4080HR	958-2
4081	Fairchild	F4081BC	622-78
		F4081BM	622-79
	GE/RCA	**CD4081B**	* **2633**
			622-80
		CD4081BE	* **2633**
			622-81
	GoldStar	**GD4081B**	* **2697**
			622-83
	Micrel	CD4081B	622-84
	National	CD4081BC	622-87
		CD4081BM	622-88
	NEC	μPC4081	1168-1
	Panasonic	MN4081B	622-89
	Sanyo	LC4081B	622-90
	SGS	HCC4081B	622-91
		HCF4081B	622-92
	Signetics	HEF4081B	622-93
	TeledyneP	4081	958-3
		4081HR	958-4
	Toshiba	TC4081B	622-95
4082	Burr-Brown	4082/03	1219-105
	Fairchild	F4082BC	621-163
		F4082BM	621-164
	GE/RCA	**CD4082B**	* **2633**
			621-165
		CD4082BE	* **2633**
			621-166
	GoldStar	**GD4082B**	* **2697**
			621-167
	Lambda	LAS4082	1216-103
	Micrel	CD4082B	621-168
	National	CD4082BC	621-171
		CD4082BM	621-172
	NEC	μPC4082	1181-23
	SGS	HCC4082B	621-173
		HCF4082B	621-174
	Signetics	HEF4082B	621-175
	TeledyneP	4082	958-5
		4082HR	958-6
	Toshiba	TC4082B	621-177
4084	NEC	μPC4084	1189-23
4085	**Burr-Brown**	**4085**	* **2540**
			1224-32
		4085M	* **2540**
			1224-33
	Fairchild	F4085BC	624-24
		F4085BM	624-25
	GE/RCA	**CD4085B**	* **2633**
			624-26
		CD4085BE	* **2633**
			624-27
	GoldStar	**GD4085B**	* **2697**
			624-28
	Panasonic	MN4085B	624-31
	SGS	HCC4085B	624-32
		HCF4085B	624-33
	Signetics	HEF4085B	624-34
	Toshiba	**TC4085B**	* **3308**
			624-36
40850	**GE/RCA**	**PA40850**	* **2659**
			4059-14
4086	Fairchild	F4086BC	624-52
		F4086BM	624-53
	GE/RCA	**CD4086B**	* **2633**
			624-54
		CD4086BE	* **2633**
			624-55
	GoldStar	**GD4086B**	* **2697**
			624-56
	SGS	HCC4086B	624-57
		HCF4086B	624-58
	Signetics	HEF4086B	624-59
			(Continued)

Base Number	Source	Device	Page-Line
4086			(Cont'd)
	Toshiba	**TC4086B**	* **3308**
			624-61
4087	Sharp	LR4087	1194-54
4088	TeledyneP	4088	976-9
4089	**GE/RCA**	**CD4089B**	* **2636**
			637-80
			¶ 402-8
		CD4089BE	* **2636**
			637-81
			¶ 402-8
	National	CD4089BC	637-82
		CD4089BM	637-83
	SGS	HCC4089B	637-84
		HCF4089B	637-85
	Sharp	LR4089	1194-55
409	**Datel**	**MVD409**	* **2577**
			911-83
		MXD409	* **2577**
			912-59
	Ferranti	ZN409CE	1228-110
	Micro-Link	VME409	4886-22
	Sensoray	**409**	* **4901**
			4848-37
			4851-25
4091	Sharp	LR4091	1194-56
4092	Sharp	LR4092	1194-57
4093	Fairchild	F4093BC	638-98
		F4093BM	638-99
	GE/RCA	**CD4093B**	* **2633**
			638-100
		CD4093BE	* **2633**
			638-101
	GoldStar	**GD4093B**	* **2697**
			638-102
	Micrel	CD4093B	638-103
	National	CD4093BC	638-106
		CD4093BM	638-107
	Panasonic	MN4093B	638-108
	SGS	HCC4093B	638-109
		HCF4093B	638-110
	Signetics	HEF4093B	638-111
	Toshiba	**TC4093B**	* **3308**
			638-113
4094	**GE/RCA**	**CD4094B**	* **2634**
			634-152
			1395-68
		CD4094BE	* **2634**
			634-153
			1395-69
	Micrel	CD4094B	634-154
			1395-70
	SGS	HCC4094B	634-157
		HCF4094B	634-158
	Signetics	HEF4094B	634-159
	Toshiba	**TC4094B**	* **3308**
			634-161
			1395-74
4095	**GE/RCA**	**CD4095B**	* **2634**
			620-132
		CD4095BE	* **2634**
			620-133
4096	CharlesRiver		
		CM4096	4892-29
		VEM4096	4889-47
	EG&G-Reticon		
		RL4096	1222-40
	GE/RCA	**CD4096B**	* **2634**
			620-134
		CD4096BE	* **2634**
			620-135
	SGS	HCF4096B	620-136
4097	**GE/RCA**	**CD4097B**	* **2635**
			914-42
		CD4097BE	* **2635**
			914-43
	SGS	HCC4097B	914-44
		HCF4097B	914-45
4098	**GE/RCA**	**CD4098B**	* **2634**
			633-57
		CD4098BE	* **2634**
			633-58
	SGS	HCC4098B	633-65
		HCF4098B	633-66
40981	Sharp	LR40981A	1194-34
40982	Sharp	LR40982	1194-35

Base Number	Source	Device	Page-Line
4099	**GE/RCA**	**CD4099B**	* **2634**
			629-24
		CD4099BE	* **2634**
			629-25
	Micrel	CD4099B	629-29
	National	CD4099BC	629-33
		CD4099BM	629-34
	SGS	HCC4099B	629-37
		HCF4099B	629-38
	Toshiba	**TC4099B**	* **3308**
			629-41
40991	Sharp	LR40991	1194-36
40992	Sharp	LR40992	1194-37
	UMC	T40992	1194-40
40993	Sharp	LR40993	1194-38
	UMC	T40993	1194-41
40994	Sharp	LR40994	1194-39
41	**AT&T**	**41LF**	* **2490**
			993-13
		41LG	* **2492**
			989-12
		41LK	* **2494**
			998-10
		41LL	* **2494**
			998-11
		41LM	* **2494**
			998-12
	Burr-Brown	**UAF41**	* **2540**
			1219-25
	Intel	UPI-41	886-97
			¶ 413-7
	NCR	ADP41	4869-28
	PMI	**OP41A**	* **2970**
			1145-10
		OP41B	* **2970**
			1148-10
		OP41E	* **2970**
			1145-12
		OP41F	* **2970**
			1148-9
41H66	**Thomson**	**MK41H66-20**	* **3264**
			1370-60
		MK41H66-25	* **3264**
			1370-76
		MK41H66-35	* **3264**
			1371-18
41H67	**Thomson**	**MK41H67-20**	* **3264**
			1370-61
		MK41H67-25	* **3264**
			1370-77
		MK41H67-35	* **3264**
			1371-19
41H68	**Thomson**	**MK41H68-20**	* **3265**
			1361-39
		MK41H68-25	* **3265**
			1362-7
		MK41H68-35	* **3265**
			1363-15
41H69	**Thomson**	**MK41H69-20**	* **3265**
			1361-40
		MK41H69-25	* **3265**
			1362-8
		MK41H69-35	* **3265**
			1363-16
41H78	Thomson	MK41H78-20	1361-47
		MK41H78-25	1362-17
		MK41H78-35	1363-29
41H79	**Thomson**	**MK41H79-20**	* **3267**
			1361-48
		MK41H79-25	* **3267**
			1362-18
		MK41H79-35	* **3267**
			1363-30
41H80	**Thomson**	**MK41H80-20**	* **3273**
			1361-49
		MK41H80-25	* **3273**
			1362-19
		MK41H80-35	* **3273**
			1363-31
41H87	**Thomson**	**MKB41H87-835**	* **3298**
			1381-79
		MKB41H87-845	* **3298**
			1382-29
			(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
41H87	**Thomson**		**(Cont'd)**
		MKB41H87-855	
			*** 3298**
			1382-51
		MK41H87-25	*** 3266**
			1381-49
		MK41H87-35	*** 3266**
			1381-80
		MK41H87-45	*** 3266**
			1382-30
41L66	Thomson	MK41L66-25	1370-62
		MK41L66-35	1370-88
41L67	Thomson	MK41L67-25	1370-63
		MK41L67-35	1370-89
41L68	Thomson	MK41L68-25	1361-66
		MK41L68-35	1362-65
41L69	Thomson	MK41L69-25	1362-9
		MK41L69-35	1363-17
41L78	Thomson	MK41L78-25	1362-12
		MK41L78-35	1363-21
410	Barvon	BC410	4042-4
			4042-5
	Ferranti	ZN410D	1003-117
		ZN410E	1003-118
	Intronics	C410	1220-13
	Motorola	MVME410	4887-30
	National	COP410C	807-6
			862-126
		COP410L	807-7
			862-127
	Siltronics	S410	1121-119
			¶ 424-26
	Telefunken	U410	1117-67
4100	**Fujitsu**	**C4100UHB**	*** 4229**
			*** 4233**
			4046-31
	Marconi	MA4100	4054-4
	MTC	4100	4860-19
	Novix	NB4100	4827-3
			4848-2
	Sanyo	LA4100	1117-44
	Telefunken	U4100	1123-64
	VME-Microsys		
		VMIVME4100	4883-24
41000	**GE/RCA**	**PA41000**	*** 2659**
			4059-16
	OKI	MSM41000-10	1344-29
		MSM41000-8	1344-13
41001	OKI	MSM41001-10	1344-24
		MSM41001-8	1344-12
41004	OKI	MSM41004-10	1341-71
		MSM41004-8	1341-44
41005	OKI	MSM41005-10	1341-57
		MSM41005-8	1341-41
4101	National	LH4101	1168-47
			¶ 428-22
		LH4101C	1168-48
			¶ 428-22
	Sanyo	LA4101	1117-45
4102	Sanyo	LA4102	1117-46
4104	Fairchild	F4104BE	636-76
		F4104BM	636-77
	GoldStar	**GD4104B**	*** 2697**
			636-78
	National	LH4104	1166-7
		LH4104C	1166-8
	Signetics	HEF4104B	636-79
	Thomson	MKB4104-84	1360-36
		MK4104-4	1360-37
		MK4104-5	1360-56
4105	VME-Microsys		
		VMIVME4105	4883-39
41051	GE/RCA	41051	925-10
			¶ 419-17
4107	Fujitsu	MB4107	884-79
411	Bit3Comp	411	4892-5
	Dense-Pac	**DPD411M**	*** 2581**
			1344-28
	EDI	411M-12C	1344-43
	Ferranti	ZN411	1003-116
	Intronics	C411	1220-14
	National	CIM411	4846-23
		COP411C	807-8
			863-1
		COP411L	807-9
			863-2

(Continued)

Base Number	Source	Device	Page-Line
411	National		(Cont'd)
		LF411	1152-4
			¶ 429-35
		LF411A	1145-47
			¶ 429-35
	Siliconix	DG411A	904-13
	Telefunken	U411	1117-68
	TI	LF411C	1152-3
4110	Sanyo	LA4110	1117-47
	Siemens	TDA4110	1120-50
	VME-Microsys		
		VMIVME4110	4888-7
411000	NEC	μPD411000-12	1344-46
		μPD411000-15	1344-57
411000A1			
	NEC	MC411000A1-12	
			1344-44
		MC411000A1-15	
			1344-55
411001	NEC	μPD411001-12	1344-47
		μPD411001-15	1344-58
41101	NEC	μPD41101-1	1305-92
		μPD41101-2	1305-93
		μPD41101-3	1305-94
41102	NEC	μPD41102-1	1306-34
		μPD41102-2	1306-35
		μPD41102-3	1306-36
4111	Fujitsu	MB4111	887-37
4112	Fujitsu	MB4112	887-38
	IMI	G4112	4051-33
	Sanyo	LA4112	1117-48
41128	Dense-Pac	DPE41128	1313-30
		DPS41128	1377-20
41129	**Dense-Pac**	**DPE41129**	*** 2582**
			1313-27
		DPS41129	*** 2579**
			1377-21
4115	Burr-Brown	4115/04	1219-111
4116	Fairchild	F4116-3	1337-25
		F4116-4	1337-35
	ITT	ITT4116-2	1337-18
	SingleBoard	MB4116	4839-3
	Stantel-STC	STC4116-2	1337-16
		STC4116-3	1337-22
		STC4116-4	1337-32
		STC4116M-3	1337-23
		STC4116M-4	1337-33
	Thomson	MKB4116-82	1337-20
		MKB4116-83	1337-28
		MKB4116-84	1337-37
		MKJ4116-93	1337-29
		MKJ4116-94	1337-38
		MK4116-2	1337-21
			¶ 412-19
			¶ 417-9
			¶ 445-37
		MK4116-3	1337-30
			¶ 412-19
			¶ 417-9
			¶ 445-37
		MK4116-4	1337-39
			¶ 412-19
			¶ 417-9
			¶ 445-37
	VME-Microsys		
		VMIVME4116	4887-48
41192	Dense-Pac	DPE41192	1313-45
		DPS41192	1378-22
41193	**Dense-Pac**	**DPE41193**	*** 2582**
			1313-43
		DPS41193	*** 2579**
			1378-23
412	Hitachi	HMCS412AC	805-15
		HMCS412C	805-16
		HMCS412CL	805-17
	LinearTech	LF412AC	1173-7
		LF412AM	1173-8
	National	LF412	1175-19
		LF412A	1173-12
	Siliconix	DF412	980-22
		DG412A	904-14
	Siltronics	S412	1121-108
	Systek	SBX412	4859-10
	Telefunken	U412	1117-69
	TI	LF412	1175-8
412S88	Dense-Pac	DPS412S88	1385-60

Base Number	Source	Device	Page-Line
4120	Hughes	HVGA4120	4050-8
	Qualogy	D4120	4831-30
			4866-13
	Sanyo	LA4120	1117-141
41200	**GE/RCA**	**PA41200**	*** 2659**
			4059-18
41221	NEC	μPD41221-70	1339-55
		μPD41221-90	1339-56
4125	Sanyo	LA4125	1117-142
		LA4125T	1117-143
41256	AT&T	M41256xx-15B	1340-76
	Dense-Pac	DPE41256	1314-10
		DPS41256	1377-22
	NEC	μPD41256-10	1340-24
		μPD41256-12	1340-60
		μPD41256-15	1340-95
		μPD41256-20	1341-20
	OKI	MSM41256-10	1340-26
		MSM41256-12	1340-62
		MSM41256-15	1340-98
	Panasonic	MN41256-12	1340-64
		MN41256-15	1341-1
	Samsung	KM41256-10	1340-28
		KM41256-12	1340-65
		KM41256-15	1341-2
	Siemens	HYB41256-12	1340-72
		HYB41256-15	1341-10
		HYB41256-20	1341-24
	Toshiba	TMM41256-12	1340-68
		TMM41256-15	1341-6
		TMM41256A-10	
			1340-31
		TMM41256A-12	
			1340-69
		TMM41256A-15	
			1341-7
41256A4			
	NEC	MC41256A4-12	
			1342-15
		MC41256A4-15	
			1342-31
41256A5			
	NEC	MC41256A5-12	
			1342-59
		MC41256A5-15	
			1342-63
41256A8			
	NEC	MC41256A8-12	
			1343-6
		MC41256A8-15	
			1343-14
41256A9			
	NEC	MC41256A9-12	
			1343-40
		MC41256A9-15	
			1343-51
41257	**Dense-Pac**	**DPE41257**	*** 2582**
			1313-52
		DPS41257	*** 2579**
			1379-83
	NEC	μPD41257-10	1340-25
		μPD41257-12	1340-61
		μPD41257-15	1340-96
		μPD41257-20	1341-21
	OKI	MSM41257A-10	
			1340-27
		MSM41257A-12	
			1340-63
		MSM41257A-15	
			1340-99
	Samsung	KM41257-10	1340-29
		KM41257-12	1340-66
		KM41257-15	1341-3
	Toshiba	TMM41257-12	1340-70
		TMM41257-15	1341-8
		TMM41257A-10	
			1340-32
		TMM41257A-12	
			1340-71
		TMM41257A-15	
			1341-9
4126	Sanyo	LA4126	1117-49
	SingleBoard	MB4126	4839-4
41264	NEC	μPD41264-12	1338-69
		μPD41264-15	1339-12
4127	**Burr-Brown**	**4127**	*** 2540**
			1103-58

Base Number	Source	Device	Page-Line
4128	Samsung	KM4128-15	1339-52
41288	**Dense-Pac**	**DPE41288**	*** 2582**
			1315-5
		DPS41288	*** 2580**
			1386-32
413	National	COP413C	807-10
			862-97
		COP413CH	807-11
			862-98
		COP413L	807-12
	Siliconix	DG413A	904-15
	Telefunken	U413B	1117-70
4131	Burr-Brown	4131	1229-67
4136	Exar	XR4136C	1187-25
			¶ 428-1
		XR4136M	1186-17
			¶ 428-1
	Fairchild	μA4136C	1187-26
		μA4136M	1186-18
	MicroPwr	MP4136	1186-19
		MP4136C	1187-27
	Raytheon	RC4136	1187-28
		RM4136	1186-20
	TI	RC4136	1187-29
		RM4136	1186-23
		RV4136	1187-30
4137	NEC	MC4137	1193-44
	Sanyo	LA4137	1117-50
4138	NEC	MC4138	1193-45
	Sanyo	LA4138	1117-51
414	**Dense-Pac**	**DPD414M**	*** 2581**
			1346-50
	Ferranti	ZN414Z	1120-30
	Hitachi	HMCS414C	805-18
	Inmos	**IMST414**	*** 2775**
			853-22
		IMST414B-C15	
			*** 2775**
			881-47
		IMST414B-C20	
			*** 2775**
			881-48
		IMST414B-G15	
			*** 2775**
			881-49
		IMST414B-G20	
			*** 2775**
			881-50
		T414	881-46
	Intech	**414BIN**	*** 2799**
			972-12
	National	COP414L	807-13
			863-3
	Telefunken	U414	1121-64
4140	Qualogy	D4140-04	4831-32
		D4140-05	4833-1
			4866-10
			4866-9
	Sanyo	LA4140	1117-88
	TeledyneP	4140	922-5
41416	NEC	μPD41416-12	1337-43
		μPD41416-15	1337-45
		μPD41416-20	1337-47
4142	TeledyneP	4142	922-6
4143	Raytheon	RV4143	1127-43
4144	Raytheon	RV4144	1127-44
	TeledyneP	4144	927-8
4145	TeledyneP	4145	933-25
4146	TeledyneP	4146	937-7
41464	Motorola	MCM41464-10	1338-55
		MCM41464-12	1338-78
		MCM41464-15	1338-85
		MCM41464A-15	
			1338-86
	NEC	μPD41464-10	1338-56
		μPD41464-12	1338-79
		μPD41464-15	1339-11
	OKI	MSM41464-10	1338-57
		MSM41464-12	1338-80
	Toshiba	TMM41464-12	1338-82
		TMM41464-15	1339-9
415	Barvon	BC415	4042-10
			4042-11
	Ferranti	ZN415E	1120-10

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4151	Exar	XR4151	1230-92
			¶ 438-32
	Raytheon	RC4151	1230-106
			¶ 421-36
	S-MOS	SMC4151F	813-13
41512	EDI	41512-12C	1343-62
4152	Raytheon	RC4152	1230-107
			¶ 421-36
4153	Raytheon	RC4153	1230-108
			¶ 421-36
		RM4153	1230-109
4156	Raytheon	RC4156	1186-7
		RM4156	1184-37
4157	Raytheon	RC4157	1184-41
416	Ferranti	ZN416E	1120-11
	Intech	416BCD	940-4
		416BIN	⋆ **2799**
			973-2
	MicroInds	mBLC416	4862-59
		mSBC416	4862-21
	Siltronics	S416	692-107
	Telefunken	U416	1120-93
4160	IMI	G4160	4051-34
4161	**TI**	**SMJ4161-15**	⋆ **3220**
			1338-39
		SMJ4161-20	⋆ **3220**
			1338-41
		TMS4161-15	1338-40
			¶ 448-11
		TMS4161-20	1338-42
			¶ 448-11
4164	Dense-Pac	DPE4164	1312-16
		DPS4164	1368-56
	Fairchild	F4164-20	1338-24
	National	NMC4164-12	1337-74
			¶ 447-1
		NMC4164-15	1338-11
			¶ 447-1
		NMC4164-20	1338-27
			¶ 447-1
	NEC	μPD4164-12	1337-75
		μPD4164-15	1338-12
		μPD4164-20	1338-28
	Panasonic	MN4164-15	1338-14
		MN4164-20	1338-30
	Samsung	KM4164-12	1338-72
		KM4164-15	1339-4
		KM4164A-12	1337-77
		KM4164A-15	1338-15
		KM4164A-20	1338-31
		KM4164B-12	1337-78
		KM4164B-15	1338-16
	TI	**SMJ4164-12**	⋆ **3220**
			1337-79
		SMJ4164-15	⋆ **3220**
			1338-17
		SMJ4164-20	⋆ **3220**
			1338-32
	Thomson	TS4164-15	1338-21
		TS4164-20	1338-35
	Toshiba	TMM4164-2	1338-1
		TMM4164-3	1338-22
		TMM4164-4	1338-36
		TMM4164A-12	1338-2
		TMM4164A-15	1338-23
		TMM4164A-20	1338-37
4168	NEC	μPD4168-15	1369-73
		μPD4168-20	1370-5
417	Siliconix	DG417	902-30
	Telefunken	U417	1120-94
4170	S-MOS	SMC4170F	813-14
	Sanyo	LA4170	1116-5
4173	Sharp	LR4173	1194-51
4174	Sharp	LR4174	1194-52
4175	Sanyo	LA4175	1116-6
4177	Sanyo	LA4177	1116-7
418	**Intech**	**418BCD**	⋆ **2799**
			941-8
	Siliconix	DG418	902-31
	Telefunken	U418	1120-95
4180	Motorola	MCM4180-25	1362-14
		MCM4180-30	1362-52
		MCM4180-35	1363-26
	Sanyo	LA4180	1117-52
	Telefunken	TDA4180	1102-88
4182	Sanyo	LA4182	1117-53

Base Number	Source	Device	Page-Line
419	Siliconix	DG419D	906-11
4190	**Raytheon**	**RC4190**	⋆ **2983**
			1216-1
		RM4190	⋆ **2983**
			1216-2
	SGS	TDA4190	1125-134
4191	Raytheon	RC4191	1217-34
		RM4191	1217-38
4192	Raytheon	RC4192	1217-35
		RM4192	1217-39
4193	Maxim	MAX4193	1216-130
	Raytheon	RC4193	1217-36
			¶ 440-30
		RM4193	1217-40
4194	Exar	XR4194M	1215-98
	MCE	MCE4194	1215-99
	Raytheon	RC4194	1215-100
		RM4194	1215-101
4195	Exar	XR4195	1212-115
	Raytheon	RC4195	1212-120
		RM4195	1212-121
42	**Burr-Brown**	**VFC42**	⋆ **2542**
			1230-85
		VFC42M	⋆ **2542**
			1230-86
	FujitsuA	FBM42DA	1337-5
	Intel	UPI-42	886-98
	PMI	**OP42A**	⋆ **2965**
			⋆ **2971**
			1149-13
		OP42E	⋆ **2965**
			⋆ **2971**
			1147-36
		OP42F	⋆ **2965**
			⋆ **2971**
			1150-9
	TeledyneC	CAG42	903-74
	Toshiba	TLCS42-CMOS	817-14
		TLCS42-NMOS	817-15
42C40	Toshiba	TMP42C40	863-115
42C4064			
	MicronTech	MT42C4064-10	
			1338-51
		MT42C4064-12	
			1338-70
		MT42C4064-15	
			1339-2
42C50	Toshiba	TMP42C50	863-117
42C60	Toshiba	TMP42C60	863-85
42C66	Toshiba	TMP42C66	863-84
42C70	Toshiba	TMP42C70	863-87
420	Barvon	BC420	4042-15
			4042-16
	Motorola	MVME420	4887-5
	National	COP420	807-14
			863-4
		COP420L	807-15
			863-5
		COP420R	807-16
			862-102
			862-106
	PMI	**OP420B**	⋆ **2970**
			⋆ **2972**
			1133-14
			1135-53
		OP420C	⋆ **2970**
			⋆ **2972**
			1133-15
			1135-54
		OP420F	⋆ **2970**
			⋆ **2972**
			1133-16
			1135-55
		OP420G	⋆ **2970**
			⋆ **2972**
			1133-17
			1135-56
	Siltronics	S420	1229-7
	Telefunken	U420	1117-71
	Xycom	XVME420	4886-18
4200	Interphase	VSMD4200	4882-42
	Novix	NB4200	4833-12
	Raytheon	RC4200	1223-62
			¶ 438-28
		RC4200A	1223-63
			¶ 438-28

(Continued)

Base Number	Source	Device	Page-Line
4200			(Cont'd)
	Sanyo	LA4200	1117-54
	Telefunken	U4200	1123-65
4201	Interphase	V/ESDI 4201	4882-3
	Sanyo	LA4201	1117-55
	Siemens	TLE4201	1003-39
4202	Exar	XR4202	1134-41
			¶ 428-1
		XR4202M	1134-42
			¶ 428-1
	Sprague	UCN4202A	1004-39
4203	Burr-Brown	4203	1223-48
		4203S	1223-49
	Sprague	UCN4203A	1004-40
4204	Burr-Brown	4204	1223-50
		4204S	1223-51
	Fujitsu	MB4204	1114-31
	Sprague	**UCN4204B**	⋆ **3203**
			1004-41
	TI	TCM4204A	1198-77
42048	TI	TCM42048	1198-70
4205	Burr-Brown	4205	1223-52
		4205S	1223-53
	Sprague	UCN4205B-2	1004-42
	TI	TCM4205A	1198-84
42050	Micropac	42050-055	1203-105
		42050-109	1205-69
		42050-128	1206-91
		42050-148	1206-100
		42050-158	1207-108
		42050-168	1207-113
		42050-188	1208-54
		42050-208	1208-87
		42050-224	1208-90
		42050-244	1209-33
		42050-264	1209-36
		42050-284	1209-39
		42050-304	1209-45
		42050-324	1209-47
		42050-344	1209-49
		42050-510	1203-114
		42050-610	1204-49
		42050-710	1204-64
42051	Micropac	42051	1212-110
		42051-055	1210-16
		42051-065	1210-49
		42051-075	1210-54
		42051-085	1210-82
		42051-095	1210-87
		42051-105	1210-95
		42051-124	1211-56
		42051-144	1211-57
		42051-154	1212-19
		42051-164	1212-24
		42051-184	1212-54
		42051-204	1212-74
		42051-223	1212-75
		42051-243	1212-95
		42051-263	1212-97
		42051-283	1212-98
		42051-303	1212-101
		42051-323	1212-103
		42051-363	1212-104
42052	Micropac	42052-055	1203-106
		42052-109	1205-70
		42052-128	1206-92
		42052-148	1206-101
		42052-158	1207-109
		42052-168	1207-114
		42052-188	1208-55
		42052-208	1208-88
		42052-224	1208-91
		42052-244	1209-34
		42052-264	1209-37
		42052-284	1209-40
		42052-304	1209-46
		42052-324	1209-48
		42052-344	1209-50
		42052-510	1203-115
		42052-610	1204-50
		42052-710	1204-65
		42052-810	1205-16
		42052-910	1205-42
42055	Micropac	42055-1020	1205-71
		42055-1216	1206-96
		42055-1416	1206-102

(Continued)

Base Number	Source	Device	Page-Line
42055	Micropac		(Cont'd)
		42055-1516	1207-112
		42055-1612	1207-115
		42055-1812	1208-56
		42055-2010	1208-89
		42055-2210	1208-92
		42055-2410	1209-35
		42055-2608	1209-38
		42055-2808	1209-41
		42055-520	1203-116
		42055-620	1204-51
		42055-720	1204-66
		42055-820	1205-20
		42055-920	1205-43
	Toshiba	42055-1812	1208-57
4206	Burr-Brown	4206	1223-54
4207	**Raytheon**	**RC4207**	⋆ **2980**
			1132-44
		RM4207	⋆ **2980**
			1132-46
	TI	TCM4207A	1198-78
42078	TI	TCM42078	1198-71
4208	TI	TCM4208	1198-72
42092	Micropac	42092-056	1224-21
		42092-066	1224-22
		42092-076	1224-23
		42092-086	1224-24
		42092-096	1224-25
		42092-1010	1223-114
		42092-1015	1223-125
		42092-106	1224-26
		42092-1210	1223-115
		42092-1215	1223-126
		42092-126	1224-27
		42092-1410	1223-116
		42092-1415	1223-127
		42092-146	1224-28
		42092-1610	1223-117
		42092-1615	1223-128
		42092-166	1224-29
		42092-1810	1223-118
		42092-1815	1223-129
		42092-186	1224-30
		42092-2010	1223-119
		42092-2015	1223-130
		42092-206	1224-31
		42092-510	1223-120
		42092-515	1223-131
		42092-610	1223-121
		42092-615	1223-132
		42092-710	1223-122
		42092-715	1223-133
		42092-810	1223-123
		42092-815	1223-134
		42092-910	1223-124
		42092-915	1223-135
42093	Micropac	42093-0520	1223-136
		42093-0525	1223-147
		42093-0530	1223-158
		42093-0535	1224-10
		42093-0620	1223-137
		42093-0625	1223-148
		42093-0630	1223-159
		42093-0635	1224-11
		42093-0720	1223-138
		42093-0725	1223-149
		42093-0730	1224-1
		42093-0735	1224-12
		42093-0820	1223-139
		42093-0825	1223-150
		42093-0830	1224-2
		42093-0835	1224-13
		42093-0920	1223-140
		42093-0925	1223-151
		42093-0930	1224-3
		42093-0935	1224-14
		42093-1020	1223-141
		42093-1025	1223-152
		42093-1030	1224-4
		42093-1035	1224-15
		42093-1220	1223-142
		42093-1225	1223-153
		42093-1230	1224-5
		42093-1235	1224-16
		42093-1420	1223-143
		42093-1425	1223-154

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
42093	Micropac		(Cont'd)
		42093-1430	1224-6
		42093-1435	1224-17
		42093-1620	1223-144
		42093-1625	1223-155
		42093-1630	1224-7
		42093-1635	1224-18
		42093-1820	1223-145
		42093-1825	1223-156
		42093-1830	1224-8
		42093-1835	1224-19
		42093-2020	1223-146
		42093-2025	1223-157
		42093-2030	1224-9
		42093-2035	1224-20
42094	Micropac	42094-005	1203-8
		42094-012	1206-26
		42094-015	1207-53
		42094-018	1208-29
		42094-024	1209-8
		42094-030	1209-43
42095	Micropac	42095-005	1209-119
		42095-012	1211-35
		42095-015	1211-123
		42095-018	1212-39
		42095-024	1212-91
		42095-030	1212-100
421	Bit3Comp	421	4860-42
	Maxim	MAX421	1137-9
		MIC421	1137-10
	National	CIM421	4846-24
		COP421	863-6
		COP421L	863-7
	PMI	**OP421B**	⋆ **2970**
			⋆ **2972**
			1184-2
		OP421C	⋆ **2970**
			⋆ **2972**
			1184-44
		OP421F	⋆ **2970**
			⋆ **2972**
			1184-3
		OP421G	⋆ **2970**
			⋆ **2972**
			1184-45
		OP421H	⋆ **2970**
			⋆ **2972**
			1187-19
	Siliconix	DG421A	902-68
4210	Interphase	V/SCSI 4210	4891-12
	Siemens	TDA4210-3	1121-65
	Telefunken	TDA4210	1121-21
421000	NEC	μPD421000-10	1344-21
		μPD421000-12	1344-37
		μPD421000-8	1344-9
421000A8			
	NEC	MC421000A8-10	
			1345-55
		MC421000A8-12	
			1345-66
		MC421000A8-8	
			1345-46
421000A9			
	NEC	MC421000A9-10	
			1346-20
		MC421000A9-12	
			1346-29
		MC421000A9-8	
			1346-12
421000B8			
	NEC	MC421000B8-10	
			1345-56
		MC421000B8-12	
			1345-67
		MC421000B8-8	
			1345-47
421000B9			
	NEC	MC421000B9-10	
			1346-21
		MC421000B9-12	
			1346-30
		MC421000B9-8	
			1346-13

Base Number	Source	Device	Page-Line
421000C8			
	NEC	MC421000C8-10	
			1345-57
		MC421000C8-12	
			1345-68
		MC421000C8-8	
			1345-48
421000C9			
	NEC	MC421000C9-10	
			1346-22
		MC421000C9-12	
			1346-31
		MC421000C9-8	
			1346-14
421001	NEC	μPD421001-10	1344-22
		μPD421001-12	1344-38
		μPD421001-8	1344-10
421002	NEC	μPD421002-10	1344-23
		μPD421002-12	1344-39
		μPD421002-8	1344-11
4211	Toshiba	BM4211	4856-34
4212	Exar	XR4212	1118-57
		XR4212C	1187-22
		XR4212M	1186-13
	Siemens	SDA4212	1124-138
	Toshiba	BM4212A	4719-11
4213	Burr-Brown	4213	1223-55
		4213S	1223-56
		4213U	⋆ **2544**
			1223-57
		4213V	⋆ **2544**
			1223-58
		4213W	1223-59
4214	Burr-Brown	4214	1223-60
		4214M	1223-61
422	Bit3Comp	422	4860-43
			4886-37
	Maxim	MAX422	1137-11
	Morrow	MX422	4858-9
	National	COP422L	863-8
		LF422A	1173-1
	PEP-Modular		
		RS422-PB	4887-1
	SBE	SERX422	4855-14
	Siltronics	S422	1120-106
4220	IMI	G4220	4051-35
	Sanyo	LA4220	1117-56
	Toshiba	BM4220	4719-12
42232	NEC	μPD42232-10	1337-52
		μPD42232-12	1337-53
		μPD42232-15	1337-54
42256	EDI	42256-12C	1341-33
4226	LogicalDes	VME4226D	4889-41
42264	NEC	μPD42264-10	1339-18
		μPD42264-12	1339-21
		μPD42264-15	1339-25
4227	**Raytheon**	**RC4227**	⋆ **2981**
			1132-45
		RM4227	⋆ **2981**
			1132-47
423	Ferranti	ZN423	1225-83
	Maxim	MAX423	1137-12
	Siliconix	DG423A	907-24
4230	NCM	NCM4230Z	1389-1
	Sanyo	LA4230	1117-89
4231	NCM	NCM4231Z	1396-26
424	Brooktree	BT424	1004-122
	Ferranti	ZN424	1163-33
			¶ 428-30
	National	COP424C	807-17
	Siltronics	S424	1221-14
4240	Toshiba	TMP4240	863-116
424256	NEC	μPD424256-10	1341-55
		μPD424256-12	1342-4
		μPD424256-8	1341-39
424258	NEC	μPD424258-10	1341-56
		μPD424258-12	1342-5
		μPD424258-8	1341-40
4244	AMD	AM4244C	1360-48
4246	LogicalDes	VME4246D	4889-48
425	Ferranti	ZN425E-8	948-33
			¶ 419-23
		ZN425J-8	948-34
			¶ 419-23
	National	COP425C	807-18
	Siliconix	DG425A	908-76

Base Number	Source	Device	Page-Line
4250	National	LM4250	1133-59
			1134-18
			1155-53
		LM4250C	1133-60
			1134-19
			1159-28
	NEC	μPC4250	1134-20
		μPC4250C	1162-41
	Panasonic	AN4250	1162-39
	Sanyo	LA4250	1117-90
	Solitron	UC4250	1133-62
			1155-54
		UC4250C	1133-63
			1159-29
	Toshiba	TMP4250	863-118
42505	NEC	μPD42505-50	1307-34
		μPD42505-75	1307-33
42532	NEC	μPD42532	1307-45
4256	**Dense-Pac**	**DPD4256**	⋆ **2581**
			1340-16
	TI	**SMJ4256-12**	⋆ **3220**
			1335-41
		SMJ4256-15	⋆ **3220**
			1341-4
		SMJ4256-20	⋆ **3220**
			1341-23
		TMS4256-10	⋆ **3259**
			1341-29
			¶ 447-42
		TMS4256-12	⋆ **3259**
			1341-30
			¶ 447-42
		TMS4256-15	⋆ **3259**
			1341-31
			¶ 447-42
4256EC4			
	Performance		
		PEP4256EC4-100	
			⋆ **2962**
			1341-64
		PEP4256EC4-120	
			⋆ **2962**
			1342-16
		PEP4256EC4-150	
			⋆ **2962**
			1342-32
		PEP4256EC4-60	
			⋆ **2962**
			1341-34
		PEP4256EC4-70	
			⋆ **2962**
			1341-35
		PEP4256EC4-80	
			⋆ **2962**
			1341-43
	TI	**TM4256EC4-10**	
			⋆ **3260**
			1341-65
		TM4256EC4-12	
			⋆ **3260**
			1342-17
		TM4256EC4-15	
			⋆ **3260**
			1342-33
4256EC5			
	Performance		
		PEP4256EC5-100	
			⋆ **2962**
			1342-55
		PEP4256EC5-120	
			⋆ **2962**
			1342-60
		PEP4256EC5-150	
			⋆ **2962**
			1342-64
		PEP4256EC5-60	
			⋆ **2962**
			1342-50
		PEP4256EC5-70	
			⋆ **2962**
			1342-51
		PEP4256EC5-80	
			⋆ **2962**
			1342-53

Base Number	Source	Device	Page-Line
4256EL8			
	Performance		
		PEP4256EL8-100	
			⋆ **2962**
			1342-75
		PEP4256EL8-120	
			⋆ **2962**
			1343-7
		PEP4256EL8-150	
			⋆ **2962**
			1343-15
		PEP4256EL8-60	
			⋆ **2962**
			1342-67
		PEP4256EL8-70	
			⋆ **2962**
			1342-68
		PEP4256EL8-80	
			⋆ **2962**
			1342-72
4256EL9			
	Performance		
		PEP4256EL9-100	
			⋆ **2962**
			1343-28
		PEP4256EL9-120	
			⋆ **2962**
			1343-41
		PEP4256EL9-150	
			⋆ **2962**
			1343-52
		PEP4256EL9-60	
			⋆ **2962**
			1343-22
		PEP4256EL9-70	
			⋆ **2962**
			1343-23
		PEP4256EL9-80	
			⋆ **2962**
			1343-25
	TI	**TM4256EL9-10**	
			⋆ **3260**
			1343-29
		TM4256EL9-12	
			⋆ **3260**
			1343-42
		TM4256EL9-15	
			⋆ **3260**
			1343-53
4256FC1			
	TI	**TM4256FC1-10**	
			⋆ **3260**
			1345-1
		TM4256FC1-12	
			⋆ **3260**
			1344-45
		TM4256FC1-15	
			⋆ **3260**
			1344-56
4256FL8			
	TI	**TM4256FL8-10**	
			⋆ **3260**
			1342-76
		TM4256FL8-12	
			⋆ **3260**
			1343-8
		TM4256FL8-15	
			⋆ **3260**
			1343-16
4256GU8			
	TI	**TM4256GU8-10**	
			⋆ **3260**
			1342-77
		TM4256GU8-12	
			⋆ **3260**
			1343-10
		TM4256GU8-15	
			⋆ **3260**
			1343-18
4256GU9			
	TI	**TM4256GU9-10**	
			⋆ **3260**
			1343-30
		TM4256GU9-12	
			⋆ **3260**
			1343-43

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4256GU9			
	TI		**(Cont'd)**
		TM4256GU9-15	
			⋆ **3260**
			1343-55
4256HE4			
	TI	TM4256HE4-12	
			1343-65
		TM4256HE4-15	
			1343-68
		TM4256HE4-20	
			1343-69
42568	**Dense-Pac**	**DPD42568**	⋆ **2581**
			1342-73
		DPD42568LL	⋆ **2581**
			1342-69
		DPD42568LP	⋆ **2581**
			1342-66
		DPE42568	⋆ **2582**
			1315-14
			1315-18
		DPS42568	⋆ **2580**
			1386-49
			1387-65
42569	Dense-Pac	DPD42569	1343-26
		DPD42569LL	⋆ **2581**
			1342-70
		DPD42569LP	⋆ **2581**
			1343-21
4257	**TI**	**TMS4257-10**	⋆ **3259**
			1341-26
		TMS4257-12	⋆ **3259**
			1341-27
		TMS4257-15	⋆ **3259**
			1341-28
4259	MicronTech	MT4259	1341-72
		MT4259-10	1341-63
		MT4259-12	1342-14
		MT4259-15	1342-30
		MT4259-8	1341-42
426	Ferranti	ZN426E-8	946-5
		ZN426J-8	946-6
	National	COP426C	807-19
	NEC	μPB426	1318-81
		μPB426-1	1318-76
		μPB426-2	1318-67
		μPB426-3	1318-51
	TeledyneS	TSC426	1005-144
			¶ 403-35
4260	Toshiba	TMP4260	863-86
4264	IMI	G4264	4051-36
	MicronTech	MT4264	1337-58
			1337-6
		MT4264-10	1337-64
		MT4264-10/883C	
			1382-71
		MT4264-12	1337-73
		MT4264-12/883C	
			1382-73
		MT4264-15	1338-10
		MT4264-15/883C	
			1382-74
		MT4264-20/883C	
			1382-76
	NEC	MC4264	1195-29
427	**Datel**	**AM427-A**	⋆ **2577**
			1141-37
		AM427-B	⋆ **2577**
			1138-34
	Ferranti	ZN427E-8	920-28
			¶ 420-27
			¶ 421-24
		ZN427J-8	920-29
			¶ 420-27
			¶ 421-24
	TeledyneS	TSC427	1005-145
			¶ 403-35
	Telefunken	U427	1122-13
4270	Toshiba	TMP4270	863-88
428	Ferranti	ZN428E-8	945-44
			¶ 420-27
			¶ 421-24
		ZN428J-8	945-45
			¶ 420-27
			¶ 421-24
	Intel	iSBC428	4853-12
	Robotrol	RBX428	4854-23
	TeledyneS	TSC428	1005-146
			¶ 403-35
	Telefunken	U428	1122-14
	Xycom	XVME428	4883-12
4282	Siemens	TDA4282	1126-121
42832	NEC	μPD42832-12	1380-13
		μPD42832-15	1380-43
429	Ferranti	ZN429E-8	946-7
		ZN429J-8	946-8
	NEC	μPB429-1	1322-31
		μPB429-2	1322-8
		μPB429-3	1321-60
429C01	LogicDev	L429C01	646-48
		L429C01C	603-48
		L429C01M	603-49
4290	NEC	MC4290	888-5
	Siemens	TDA4290-2	1116-59
4292	**Raytheon**	**RC4292**	⋆ **2982**
			1224-94
		RM4292	⋆ **2982**
			1224-95
43	FujitsuA	FBM43CA	4894-17
		FBM43DA	1337-4
	PMI	**OP43**	⋆ **2970**
			1143-14
		OP43A	⋆ **2970**
			1145-11
		OP43B	⋆ **2970**
			1148-18
		OP43E	⋆ **2970**
			1143-42
		OP43F	⋆ **2970**
			1147-32
		OP43G	⋆ **2970**
			1150-6
		REF43B	⋆ **2969**
			⋆ **2975**
			1226-2
		REF43F	⋆ **2969**
			⋆ **2975**
			1225-140
		REF43G	⋆ **2969**
			⋆ **2975**
			1225-141
430	**Datel**	**AM430**	⋆ **2577**
			1130-132
		AM430A	⋆ **2577**
			1147-38
		AM430B	⋆ **2577**
			1132-59
			1144-11
	Maxim	MAX430C	1137-28
		MAX430E	1137-35
	National	COP430	863-47
	TI	TL430	1225-46
		TL430C	1213-26
4300	AMCC	Q4300C	4041-23
		Q4300D	4041-24
	Motorola	MC4300	679-12
			1008-5
	Novix	NB4300	4833-21
			4850-47
	Toshiba	TMP4300C	817-19
4301	Burr-Brown	4301	1223-5
4302	AdvLinear	ALD4302	1115-9
		ALD4302A	1114-16
		ALD4302B	1115-8
	Burr-Brown	**4302**	⋆ **2540**
			1223-6
	Tech80	4302	4871-47
4303	Tech80	4303	4879-12
4304	Motorola	MC4304	678-69
			1347-38
	Tech80	4304	4876-18
4305	Motorola	MC4305	678-70
			1347-39
	Tech80	4305	4876-52
4306	Motorola	MC4306	664-28
	Tech80	4306	4871-46
4307	Motorola	MC4307	664-92
	National	NSM4307	980-33
	Tech80	4307	4872-9
4308	Motorola	MC4308	689-144
	TopazSemi	**CDG4308**	⋆ **3301**
			905-46
		CDG4308BJ	⋆ **3301**
			902-27
4309	**TopazSemi**	**CDG4309**	⋆ **3301**
			905-47
		CDG4309BJ	⋆ **3301**
			902-28
431	Brooktree	BT431	882-58
	Fairchild	μA431AC	1213-105
	Motorola	**TL431C**	⋆ **2960**
			1213-106
		TL431M	⋆ **2960**
			1213-107
	National	COP431	863-48
	TI	TL431	1225-47
		TL431C	1213-108
		TL431M	1213-109
	Xylogics	431	4857-18
4310	Motorola	MC4310	688-116
	S-MOS	**SMM4310**	⋆ **3201**
			1392-44
	Tech80	4310	4871-29
4311	NEC	μPD4311-35	1371-15
		μPD4311-45	1371-40
		μPD4311-55	1371-65
43115	Hitachi	HD43115	1119-26
4312	IMI	G4312	4051-38
	Motorola	MC4312	682-127
			1393-99
	Tech80	4312	4879-25
4313	Tech80	4313	4871-28
4314	NEC	μPD4314-35	1363-8
		μPD4314-45	1364-5
		μPD4314-55	1364-66
	Tech80	4314	4876-17
4316	Fujitsu	MB4316	883-83
			1001-43
	Motorola	MC4316	664-9
			¶ 439-8
	Tech80	4316	4854-12
43160	Hitachi	HD43160AH	977-91
4317	Motorola	MC4317	664-10
	Tech80	4317	4871-30
4318	Motorola	MC4318	664-4
	Tech80	4318	4871-31
4319	Motorola	MC4319	664-5
432	Ferranti	ZN432BJ-10	926-35
			¶ 421-25
		ZN432CJ-10	926-36
			¶ 421-25
		ZN432E-10	926-37
			¶ 421-25
		ZN432J-10	926-38
			¶ 421-25
	Maxim	MAX432C	1137-27
		MAX432E	1137-34
	National	COP432	863-49
	Xylogics	432	4857-17
4320	Mitel	MT4320	1193-76
	Plessey	MV4320	1193-84
	TI	TP4320A	632-131
4321	Motorola	MC4321	656-39
	Tech80	4321	4871-21
4322	Motorola	MC4322	656-40
	NCM	NCM4322Z	1124-113
	Plessey	MV4322	1193-85
	Tech80	4322	4871-20
4323	Plessey	MV4323	1193-86
4324	LogicalDes	VME4324D	4890-25
	Motorola	MC4324	682-69
			¶ 439-8
	Tech80	4324	4879-24
4325	Mitel	MT4325	1193-77
	Plessey	MV4325	1193-87
	Tech80	4325	4879-13
43254	NEC	μPD43254-35	1383-16
		μPD43254-45	1383-58
		μPD43254-55	1383-88
43256	NEC	μPD43256-10	1379-74
		μPD43256-10L	1379-75
		μPD43256-10LL	
			1379-76
		μPD43256-12	1380-14
		μPD43256-12L	1380-15
		μPD43256-12LL	
			1380-16
		μPD43256-15	1380-44
		μPD43256-15L	1380-45
		μPD43256-15LL	
			1380-46
		μPD43256-85	1379-46
		μPD43256-85L	1379-47
		μPD43256-85LL	
			1379-48
43257	NEC	μPD43257-10L	1379-77
		μPD43257-10LL	
			1379-78
		μPD43257-12L	1380-17
		μPD43257-12LL	
			1380-18
		μPD43257-15L	1380-47
		μPD43257-15LL	
			1380-48
4326	Plessey	MV4326	1193-88
4327	Plessey	MV4327	1193-89
	Tech80	4327	4871-22
4328	Dense-Pac	DPE4328	1314-11
		DPS4328	1380-27
	Tech80	4328	4872-3
4329	Tech80	4329	4876-51
433	Ferranti	ZN433BJ-10	926-8
			¶ 423-5
		ZN433CJ-10	926-9
			¶ 423-5
		ZN433J-10	926-10
			¶ 423-5
	Sanyo	STK433	1117-161
4330	Mitel	MD4330B	636-34
			981-29
			1395-97
	Plessey	MV4330	636-35
4332	Mitel	MD4332B	636-40
	Plessey	MV4332	636-41
	Sanyo	STK4332	1117-96
434	Ferranti	ZN434	645-30
		ZN434E	940-5
	National	COP434	863-50
4340	Burr-Brown	4340	1227-103
4341	**Burr-Brown**	**4341**	⋆ **2540**
			1227-104
4344	Motorola	MC4344	688-82
			¶ 439-8
435	Ferranti	ZN435E	948-37
		ZN435J	948-38
	Micro-Link	STD435	4875-48
	Motorola	MVME435	4886-31
	Sanyo	STK435	1117-162
4350	Motorola	MC4350	664-15
435101	Hitachi	HM435101-1	1350-70
4352	Sanyo	STK4352	1117-97
4355	Motorola	MC4355	662-47
4356	Motorola	MC4356	656-2
436	Ferranti	ZN436E	941-32
		ZN436J	941-33
	Micro-Link	STD436	4876-1
4360	Western	ADS4360	886-90
43608	NEC	μPD43608	1359-12
4361	NEC	μPD4361-40	1382-9
		μPD4361-45	1382-28
		μPD4361-55	1382-48
		μPD4361-70	1382-65
4362	NEC	μPD4362-45	1374-91
		μPD4362-55	1375-78
		μPD4362-70	1376-31
	Sanyo	STK4362	1117-98
4363	NEC	μPD4363-45	1375-19
		μPD4363-55	1375-91
		μPD4363-70	1376-37
4364	IMI	G4364	4051-39
	NEC	μPD4364-10	1368-43
		μPD4364-10L	1368-44
		μPD4364-10LL	1368-45
		μPD4364-12	1368-83
		μPD4364-12L	1368-84

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4364	NEC		(Cont'd)
		μPD4364-12LL	1368-85
		μPD4364-15	1369-51
		μPD4364-15L	1369-52
		μPD4364-15LL	1369-53
437	Ferranti	ZN437E	1220-87
		ZN437J	1220-88
	Sanyo	STK437	1117-130
4372	Sanyo	STK4372	1117-13
438	Brooktree	BT438	1001-13
	Ferranti	ZN438E	946-17
		ZN438J	946-18
	National	COP438	863-51
43890	Hitachi	HD43890	1119-27
439	Brooktree	BT439	1001-14
	Sanyo	STK439	1117-131
4391	Maxim	MAX4391	1217-1
	Raytheon	RC4391	1217-37
			¶ 440-30
		RM4391	1217-41
4392	Sanyo	STK4392	1117-14
44	Clearpoint	QRAM44B	4867-43
	Hitachi	HMCS44C	805-19
		HMCS44CL	805-20
	Intel	iRCB44/10A	4803-33
			4846-10
		iRCB44/20A	4803-31
			4846-9
		IRCB 44/20	4803-32
	NCR	ADP44	4869-31
	PMI	**OP44A**	★ **2966**
			★ **2971**
			1149-12
		OP44E	★ **2966**
			★ **2971**
			1147-35
		OP44F	★ **2966**
			★ **2971**
			1150-8
	Wintek	**MDS44**	★ **4913**
			4865-44
44C251	TI	SMJ44C251-12	1341-32
		SMJ44C251-15	1342-48
		TMX44C251-10	
			1342-46
		TMX44C251-12	
			1342-47
		TMX44C251-15	
			1342-49
44C256	TI	SMJ44C256-12	1342-9
		SMJ44C256-15	1342-27
		TMS44C256-10	
			★ **3259**
			1342-39
		TMS44C256-12	
			★ **3259**
			1342-40
		TMS44C256-15	
			★ **3259**
			1342-41
44C257	TI	SMJ44C257-12	1342-20
		SMJ44C257-15	1342-28
		TMS44C257-10	
			★ **3259**
			1342-42
		TMS44C257-12	
			★ **3259**
			1342-43
		TMS44C257-15	
			★ **3259**
			1342-44
440	Ferranti	ZN440CJ	916-30
	National	COP440	807-20
			863-9
			¶ 409-4
		COP440R	807-21
			862-103
			862-107
			¶ 409-4
		TDA440	1126-103
	Plessey	SL440	1004-14
			¶ 439-33
		TDA440	1126-109
	Siemens	TCA440	1120-21
	Telefunken	TDA440	1126-128

Base Number	Source	Device	Page-Line
4400	MicroSys	MV4400	4887-10
		MV4400-1	4887-9
	Systech	STC4400	4858-10
	Telefunken	TDA4400	1126-129
44007	Hitachi	HD44007A	1123-82
440072	Hitachi	HD440072	1126-16
4401	Sprague	UCS4401H	1001-9
			1006-103
44010	Hitachi	HD44010	1119-61
4402	Solitron	SCL4402B	626-1
		883/4402B	626-2
4404	FujitsuA	FBM4404P	4894-15
4409	Toko	KB4409	1121-93
441	**Dense-Pac**	**DPD441M**	★ **2581**
			1344-59
	Ferranti	ZN441CJ	916-33
	Motorola	**LF441C**	★ **2920**
			★ **2958**
			1159-5
	National	COP441	807-22
			863-10
		LF441	1159-1
			¶ 429-35
		LF441A	1145-46
			¶ 429-35
	Sanyo	STK441	1117-132
	TI	TL441AM	1103-62
4410	Telefunken	TDA4410	1126-130
44100	Hitachi	HD44100H	978-20
44102	Hitachi	HD44102CH	977-104
44103	Hitachi	HD44103CH	977-105
44105	Hitachi	HD44105CH	977-106
4416	**TI**	**SMJ4416-12**	★ **3220**
			1337-44
		SMJ4416-15	★ **3220**
			1337-46
		SMJ4416-20	★ **3220**
			1337-48
4419	Toko	TK4419A	1120-98
442	**Motorola**	**LF442C**	★ **2921**
			★ **2958**
			1176-50
	National	COP442	807-23
			863-11
		LF442	1133-26
			1176-49
		LF442A	1133-24
			1173-2
	VTC	**VM442**	★ **3375**
			888-1
4420	IMI	G4420	4051-41
	Sanyo	LA4420	1117-91
	Toko	KB4420B	1121-116
4421	Telefunken	TDA4421	1126-131
4422	Sanyo	LA4422	1117-92
4423	**Burr-Brown**	**4423**	★ **2540**
			1223-84
44235	Gould	S44235	1192-62
4424	Toko	KB4424A	1121-94
44256	**Dense-Pac**	**DPD44256**	★ **2581**
			1341-66
	EDI	44256-12C	1342-11
4426	Telefunken	TDA4426	1126-132
4427	Telefunken	TDA4427	1126-133
4428	Telefunken	TDA4428	1126-134
443	Sanyo	STK443	1117-163
	VTC	**VM443**	★ **3375**
			999-24
4430	Sanyo	LA4430	1117-57
	Telefunken	TDA4430	1126-135
4431	Telefunken	TDA4431	1126-136
4432	Telefunken	TDA4432	1126-137
4436	Toko	KB4436	1120-121
4437	Toko	KB4437	1121-95
444	Altera	EPS444	4081-67
	Brooktree	BT444	882-92
			940-13
	Intech	VDAC444	883-30
		VDAC444E	645-31
			940-31
	Motorola	**LF444C**	★ **2923**
			★ **2958**
			1188-32
	National	COP444C	807-24
		COP444L	807-25
			863-12

(Continued)

Base Number	Source	Device	Page-Line
444	National		(Cont'd)
		COP444LR	809-1
			862-104
			862-108
		LF444	1188-31
		LF444A	1185-27
4440	Sanyo	LA4440	1117-93
	Telefunken	TDA4440	1126-138
4442	Telefunken	TDA4442	1126-139
4443	Thomson	EF4443	1004-20
4444	Raytheon	RC4444	911-65
			1193-25
		RM4444	911-66
			1193-26
4445	Telefunken	TDA4445	1126-8
4448	Toko	KB4448	1121-96
445	**Burr-Brown**	**OPA445BM**	★ **2536**
			1154-42
		OPA445SM	★ **2536**
			1148-33
	National	COP445C	809-2
		COP445L	809-3
			863-13
	Plessey	SL445A	1224-65
4450	ILC-DDC	ADC4450	928-48
	Telefunken	TDA4450	1126-140
4454	Toko	KB4454	1120-96
446	Dionics	DI446	1001-59
	NEC	μPD446-1	1358-78
		μPD446-2	1358-51
		μPD446-3	1358-15
	Telefunken	U446	1103-100
4460	Sanyo	LA4460	1116-142
	TopazSemi	CDG4460J	1219-74
4461	Sanyo	LA4461	1116-143
	TI	SMJ4461-12	1337-57
		SMJ4461-15	1339-10
		TMS4461-12	★ **3259**
			1339-28
		TMS4461-15	★ **3259**
			1339-29
4464	**Dense-Pac**	**DPD4464**	★ **2581**
			1338-52
	NEC	μPD4464-12	1368-86
		μPD4464-12L	1368-87
		μPD4464-15	1369-54
		μPD4464-15L	1369-55
	TI	**SMJ4464-15**	★ **3220**
			1339-1
		SMJ4464-20	★ **3220**
			1339-14
		TMS4464-10	★ **3259**
			1338-58
			¶ 448-1
		TMS4464-12	★ **3259**
			1338-81
			¶ 448-1
		TMS4464-15	★ **3259**
			1339-8
			¶ 448-1
4469	TopazSemi	CDG4469	1219-71
		CDG4469J	1219-75
447	Ferranti	ZN447E	917-13
44780	Hitachi	HD44780	977-102
44790	Hitachi	HD44790	805-3
448	Altera	EPS448	4081-68
	Ferranti	ZN448E	920-10
		ZN448J	920-11
	PLXTechnology		
		PLX448-25C	4070-5
		PLX448-25M	4070-6
		PLX448-35C	4070-7
		PLX448-35M	4070-8
		PLX448-45C	4070-9
		PLX448-45M	4070-10
4480	IMI	G4480	4051-42
44820	Sierra	SC44820	839-17
44821	Sierra	SC44821	839-18
44822	Sierra	SC44822	839-19
44840	Sierra	SC44840	839-20
44841	Sierra	SC44841	839-21
449	Ferranti	ZN449E	924-14
		ZN449J	924-15
	NEC	μPD449-1	1358-79
		μPD449-2	1358-52
		μPD449-3	1358-16

Base Number	Source	Device	Page-Line
45	**Datel**	**SHM45MC**	★ **2571**
			★ **2577**
			1227-156
		SHM45MM	★ **2571**
			★ **2574**
			★ **2577**
			1227-157
	Fairchild	PEP45	4827-14
	Hitachi	HMCS45C	805-21
		HMCS45CL	805-22
	TeledyneC	CAG45A	903-75
	Wintek	**MCL45**	★ **4913**
			4803-36
		MCV45	4805-1
45AM8	**Thomson**	**MK45AM8-60**	
			★ **3278**
			1354-74
		MK45AM8-70	
			★ **3278**
			1354-79
45CF8	NCR	NCR45CF8	646-86
			¶ 406-23
45CG72			
	NCR	NCR45CG72	645-118
			803-1
			¶ 406-5
			¶ 406-6
			¶ 406-9
45CM16			
	GE/RCA	NCR45CM16A	644-114
	NCR	NCR45CM16	644-115
			¶ 409-21
45DP8	**Thomson**	**MK45DP8-60**	★ **3277**
			1354-75
		MK45DP8-70	★ **3277**
			1354-80
45F56	**Thomson**	**MKB45F56-80**	
			★ **3295**
			1340-30
		MKB45F56-81	
			★ **3295**
			1340-67
		MKB45F56-82	
			★ **3295**
			1341-5
45GS2	NCR	NCR45GS2	602-135
45H64	**Thomson**	**MKB45H64-81**	
			★ **3299**
			1337-80
		MKB45H64-82	
			★ **3299**
			1338-18
		MKB45H64-83	
			★ **3299**
			1338-33
450	ArrayTech	DHS450	4041-34
	Brooktree	BT450	882-95
	Datel	**AM450-2**	★ **2577**
			1164-38
	Fairchild	FVG450	940-16
	Ferranti	ZN450	939-12
	GE/Intersil	MM450	911-27
	Maxim	MAX450C	1168-20
	NEC	μPB450	4079-16
	SBE	SBE450	4717-10
	SiliconSys	SSI450A	886-47
	Siltronics	SM450	1121-107
			4895-7
	TeledyneS	TSC450C	1005-149
		TSC450M	1005-150
	Xylogics	450	4857-38
4500	**Fujitsu**	**ET4500**	★ **4230**
			4047-2
	HyComp	MC4500	1144-31
	MicroSys	MV4500	4886-39
		MV4500-1	4886-41
	Motorola	**TCA4500A**	★ **2946**
			1121-129
	National	LM4500A	1121-133
	Plessey	CLA4500	4058-24
	Siemens	PSB4500	1198-42
		TCA4500A	1121-150
	TI	**TMS4500A**	★ **3227**
			999-76
		TMS4500A-15	999-77
		TMS4500A-20	999-78

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4500	TI		(Cont'd)
		TMS4500A-25	999-79
	TopazSemi	**CDG4500**	⋆ **3301**
			913-7
		CDG4500AK	⋆ **3301**
			913-15
		CDG4500BJ	⋆ **3301**
			913-16
		CDG4500BK	⋆ **3301**
			913-17
		CDG4500CJ	⋆ **3301**
			913-18
	VLSI Tech	VL4500A	999-80
	VME-Microsys		
		VMIVME4500	4888-9
4501	AdvLinear	ALD4501	1201-115
	National	CD4501BC	913-49
		CD4501BM	913-50
	Siemens	PSB4501	1198-43
		SLE4501	889-45
	Signetics	TDA4501	1104-108
			1126-126
	SiliconG	SG4501	1213-3
			1215-97
	SpaceResearch		
		SRT4501-120	1305-62
		SRT4501-65	1305-79
		SRT4501-80	1305-71
	Thomson	**MKB4501-81**	⋆ **3296**
			1305-60
		MKB4501-82	⋆ **3296**
			1305-54
		MK4501-10	⋆ **3268**
			1305-49
		MK4501-12	⋆ **3268**
			1305-61
		MK4501-15	⋆ **3268**
			1305-55
		MK4501-20	⋆ **3268**
			1305-53
		MK4501-65	⋆ **3268**
			1305-50
		MK4501-80	⋆ **3268**
			1305-51
	Toshiba	**TC4501B**	⋆ **3308**
			626-113
	UMC	**UM4501**	⋆ **3311**
			1305-52
4502	Conway	CE4502	4871-12
	GE/RCA	**CD4502B**	⋆ **2633**
			605-116
		CD4502BE	⋆ **2633**
			605-117
	SGS	HCC4502B	605-120
		HCF4502B	605-121
	Siemens	SLE4502	1190-80
	Signetics	HEF4502B	605-122
		TDA4502	1104-109
			1126-127
	TI	**THCT4502B**	⋆ **3227**
			⋆ **3236**
			999-49
	Toshiba	**TC4502B**	⋆ **3308**
			605-124
	VLSI Tech	VL4502	1001-15
4503	AdvLinear	ALD4503	1201-114
	Conway	CE4503	4871-11
	GE/RCA	**CD4503BD**	⋆ **2633**
			606-93
		CD4503BE	⋆ **2633**
			606-94
	National	CD4503BC	606-98
		CD4503BM	606-99
	Panasonic	MN4503B	606-100
	SGS	TM4503	1004-59
	Signetics	TDA4503	1125-71
	Thomson	**MK4503-10**	⋆ **3271**
			1306-50
		MK4503-12	⋆ **3271**
			1306-51
		MK4503-15	⋆ **3271**
			1306-52
		MK4503-20	⋆ **3271**
			1306-53
		MK4503-65	⋆ **3271**
			1306-54
			(Continued)

Base Number	Source	Device	Page-Line
4503	**Thomson**		(Cont'd)
		MK4503-80	⋆ **3271**
			1306-55
	Toshiba	TC4503B	606-1
		TM4503	1004-26
4505	Signetics	HEF4505	1348-45
		HEF4505B	630-55
		TDA4505	1124-115
	Thomson	**MKB4505M-25**	
			⋆ **3300**
			1305-99
		MKB4505M-33	
			⋆ **3300**
			1305-97
		MKB4505M-50	
			⋆ **3300**
			1305-95
		MK4505M-25	
			⋆ **3272**
			1305-100
		MK4505M-33	
			⋆ **3272**
			1305-98
		MK4505M-50	
			⋆ **3272**
			1305-96
4507	National	CD4507BC	626-61
		CD4507BM	626-62
		NSM4507	980-34
4508	**GE/RCA**	**CD4508B**	⋆ **2634**
			626-131
		CD4508BE	⋆ **2634**
			626-132
	SGS	HCC4508B	626-135
	Signetics	HEF4508B	626-136
	Toshiba	**TC4508B**	⋆ **3308**
			626-138
451	Brooktree	BT451	882-97
			940-17
	Fairchild	FVG451	940-18
	Ferranti	ZN451	939-13
	GE/Intersil	MM451	911-18
	Maxim	MAX451C	1168-34
	Xylogics	451	4857-16
4510	Conway	CE4510-2	4878-31
	Fairchild	F4510BC	612-86
		F4510BM	612-87
	GE/RCA	**CD4510B**	⋆ **2635**
			612-90
		CD4510BE	⋆ **2635**
			612-91
	GoldStar	**GD4510B**	⋆ **2697**
			612-93
	Micrel	CD4510B	612-95
	National	CD4510BC	612-100
		CD4510BM	612-101
	SGS	HCC4510B	612-103
		HCF4510B	612-105
	Signetics	HCT4510	612-150
		HEF4510B	612-107
	Toshiba	**TC4510B**	⋆ **3308**
			612-111
4511	Fairchild	F4511BC	617-23
			979-74
		F4511BM	617-24
			979-75
	GE/RCA	**CD4511B**	⋆ **2635**
			617-27
			979-76
		CD4511BE	⋆ **2635**
			617-28
			979-77
	GoldStar	**GD4511B**	⋆ **2697**
			617-29
	National	CD4511BC	617-35
			979-82
		CD4511BM	617-36
			979-83
	Panasonic	MN4511B	617-37
			979-84
	SGS	HCC4511B	617-38
			979-85
		HCF4511B	617-39
			979-86
	Siemens	TCA4511	1190-74
			(Continued)

Base Number	Source	Device	Page-Line
4511			(Cont'd)
	Signetics	HEF4511B	617-40
			979-87
		HEF4511BD	979-88
	Thomson	**MK4511-12**	⋆ **3269**
			1351-19
		MK4511-15	⋆ **3269**
			1351-20
		MK4511-20	⋆ **3269**
			1351-21
	Toshiba	**TC4511B**	⋆ **3308**
			617-42
			979-90
4512	Fairchild	F4512BC	632-42
		F4512BM	632-43
	GE/RCA	**CD4512B**	⋆ **2635**
			632-44
		CD4512BE	⋆ **2635**
			632-45
	GoldStar	**GD4512B**	⋆ **2697**
			632-46
	Micrel	CD4512B	632-47
	National	CD4512BC	632-50
		CD4512BM	632-51
	Panasonic	MN4512B	632-52
	SGS	HCC4512B	632-53
		HCF4512B	632-54
	Signetics	HEF4512B	632-55
	Toshiba	**TC4512B**	⋆ **3308**
			632-57
	VME-Microsys		
		VMIVME4512	4886-9
45128	**Dense-Pac**	**DPE45128**	⋆ **2582**
			1315-22
			1315-25
		DPS45128	⋆ **2580**
			1387-77
			1388-9
45129	**Dense-Pac**	**DPE45129**	⋆ **2582**
			1315-21
			1315-24
		DPS45129	⋆ **2580**
			1387-76
			1388-5
4514	Fairchild	F4514BC	616-29
		F4514BM	616-30
	GE/RCA	**CD4514B**	⋆ **2633**
			616-33
		CD4514BE	⋆ **2633**
			616-34
	GoldStar	**GD4514B**	⋆ **2697**
			616-37
	Micrel	CD4514B	616-39
	National	CD4514BC	616-45
		CD4514BM	616-46
	SGS	HCC4514B	616-49
		HCF4514B	616-51
	Signetics	HEF4514B	616-53
	Toshiba	**TC4514B**	⋆ **3308**
			616-57
45148020			
	Bicc-Vero	45148020L	4835-32
45148024			
	Bicc-Vero	45148024K	4835-33
4515	Fairchild	F4515BC	616-31
		F4515BM	616-32
	GE/RCA	**CD4515B**	⋆ **2633**
			616-35
		CD4515BE	⋆ **2633**
			616-36
	GoldStar	**GD4515B**	⋆ **2697**
			616-38
	Micrel	CD4515B	616-40
	National	CD4515BC	616-47
		CD4515BM	616-48
	SGS	HCC4515B	616-50
		HCF4515B	616-52
	Signetics	HEF4515B	616-54
	Toshiba	**TC4515B**	⋆ **3308**
			616-58
4516	Fairchild	F4516BC	609-117
		F4516BM	609-118
	GE/RCA	**CD4516B**	⋆ **2635**
			609-121
		CD4516BE	⋆ **2635**
			609-122
			(Continued)

Base Number	Source	Device	Page-Line
4516			(Cont'd)
	GoldStar	**GD4516B**	⋆ **2698**
			609-124
	Micrel	CD4516B	609-126
	National	CD4516BC	609-131
		CD4516BM	609-132
	Panasonic	MN4516B	609-133
	SGS	HCC4516B	609-134
		HCF4516B	609-135
	Signetics	HEF4516B	609-137
	Thomson	MKB4516-80	1337-31
		MKB4516-81	1337-40
		MKB4516-82	1337-42
	Toshiba	**TC4516B**	⋆ **3308**
			609-141
4517	**GE/RCA**	**CD4517B**	⋆ **2634**
			633-147
		CD4517BE	⋆ **2634**
			633-148
			1396-6
			1396-8
	SGS	HCF4517B	633-151
	Signetics	HEF4517B	633-152
4518	Fairchild	F4518BC	613-30
		F4518BM	613-31
	GE/RCA	**CD4518B**	⋆ **2635**
			613-32
			¶ 404-9
		CD4518BE	⋆ **2635**
			613-33
			¶ 404-9
	GoldStar	**GD4518B**	⋆ **2698**
			613-34
	Micrel	CD4518B	613-35
	National	CD4518BC	613-38
		CD4518BM	613-39
	Panasonic	MN4518B	613-40
	SGS	HCC4518B	613-41
		HCF4518B	613-42
	Signetics	HEF4518B	613-43
	Toshiba	**TC4518B**	⋆ **3308**
			613-45
4519	Fairchild	F4519BC	631-171
		F4519BM	631-172
	GoldStar	**GD4519B**	⋆ **2698**
			631-173
	National	CD4519BC	632-2
		CD4519BM	632-3
	Signetics	HEF4519B	632-4
	Toshiba	**TC4519B**	⋆ **3308**
			632-5
452	Brooktree	BT452	882-32
			940-15
	Datel	**AM452-2**	⋆ **2577**
			1166-32
	GE/Intersil	MM452	911-3
	Intel	UPI-452	886-96
	Maxim	MAX452	1229-113
	National	COP452	863-39
	SiliconSys	SSI452	886-80
4520	Fairchild	F4520BC	609-180
		F4520BM	609-181
	GE/RCA	**CD4520B**	⋆ **2635**
			609-182
		CD4520BE	⋆ **2635**
			609-183
	GoldStar	**GD4520B**	⋆ **2698**
			609-184
	Gould	S4520	977-137
	Micrel	CD4520B	609-185
	National	CD4520BC	610-3
		CD4520BM	610-4
	Panasonic	MN4520B	610-5
	SGS	HCC4520B	610-6
		HCF4520B	610-7
	Siemens	SLE4520	1224-128
	Signetics	HEF4520B	610-8
	Toshiba	**TC4520B**	⋆ **3308**
			610-10
4521	**GoldStar**	**GD4521B**	⋆ **2698**
			633-102
	Gould	S4521	981-31
			1002-138
	Signetics	HEF4521B	633-105
	Toshiba	**TC4521B**	⋆ **3308**
			633-106

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4522	Fairchild	F4522BC	612-129
		F4522BM	612-130
	GoldStar	**GD4522B**	★ **2698**
			612-131
	National	CD4522BC	612-134
		CD4522BM	612-135
	Signetics	HEF4522B	612-136
	Toshiba	**TC4522B**	★ **3308**
			612-138
4524	Motorola	MHW4524F	1124-27
45256	**Dense-Pac**	**DPD45256**	★ **2581**
			1342-56
4526	Fairchild	F4526BC	609-150
		F4526BM	609-151
	GoldStar	**GD4526B**	★ **2698**
			609-152
	National	CD4526BC	609-155
		CD4526BM	609-156
	Signetics	HEF4526B	609-157
	Toshiba	**TC4526B**	★ **3308**
			609-159
45264	**Thomson**	**MK45264-55**	★ **3276**
			1304-92
		MK45264-70	★ **3276**
			1304-90
45265	**Thomson**	**MK45265-55**	★ **3276**
			1304-93
		MK45265-70	★ **3276**
			1304-91
45269	**Dense-Pac**	**DPD45269**	★ **2581**
			1343-20
4527	**GE/RCA**	**CD4527B**	★ **2636**
			637-86
			¶ 402-8
		CD4527BE	★ **2636**
			637-87
			¶ 402-8
	GoldStar	**GD4527B**	★ **2698**
			637-88
	National	CD4527BC	637-91
		CD4527BM	637-92
	SGS	HCC4527B	637-93
		HCF4527B	637-94
	Signetics	HEF4527B	637-95
	Toshiba	**TC4527B**	★ **3308**
			637-97
4528	Fairchild	F4528BC	633-55
		F4528BM	633-56
	GoldStar	**GD4528B**	★ **2698**
			633-59
	Micrel	CD4528B	633-60
	National	CD4528BC	633-63
		CD4528BM	633-64
	Panasonic	MN4528B	633-35
	Signetics	HEF4528B	633-67
	Toshiba	**TC4528B**	★ **3308**
			633-69
4529	National	CD4529BC	911-86
			913-3
		CD4529BM	911-87
			913-4
453	Brooktree	BT453	882-98
			949-19
	Fairchild	FVG453	949-17
	Maxim	MAX453	1229-114
	SiliconSys	SSI453	881-78
4530	**Toshiba**	**TC4530B**	★ **3308**
			626-110
4531	Fairchild	F4531BC	643-60
		F4531BM	643-61
	Signetics	HEF4531B	643-64
	Toshiba	**TC4531B**	★ **3308**
			643-66
4532	Fairchild	F4532BC	642-90
		F4532BM	642-91
	GE/RCA	CD4532B	642-92
		CD4532BE	642-93
	GoldStar	**GD4532B**	★ **2698**
			642-94
	SGS	HCC4532B	642-97
		HCF4532B	642-98
	Signetics	HEF4532B	642-99
	Thomson	**MK4532-55**	★ **3270**
			1356-59
		MK4532-70	★ **3270**
			1357-3

(Continued)

Base Number	Source	Device	Page-Line
4532	**Thomson**		**(Cont'd)**
		MK4532-90	★ **3270**
			1357-41
	Toshiba	**TC4532B**	★ **3308**
			642-101
4534	**GoldStar**	**GD4534B**	★ **2698**
			613-106
	Gould	S4534	981-5
			1002-132
	Signetics	HEF4534B	613-109
4535	Gould	S4535	981-32
			1002-139
4536	**GE/RCA**	**CD4536B**	★ **2634**
			633-83
		CD4536BE	★ **2634**
			633-84
4538	**GE/RCA**	**CD4538B**	★ **2634**
			633-28
		CD4538BE	★ **2634**
			633-29
	GoldStar	**GD4538B**	★ **2698**
			633-30
	National	CD4538BC	633-33
		CD4538BM	633-34
	Panasonic	MN4538B	633-36
	Signetics	HEF4538B	633-37
	Toshiba	**TC4538B**	★ **3308**
			633-38
4539	Fairchild	F4539BC	630-108
		F4539BM	630-109
	GoldStar	**GD4539B**	★ **2698**
			630-110
	NEC	μPC4539	1169-30
	Panasonic	MN4539B	630-113
	Signetics	HEF4539B	630-114
	Toshiba	**TC4539B**	★ **3308**
			630-115
454	Brooktree	BT454	882-96
			940-14
	Ferranti	ZN454CJ	940-10
	Maxim	MAX454	1229-115
	Telefunken	U454B	1198-38
4541	**GE/RCA**	**CD4541B**	★ **2634**
			633-78
		CD4541BE	★ **2634**
			633-79
	Signetics	HEF4541B	633-82
4543	**GE/RCA**	**CD4543BD**	★ **2635**
			979-91
		CD4543BE	★ **2635**
			979-92
	GoldStar	**GD4543B**	★ **2698**
			616-138
	National	CD4543BC	616-141
		CD4543BM	616-142
	Signetics	HEF4543B	616-143
	Toshiba	**TC4543B**	★ **3308**
			616-145
455	GE/Intersil	MM455	910-57
	Maxim	MAX455	1229-116
	National	NS455	882-101
			¶ 416-27
			¶ 416-28
			¶ 416-29
4553	Fairchild	F4553BC	613-52
		F4553BM	613-53
	GoldStar	**GD4553B**	★ **2698**
			613-54
4555	Fairchild	F4555BC	614-105
		F4555BM	614-106
	GE/RCA	**CD4555B**	★ **2633**
			★ **2635**
			614-109
		CD4555BE	★ **2633**
			★ **2635**
			614-110
	GoldStar	**GD4555B**	★ **2698**
			614-113
	SGS	HCC4555B	614-119
		HCF4555B	614-121
	Signetics	HEF4555B	614-123
		TDA4555	1124-81
	Toshiba	**TC4555B**	★ **3308**
			614-127

Base Number	Source	Device	Page-Line
4556	Fairchild	F4556BC	614-107
		F4556BM	614-108
	GE/RCA	**CD4556B**	★ **2633**
			★ **2635**
			614-111
		CD4556BE	★ **2633**
			★ **2635**
			614-112
	NEC	μPC4556	1179-2
	Panasonic	MN4556B	614-118
	SGS	HCC4556B	614-120
		HCF4556B	614-122
	Signetics	HEF4556B	614-124
	Toshiba	**TC4556B**	★ **3308**
			614-128
4557	Fairchild	F4557BC	636-57
			1396-3
		F4557BM	636-58
			1395-103
	GoldStar	**GD4557B**	★ **2698**
			636-59
	NEC	μPC4557	1178-47
	Signetics	HEF4557B	636-62
4558	Exar	XR4558	1179-29
			¶ 428-1
	GoldStar	**GL4558**	★ **2700**
			1177-44
	Motorola	**MC4558**	★ **2922**
			★ **2959**
			1177-45
		MC4558A	★ **2922**
			★ **2959**
			1177-46
		MC4558C	★ **2922**
			★ **2959**
			1179-23
	NEC	μPC4558	1179-31
	Raytheon	RC4558	1179-32
		RM4558	1177-39
	Samsung	MC4558	1177-42
		MC4558C	1179-26
	SGS	LS4558N	1177-38
	Signetics	NE4558	1179-25
		SE4558	1177-41
	TI	RC4558	1179-33
		RM4558	1177-40
	Thomson	MC4558	1177-43
		MC4558C	1179-24
4559	**GoldStar**	**GL4559**	★ **2700**
			1186-26
	NEC	μPC4559	1179-1
	Raytheon	RC4559	1179-34
		RM4559	1177-47
	TI	RC4559	1179-35
		RM4559	1177-48
456	Brooktree	BT456	940-3
4560	**Exar**	**XR4560**	★ **2607**
			1136-23
			1179-38
	GoldStar	**GD4560B**	★ **2698**
			602-7
	NEC	μPC4560	1179-39
	Raytheon	RC4560	1135-57
	Toshiba	**TC4560B**	★ **3308**
			602-10
4561	**GoldStar**	**GD4561B**	★ **2698**
			604-152
	Toshiba	**TC4561B**	★ **3308**
			604-155
4562	Raytheon	4562	1135-58
4564	**Thomson**	**MKB4564-82**	★ **3297**
			1338-19
		MKB4564-83	★ **3297**
			1338-34
		MKB4564-84	★ **3297**
			1338-38
		MKJ4564-92	1338-20
4565	Raytheon	DAC4565	958-32
		DAC4565S	928-28
	Signetics	TDA4565	1124-114
4566	**GoldStar**	**GD4566B**	★ **2698**
			613-135
457	Sanyo	STK457	1117-164
457KG100			
	Brooktree	BT457KG100	947-18

Base Number	Source	Device	Page-Line
457KG125			
	Brooktree	BT457KG125	947-19
457KG75			
	Brooktree	BT457KG75	947-20
4570	NEC	μPC4570	1181-5
	Signetics	TDA4570	1125-76
4572	**Toshiba**	**TC4572B**	★ **3308**
			626-116
458	Brooktree	BT458	882-99
			949-18
	Ferranti	ZN458	1225-88
		ZN458A	1225-89
		ZN458B	1225-90
4580	Signetics	TDA4580	1126-146
4581	**GoldStar**	**GD4581B**	★ **2698**
			603-42
4582	Fairchild	F4582BC	603-70
		F4582BM	603-71
	GoldStar	**GD4582B**	★ **2698**
			603-74
4583	Fairchild	F4583BC	638-6
		F4583BM	638-7
	GoldStar	**GD4583B**	★ **2698**
			638-8
	Toshiba	**TC4583B**	★ **3308**
			638-11
4584	Micrel	CD4584B	638-152
	National	CD4584BC	638-157
		CD4584BM	638-158
	Toshiba	**TC4584B**	★ **3308**
			608-41
			638-145
4585	**GE/RCA**	**CD4585B**	★ **2636**
			603-109
		CD4585BE	★ **2636**
			603-110
	Panasonic	MN4585B	603-114
	Signetics	HEF4585B	603-117
	Toshiba	**TC4585B**	★ **3308**
			603-120
459	Ferranti	ZN459	1117-182
		ZN459C	1117-183
		ZN459CP	1117-184
	Sanyo	STK459	1117-165
46	Hitachi	HMCS46C	805-23
		HMCS46CL	805-24
	NCR	ADP46	4869-32
46C16	EXEL	XL46C16-55	1309-60
		XL46C16-60	1309-65
		XL46C16-70	1309-70
		XL46C16-85	1310-1
460	**Datel**	**AM460-2**	★ **2577**
			1159-47
	Fairchild	CCD460	1393-21
	Ferranti	ZN460	1117-185
		ZN460C	1117-186
		ZN460CP	1117-187
	Maxim	MAX460I	1128-35
		MAX460M	1128-30
	Micro-Link	STD460	4876-9
4600	CalDevices	DLM4600	4042-45
	Motorola	TDA4600	1221-74
	Siemens	TDA4600-2	1217-67
	Toshiba	TCP4600AC	817-13
4601	SGS	TDA4601B	1125-105
	Siemens	TDA4601	1217-68
46030	National	HPC46030	847-30
			878-116
46040	National	HPC46040	847-31
			878-117
461	Brooktree	BT461	947-23
462	**Datel**	**AM462-1**	★ **2577**
			1159-50
		AM462-1M	★ **2577**
			1159-51
462532	Hitachi	HN462532	1324-4
463	Sanyo	STK463	1117-166
4632	Plessey	SP4632	1190-103
464	Fairchild	F464	1393-22
	Intel	iSBC464	4853-26
	MicroInds	mBLC464	4862-1
		mSBC464	4861-37
46400	National	HPC46400	878-120
4642	Plessey	SP4642	1190-100

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
4648	**Dense-Pac**	**DPE4648**	⋆ **2582**
			1314-52
		DPS4648	⋆ **2580**
			1384-52
465	Sanyo	STK465	1117-167
	SGS	L465A	1168-37
4652	Plessey	SP4652	1190-101
4653	Plessey	SP4653	1190-102
468A10	Hitachi	HM468A10	1348-62
46810	Hitachi	HM46810	1348-67
469	Exar	XRT469	1224-134
	Siemens	TBB469	1121-113
	Siliconix	D469A	911-40
			¶ 403-33
47	Hitachi	HMCS47C	805-25
		HMCS47CL	805-26
	NCR	ADP47	4869-25
	Raytheon	**OP47B**	⋆ **2979**
			1140-17
		OP47F	⋆ **2979**
			1140-16
		OP47G	⋆ **2979**
			1142-7
	Toshiba	TLCS47-CMOS	817-16
		TLCS47-NMOS	817-17
47C200	Toshiba	TMP47C200	863-89
47C210	Toshiba	TMP47C210A	863-96
47C220	Toshiba	TMP47C220A	863-92
47C231	Toshiba	TMP47C231A	863-94
47C232	Toshiba	TMP47C232	863-95
47C25	Toshiba	TMP47C25	863-90
47C26	Toshiba	TMP47C26	863-91
47C400	Toshiba	TMP47C400	863-97
47C410	Toshiba	TMP47C410A	863-108
47C420	Toshiba	TMP47C420A	863-101
47C425	Toshiba	TMP47C425A	863-102
47C432	Toshiba	TMP47C432	863-105
47C440	Toshiba	TMP47C440A	863-98
47C441	Toshiba	TMP47C441A	863-99
47C451	Toshiba	TMP47C451A	863-106
47C452	Toshiba	TMP47C452A	863-107
47C460	Toshiba	TMP47C460A	863-100
47C475	Toshiba	TMP47C475A	863-109
47C660	Toshiba	TMP47C660	863-110
47C670	Toshiba	TMP47C670	863-111
47C800	Toshiba	TMP47C800	863-114
47C860	Toshiba	TMP47C860	863-112
47C870	Toshiba	TMP47C870	863-113
470	Ferranti	ZN470AE	1102-18
	National	COP470	863-46
			980-30
	PMI	**OP470A**	⋆ **2971**
			1182-38
		OP470E	⋆ **2971**
			1182-39
		OP470F	⋆ **2971**
			1183-25
	Toshiba	TLCS470	817-18
4700	Plessey	CLA4700	4058-27
	Siemens	TDA4700A	1217-69
	Toshiba	TMP4700C	817-20
4701	AdvLinear	ald4701	1181-6
		ALD4701	1188-20
		ALD4701A	1183-39
		ALD4701B	1185-18
	Hitachi	H4701B	1396-54
	VTC	**VA4701J**	⋆ **3374**
			1183-5
		VA4701S	⋆ **3374**
			1183-3
4702	Fairchild	F4702BC	636-97
			860-21
			1009-22
		F4702BM	636-98
			860-22
			1009-23
	GE/Intersil	**IM4702**	⋆ **2678**
			1009-24
	GoldStar	**GD4702B**	⋆ **2698**
			636-99
			860-23

(Continued)

Base Number	Source	Device	Page-Line
4702			(Cont'd)
	Harris	**HD4702-Cell**	⋆ **2703**
			⋆ **2735**
			⋆ **2768**
			⋆ **4249**
			636-96
			860-24
			1009-26
			¶ 433-33
		HD4702-2	⋆ **2703**
			⋆ **2735**
			⋆ **2768**
			⋆ **4249**
			636-100
			860-25
			1009-27
			¶ 433-33
4703	Fairchild	F4703BC	630-31
			860-17
		F4703BM	630-32
			860-18
	GoldStar	**GD4703B**	⋆ **2698**
			630-33
4704	Fairchild	F4704BC	602-101
			860-12
		F4704BM	602-102
			860-13
	GoldStar	**GD4704B**	⋆ **2698**
			602-103
4705	Fairchild	F4705BC	603-18
			860-8
		F4705BM	603-19
			860-9
	GoldStar	**GD4705B**	⋆ **2698**
			603-20
	SGS	L4705	1202-70
	VTC	**VA4705**	⋆ **3374**
			1135-73
		VA4705J	⋆ **3374**
			1189-15
		VA4705K	⋆ **3374**
			1187-32
4706	Fairchild	F4706BC	630-36
			860-19
		F4706BM	630-37
			860-20
	GoldStar	**GD4706B**	⋆ **2698**
			630-38
	VTC	**VA4706**	⋆ **3374**
			1135-74
		VA4706J	⋆ **3374**
			1189-35
4707	Fairchild	F4707BC	602-98
			860-10
		F4707BM	602-99
			860-11
	GoldStar	**GD4707B**	⋆ **2698**
			602-100
	VTC	**VA4707**	⋆ **3374**
			1189-12
		VA4707J	⋆ **3374**
			1189-11
4708	Fairchild	F4708C	860-14
		F4708M	860-15
	GoldStar	**GD4708B**	⋆ **2698**
			860-16
	VTC	**VA4708**	⋆ **3374**
			1189-10
471	Brooktree	BT471	941-36
	PMI	**OP471A**	⋆ **2971**
			1183-23
		OP471E	⋆ **2971**
			1183-24
		OP471F	⋆ **2971**
			1183-32
4710	Fairchild	F4710BC	630-50
			860-26
			1348-31
		F4710BM	630-51
			860-27
			1348-32
	GoldStar	**GD4710B**	⋆ **2698**
			630-52
			860-28
	SGS	L4710	1205-60

Base Number	Source	Device	Page-Line
4711	**VTC**	**VA4711J**	⋆ **3374**
			1183-6
		VA4711S	⋆ **3374**
			1183-4
4712	**GE/Intersil**	**IM4712**	⋆ **2678**
			1009-25
4718	Siemens	TDA4718A	1217-70
472	Ferranti	ZN472E	1102-19
	National	COP472	863-40
	Xylogics	472	4858-1
4720	Fairchild	F4720AC	630-67
			1349-3
		F4720AM	630-68
		F4720C	630-69
			860-31
			1349-4
		F4720M	630-70
			860-32
			1349-5
	GoldStar	**GD4720B**	⋆ **2698**
			630-73
	Signetics	HEF4720B	630-76
		HEF4720V	630-77
	Toshiba	BM4720	4719-13
		TMP4720	863-93
4721	**GoldStar**	**GD4721B**	⋆ **2698**
			860-35
	Toshiba	BM4721	4719-14
	VTC	**VA4721J**	⋆ **3374**
			1183-7
		VA4721S	⋆ **3374**
			1183-8
4722	**GoldStar**	**GD4722B**	⋆ **2698**
			637-66
4723	Fairchild	F4723BC	626-139
		F4723BM	626-140
	GoldStar	**GD4723B**	⋆ **2698**
			626-141
	National	CD4723BC	626-142
		CD4723BM	626-143
4724	Fairchild	F4724BC	629-22
		F4724BM	629-23
	GE/RCA	**CD4724B**	⋆ **2634**
			629-26
		CD4724BE	⋆ **2634**
			629-27
	GoldStar	**GD4724B**	⋆ **2698**
			629-28
	Micrel	CD4724B	629-30
	National	CD4724BC	629-35
		CD4724BM	629-36
	Signetics	HEF4724B	629-39
4725	Fairchild	F4725BC	630-46
			860-29
		F4725BM	630-47
			860-30
	GoldStar	**GD4725B**	⋆ **2698**
			630-49
4726	Fairchild	F4726BC	860-33
		F4726BM	860-34
4727	**GoldStar**	**GD4727B**	⋆ **2698**
			610-100
473	Signetics	PLC473	4079-13
		PLHS473	⋆ **3155**
			⋆ **3175**
			4079-12
4731	Fairchild	F4731BC	634-6
			1396-13
		F4731BM	634-7
			1396-14
	GoldStar	**GD4731B**	⋆ **2698**
			634-8
	Signetics	HEF4731B	634-9
		HEF4731V	634-10
	TeledyneP	4731	1230-68
		4731HR	1230-69
4732	TeledyneP	4732	1230-70
		4732HR	1230-71
4733	TeledyneP	4733	1230-72
		4733HR	1230-73

Base Number	Source	Device	Page-Line
4734	Fairchild	F4734BC	617-25
			979-110
		F4734BM	617-26
			979-111
	GoldStar	**GD4734B**	⋆ **2698**
			617-30
	TeledyneP	4734	1230-74
		4734HR	1230-75
4735	Fairchild	F4735BC	860-37
		F4735BM	860-38
	GoldStar	**GD4735B**	⋆ **2698**
			860-39
	TeledyneP	4735	1230-76
		4735HR	1230-77
4736	GoldStar	GD4736B	860-36
	TeledyneP	4736	1221-85
		4736HR	1230-78
4737	**GoldStar**	**GD4737B**	⋆ **2698**
			610-101
	Signetics	HEF4737	613-86
4738	Signetics	HEF4738	868-31
			884-120
4739	Exar	XR4739	1118-26
			1179-27
		XR4739M	1118-27
	TeledyneP	4739	1230-79
474	Proximity	PF474C	646-77
			886-83
4740	Toshiba	TMP4740	863-103
4741	Exar	XR4741C	1186-9
		XR4741M	1184-38
	GoldStar	**GD4741B**	⋆ **2698**
			911-60
	Harris	**HA4741-2**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			1184-39
		HA4741-5	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			1186-10
	Motorola	**MC4741**	⋆ **2923**
			⋆ **2959**
			1186-27
		MC4741C	⋆ **2923**
			⋆ **2959**
			1187-24
	NEC	μPC4741	1186-8
	Raytheon	HA4741-2	1184-40
		HA4741-5	1186-11
	VTC	**VA4741**	⋆ **3374**
			1183-45
4742	Plessey	SP4742	1190-98
	VTC	**VA4742**	⋆ **3374**
			1183-46
4743	TeledyneP	4743	1230-80
4746	Toshiba	TMP4746	863-104
475	Ferranti	ZN475E	1102-20
4750	Signetics	HEF4750	1191-6
4751	Signetics	HEF4751	692-64
4752	Signetics	HEF4752V	1003-15
476	Ferranti	ZN476E	1102-21
4760	NEC	MC4760	1122-123
477	Ferranti	ZN477E	1102-22
4777	Telefunken	U4777B	1126-74
478	Brooktree	BT478	942-2
	Ferranti	ZN478E	1102-23
4780	Plessey	SP4780	1190-99
	TeledyneP	4780	1230-110
4781	TeledyneP	4781	1230-111
4782	TeledyneP	4782	1230-112
4785	SGS	L4785	1205-24
4799	Toshiba	TMP4799C	4856-35
48	CompDyn	CDX-P48	4855-1
		DAD48	4872-8
	NCR	ADP48	4869-27
	TeledyneC	CAG48A	909-62
	Wintek	**MCH48**	⋆ **4913**
			4851-2
48C02	Thomson	MK48C02-20	1358-68
		MK48C02-25	1358-87
		MK48C02L-20	1358-69
		MK48C02L-25	1358-88

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
48C1024			
	Dense-Pac	**DPZ48C1024**	*** 2585**
			1315-8
	SEEQ	**48C1024-200**	
			*** 2991**
			1315-9
		48C1024-250	
			*** 2991**
			1315-11
		48C1024-300	
			*** 2991**
			1315-12
48C2048			
	Dense-Pac	**DPZ48C2048**	*** 2585**
			1315-19
48C4096			
	Dense-Pac	**DPZ48C4096**	*** 2585**
			1315-26
48C512	**Dense-Pac**	**DPZ48C512**	*** 2585**
			1314-53
	SEEQ	**48C512-200**	*** 2991**
			1314-54
		48C512-250	*** 2991**
			1314-56
		48C512-300	*** 2991**
			1314-57
48H64	**Thomson**	**MK48H64-35**	*** 3275**
			1366-64
		MK48H64-45	*** 3275**
			1367-12
		MK48H64-55	*** 3275**
			1367-56
		MK48H64-70	*** 3275**
			1367-84
48H74	**Thomson**	**MK48H74-35**	*** 3274**
			1366-65
		MK48H74-45	*** 3274**
			1367-13
		MK48H74-55	*** 3274**
			1367-57
48T02	**Thomson**	**MK48T02B-12**	
			*** 3262**
			1357-78
		MK48T02B-15	
			*** 3262**
			1358-29
		MK48T02B-20	
			*** 3262**
			1358-63
		MK48T02B-25	
			*** 3262**
			1358-83
48T12	Thomson	MK48T12B-12	1357-79
		MK48T12B-15	1358-30
		MK48T12B-20	1358-64
		MK48T12B-25	1358-84
48Z02	**Thomson**	**MK48Z02-15**	*** 3261**
			1358-31
		MK48Z02-20	*** 3261**
			1358-65
		MK48Z02-25	*** 3261**
			1358-85
		MK48Z02B-12	
			*** 3261**
			1357-80
48Z08	**Thomson**	**MK48Z08B-20**	
			*** 3263**
			1369-88
		MK48Z08B-25	
			*** 3263**
			1370-6
48Z09	Thomson	MK48Z09B-20	1369-89
		MK48Z09B-25	1370-7
48Z12	Thomson	MK48Z12B-12	1357-81
		MK48Z12B-15	1358-32
		MK48Z12B-20	1358-66
		MK48Z12B-25	1358-86
48Z18	Thomson	MK48Z18B-20	1370-1
		MK48Z18B-25	1370-8
48Z19	Thomson	MK48Z19B-20	1370-2
		MK48Z19B-25	1370-9
480	Cybernetic	CY480	885-102
			1004-82
	Ferranti	ZN480E	1197-98
		ZN480J	1197-99
4800	CalDevices	CHA4800	4042-46
4801	Sharp	LR4801D	1194-23
	Sprague	UCS4801H	1001-10
	Thomson	MKB4801-87	1354-18
		MKB4801-89	1354-28
		MKB4801A-81	1354-50
		MK4801A-1	1354-51
		MK4801A-2	1354-60
		MK4801A-3	1354-67
		MK4801A-4	1354-70
		MK4801A-55	1354-12
		MK4801A-70	1354-19
		MK4801A-90	1354-29
48010	Bicc-Vero	48010D	4837-18
48014	Bicc-Vero	48014C	4837-25
4802	**Motorola**	**μAA4802**	*** 2948**
			1120-79
	Sharp	LR4802	1193-129
		LR4802A	1194-24
		LR4802I	1194-25
4803	Sharp	LR4803	1193-130
4804	Sharp	LR4804	1194-12
4805	Raytheon	RC4805	1109-16
			¶ 434-24
		RC4805A	1109-3
			¶ 434-24
		RM4805	1109-17
		RM4805A	1109-4
	SGS	L4805	1202-55
	Sharp	LR4805	1194-13
	Sprague	UCN4805A	978-107
48051	Bicc-Vero	48051G	4890-23
48055	Bicc-Vero	48055F	4889-26
4806	Sharp	LR4806	1193-136
48062	Sharp	LR48062	1193-109
48063	Sharp	LR48063	1194-27
48064	Sharp	LR48064	1194-28
48065	Sharp	LR48065	1193-137
48066	Sharp	LR48066	1193-138
48067	Sharp	LR48067	1194-29
4807	Sharp	LR4807	1193-121
	Sprague	UCN4807A	1002-121
48070	Bicc-Vero	48070B	4889-51
4808	Sprague	UCN4808A	1002-122
48081	Sharp	LR48081	1194-14
48082	Sharp	LR48082	1194-15
4809	Sharp	LR4809	1193-118
4810	SGS	L4810	1205-54
	Sharp	LR4810	888-20
	Sprague	UCS4810H	1001-11
			1002-134
	TI	TL4810B	981-6
		UCN4810A	981-13
			981-7
48120	Bicc-Vero	48120F	4882-9
48128	**SEEQ**	**48128-170**	*** 2991**
			1313-31
		48128-200	*** 2991**
			1313-33
		48128-250	*** 2991**
			1313-36
		48128-300	*** 2991**
			1329-72
4814	Siemens	TDA4814	1219-3
4815	Sprague	UCS4815H	980-90
4817	Thomson	MKB4817-82	1358-24
		MKB4817-83	1358-25
		MKB4817-84	1358-26
482	Ferranti	ZN482Z	1103-95
	SGS	L482	1118-108
4820	Sharp	LR4820	1198-94
	Toshiba	BM4820	4719-15
48200	Bicc-Vero	48200J	4887-32
48201	Bicc-Vero	451-48201F	4881-23
4821	Sprague	UCS4821H	1002-127
	Toshiba	BM4821	4719-16
48210	Bicc-Vero	48210E	4887-31
48211	Sharp	LR48211	1194-26
4822	Sprague	UCS4822H	1002-129
48220	Bicc-Vero	48220A	4882-11
4823	Sprague	UCS4823H	1002-125
48230	Bicc-Vero	48230H	4882-36
48231	Bicc-Vero	451-48231E	4891-2
4824	Bicc-Vero	48240D	4887-42
48250	Bicc-Vero	48250L	4888-10
48350	Bicc-Vero	48350J	4837-17
48354	Bicc-Vero	48354H	4837-23
484	National	COP484	809-4
	SGS	L484	1118-109
4848	**Dense-Pac**	**DPD4848**	*** 2581**
			1339-34
4849	**Dense-Pac**	**DPD4849**	*** 2581**
			1339-41
485	SGS	L485	1118-100
4856	TeledyneP	4856	1228-94
486	Datel	SHM486OC	1228-1
	SGS	L486	1118-104
4860	**Datel**	**SHM4860M**	*** 2577**
			1228-2
	TeledyneP	4860	1228-95
		4860HR	1228-96
48606	Bicc-Vero	48606G	4889-34
48607	Bicc-Vero	48607D	4889-49
48620	Sierra	SC48620	839-22
48621	Sierra	SC48621	839-23
48622	Sierra	SC48622	839-24
48640	Bicc-Vero	48640J	4890-7
48650	Bicc-Vero	452-48650E	4885-2
4866	TeledyneP	4866	1229-84
48680	Bicc-Vero	48680D	4882-1
487	SGS	L487	1202-71
48720	Sierra	SC48720	839-25
48721	Sierra	SC48721	839-26
48722	Sierra	SC48722	839-27
48760	Bicc-Vero	48760G	4837-11
488	CompDyn	CDI488	4871-7
	CompModules		
		LSBX488	4858-4
			4863-22
			4864-8
			4865-16
	Ferranti	ZN488E	1199-98
	Intel	iSBX488	4855-32
	MicroInds	mSBX488	4854-36
	MicroDesigns		
		μDX488	4854-40
	Zendex	ZBX488	4854-39
4885	SGS	L4885	1205-22
4888	Raytheon	DAC4888	943-18
		DAC4888B	943-19
		DAC4888D	943-46
		DAC4888F	943-43
49	TeledyneC	CAG49	905-64
			905-66
	Wintek	**MRR49**	*** 4913**
			4865-33
49C25	**IDT**	**IDT49C25**	*** 2801**
			860-103
49C401	**IDT**	**IDT49C401**	*** 2801**
			847-14
			877-99
		IDT49C401A	*** 2801**
			847-15
			877-100
49C402	**IDT**	**IDT49C402**	*** 2801**
			*** 2813**
			847-16
			877-96
		IDT49C402A	*** 2801**
			*** 2813**
			877-97
49C403	**IDT**	**IDT49C403**	*** 2801**
			*** 2814**
			853-16
			877-101
		IDT49C403A	*** 2801**
			*** 2814**
			853-17
			877-102
49C404	**IDT**	**IDT49C404**	*** 2801**
			*** 2815**
			861-118
		IDT49C404A	*** 2801**
			*** 2815**
			861-119
49C410	**IDT**	**IDT49C410**	*** 2801**
			*** 2816**
			877-94
			¶ 402-26
		IDT49C410A	*** 2801**
			*** 2816**
			877-95
			¶ 402-26
49C460	**IDT**	**IDT49C460**	*** 2801**
			*** 2817**
			860-117
			982-23
			¶ 426-23
		IDT49C460A	*** 2801**
			*** 2817**
			860-118
			982-24
			¶ 426-23
		IDT49C460B	*** 2801**
			*** 2817**
			860-119
			¶ 426-23
49FCT601			
	IDT	**IDT49FCT601**	
			*** 2808**
			629-113
49FCT618			
	IDT	**IDT49FCT618**	
			*** 2808**
			636-15
49FCT661			
	IDT	**IDT49FCT661**	
			*** 2808**
			611-80
49FCT818			
	IDT	**IDT49FCT818**	
			*** 2808**
			635-24
490	Plessey	SL490	1122-77
	PMI	**OP490A**	*** 2970**
			*** 2972**
			1183-2
		OP490E	*** 2970**
			*** 2972**
			1183-1
		OP490F	*** 2970**
			*** 2972**
			1183-22
		OP490G	*** 2970**
			*** 2972**
			1183-26
4900	AMCC	Q4900J	4041-25
	Harris	**HA4900-2**	*** 2706**
			1114-7
	VME-Microsys		
		VMIVME4900	4892-9
4901	Siemens	TLE4901F	1221-118
4902	**Harris**	**HA4902-2**	*** 2706**
			*** 2768**
			1114-28
	Siemens	TLB4902F	1221-117
	TeledyneP	4902	1221-23
		4902HR	1221-24
4905	Harris	HA4905-5	1115-5
	VME-Microsys		
		VMIVME4905	4891-1
4910	VME-Microsys		
		VMIVME4910	4892-8
4911	VME-Microsys		
		VMIVME4911	4883-21
4913	TI	TCM4913	1192-138
4914	TI	TCM4914	1192-139
4917	Siemens	TDA4917A	1224-104
4920	VME-Microsys		
		VMIVME4920	4891-35
493	TI	TL493	1225-11
		TL493C	1217-112
	Unitrode	**UC493A**	*** 3323**
			1218-55
		UC493AC	*** 3323**
			1218-56
4935	Siemens	TDA4935	1120-104
494	Exar	XR494	1216-39
	Fairchild	μA494C	1216-41
		μA494M	1216-42
	GoldStar	**GL494**	*** 2701**
			1216-55
	IPS	**IP494A**	*** 2854**
			1216-94
		IP494AC	*** 2854**
			1216-95
	Motorola	**TL494C**	*** 2931**
			1217-23
		TL494I	*** 2931**
			1229-11

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
494	**Motorola**		**(Cont'd)**
		TL494M	* **2931**
			1217-24
	National	COP494	863-38
			1308-1
	NEC	μPC494	1217-33
	TI	TL494	1225-12
		TL494C	1217-113
		TL494M	1217-114
	Unitrode	**UC494A**	* **3323**
			1218-57
		UC494AC	* **3323**
			1218-58
4940	VME-Microsys		
		VMIVME4940	4892-11
4941	VME-Microsys		
		VMIVME4941	4883-34
4944	National	NSL4944	1222-89
495	Exar	XR495	1216-40
	National	COP495	1308-40
	TI	TL495	1225-13
		TL495C	1217-115
	Unitrode	**UC495**	* **3323**
			1218-59
		UC495A	* **3323**
			1218-60
		UC495AC	* **3323**
			1218-61
		UC495B	* **3323**
			1218-62
		UC495BC	* **3323**
			1218-63
4950	SGS	TDA4950	1125-1
496	Telefunken	U496BS	692-58
	TI	TL496	1224-143
		TL496C	1224-99
4960	SGS	L4960	1217-47
4962	SGS	L4962	1217-48
4964	SGS	L4964	1217-49
4968	**Dense-Pac**	**DPE4968**	* **2582**
			1315-3
		DPS4968	* **2580**
			1385-49
497	SGS	L497	1118-110
	TI	TL497A	1224-144
		TL497AC	1217-116
498	National	COP498	630-84
			863-42
499	National	COP499	863-44
5	AD	5B SERIES	4895-8
	Burr-Brown	PWR5XX	1220-144
	Computrol	LU5	4880-10
	Datel	FLJ-D5	692-68
	Force	CPU5A	4835-11
		CPU5V	4835-18
		DRAM5	4889-20
		SRAM5	4890-15
	GIM	AY-5-8126T	881-74
		AY-5-8146	881-75
		AY-5-8146T	881-76
	Intel	**5CBIC**	* **4257**
			881-85
	Interdesign	ULA5G	4066-26
		ULA5RA	4044-42
		ULA5RB	4044-43
		ULA5RC	4044-44
		ULA5RD	4044-45
	LSIComp	**RED5/6**	* **2867**
			633-70
			691-94
	Matrix	DSC5K	4871-40
		SSC5K	4871-38
	Micro-Rel	D5 Library	4085-7
	National	MF5	1228-141
	PlesseyMicro		
		CS/5	4715-10
	Raytheon	**RVG5**	* **4296**
			4059-1
	Sharp	SM5A	813-37
			862-33
		SM5L	815-8
	Siliconix	ISO-5 Library	4086-13
	Supertex	ED5	637-107
			¶ 426-11
	TLSI	TA5	4061-54
	VersaLogic	IPI-5	4874-18

(Continued)

Base Number	Source	Device	Page-Line
5			(Cont'd)
	WinSystems	LPM-SBC5	4817-21
		MCMSBC5	4821-31
5A26LS29			
	Mitsubishi	M5A26LS29	985-48
5A26LS31			
	Mitsubishi	M5A26LS31	989-1
5A26LS32			
	Mitsubishi	M5A26LS32A	990-18
5C01	Panatech	RP5C01	886-25
5C031	Intel	5C031	4078-70
5C032	Intel	5C032	4078-71
			¶ 451-28
5C06	Panatech	RP5C06	691-69
5C060	Intel	5C060	4077-62
			¶ 451-28
			¶ 451-3
			¶ 451-39
5C090	Intel	5C090	4077-63
5C121	Intel	5C121	4079-1
			¶ 426-7
			¶ 450-15
			¶ 451-5
5C15	Panatech	RP5C15	886-26
5C16	Panatech	RP5C16	1124-117
5C1601	MicronTech	MT5C1601-25	1370-85
		MT5C1601-35	1371-22
		MT5C1601-45	1371-50
5C1604	MicronTech	MT5C1604-25	1362-42
		MT5C1604-35	1363-63
		MT5C1604-45	1364-46
5C1605	MicronTech	MT5C1605-25	1362-43
		MT5C1605-35	1363-64
		MT5C1605-45	1364-47
5C1606	MicronTech	MT5C1606-25	1362-44
		MT5C1606-35	1363-65
		MT5C1606-45	1364-48
5C1608	MicronTech	MT5C1608-25	1355-35
		MT5C1608-35	1355-77
		MT5C1608-45	1356-18
5C17	Panatech	RP5C17	1124-118
5C180	Intel	5C180	4078-68
5C2561	MicronTech	MT5C2561	1386-73
		MT5C2561-35	1386-75
		MT5C2561-45	1387-12
		MT5C2561-55	1387-20
5C2564	MicronTech	MT5C2564	1383-45
		MT5C2564-35	1383-47
		MT5C2564-45	1383-78
		MT5C2564-55	1384-11
5C2565	MicronTech	MT5C2565-35	1383-48
		MT5C2565-45	1383-79
		MT5C2565-55	1384-12
5C2568	MicronTech	MT5C2568	1378-42
		MT5C2568-35	1378-43
		MT5C2568-45	1378-61
		MT5C2568-55	1379-8
5C6401	MicronTech	MT5C6401-25	1381-56
		MT5C6401-35	1382-8
		MT5C6401-45	1382-34
5C6404	MicronTech	MT5C6404-25	1373-16
		MT5C6404-35	1374-66
		MT5C6404-45	1375-62
5C6405	MicronTech	MT5C6405-25	1373-17
		MT5C6405-35	1374-67
		MT5C6405-45	1375-63
5C6406	MicronTech	MT5C6406-25	1373-18
		MT5C6406-35	1374-68
		MT5C6406-45	1375-64
5C6408	MicronTech	MT5C6408-25	1366-27
		MT5C6408-35	1366-75
		MT5C6408-45	1367-24
5E3	Sharp	SM5E3	815-1
5E4	Sharp	LU5E4POP	813-27
		SM5E4	815-2
5E5	Sharp	SM5E5	815-3
5E555	Mitsubishi	M5E555	1201-41
		M5E555A	1201-42
5E556	Mitsubishi	M5E556A	1201-110
5F3	Sharp	SM5F3	815-4
5F741	Mitsubishi	M5F741	1160-43
5F78M05			
	Mitsubishi	M5F78M05	1202-63
5F78M06			
	Mitsubishi	M5F78M06	1203-126

Base Number	Source	Device	Page-Line
5F78M07			
	Mitsubishi	M5F78M07	1204-60
5F78M08			
	Mitsubishi	M5F78M08	1204-87
5F78M09			
	Mitsubishi	M5F78M09	1205-35
5F78M10			
	Mitsubishi	M5F78M10	1205-56
5F78M12			
	Mitsubishi	M5F78M12	1205-102
5F78M15			
	Mitsubishi	M5F78M15	1207-8
5F78M18			
	Mitsubishi	M5F78M18	1207-124
5F78M20			
	Mitsubishi	M5F78M20	1208-62
5F78M24			
	Mitsubishi	M5F78M24	1208-104
5F7805	Mitsubishi	M5F7805	1202-87
5F7806	Mitsubishi	M5F7806	1204-11
5F7807	Mitsubishi	M5F7807	1204-62
5F7808	Mitsubishi	M5F7808	1204-101
5F7809	Mitsubishi	M5F7809	1205-36
5F7810	Mitsubishi	M5F7810	1205-62
5F7812	Mitsubishi	M5F7812	1205-118
5F7815	Mitsubishi	M5F7815	1207-22
5F7818	Mitsubishi	M5F7818	1208-11
5F7820	Mitsubishi	M5F7820	1208-75
5F7824	Mitsubishi	M5F7824	1208-117
5F79M05			
	Mitsubishi	M5F79M05	1209-82
5F79M06			
	Mitsubishi	M5F79M06	1210-37
5F79M07			
	Mitsubishi	M5F79M07	1210-51
5F79M08			
	Mitsubishi	M5F79M08	1210-58
5F79M09			
	Mitsubishi	M5F79M09	1210-84
5F79M10			
	Mitsubishi	M5F79M10	1210-89
5F79M12			
	Mitsubishi	M5F79M12	1210-124
5F79M15			
	Mitsubishi	M5F79M15	1211-88
5F79M18			
	Mitsubishi	M5F79M18	1212-29
5F79M20			
	Mitsubishi	M5F79M20	1212-57
5F79M24			
	Mitsubishi	M5F79M24	1212-81
5F7905	Mitsubishi	M5F7905	1209-94
5F7906	Mitsubishi	M5F7906	1210-40
5F7907	Mitsubishi	M5F7907	1210-52
5F7908	Mitsubishi	M5F7908	1210-64
5F7909	Mitsubishi	M5F7909	1210-85
5F7910	Mitsubishi	M5F7910	1210-91
5F7912	Mitsubishi	M5F7912	1211-7
5F7915	Mitsubishi	M5F7915	1211-94
5F7918	Mitsubishi	M5F7918	1212-33
5F7920	Mitsubishi	M5F7920	1212-60
5F7924	Mitsubishi	M5F7924	1212-84
5GH05	Panatech	RP5GH05	4058-11
	Ricoh	RP5GH05	4059-24
5GH10	Ricoh	RP5GH10	4059-25
5GH16	Panatech	RP5GH16	4058-12
	Ricoh	RP5GH16	4059-26
5GH23	Panatech	RP5GH23	4058-13
	Ricoh	RP5GH23	4059-27
5GH29	Panatech	RP5GH29	4058-14
	Ricoh	RP5GH29	4059-28
5GH38	Panatech	RP5GH38	4058-15
	Ricoh	RP5GH38	4059-29
5GH55	Panatech	RP5GH55	4058-16
	Ricoh	RP5GH55	4059-30
5G1400	Mitsubishi	M5G1400	1308-46
5G3	Sharp	SM5G3	815-5
5G4	Sharp	SM5G4	815-6
5H01	Panatech	RP5H01	1316-54
5J5	Sharp	SM5J5	815-7
5L27128			
	Mitsubishi	M5L27128-2	1329-49
5L271512			
	Mitsubishi	M5L271512-17	1333-9
5L27256			
	Mitsubishi	M5L27256	1332-25
		M5L27256-15	1331-3

(Continued)

Base Number	Source	Device	Page-Line
5L27256			
	Mitsubishi		(Cont'd)
		M5L27256-2	1331-69
5L27512			
	Mitsubishi	M5L27512	1333-49
		M5L27512-2	1333-28
5L2764	Mitsubishi	M5L2764	1327-48
5L8035	Mitsubishi	M5L8035	869-72
		M5L8035-6	869-73
5L8039	Mitsubishi	M5L8039-11	869-74
		M5L8039-6	829-3
		M5L8039HL-14	869-75
5L8040	Mitsubishi	M5L8040H	869-76
5L8041	Mitsubishi	M5L8041A	829-4
			870-28
5L8042	Mitsubishi	M5L8042	869-77
5L8048	Mitsubishi	M5L8048	869-78
5L8049	Mitsubishi	M5L8049	869-79
		M5L8049-6	869-80
5L8049H1			
	Mitsubishi	M5L8049H1	869-81
5L8085	Mitsubishi	M5L8085A	872-11
5L8155	Mitsubishi	M5L8155	873-14
5L8156	Mitsubishi	M5L8156	873-15
5L8212	Mitsubishi	M5L8212	872-65
5L8216	Mitsubishi	M5L8216	872-27
5L8226	Mitsubishi	M5L8226	872-23
5L8243	Mitsubishi	M5L8243	869-120
5L8251	Mitsubishi	M5L8251A-5	872-83
5L8253	Mitsubishi	M5L8253-5	872-130
5L8255	Mitsubishi	M5L8255A-5	872-144
5L8257	Mitsubishi	M5L8257-5	872-97
5L8259	Mitsubishi	M5L8259A	872-117
5L8279	Mitsubishi	M5L8279-5	872-69
5L8282	Mitsubishi	M5L8282	873-49
5L8283	Mitsubishi	M5L8283	873-47
5L8284	Mitsubishi	M5L8284A	872-31
5L8286	Mitsubishi	M5L8286	873-46
5L8287	Mitsubishi	M5L8287	873-43
5L8288	Mitsubishi	M5L8288	873-56
5L8289	Mitsubishi	M5L8289	873-52
5MC49	Mitsubishi	M5MC49A	829-5
		M5MC49H	829-6
5MM4464			
	Mitsubishi	M5MM4464A-8	1339-65
5M005G1			
	ICDC	C5M005G1	4051-1
5M010G1			
	ICDC	C5M010G1	4051-2
5M015G1			
	ICDC	C5M015G1	4051-5
5M21C67			
	Mitsubishi	M5M21C67-35	1371-14
		M5M21C67-45	1371-39
		M5M21C67-55	1371-64
5M21C68			
	Mitsubishi	M5M21C68-35	1363-5
		M5M21C68-45	1364-2
		M5M21C68-55	1364-64
5M23C100			
	Mitsubishi	M5M23C100	1386-33
			1392-58
5M23C400			
	Mitsubishi	M5M23C400	1387-78
5M23C401			
	Mitsubishi	M5M23C401	1388-10
			1392-81
5M231000			
	Mitsubishi	M5M231000	1392-55
5M231001			
	Mitsubishi	M5M231001	1386-43
			1390-106
5M23256			
	Mitsubishi	M5M23256	1391-99
5M2364			
	Mitsubishi	M5M2364	1390-38
5M2365			
	Mitsubishi	M5M2365	1390-24
5M257	Mitsubishi	M5M257A-12	1340-54
5M258	Mitsubishi	M5M258-45	1383-75
5M27C100			
	Mitsubishi	M5M27C100	1335-14
		M5M27C100-15	
			1334-57
		M5M27C100-2	1334-69

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5M27C101			
	Mitsubishi	M5M27C101	1335-15
		M5M27C101-15	1334-58
		M5M27C101-2	1334-70
5M27C102			
	Mitsubishi	M5M27C102-15	1334-4
		M5M27C102-20	1334-15
		M5M27C102-25	1334-30
5M27C128			
	Mitsubishi	M5M27C128	1329-28
		M5M27C128-15	1328-49
		M5M27C128-2	1328-72
5M27C256			
	Mitsubishi	M5M27C256	1331-83
		M5M27C256-12	1330-52
		M5M27C256-15	1330-60
5M28C64			
	Mitsubishi	M5M28C64-15	1312-6
		M5M28C64-20	1312-21
5M4C1000			
	Mitsubishi	M5M4C1000-10	1344-18
		M5M4C1000-12	1344-34
		M5M4C1000-15	1344-54
5M4C1001			
	Mitsubishi	M5M4C1001-10	1344-19
		M5M4C1001-12	1344-35
		M5M4C1001-15	1344-52
5M4C1002			
	Mitsubishi	M5M4C1002-10	1344-20
		M5M4C1002-12	1344-36
		M5M4C1002-15	1344-53
5M41000			
	Mitsubishi	M5M41000-10	1344-73
		M5M41000A-12	1345-5
		M5M41000A-8	1344-62
5M41001			
	Mitsubishi	M5M41001-10	1344-74
		M5M41001-12	1345-6
		M5M41001-8	1344-63
5M41002			
	Mitsubishi	M5M41002-10	1344-75
		M5M41002-12	1345-7
		M5M41002-8	1344-64
5M4256			
	Mitsubishi	M5M4256-10	1340-19
		M5M4256-12	1340-55
		M5M4256-15	1340-92
		M5M4256A-10	1340-20
		M5M4256A-12	1340-56
		M5M4256A-85	1340-1
5M4257			
	Mitsubishi	M5M4257A-10	1340-21
		M5M4257A-12	1340-57
		M5M4257A-85	1340-2
5M44C256			
	Mitsubishi	M5M44C256-10	1341-49
		M5M44C256-12	1341-79
		M5M44C256-15	1341-80
5M44C258			
	Mitsubishi	M5M44C258-10	1341-50
		M5M44C258-12	1341-81
		M5M44C258-15	1342-23
5M44C264			
	Mitsubishi	M5M44C264-12	1338-67
		M5M44C264-15	1338-90
5M44256			
	Mitsubishi	M5M44256A-10	1341-51
		M5M44256A-12	1341-82
		M5M44256A-8	1341-37
5M44258			
	Mitsubishi	M5M44258A-10	1341-52
		M5M44258A-12	1342-1
		M5M44258A-8	1341-38
5M4464			
	Mitsubishi	M5M4464-10	1338-54
		M5M4464-12	1338-77
		M5M4464-15	1339-7
		M5M4464A-10	1340-15
		M5M4464A-12	1340-49
		M5M4464A-8	1339-63
5M51000			
	Mitsubishi	M5M51000-10	1386-24
		M5M51000-12	1386-29
		M5M51000-15	1386-39
		M5M51000-70	1386-8
		M5M51000-85	1386-11
5M5165			
	Mitsubishi	M5M5165-10	1368-40
		M5M5165-12	1368-80
		M5M5165-15	1369-47
		M5M5165-15L	1369-48
5M5178			
	Mitsubishi	M5M5178P-35	1366-69
		M5M5178P-45	1367-21
		M5M5178P-55	1367-61
5M5179			
	Mitsubishi	M5M5179P-35	1346-57
		M5M5179P-45	1370-25
		M5M5179P-55	1370-30
5M5187			
	Mitsubishi	M5M5187-45	1382-27
		M5M5187-55	1382-47
		M5M5187A-25	1381-52
		M5M5187A-35	1382-4
		M5M5187B-15	1381-27
		M5M5187B-20	1381-35
5M5188			
	Mitsubishi	M5M5188-45	1374-90
		M5M5188-55	1375-77
		M5M5188A-25	1373-13
		M5M5188A-35	1374-61
		M5M5188B-15	1372-25
		M5M5188B-20	1372-49
5M5189			
	Mitsubishi	M5M5189A-25	1372-78
		M5M5189A-35	1374-22
5M5256			
	Mitsubishi	M5M5256-10	1379-68
		M5M5256-10L	1379-69
		M5M5256-12L	1380-8
		M5M5256-15	1380-37
		M5M5256-15L	1380-38
		M5M5256A-10L	1379-70
		M5M5256A-10LL	1379-71
		M5M5256A-12L	1380-9
		M5M5256A-12LL	1380-10
		M5M5256A-15L	1380-39
		M5M5256A-15LL	1380-40
		M5M5256A-70	1379-25
		M5M5256A-70L	1379-26
		M5M5256A-70LL	1379-27
		M5M5256A-85	1379-41
		M5M5256A-85L	1379-42
		M5M5256A-85LL	1379-43
5M5257			
	Mitsubishi	M5M5257A-25	1386-56
		M5M5257A-35	1386-65
		M5M5257A-45	1387-7
		M5M5257A-55	1387-19
5M5258			
	Mitsubishi	M5M5258-35	1383-33
		M5M5258-55	1384-8
		M5M5258A-25	1382-83
5M80C39			
	Mitsubishi	M5M80C39-6	869-82
		M5M80C39A	829-7
			869-83
		M5M80C39H	829-8
			869-84
5M80C49			
	Mitsubishi	M5M80C49	869-85
		M5M80C49A	829-9
			869-86
		M5M80C49AT	829-10
		M5M80C49H	829-11
			869-87
		M5M80C49HT	829-12
5M80C85			
	Mitsubishi	M5M80C85A	872-12
		M5M80C85A-2	829-14
5M8040			
	Mitsubishi	M5M8040L	829-15
			869-88
5M8050			
	Mitsubishi	M5M8050H	829-16
			869-89
		M5M8050L	829-17
			869-90
5M81C55			
	Mitsubishi	M5M81C55	873-16
5M81C56			
	Mitsubishi	M5M81C56	873-17
5M82C37			
	Mitsubishi	M5M82C37A	883-70
5M82C43			
	Mitsubishi	M5M82C43	869-121
5M82C51			
	Mitsubishi	M5M82C51A	886-1
5M82C54			
	Mitsubishi	M5M82C54	872-131
			886-2
5M82C55			
	Mitsubishi	M5M82C55A	872-145
5M82C59			
	Mitsubishi	M5M82C59A	872-118
5M82C82			
	Mitsubishi	M5M82C82	873-50
5M82C83			
	Mitsubishi	M5M82C83	873-48
5M82C84			
	Mitsubishi	M5M82C84A	876-32
5M82C86			
	Mitsubishi	M5M82C86	877-6
5M82C87			
	Mitsubishi	M5M82C87	876-116
5M82C89			
	Mitsubishi	M5M82C89	876-1
5N317	Mitsubishi	M5N317L	1213-120
5N324	Mitsubishi	M5N324	1187-40
5N337	Mitsubishi	M5N337L	1215-10
5N339	Mitsubishi	M5N339	1114-51
5N358	Mitsubishi	M5N358	1180-5
5P16	MMI	PLE5P16C	4079-53
5P8	MMI	PLE5P8AC	4079-22
		PLE5P8C	4079-23
		PLE5P8M	4079-24
5R4558	Mitsubishi	M5R4558	1179-37
5S70	AD	5S70	1227-49
5S72	AD	5S72	1227-50
5T082	Mitsubishi	M5T082	1181-20
5T494	Mitsubishi	M5T494	1217-4
50	Amperex	BGY50	1123-90
	Cyberchron	CVM50/30	4881-2
	ECISemi	ECIML50	4065-45
	Fairchild	SBC50	4827-13
	Ferranti	REF50	1226-56
		REF50Z	1226-57
	IntSolutions	VMETC50	4883-13
	Interconics	Interchip 50	4051-26

(Continued)

Base Number	Source	Device	Page-Line
50			(Cont'd)
	LSIComp	**RED50/60**	*** 2867**
			633-72
			692-20
	Microbar	DBR50	4862-10
	PMI	**OP50A**	*** 2970**
			1168-44
		OP50B	*** 2970**
			1169-10
		OP50E	*** 2970**
			1168-45
		OP50F	*** 2970**
			1169-11
	Raytheon	RG50	674-108
	TeledyneC	CAG50	905-65
	VisionsUnlim	86/50A	4829-10
	WinSystems	LPM-SBC50	4833-17
		MCM-SBC50	4833-18
50C12	Western	WD50C12	887-106
50C20	Western	WD50C20A	887-107
50C40	TI	TSP50C40A	1122-139
50C41	TI	TSP50C41	1122-140
50C42	TI	TSP50C42	1123-1
50C43	TI	TSP50C43	1123-2
50C44	TI	TSP50C44	1123-3
50C50	TI	TSP50C50	1122-119
50H000			
	Sharp	LR50H000	605-156
	Toshiba	TC50H000	605-125
50H001			
	Toshiba	TC50H001	605-137
			605-99
50H002			
	Sharp	LR50H002	625-167
50H4066			
	Toshiba	TC50H4066	638-18
			905-11
50L15	Raytheon	CGA50L15	4058-47
500	**CMD ASIC**	**CSC500**	*** 4216**
			4082-13
	Cybernetic	CY500	885-86
			1003-35
	Datel	**ADC500MC**	*** 2571**
			*** 2575**
			928-29
		AM500	*** 2577**
			1130-123
		AM500GC	*** 2577**
			1131-11
			1136-8
			1155-45
		AM500MC	*** 2577**
			1131-12
			1136-9
			1155-46
		AM500MM	*** 2574**
			*** 2577**
			1131-13
			1136-10
	ECISemi	ECIFE500	4065-51
	Exar	XR500	4044-10
	Gould	GA500	4048-33
		GA500D	4048-34
	Motorola	**MCA500ALS**	*** 4282**
			4055-32
	Octagon	500	4874-33
	SBE	SBE500	4717-11
	Sharp	SM500	815-9
			862-34
	TeledyneS	TSC500	939-4
	TI	TL500	939-72
		TSC500	
		Series	*** 4317**
			4082-1
	TLSI	TA500	4061-51
	VisionsUnlim	86/500A	4829-13
	Xycom	XVME500	4884-38
5000	Dallas	DS5000	870-80
	Fujitsu	**C5000AV**	*** 4229**
			*** 4231**
			4046-34
	Gould	**GC5000**	*** 4244**
			4048-46

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5000			(Cont'd)
	Honeywell	HT5000	4049-46
			¶ 449-19
			¶ 449-20
			¶ 449-22
	Matra	MA5000	4054-12
	Matra-Harris		
		MB5000	4054-22
			¶ 449-25
	MMI	MLA5000	4055-12
	SMS	OMTI5000	4869-29
	Siliconix	SD5000	905-57
	Tech80	5000	4848-17
	TopazSemi	**SD5000**	⋆ **3301**
			910-69
		SD5000N	⋆ **3301**
			910-14
	UMC	**UM5000**	⋆ **4329**
			1118-90
			1229-119
	VTC	**VL5000**	⋆ **4334**
			4087-14
			¶ 452-14
50000	Fujitsu	C50000AU	4047-15
	ZyMOS	Zy50000	4087-32
5001	NCM	NCM5001Z	4068-47
	Siemens	SLE5001	1127-119
	Siliconix	SD5001	905-58
	TopazSemi	**SD5001**	⋆ **3301**
			910-67
		SD5001N	⋆ **3301**
			910-11
	Toshiba	**TC5001**	⋆ **3308**
			613-87
5002	**Harris**	**HA5002-2**	⋆ **2706**
			⋆ **2738**
			⋆ **2748**
			⋆ **2753**
			1102-35
			1102-53
			1128-52
		HA5002-5	⋆ **2706**
			⋆ **2738**
			⋆ **2748**
			⋆ **2753**
			1102-36
			1102-54
			1128-53
	Micrel	MIC5002	691-26
	NCM	NCM5002Z	4068-48
	Siemens	SLE5002	1127-118
	Siliconix	SD5002	905-59
			¶ 426-31
			¶ 426-32
	Thomson	MK5002	691-29
	TopazSemi	**SD5002**	⋆ **3301**
			910-68
		SD5002N	⋆ **3301**
			910-12
	Toshiba	**TC5002B**	⋆ **3308**
			614-104
5003	Sharp	LH5003	978-26
50031	Sharp	LH50031	978-27
5004	Sharp	LH5004	978-28
50041	Sharp	LH50041	978-29
5005	Micrel	MIC5005	691-27
	Thomson	MK5005	691-30
5006	Sharp	LH5006A	977-130
5007	Micrel	MIC5007	691-28
	Thomson	MK5007	691-31
5009	**GE/Intersil**	**IH5009C**	⋆ **2681**
			911-5
		IH5009M	⋆ **2681**
			911-6
	Micrel	MIC5009	691-44
	National	AH5009C	911-7
	Thomson	MK5009	691-45
			¶ 404-15
501	Abionics	MX501	4854-42
	Brooktree	BT501	649-65
			688-15
	Burr-Brown	**OPA501**	⋆ **2536**
			1130-46
		OPA501A	⋆ **2536**
			1130-47
			1166-16
			(Continued)

Base Number	Source	Device	Page-Line
501	**Burr-Brown**		**(Cont'd)**
		OPA501B	⋆ **2536**
			1159-37
		OPA501R	⋆ **2536**
			1166-17
		OPA501S	⋆ **2536**
			1130-45
			1159-38
		OPA501U	⋆ **2536**
			⋆ **2545**
			1166-22
		OPA501U/883B	
			⋆ **2536**
			⋆ **2545**
			1166-23
		OPA501V	⋆ **2536**
			⋆ **2545**
			1160-10
		OPA501V/883B	
			⋆ **2536**
			⋆ **2545**
			1160-11
	Electrologic	Z501	4876-24
	Exar	XR501-6	885-11
		XR501-8	885-12
		XR501R-6	885-7
		XR501R-8	885-8
	Ferranti	ZN501AJ	926-32
	Fujitsu	MB501	692-28
			1191-98
		MB501L	692-29
			1191-99
	GE/RCA	GP501AD	862-3
	Gennum	LD501	1103-75
			1116-16
			¶ 431-6
			¶ 437-25
	IXYS	IXSE501	873-55
			874-87
			881-82
			888-80
	LogicalDes	SBIO501	4887-7
	MicroInds	mSBC501	4857-21
		MIB501A	4857-20
	MicroLinear	ML501	888-9
	Recognition	AS501M	4859-21
		DS501M	4859-22
		PX501M	4859-23
	Signetics	PLHS501	4079-17
	Siliconix	DG501A	914-32
			914-34
	TI	TL501	939-71
	Validyne	CD501	4873-47
501M4	FujitsuA	FBC501M4	4894-7
			4894-9
5010	AD	AD5010K	916-14
	GE/Intersil	**IH5010C**	⋆ **2681**
			911-12
		IH5010M	⋆ **2681**
			911-13
	HybridSys	HS5010	1225-68
	Micom Int	NI5010	4848-4
	MicroPwr	MP5010	1225-49
		MP5010A	1225-50
	National	AH5010C	911-14
	Western	WD5010	887-20
5011	**GE/Intersil**	**IH5011C**	⋆ **2681**
			910-71
		IH5011M	⋆ **2681**
			910-72
	National	AH5011C	910-73
	Western	WD5011	887-21
50110	Analogic	AC50110	951-10
50116	Analogic	AC50116	973-40
5012	**GE/Intersil**	**IH5012C**	⋆ **2681**
			910-77
		IH5012M	⋆ **2681**
			910-78
	National	AH5012C	910-79
	Toshiba	**TC5012B**	⋆ **3308**
			606-105
5013	GE/Intersil	IH5013C	910-59
		IH5013M	910-60
5014	Crystal	CS5014	936-44
	GE/Intersil	IH5014C	910-63
		IH5014M	910-64

Base Number	Source	Device	Page-Line
5015	GE/Intersil	IH5015C	910-49
		IH5015M	910-50
	Sharp	LH5015	1195-81
	SMC	SR5015	1393-23
		SR5015-133	1396-33
		SR5015-80	1396-15
		SR5015-81	1396-24
5016	Crystal	CS5016	937-34
	GE/Intersil	IH5016C	910-53
		IH5016M	910-54
	SMC	COM5016	691-13
			1009-54
		COM5016T	691-14
			1009-55
5017	**GE/Intersil**	**IH5017C**	⋆ **2681**
			910-33
		IH5017M	⋆ **2681**
			910-34
	SMC	SR5017	1307-55
			1396-34
5018	**GE/Intersil**	**IH5018C**	⋆ **2681**
			910-45
		IH5018M	⋆ **2681**
			910-46
	SGS	LS5018	1229-93
	Signetics	**NE5018**	⋆ **3117**
			888-34
			946-26
		SE5018	946-27
	SMC	SR5018	1307-53
			1396-25
	Toshiba	**TC5018**	⋆ **3308**
			608-107
		TC5018B	⋆ **3308**
			642-70
5019	**GE/Intersil**	**IH5019C**	⋆ **2681**
			910-41
		IH5019M	⋆ **2681**
			910-42
	Signetics	NE5019	943-41
		SE5019	943-42
502	Abionics	MX502	4854-43
	Amperex	BGD502	1123-88
	Brooktree	BT502	650-102
			688-16
	Ferranti	ZN502CJ	927-18
		ZN502E	927-19
	Fujitsu	**MB502A**	⋆ **2626**
			885-51
	GE/RCA	GP502	862-7
			¶ 408-27
			¶ 412-23
			¶ 414-1
		GP502AD	877-79
			¶ 408-27
			¶ 412-23
			¶ 414-1
	Gennum	LD502	1103-76
			1116-17
			¶ 431-7
			¶ 435-26
	ILC-DDC	RDC502	1227-78
		SDC502	1229-16
	MicroLinear	ML502	888-4
	Octagon	502	4874-56
	Validyne	SG502	4873-48
502M4	FujitsuA	FBC502M4	4894-10
5020	**GE/Intersil**	**IH5020C**	⋆ **2681**
			910-37
		IH5020M	⋆ **2681**
			910-38
	Signetics	NE5020	952-31
	Toshiba	**TC5020B**	⋆ **3308**
			636-82
	Western	WD5020-10	883-90
5021	**GE/Intersil**	**IH5021C**	⋆ **2681**
			910-20
		IH5021M	⋆ **2681**
			910-21
	OEI	5021	1228-72
	Sharp	LH5021A	977-131

Base Number	Source	Device	Page-Line
5022	**GE/Intersil**	**IH5022C**	⋆ **2681**
			910-27
		IH5022M	⋆ **2681**
			910-28
	Sharp	LH5022	977-132
	Toshiba	**TC5022B**	⋆ **3308**
			617-43
5023	**GE/Intersil**	**IH5023C**	⋆ **2681**
			910-22
		IH5023M	⋆ **2681**
			910-23
	Toshiba	**TC5023B**	⋆ **3308**
			915-19
5024	**GE/Intersil**	**IH5024C**	⋆ **2681**
			910-29
		IH5024M	⋆ **2681**
			910-30
	Toshiba	**TC5024B**	⋆ **3308**
			605-91
50240	Thomson	MK50240	1119-132
5025	**CMD ASIC**	**C5025**	⋆ **4215**
			4043-7
	GE/Intersil	IH5025C	911-10
		IH5025M	911-11
	OEI	5025	1228-73
	SMC	COM5025	886-84
			1011-76
	Thomson	**MK5025**	⋆ **3282**
			1192-34
	Toshiba	**TC5025B**	⋆ **3308**
			605-92
50256	Hitachi	HM50256-12	1340-52
		HM50256-15	1340-89
		HM50256-20	1341-18
50257	Hitachi	HM50257-12	1340-53
		HM50257-15	1340-90
		HM50257-20	1341-19
5026	GE/Intersil	IH5026C	911-16
		IH5026M	911-17
	SMC	COM5026	691-3
			1009-36
		COM5026T	691-4
			1009-37
	Toshiba	TC5026B	614-32
5027	GE/Intersil	IH5027C	910-75
		IH5027M	910-76
	SMC	CRT5027	883-39
	Thomson	MK5027	1192-27
	Toshiba	**TC5027B**	⋆ **3308**
			608-110
5028	GE/Intersil	IH5028C	911-1
		IH5028M	911-2
5029	GE/Intersil	IH5029C	910-61
		IH5029M	910-62
	Toshiba	**TC5029B**	⋆ **3308**
			623-135
503	AD	AD503J	1169-7
		AD503K	1168-30
		AD503S	1168-31
	Ferranti	ZN503AJ	926-39
	Fujitsu	MB503	692-6
	GE/RCA	GP503AD	862-12
			¶ 402-10
	OEI	AH503	1224-34
	Siliconix	DG503A	914-33
	Validyne	PT503	4874-7
503M4	FujitsuA	FBC503M4	4894-11
5030	GE/Intersil	IH5030C	910-65
		IH5030M	910-66
	OEI	5030A	1224-36
	Sharp	LH5030	977-123
	Signetics	**TDA5030**	⋆ **3105**
			1126-37
	Thomson	**MK5030**	⋆ **3283**
			885-24
		TEA5030	1124-97
5031	GE/Intersil	IH5031C	910-51
		IH5031M	910-52
	Sharp	LH5031	977-124
5032	GE/Intersil	IH5032C	910-55
		IH5032M	910-56
	OEI	5032A	1224-37
	Toshiba	**TC5032**	⋆ **3308**
			613-111

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
5033	GE/Intersil	IH5033C	910-35
		IH5033M	910-36
	Harris	**HA5033**	⋆ **2706**
			⋆ **2738**
			⋆ **2748**
			1102-42
		HA5033-2	⋆ **2706**
			⋆ **2738**
			⋆ **2748**
			1104-62
			1128-45
		HA5033-5	⋆ **2706**
			⋆ **2738**
			⋆ **2748**
			1104-63
			1128-46
	Thomson	**MK5033N**	⋆ **3284**
			1194-118
5034	GE/Intersil	IH5034C	910-47
		IH5034M	910-48
	Signetics	NE5034	920-33
5035	GE/Intersil	IH5035C	910-43
		IH5035M	910-44
	Sharp	LH5035A	977-125
	Thomson	**MK5035**	⋆ **3285**
			885-25
5036	GE/Intersil	IH5036C	910-39
		IH5036M	910-40
	Sharp	LH5036A	977-126
	Signetics	NE5036	916-38
	SMC	COM5036	691-15
			1009-56
		COM5036T	691-16
			1009-57
	Toshiba	**TC5036**	⋆ **3308**
			611-17
5037	GE/Intersil	IH5037C	910-25
		IH5037M	910-26
	Signetics	NE5037	916-39
	SMC	CRT5037	883-42
			¶ 409-3
	Toshiba	**TC5037**	⋆ **3308**
			613-88
5038	Burr-Brown	PWR5038	1221-15
	GE/Intersil	IH5038C	910-31
		IH5038M	910-32
50395	Micrel	MIC50395	691-33
	Thomson	MK50395	691-38
50396	Micrel	MIC50396	691-34
	Thomson	MK50396	691-39
50397	Micrel	MIC50397	691-35
	Thomson	MK50397	691-40
50398	Micrel	MIC50398	691-36
	Thomson	MK50398	691-41
50399	Micrel	MIC50399	691-37
	Thomson	MK50399	691-42
504	Amperex	BGD504	1123-89
	AD	AD504J	1154-19
		AD504K	1150-13
		AD504L	1132-87
			1147-9
		AD504M	1132-19
			1147-8
		AD504S	1132-88
			1147-10
	Ferranti	ZN504CJ	926-40
		ZN504E	926-41
	Fujitsu	MB504	692-17
	Octagon	504	4875-3
	OEI	AH504	1224-35
	RTC	MS504	913-19
	Validyne	TC504	4874-8
504D4	FujitsuA	FBC504D4	4894-24
5040	**GE/Intersil**	**IH5040C**	⋆ **2679**
			902-48
		IH5040M	⋆ **2679**
			902-41
	Harris	**HI5040-2**	⋆ **2707**
			⋆ **2737**
			902-42
		HI5040-5	⋆ **2707**
			⋆ **2737**
			902-43
	Maxim	IH5040C	902-49
		IH5040M	902-35
			(Continued)

Base Number	Source	Device	Page-Line
5040			(Cont'd)
	S-MOS	**SLA5040**	⋆ **4305**
			4059-31
	Signetics	TDA5040	1003-45
	Siliconix	DG5040A	902-39
	Thomson	ETC5040	1195-43
5041	**GE/Intersil**	**IH5041C**	⋆ **2680**
			903-28
		IH5041M	⋆ **2680**
			903-17
	Harris	**HI5041-2**	⋆ **2707**
			⋆ **2737**
			903-21
		HI5041-5	⋆ **2707**
			⋆ **2737**
			903-22
	Maxim	IH5041C	903-18
		IH5041M	902-36
	Siliconix	DG5041A	903-6
5042	**GE/Intersil**	**IH5042C**	⋆ **2680**
			906-58
		IH5042M	⋆ **2680**
			906-53
	Harris	**HI5042-2**	⋆ **2707**
			⋆ **2737**
			906-56
		HI5042-5	⋆ **2707**
			⋆ **2737**
			906-57
	Maxim	IH5042C	906-59
		IH5042M	906-54
	Siliconix	DG5042A	906-51
5043	**GE/Intersil**	**IH5043C**	⋆ **2680**
			907-70
		IH5043M	⋆ **2680**
			907-65
	Harris	**HI5043-2**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			907-68
		HI5043-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			907-69
	Maxim	IH5043C	907-71
		IH5043M	907-66
	Siliconix	DG5043A	907-61
	Toshiba	**TC5043**	⋆ **3308**
			637-125
			1229-71
5044	**GE/Intersil**	**IH5044C**	⋆ **2680**
			908-70
		IH5044M	⋆ **2680**
			908-58
			908-71
	Harris	**HI5044-2**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			908-65
		HI5044-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			908-66
	Maxim	IH5044C	908-72
		IH5044M	908-62
	Signetics	NE5044	1122-23
			1197-70
	Siliconix	DG5044A	908-61
5045	**GE/Intersil**	**IH5045C**	⋆ **2680**
			909-13
		IH5045M	⋆ **2680**
			909-5
	Harris	**HI5045-2**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			909-8
		HI5045-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			909-9
	Maxim	IH5045C	909-14
		IH5045M	909-6
			(Continued)

Base Number	Source	Device	Page-Line
5045			(Cont'd)
	Signetics	NE5045	1122-22
			1197-69
	Siliconix	DG5045A	909-3
5046	**GE/Intersil**	**IH5046C**	⋆ **2680**
			909-70
		IH5046M	⋆ **2680**
			909-67
	Harris	**HI5046-2**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			909-68
		HI5046-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			909-69
		HI5046A-2	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			909-65
		HI5046A-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			1009-39
50464	Hitachi	HM50464-12	1338-73
		HM50464-15	1338-74
		HM50464-20	1339-16
50465	Hitachi	HM50465-12	1338-75
		HM50465-15	1339-5
		HM50465-20	1339-17
5047	**GE/Intersil**	**IH5047C**	⋆ **2680**
			910-9
		IH5047M	⋆ **2680**
			910-6
	Harris	**HI5047-2**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			910-7
		HI5047-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			910-8
		HI5047A-2	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			910-4
		HI5047A-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			910-5
	SMC	CRT5047	883-41
5048	**GE/Intersil**	**IH5048C**	⋆ **2679**
			902-77
		IH5048M	⋆ **2679**
			902-74
	Harris	**HI5048-2**	⋆ **2707**
			⋆ **2737**
			903-4
		HI5048-5	⋆ **2707**
			⋆ **2737**
			903-5
	Maxim	IH5048C	902-75
		IH5048M	902-76
	Siliconix	DG5048A	902-69
	Toshiba	**TC5048**	⋆ **3308**
			610-64
5049	**GE/Intersil**	**IH5049C**	⋆ **2680**
			908-83
		IH5049M	⋆ **2680**
			908-80
	Harris	**HI5049-2**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			909-1
		HI5049-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			909-2
	Maxim	IH5049C	908-81
		IH5049M	908-82
	Siliconix	DG5049A	908-77

Base Number	Source	Device	Page-Line
505	Barvon	BC505	4042-1
			4042-2
	Datel	**ADC505MM**	⋆ **2575**
			928-30
	Fujitsu	MB505-24	692-43
			1190-93
	Gennum	LC505	1103-69
			1116-9
			¶ 431-3
			¶ 431-4
		LD505	1103-72
			1116-18
		LR505	1103-66
			1116-25
			¶ 431-12
		LS505	1103-67
			1116-26
			¶ 431-12
		LT505	1103-68
			1116-27
			¶ 431-13
	TI	TL505	939-70
	Validyne	DA505	4873-20
	Xycom	XVME505	4885-14
5050	**GE/Intersil**	**IH5050C**	⋆ **2680**
			906-31
		IH5050M	⋆ **2680**
			906-30
	Harris	**HI5050-2**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			906-49
		HI5050-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			906-50
	Maxim	IH5050C	906-13
		IH5050M	906-14
	Signetics	**NE5050**	⋆ **3097**
			1196-68
	Siliconix	DG5050A	906-12
	Toshiba	**TC5050**	⋆ **3308**
			633-154
	Western	ADS5050	887-100
50500	CMD Micro	G50500B	4048-54
	HoneywellSPT		
		HDAC50500AC	
			⋆ **2997**
			959-8
		HDAC50500AI	
			⋆ **2997**
			959-9
		HDAC50500AM	
			⋆ **2997**
			959-10
		HDAC50500BC	
			⋆ **2997**
			965-20
		HDAC50500BI	
			⋆ **2997**
			965-21
		HDAC50500BM	
			⋆ **2997**
			965-22
5051	**GE/Intersil**	**IH5051C**	⋆ **2680**
			907-38
		IH5051M	⋆ **2680**
			907-37
	Harris	**HI5051-2**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			907-58
		HI5051-5	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			907-59
	Maxim	IH5051C	907-26
		IH5051M	907-27
	Siliconix	DG5051A	907-25
	Thomson	ETC5051	1192-114
	Toshiba	**TC5051**	⋆ **3308**
			613-89

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5052	**GE/Intersil**	**IH5052C**	* 2679
			904-34
		IH5052M	* 2679
			904-27
	Toshiba	**TC5052**	* 3308
			613-90
5053	**GE/Intersil**	**IH5053C**	* 2680
			904-35
		IH5053M	* 2680
			904-28
	Toshiba	**TC5053**	* 3308
			613-91
5054	Siemens	5054	1120-1
	Toshiba	**TC5054**	* 3308
			613-92
5055	AMD	AM5055	1396-32
	CMD ASIC	**C5055**	* 4215
			4043-15
5056	AMD	AM5056	1396-39
	GoldStar	GM5056	1194-5
	Thomson	ETC5056	1192-115
5057	AMD	AM5057	1396-43
	SMC	CRT5057	883-40
506	AD	AD506J	1156-36
		AD506K	1150-1
		AD506L	1148-7
		AD506S	1150-2
	Burr-Brown	HI506A	911-54
	Gennum	LC506	1103-70
			1116-10
		LV506	1103-74
			1116-29
	Harris	**HI506-2**	* 2703
			* 2738
			* 2748
			* 2768
			915-43
		HI506-5	* 2703
			* 2738
			* 2748
			* 2768
			915-44
		HI506/883	* 2703
			* 2738
			* 2748
			* 2768
			915-45
		HI506A-2	* 2703
			* 2738
			* 2748
			* 2768
			915-61
		HI506A-5	* 2703
			* 2738
			* 2748
			* 2768
			915-63
		HI506A-8	* 2703
			* 2738
			* 2748
			* 2768
			915-64
	Octagon	506	4874-32
	Siliconix	DG506AA	912-48
			¶ 427-17
5060	SGS	LS5060	1229-94
	Signetics	NE5060	1228-89
50600	**HoneywellSPT**		
		HDAC50600	* 2997
			972-1
50601	Mitsubishi	M50601	1116-65
50602	Mitsubishi	M50602	1116-66
50610	**HoneywellSPT**		
		HDAC50610	* 2998
			645-68
5064	**Toshiba**	**TC5064B**	* 3308
			605-102
5065	MicroNet	MN5065	921-36
		MN5065H	921-37
	Toshiba	**TC5065B**	* 3308
			605-103
5066	MicroNet	MN5066	921-38
		MN5066H	921-39
	Toshiba	**TC5066B**	* 3308
			607-88
5067	**Toshiba**	**TC5067B**	* 3308
			607-89
5068	**Toshiba**	**TC5068B**	* 3308
			617-44
5069	**Toshiba**	**TC5069B**	* 3308
			617-45
507	AD	AD507J	1162-24
		AD507K	1156-2
		AD507S	1156-49
	Burr-Brown	HI507A	911-52
	Gennum	LC507	1103-71
			1116-11
		LE507	1103-73
			1116-23
	Harris	**HI507-2**	* 2703
			* 2738
			* 2748
			* 2768
			914-50
		HI507-5	* 2703
			* 2738
			* 2748
			* 2768
			914-51
		HI507-8	* 2703
			* 2738
			* 2748
			* 2768
			914-52
		HI507A-2	* 2703
			* 2738
			* 2748
			* 2768
			914-70
		HI507A-5	* 2703
			* 2738
			* 2748
			* 2768
			914-72
		HI507A-8	* 2703
			* 2738
			* 2748
			* 2768
			914-73
	Octagon	507	4874-9
	Sanyo	STK507	1208-100
	Siliconix	DG507AA	914-55
	TI	TL507	939-69
5070	**Thomson**	**TS5070**	* 3290
			1192-122
	Toshiba	**TC5070**	* 3308
			613-110
			637-133
5071	MicroPwr	MP5071	1121-120
	Thomson	TS5071	1192-123
	Toshiba	**TC5071**	* 3308
			637-132
			637-134
5072	**Toshiba**	**TC5072**	* 3308
			637-131
			637-135
50734	Mitsubishi	M50734	829-18
			864-53
		M50734-10	829-19
50740	Mitsubishi	M50740	829-20
			864-62
		M50740-PGYS	864-54
		M50740A	829-21
			864-63
		M50740ASP	864-61
50741	Mitsubishi	M50741	829-22
			864-64
50742	Mitsubishi	M50742	829-23
			864-65
		M50742-PGYS	864-55
50743	Mitsubishi	M50743	829-24
			864-66
		M50743-PGYS	864-56
50744	Mitsubishi	M50744	829-25
		M50744-PGYS	829-26
		M50744T	829-27
50745	Mitsubishi	M50745	829-28
			864-67
		M50745-PGYS	864-57
50746	Mitsubishi	M50746	829-29
		M50746E	829-30
			(Continued)
50746	Mitsubishi		(Cont'd)
		M50746ES	829-31
		M50746S	829-32
50747	Mitsubishi	M50747	829-33
			864-68
		M50747-PGYS	864-58
		M50747E	829-34
		M50747ES	829-35
		M50747H	829-36
		M50747T	829-37
50752	Mitsubishi	M50752	829-38
			864-69
		M50752-PGYS	864-60
50753	Mitsubishi	M50753	829-39
			864-70
		M50753-PGYS	864-59
		M50753T	829-40
50754	Mitsubishi	M50754	829-41
			864-71
50757	Mitsubishi	M50757	829-42
			864-72
50758	Mitsubishi	M50758	864-73
5078	Mitsubishi	M5078	829-43
50780	Mitsubishi	M50780	869-122
50781	Mitsubishi	M50781	869-123
50782	Mitsubishi	M50782	869-124
50783	Mitsubishi	M50783	869-125
50784	Mitsubishi	M50784	869-126
50786	Mitsubishi	M50786	869-127
50790	Mitsubishi	M50790	869-128
508	Burr-Brown	HI508A	911-53
	Datel	**ADC508MC**	* 2575
			928-36
		ADC508MM	* 2574
			928-37
	Gennum	LC508	1103-78
			1116-12
		LP508	1103-79
			1116-24
			¶ 431-11
	Harris	**HI508-2**	* 2703
			* 2738
			* 2748
			* 2768
			913-73
		HI508-5	* 2703
			* 2738
			* 2748
			* 2768
			913-74
		HI508-8	* 2703
			* 2738
			* 2748
			* 2768
			913-75
		HI508A-2	* 2703
			* 2738
			* 2748
			* 2768
			914-11
		HI508A-5	* 2703
			* 2738
			* 2748
			* 2768
			914-17
		HI508A-8	* 2703
			* 2738
			* 2748
			* 2768
			914-18
		HS508ARH	* 2702
			* 2718
			913-76
	Maxim	DG508AA	913-87
		DG508AB	914-4
		DG508AC	914-5
		HI508A-2	914-12
		HI508A-5	914-19
		HI508L-2	915-2
		HI508L-5	915-3
	MicroInds	mBLC508	4860-18
	Octagon	508	4874-10
	Siliconix	DGP508AA	915-18
		DG508AA	913-88
5080	**CMD ASIC**	**C5080**	* 4215
			4043-18
		C5080M	* 4215
			4043-19
	GoldStar	**GCL5080**	* 4242
			4047-41
		LL5080	4047-42
	Laserpath	LP5080A	4052-4
	LSI Logic	LL5080	4052-39
	S-MOS	**SLA5080**	* 4305
			4059-32
	Sharp	LH5080	839-5
		LH5080A	839-6
		LH5080AL	839-7
		LH5080B	839-8
		LH5080BL	839-9
		LH5080L	839-10
	Signetics	**NE5080**	* 3098
			1197-23
50800	**GE/RCA**	**PA50800**	* 2659
			4059-15
	HoneywellSPT		
		HDAC50800	* 2997
			972-2
508041	Mitsubishi	M508041AH	831-1
5081	**Signetics**	**NE5081**	* 3099
			1197-19
50810	**HoneywellSPT**		
		HDAC50810	* 2998
			645-69
5086	MMI	5086	679-3
5087	MMI	5087	679-4
	TI	TCM5087	1199-30
	Thomson	MK5087	1199-32
5088	National	TP5088	1199-14
5089	ITT	SBA5089	1200-18
		SRA5089	1199-9
	National	TP5089	1199-15
	Samsung	MK5089	1199-22
	Sprague	STC5089	1199-27
	Stantel-STC	STC5089	1199-28
		STC5089L	1199-29
	TI	TCM5089	1199-31
	Thomson	MK5089	1199-33
509	AD	AD509J	1166-24
		AD509K	1131-52
			1164-35
		AD509S	1131-53
			1164-36
	Burr-Brown	HI509A	911-51
	Harris	**HI509-2**	* 2703
			* 2738
			* 2748
			* 2768
			912-33
		HI509-5	* 2703
			* 2738
			* 2748
			* 2768
			912-34
		HI509-8	* 2703
			* 2738
			* 2748
			* 2768
			912-35
		HI509A-2	* 2703
			* 2738
			* 2748
			* 2768
			912-60
		HI509A-5	* 2703
			* 2738
			* 2748
			* 2768
			912-65
	Maxim	DG509AA	912-47
		DG509AB	912-50
		DG509AC	912-51
		HI509A-2	912-61
		HI509A-5	912-66
		HI509L-2	912-76
		HI509L-5	912-77
	Siliconix	DGP509AA	913-12
		DG509AA	912-49

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
5090	OEI	5090A	1220-9
	Signetics	NE5090	1002-75
	Toshiba	**TC5090A**	* 3308
			924-48
5091	ITT	SBA5091	1199-8
	Thomson	MK5091	1199-34
	Toshiba	**TC5091A**	* 3308
			924-47
5092	Thomson	MK5092	1199-35
	Toshiba	**TC5092A**	* 3308
			645-19
50930	Mitsubishi	M50930	831-2
		M50930T	831-3
50931	Mitsubishi	M50931	831-4
		M50931-PGYS	831-5
50932	Mitsubishi	M50932	864-74
5094	Thomson	MK5094	1199-36
50940	Mitsubishi	M50940	831-6
50941	Mitsubishi	M50941	831-7
		M50941-PGYS	831-8
50943	Mitsubishi	M50943	831-9
			864-75
50950	Mitsubishi	M50950	831-10
		M50950-PGYS	831-11
50951	Mitsubishi	M50951	831-12
50954	Mitsubishi	M50954	831-13
50955	Mitsubishi	M50955	831-14
		M50955-PGYS	831-15
50957	Mitsubishi	M50957	831-16
		M50957ES	831-17
50959	Mitsubishi	M50959	831-18
50963	Mitsubishi	M50963	831-19
50964	Mitsubishi	M50964	831-20
		M50964-PGYS	831-21
50981	Samsung	MK50981	1193-95
	Thomson	MK50981	1193-101
			¶ 433-16
50982	Thomson	MK50982	1193-102
			¶ 433-16
50991	Thomson	MK50991	1193-103
50992	Samsung	MK50992	1193-96
	Thomson	MK50992	1193-104
			¶ 432-8
			¶ 433-16
50993	Samsung	MK50993	1193-97
51	Amperex	BGY51	1123-91
	Apex	**PA51**	* 2458
			1130-44
			1131-91
			1166-18
		PA51A	* 2458
			1130-42
			1131-75
			1159-40
		PA51M	* 2458
			1130-43
			1131-76
			1159-41
		PA51Q	* 2458
			1159-39
	BinaryTech	PDK51	4703-7
51c256	Vitelic	v51c256l-12	1340-45
51C100	Hyundai	HY51C100-10	1344-17
		HY51C100-12	1344-33
		HY51C100-15	1344-51
	Vitelic	V51C100-10	1344-81
		V51C100-12	1345-15
		V51C100-15	1345-21
51C256	**Hyundai**	**HY51C256-10**	
			* 2770
			1340-8
		HY51C256-12	
			* 2770
			1340-39
		HY51C256-15	
			* 2770
			1340-79
		HY51C256-20	
			* 2770
			1341-11
		HY51C256L-10	
			* 2770
			1340-9
		HY51C256L-12	
			* 2770
			1340-40

(Continued)

Base Number	Source	Device	Page-Line
51C256	**Hyundai**		**(Cont'd)**
		HY51C256L-15	
			* 2770
			1340-80
		HY51C256L-20	
			* 2770
			1341-12
	Vitelic	V51C256L-10	1340-11
		V51C256L-15	1340-85
		V51C256L-20	1341-17
51C259	Vitelic	V51C259HL-12	1338-64
		V51C259HL-15	1338-89
		V51C259HL-20	1339-13
51C264	**Hyundai**	**HY51C264-10**	
			* 2770
			1339-19
		HY51C264-12	
			* 2770
			1339-23
		HY51C264-15	
			* 2770
			1339-26
	Vitelic	V51C264	1338-91
		V51C264A	1338-68
51C464	Hyundai	HY51C464-12	1338-60
		HY51C464-15	1338-83
51C64	**Hyundai**	**HY51C64-10**	* 2770
			1337-59
		HY51C64-12	* 2770
			1337-65
		HY51C64-15	* 2770
			1338-3
		HY51C64L-10	
			* 2770
			1337-60
		HY51C64L-12	
			* 2770
			1337-66
		HY51C64L-15	
			* 2770
			1338-4
	Vitelic	V51C64-10	1337-61
		V51C64-12	1337-67
		V51C64-15	1338-5
		V51C64L-10	1337-62
		V51C64L-12	1337-68
		V51C64L-15	1338-6
510	AD	AD510J	1141-7
		AD510K	1132-89
			1139-28
		AD510L	1132-20
			1132-48
			1138-15
		AD510S	1132-90
			1139-29
	Barvon	BC510	4042-6
	Cirrus	CLGD510	882-56
	Datel	**ADC510MC**	* 2575
			925-40
		ADC510MM	* 2575
			925-41
	Exar	XR510	885-10
		XR510R	885-9
	LogicalDes	VAT510	4892-4
	National	CIM510	4846-21
	SMS	OMTI510	4851-17
			4870-11
	Sharp	SM510	815-10
			862-30
	TI	TL510C	1110-13
5100	**CMD ASIC**	**C5100**	* 4215
			4043-22
	Elantec	EHO5100SH	1169-17
	Holt	HI5100	4067-12
	LogicalDes	VME5100D	4891-16
		VME5100S	4891-24
	MicroNet	MN5100	918-33
		MN5100H	918-34
	Plessey	CLA5100	4058-18
	SMS	OMTI5100	4893-9
	TopazSemi	SD5100	905-49
	UMC	UM5100	1200-13
			¶ 435-30
51000	CMD Micro	G51000B	4048-55
	Samsung	KS51000	813-24
			863-52

Base Number	Source	Device	Page-Line
5101	**Datel**	**ADC5101**	* 2575
			918-20
		ADC5101H	* 2574
			918-21
	Harris	**HA5101**	* 2737
			* 2747
			* 2759
			1156-17
	ITT	ITT5101S	1350-86
	Marconi	**MA5101SOS**	* 2883
			1350-10
	MicroNet	MN5101	918-22
		MN5101H	918-23
	Qualogy	QPC5101	4805-33
	Sharp	**LH5101**	* 2993
			1350-84
		LH5101-L3	* 2993
			1350-83
		LH5101-30	* 2993
			1350-40
		LH5101-45	* 2993
			1350-71
		LH5101S	* 2993
			1350-87
		LH5101SM	* 2993
			1350-88
		LH5101W	* 2993
			1350-85
	Systek	5101	4875-44
	TopazSemi	SD5101	905-48
5101DL3			
	GE/RCA	MWS5101DL3	1350-53
5101EL2			
	GE/RCA	MWS5101EL2	1350-29
5101EL3			
	GE/RCA	MWS5101EL3	1350-54
5102	**Harris**	**HA5102-2**	* 2706
			* 2737
			* 2747
			1174-38
		HA5102-5	* 2706
			* 2737
			* 2747
			1174-39
	Sharp	**LH5102**	* 2993
			1351-15
		LH5102-6	* 2993
			1351-12
		LH5102-8	* 2993
			1351-13
		LH5102W	* 2993
			1351-14
	Thomson	MK5102-5	1199-86
			¶ 432-20
5103	Thomson	MK5103-5	1199-87
			¶ 432-20
5104	Burr-Brown	PWR5104	1221-16
	GE/RCA	**CMM5104/1RZ**	
			* 2658
			1360-39
	Harris	**HA5104-2**	* 2706
			* 2737
			* 2747
			1184-7
		HA5104-5	* 2706
			* 2737
			* 2747
			1184-8
		HS5104RH	* 2717
			1184-43
	Marconi	**MA5104SOS**	* 2884
			1360-1
	OKI	MSM5104-2	1360-24
		MSM5104-3	1360-46
	Sharp	**LH5104-4**	* 2993
			1360-65
	WinSystems	MCM-5104	4875-55
5105	Burr-Brown	PWR5105	1221-17
	Signetics	NE5105A	656-146
		SA5105A	656-147
		SE5105A	656-148
5106	**EG&G-Reticon**		
		RD5106	* 2590
			1219-49

Base Number	Source	Device	Page-Line
5107	**EG&G-Reticon**		
		RD5107	* 2590
			1219-50
5108	**EG&G-Reticon**		
		RD5108	* 2590
			1219-48
	GE/Intersil	**IH5108C**	* 2681
			914-7
		IH5108M	* 2681
			914-6
	NEC	MC5108B	1104-127
511	**Burr-Brown**	**OPA511**	* 2536
			1130-53
		OPA511AM	* 2536
			1166-14
	GE/RCA	**GP511AD**	* 2658
			862-6
	Gennum	LD511	1103-77
			1116-19
			¶ 431-16
	Sharp	SM511	815-11
			862-39
5110	GE/Intersil	IH5110	1228-9
	TI	TSP5110A	1123-18
51100	**HoneywellSPT**		
		HDAM51100	* 2997
			944-10
511000	Hitachi	HM511000-10	1344-14
		HM511000-12	1344-30
		HM511000-15	1344-48
	Motorola	MCM511000-10	
			1344-76
		MCM511000-12	
			1345-8
		MCM511000-85	
			1344-66
	Siemens	HYB511000-10	1344-79
		HYB511000-12	1345-11
	Toshiba	**TC511000-10**	
			* 3302
			1344-25
		TC511000-12	
			* 3302
			1344-40
		TC511000-85	
			* 3302
			1344-68
511001	Hitachi	HM511001-10	1344-15
		HM511001-12	1344-31
		HM511001-15	1344-49
	Motorola	MCM511001-10	
			1344-77
		MCM511001-12	
			1345-9
		MCM511001-85	
			1344-67
	Toshiba	TC511001-10	1344-26
		TC511001-12	1344-41
		TC511001-85	1344-69
511002	Hitachi	HM511002-10	1344-16
		HM511002-12	1344-32
		HM511002-15	1344-50
	Motorola	MCM511002-10	
			1344-78
		MCM511002-12	
			1345-10
	Siemens	HYB511002-10	1344-80
		HYB511002-12	1345-12
	Toshiba	TC511002-10	1344-27
		TC511002-12	1344-42
		TC511002-85	1344-70
5111	GE/Intersil	IH5111	1228-10
	Harris	**HA5111**	* 2737
			* 2747
			* 2759
			1156-18
5112	GE/Intersil	IH5112	1228-11
	Harris	**HA5112**	* 2706
			* 2737
			* 2747
			1135-82
		HA5112-2	* 2706
			* 2737
			* 2747
			1174-40

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5112	**Harris**		**(Cont'd)**
		HA5112-5	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1174-41
	Sanyo	LA5112	1125-85
5113	GE/Intersil	IH5113	1228-12
5114	GE/Intersil	IH5114	1228-13
	GE/RCA	**CMM5114/1RZ**	
			⋆ **2658**
			1353-54
		MWS5114-1	⋆ **2643**
			1353-55
		MWS5114-2	⋆ **2643**
			1353-49
		MWS5114-3	⋆ **2643**
			1353-32
	Harris	**HA5114**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1135-83
		HA5114-2	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1184-9
		HA5114-5	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1184-10
	Marconi	**MA5114SOS**	⋆ **2885**
			1353-7
	OKI	MSM5114	1353-77
		MSM5114-2	1353-35
		MSM5114-3	1353-59
	Sharp	**LH5114-4**	⋆ **2993**
			1353-78
		LH5114H-15	⋆ **2993**
			1353-29
		LH5114L	⋆ **2993**
			1353-93
5115	GE/Intersil	IH5115	1228-14
	Sharp	**LH5115-55**	⋆ **2993**
			1356-39
		LH5115-70	⋆ **2993**
			1356-81
5116	Fairchild	5116	1192-146
	National	TP5116A	1193-3
	SGS	M5116	1193-6
	Sharp	**LH5116-15**	⋆ **2993**
			1358-20
		LH5116-20	⋆ **2993**
			1358-58
	Thomson	MK5116	1193-8
5117	National	TP5117A	1193-4
	Sharp	**LH5117-15**	⋆ **2993**
			1358-21
		LH5117-20	⋆ **2993**
			1358-59
5118	**Sharp**	**LH5118-15**	⋆ **2993**
			1358-22
		LH5118-20	⋆ **2993**
			1358-60
	Signetics	NE5118	944-26
		SE5118	944-27
5119	Signetics	NE5119	943-20
		SE5119	943-21
512	**Burr-Brown**	**OPA512**	⋆ **2536**
			1130-39
		OPA512BM	⋆ **2536**
			1162-34
		OPA512SM	⋆ **2536**
			1156-6
	CharlesRiver		
		CM512	4892-31
		VCM512	4890-40
		VEM512	4890-21
	Cybernetic	CY512	885-87
			1003-36
	Dionics	DI512BR	978-98
	EG&G-Reticon		
		RL512SAF	1222-41
	Gennum	LD512	1102-37
			¶ 431-8
	Imaging	IP512	4859-18
			4866-29
	Matrox	MIP512	4858-41

(Continued)

Base Number	Source	Device	Page-Line
512	Matrox		(Cont'd)
		PIP512	4848-35
	Onset	RAM512	4846-20
	PlesseyMicro		
		PME	
		DB512EA	4890-19
		PME	
		DB512EP	4890-20
		PME512S	4889-12
	Plessey	PMEDB512EA	4890-41
		PMEDB512EP	4890-44
		PME512EP	4890-43
		PSM512A	4863-4
		PSM512DA	4863-2
		PSM512P	4863-3
	SMS	OMTI512	4851-18
	Sharp	SM512	815-12
	VTC	**VC512J**	⋆ **3373**
			645-64
		VC512S	⋆ **3373**
			645-65
512K8	PEP-Modular		
		512K8	4852-19
512X16	**Dense-Pac**	**DPV512X16B**	⋆ **2582**
			1335-52
512X8	**Dense-Pac**	**DPE512X8V**	⋆ **2583**
			1315-23
		DPS512X8V	⋆ **2583**
			1388-2
		DPV512X8	⋆ **2582**
			1335-50
		DPV512X8V	⋆ **2582**
			⋆ **2584**
			1335-49
5120	**Intech**	**ADC5120**	⋆ **2799**
			919-48
	MicroNet	MN5120	919-51
		MN5120H	919-52
	NEC	MC5120	1104-128
	S-MOS	**SLA5120**	⋆ **4305**
			4059-34
	SGS	LS5120	1229-95
51200	**HoneywellSPT**		
		HDAM51200	⋆ **2997**
			948-18
	Samsung	KS51200	813-25
			863-53
5121	MicroNet	MN5121	920-1
		MN5121H	920-2
	Motorola	MWA5121	1104-39
	NEC	MC5121	1104-129
51210	HoneywellSPT		
		HDAM51210	948-19
51216	Dense-Pac	DPV51216	1335-53
5122	Dense-Pac	DPS5122	1387-81
			1388-15
		DP5122	⋆ **2579**
			1387-80
			1388-17
	MicroNet	MN5122	920-3
		MN5122H	920-4
5123	MicroNet	MN5123	920-5
		MN5123H	920-6
5124	**Dense-Pac**	**DPD5124**	⋆ **2581**
			1343-63
		DPO5124	⋆ **2581**
			1343-70
		DPS5124	⋆ **2580**
			1387-61
			1388-1
		DPV5124	1341-70
51240	**Dense-Pac**	**DPD51240**	⋆ **2581**
			1344-8
5125	**Dense-Pac**	**DPS5125**	⋆ **2580**
			1387-63
			1388-8
51256	Hitachi	HM51256L-10	1340-6
		HM51256L-12	1340-37
		HM51256L-15	1340-77
	Hyundai	**HY51256-10**	⋆ **2770**
			1340-10
		HY51256-12	⋆ **2770**
			1340-41
		HY51256-15	⋆ **2770**
			1340-81

(Continued)

Base Number	Source	Device	Page-Line
51256	**Hyundai**		**(Cont'd)**
		HY51256-20	⋆ **2770**
			1341-13
51258	Hitachi	HM51258-12	1340-38
		HM51258-15	1340-78
5126	OKI	MSM5126-20	1358-53
		MSM5126-25	1358-80
51268	Hitachi	HM51268-10	1340-7
5127	**Harris**	**HA5127**	⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			1132-113
			1141-48
		HA5127A	⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			1132-61
			1138-48
5128	Dense-Pac	DPV5128	1335-51
	OKI	MSM5128	1358-54
		MSM5128-12	1357-87
		MSM5128-15	1358-33
		MSM5128-20	1358-55
5129	OKI	MSM5129-15	1358-17
		MSM5129-20	1358-56
513	Dionics	DI513BR	978-99
5130	**GE/RCA**	**CA5130**	⋆ **2646**
			1180-31
		CA5130A	⋆ **2646**
			1175-49
	Harris	**HA5130**	⋆ **2737**
			⋆ **2747**
			1132-62
	Intech	**ADC5130**	⋆ **2799**
			919-49
	MicroNet	MN5130	919-27
		MN5130H	919-28
5131	HybridSys	HS5131B	924-3
		HS5131C	924-4
	MicroNet	MN5131	919-29
		MN5131H	919-30
5132	MicroNet	MN5132	919-31
		MN5132H	919-32
5133	MicroNet	MN5133	919-33
		MN5133H	919-34
5134	**Harris**	**HA5134**	⋆ **2737**
			⋆ **2747**
			⋆ **2757**
			1132-116
			1182-29
		HA5134A	⋆ **2737**
			⋆ **2747**
			⋆ **2757**
			1132-111
			1182-25
5135	**Harris**	**HA5135-2**	⋆ **2706**
			1138-13
		HA5135-5	⋆ **2706**
			1132-112
			1138-14
5137	**Harris**	**HA5137**	⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			1132-114
			1135-84
			1142-8
		HA5137A	⋆ **2737**
			⋆ **2747**
			⋆ **2768**
			1132-63
			1139-6
514	Dionics	DI514BR	978-100
	GE/RCA	**GP514**	⋆ **2658**
			862-1
		GP514AD	⋆ **2658**
			861-135
	TI	TL514C	1111-49
		TL514M	1111-23
5140	Dionics	DI5140	980-48
	GE/Intersil	**IH5140C**	⋆ **2679**
			902-40
		IH5140M	⋆ **2679**
			902-34
	GoldStar	**GCL5140**	⋆ **4242**
			4048-3
		LL5140	4048-4

(Continued)

Base Number	Source	Device	Page-Line
5140			(Cont'd)
	Intech	**ADC5140**	⋆ **2799**
			919-50
	Laserpath	LP5140A	4052-7
	LSI Logic	LL5140	4052-40
	Maxim	IH5140C	902-44
		IH5140M	902-37
	MicroNet	MN5140	919-17
		MN5140H	919-18
	Siliconix	DG5140A	902-32
51400	**GE/RCA**	**PA51400**	⋆ **2659**
			4059-19
	HoneywellSPT		
		HDAC51400	⋆ **2997**
			950-14
5141	**GE/Intersil**	**IH5141C**	⋆ **2680**
			903-14
		IH5141M	⋆ **2680**
			902-80
	Harris	**HA5141**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2756**
			⋆ **2768**
			1133-10
			1134-63
			1162-42
	Maxim	IH5141C	903-19
		IH5141M	902-38
	MicroNet	MN5141	919-19
		MN5141H	919-20
	Motorola	MHW5141A	1124-1
	Siliconix	DG5141A	902-72
5142	**GE/Intersil**	**IH5142C**	⋆ **2680**
			906-52
		IH5142M	⋆ **2680**
			906-32
	Harris	**HA5142**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2756**
			⋆ **2768**
			1133-11
			1134-81
			1178-37
	Maxim	IH5142C	906-55
		IH5142M	906-45
	MicroNet	MN5142	919-21
		MN5142H	919-22
	Motorola	MHW5142A	1124-2
	Siliconix	DG5142A	906-28
514256	Hitachi	HM514256-10	1341-47
		HM514256-12	1341-77
		HM514256-15	1342-21
	Motorola	MCM514256-10	
			1341-53
	Toshiba	TC514256-10	1341-62
		TC514256-12	1342-12
		TC514256-85	1341-45
514258	Toshiba	TC514258-10	1341-61
		TC514258-12	1342-10
51426	Motorola	MCM51426-12	1342-2
51428	Motorola	MCM51428-10	1341-54
		MCM51428-12	1342-3
5143	**GE/Intersil**	**IH5143C**	⋆ **2680**
			907-64
		IH5143M	⋆ **2680**
			907-39
	Maxim	IH5143C	907-67
		IH5143M	907-52
	MicroNet	MN5143	919-23
		MN5143H	919-24
	Siliconix	DG5143A	907-62
5144	**GE/Intersil**	**IH5144C**	⋆ **2680**
			908-59
		IH5144M	⋆ **2680**
			908-60
	Harris	**HA5144**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2756**
			⋆ **2768**
			1133-12
			1135-2
			1187-1
	Maxim	IH5144C	908-63

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5144	Maxim		(Cont'd)
		IH5144M	908-64
	Siliconix	DG5144A	908-55
5145	**GE/Intersil**	**IH5145C**	⋆ **2680**
			909-4
		IH5145M	⋆ **2680**
			908-84
	Maxim	IH5145C	909-7
		IH5145M	908-97
	Siliconix	DG5145A	908-78
51464	Hyundai	HY51464-12	1338-61
		HY51464-15	1338-84
5147	**Harris**	**HA5147**	⋆ **2737**
			⋆ **2747**
			⋆ **2759**
			⋆ **2768**
			1132-115
			1136-20
			1142-10
		HA5147-2	⋆ **2737**
			⋆ **2747**
			⋆ **2759**
			⋆ **2768**
			1169-25
		HA5147-5	⋆ **2737**
			⋆ **2747**
			⋆ **2759**
			⋆ **2768**
			1169-26
		HA5147A	⋆ **2737**
			⋆ **2747**
			⋆ **2759**
			⋆ **2768**
			1132-64
			1139-7
		HA5147A-2	⋆ **2737**
			⋆ **2747**
			⋆ **2759**
			⋆ **2768**
			1169-23
		HA5147A-5	⋆ **2737**
			⋆ **2747**
			⋆ **2759**
			⋆ **2768**
			1169-24
5148	**GE/Intersil**	**IH5148**	⋆ **2679**
			902-66
5149	**GE/Intersil**	**IH5149**	⋆ **2680**
			907-21
515	AD	AD515J	1132-15
			1154-22
		AD515K	1132-8
			1147-48
		AD515L	1132-2
			1147-47
	Barvon	BC515	4042-12
			4042-13
	Burr-Brown	**AD515J**	⋆ **2533**
			1144-41
		AD515K	⋆ **2533**
			1144-40
		AD515L	⋆ **2533**
			1144-39
	Datel	**ADC515MC**	⋆ **2575**
			926-1
		ADC515MM	⋆ **2574**
			926-2
	GE/RCA	**GP515**	⋆ **2658**
			862-2
		GP515AD	⋆ **2658**
			862-8
	Zendex	ZX515	4860-51
5150	**CMD ASIC**	**C5150**	⋆ **4215**
			4043-26
	GE/Intersil	**IH5150**	⋆ **2680**
			906-9
	HybridSys	HS5150B	919-25
		HS5150C	919-26
	MicroNet	MN5150	919-35
	Signetics	**NE5150**	⋆ **3115**
			941-7
51500	CMD Micro	G51500B	4049-1

Base Number	Source	Device	Page-Line
5151	Fairchild	5151	1192-147
	GE/Intersil	**IH5151**	⋆ **2680**
			907-22
	Harris	**HA5151**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2755**
			⋆ **2768**
			1133-18
			1134-64
			1134-74
		HA5151-2	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2755**
			⋆ **2768**
			1153-39
		HA5151-5	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2755**
			⋆ **2768**
			1156-15
	Signetics	**NE5151**	⋆ **3115**
			941-6
	Thomson	MK5151	1193-9
5152	**Harris**	**HA5152**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2755**
			⋆ **2768**
			1133-19
			1134-82
		HA5152-2	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2755**
			⋆ **2768**
			1174-37
		HA5152-5	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2755**
			⋆ **2768**
			1175-38
	Signetics	**NE5152**	⋆ **3115**
			940-2
5154	**Harris**	**HA5154**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			⋆ **2755**
			⋆ **2768**
			1133-20
			1135-3
			1184-42
51551	Mitsubishi	M51551	911-49
5156	Fairchild	5156	1192-35
	National	TP5156A	1192-40
	NEC	MC5156	1104-130
	SGS	M5156	1192-41
	Thomson	MK5156	1192-42
5157	Motorola	MWA5157	1104-40
	NEC	MC5157	1104-131
516	**GE/RCA**	**GP516**	⋆ **2658**
			861-136
	Harris	**HI516-2**	⋆ **2703**
			⋆ **2738**
			⋆ **2748**
			⋆ **2768**
			915-55
		HI516-5	⋆ **2703**
			⋆ **2738**
			⋆ **2748**
			⋆ **2768**
			915-56
5160	**GE/RCA**	**CA5160**	⋆ **2646**
			1180-30
		CA5160A	⋆ **2646**
			1175-50
	Harris	**HA5160**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1131-58
			1132-41
			1136-12

(Continued)

Base Number	Source	Device	Page-Line
5160	**Harris**		(Cont'd)
		HA5160-2	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1154-38
		HA5160-5	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1154-40
51600	**HoneywellSPT**		
		HDAC51600	⋆ **2997**
			946-31
5162	Harris	HA5162	1131-59
			1136-13
		HA5162-5	1167-37
5165	OKI	MSM5165-10	1368-46
		MSM5165-15	1369-56
51664	EDI	51664-30MHR	1314-46
		51664-35MHR	1314-47
5167	GE/RCA	CDM5167-55	1371-53
		CDM5167-70	1371-79
	Sharp	**LH5167-55**	⋆ **2993**
			1371-51
		LH5167-70	⋆ **2993**
			1371-86
517	AD	AD517J	1142-40
		AD517K	1132-91
			1139-22
		AD517L	1132-21
			1138-3
		AD517S	1132-92
			1139-23
	GE/RCA	**GP517**	⋆ **2658**
			862-5
			¶ 451-23
		GP517AD	⋆ **2658**
			862-4
			¶ 451-23
	Intel	iSBC517	4853-3
5170	**Harris**	**HA5170**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1132-42
		HA5170-2	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1144-21
		HA5170-5	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1144-22
	LSI Logic	LL5170	4052-44
	Signetics	NE5170	986-15
	Thomson	MK5170	1193-64
	Unitrode	**UC5170**	⋆ **3327**
			986-17
5171	Motorola	MHW5171A	1124-7
	Samsung	KS5171	1119-35
5172	Motorola	MHW5172A	1124-8
5175	Thomson	MK5175	1194-48
5176	Thomson	MK5176	1194-61
5177	Thomson	MK5177	1194-62
518	AD	AD518J	1163-28
		AD518K	1157-3
		AD518S	1157-4
	Harris	**HI518-2**	⋆ **2703**
			⋆ **2738**
			⋆ **2749**
			⋆ **2768**
			914-64
		HI518-5	⋆ **2703**
			⋆ **2738**
			⋆ **2749**
			⋆ **2768**
			914-65
5180	Dionics	DI5180	980-49
	Harris	**HA5180**	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1132-13
		HA5180-2	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1154-23

(Continued)

Base Number	Source	Device	Page-Line
5180	**Harris**		(Cont'd)
		HA5180-5	⋆ **2706**
			⋆ **2737**
			⋆ **2747**
			1154-24
	Signetics	NE5180	991-5
	Unitrode	**UC5180**	⋆ **3327**
			993-18
5181	Motorola	MHW5181A	1124-13
	Signetics	NE5181	991-6
	Unitrode	**UC5181**	⋆ **3327**
			993-19
5182	Motorola	MHW5182A	1124-14
51832	Toshiba	TC51832-12	1380-25
		TC51832-15	1380-58
51849	Mitsubishi	M51849	1201-7
5185	Motorola	MHW5185	1124-28
5189	Samsung	KS5189	1119-101
519	Intel	iSBC519	4853-6
5190	Elantec	EHA-5190-2	1161-41
		EHA5190	⋆ **2594**
			1136-21
	Harris	**HA5190**	⋆ **2707**
			⋆ **2737**
			⋆ **2747**
			1131-48
			1136-24
			1161-40
	Interphase	WNC5190	4857-8
5192	NEC	MC5192	1104-132
51934	Micropac	51934	1104-19
5194	Samsung	KS5194	1119-102
5195	Elantec	EHA-5195	1163-36
		EHA5195	⋆ **2594**
			1136-22
	Harris	HA5195	1131-49
			1136-25
			1163-37
5198	Samsung	KS5198	1119-97
5199	Samsung	KS5199A	1119-98
51998	Micropac	51998	988-20
52	AdvMicroSys		
		BAS52	4821-39
	Amperex	BGY52	1123-92
	Burr-Brown	**VFC52**	⋆ **2542**
			1230-87
		VFC52M	⋆ **2542**
			1230-88
52B13	SEEQ	M52B13-250	1310-65
		M52B13-300	1310-78
		M52B13-350	1311-28
		M52B13H-250	1310-66
		M52B13H-300	1310-79
		M52B13H-350	1311-29
		52B13-200	⋆ **2991**
			1310-27
			¶ 445-11
			¶ 445-8
		52B13-250	⋆ **2991**
			1310-53
			¶ 445-11
			¶ 445-8
		52B13-350	⋆ **2991**
			1311-19
			¶ 445-11
			¶ 445-8
		52B13H-200	⋆ **2991**
			1310-28
			¶ 445-11
			¶ 445-8
		52B13H-250	⋆ **2991**
			1310-54
			¶ 445-11
			¶ 445-8
		52B13H-350	⋆ **2991**
			1311-22
			¶ 445-11
			¶ 445-8
52B33	SEEQ	M52B33-300	1312-67
		M52B33H-300	1312-78
		52B33-200	⋆ **2991**
			1312-36
			¶ 444-34
			¶ 445-11

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
52B33	**SEEQ**		**(Cont'd)**
		52B33-250	⋆ **2991**
			1312-62
			¶ 444-34
			¶ 445-11
		52B33-3	⋆ **2991**
			1312-73
			¶ 444-34
			¶ 445-11
		52B33-300	⋆ **2991**
			1312-74
			¶ 444-34
			¶ 445-11
		52B33-350	⋆ **2991**
			1313-23
			¶ 444-34
			¶ 445-11
		52B33H-200	⋆ **2991**
			1312-33
			¶ 444-34
			¶ 445-11
		52B33H-250	⋆ **2991**
			1312-56
			¶ 444-34
			¶ 445-11
		52B33H-300	⋆ **2991**
			1312-76
			¶ 444-34
			¶ 445-11
52C50	SMC	COM52C50	882-17
520	Barvon	BC520	4042-17
			4042-18
			4042-7
	Cirrus	CLGD520	882-57
	Datel	**ADC520MC**	⋆ **2575**
			928-33
		ADC520MM	⋆ **2574**
			928-34
	LogicDev	LPR520	646-57
		LPR520C	637-16
		LPR520M	637-17
	Sharp	SM520	815-13
			862-29
	Siliconix	SI520	921-14
			1220-100
			¶ 423-18
	Telefunken	TBA520	1124-82
5200	**CMD ASIC**	**C5200**	⋆ **4215**
			4043-28
	GE/Intersil	IH5200	903-8
		IH5200C	903-30
		IM5200	4079-18
	Intech	ADC5200	928-14
	MicroNet	MN5200	933-1
		MN5200H	933-2
	Plessey	CLA5200	4058-20
	SMS	OMTI5200	4893-6
	Siemens	SDA5200	644-136
	TopazSemi	SD5200	905-50
52000	CMD Micro	G52000B	4049-2
	Samsung	KS52000	813-26
			863-54
5201	AD	AD5201B	932-36
		AD5201T	932-37
	GE/Intersil	IH5201C	904-47
		IH5201M	904-37
	Intech	ADC5201	928-15
	MicroNet	MN5201	933-3
		MN5201H	933-4
5202	AD	AD5202B	932-38
		AD5202T	932-39
	Intech	ADC5202	928-16
	MicroNet	MN5202	933-5
		MN5202H	933-6
5203	Intech	ADC5203	928-17
	MicroNet	MN5203	932-43
		MN5203H	932-44
5204	AD	AD5204B	935-7
		AD5204T	932-40
	Intech	ADC5204	928-18
	MicroNet	MN5204	932-45
		MN5204H	932-46
			(Continued)

Base Number	Source	Device	Page-Line
5204			(Cont'd)
	OKI	MSM5204	924-41
	Samsung	KS5204	1119-36
	Signetics	NE5204	1137-6
52046	Micropac	52046	1103-48
5205	AD	AD5205B	932-41
		AD5205T	932-42
	Intech	ADC5205	928-19
	MicroNet	MN5205	932-47
		MN5205H	932-48
	OKI	MSM5205	1123-5
	Samsung	KS5205	1119-37
	Signetics	**NE5205**	⋆ **3086**
			1104-104
52051	Micropac	52051-012	1205-93
		52051-015	1206-122
		52051-018	1207-121
		52051-024	1208-98
		52051-030	1209-42
52052	Micropac	52052-012	1210-116
		52052-015	1211-79
		52052-018	1212-27
		52052-024	1212-79
		52052-030	1212-99
52053	Micropac	52053-012	1206-79
		52053-015	1207-97
		52053-018	1208-53
		52053-024	1209-32
		52053-030	1209-44
52054	Micropac	52054-012	1211-55
		52054-015	1212-23
		52054-018	1212-53
		52054-024	1212-96
		52054-030	1212-102
5206	Intech	ADC5206	928-20
	MicroNet	MN5206	933-7
		MN5206H	933-8
	Samsung	KS5206	1119-38
52063	Micropac	52063	1156-22
52065	Micropac	52065	1227-18
5207	Intech	ADC5207	928-21
	Samsung	KS5207	1119-39
5208	**GE/Intersil**	**IH5208C**	⋆ **2681**
			912-57
		IH5208M	⋆ **2681**
			912-56
52098	Micropac	52098	1227-19
521	AD	AD521J	1102-99
		AD521K	1102-100
		AD521L	1102-101
		AD521S	1102-102
	LogicDev	LPR521	646-58
		LPR521C	637-18
		LPR521M	637-19
	Plessey	SL521	1105-1
			¶ 430-27
	Sanyo	STK521	1205-121
	Signetics	**NE521**	⋆ **3122**
			1113-8
		SE521	1113-9
5210	Datel	ADC5210	930-40
		ADC5210H	930-41
	HybridSys	HS5210B	936-17
		HS5210C	936-18
	Intech	ADC5210	927-50
	MicroNet	MN5210	931-4
		MN5210H	931-5
	S-MOS	**SLA5210**	⋆ **4305**
			4059-37
	TeledyneP	TP5210	931-12
52101	Micropac	52101	1225-40
52106	Micropac	52106	1156-23
5211	AD	AD5211B	931-27
		AD5211T	931-28
	Datel	**ADC5211**	⋆ **2575**
			930-42
		ADC5211H	⋆ **2574**
			930-43
	HybridSys	HS5211B	936-19
		HS5211C	936-20
	Intech	**ADC5211**	⋆ **2799**
			927-49
	MicroNet	MN5211	931-6
		MN5211H	931-7
	TeledyneP	TP5211	931-13
		TP5211-HR	931-14

Base Number	Source	Device	Page-Line
52116	National	MM52116	1389-46
		MM52116FDW	1302-6
		MM52116FDX	1302-14
5212	AD	AD5212B	931-29
		AD5212T	931-30
	Datel	**ADC5212**	⋆ **2575**
			930-44
		ADC5212H	⋆ **2574**
			931-1
	HybridSys	HS5212B	936-21
		HS5212C	936-22
	Intech	**ADC5212**	⋆ **2799**
			930-26
	MicroNet	MN5212	931-8
		MN5212H	931-9
	Signetics	**NE5212**	⋆ **3092**
			1137-3
		SA5212	1137-4
		SE5212	1137-5
	TeledyneP	TP5212	931-15
		TP5212-HR	931-16
5213	Datel	ADC5213	930-27
		ADC5213H	930-28
	HybridSys	HS5213B	936-23
		HS5213C	936-24
	Intech	ADC5213	928-1
	MicroNet	MN5213	930-33
		MN5213H	930-34
	TeledyneP	TP5213	931-17
		TP5213-HR	931-18
52132	National	MM52132	1389-97
5214	AD	AD5214B	931-31
		AD5214T	931-32
	Datel	**ADC5214**	⋆ **2575**
			930-29
		ADC5214H	⋆ **2574**
			930-30
	HybridSys	HS5214B	936-25
		HS5214C	936-26
	Intech	ADC5214	928-2
	MicroNet	MN5214	930-35
		MN5214H	930-36
	Qualogy	MC5214	4827-31
			4858-31
	TeledyneP	TP5214	931-19
		TP5214-HR	931-20
5215	AD	AD5215B	931-33
		AD5215T	931-34
	Datel	**ADC5215**	⋆ **2575**
			930-31
		ADC5215H	⋆ **2574**
			930-32
	HybridSys	HS5215B	936-27
		HS5215C	936-28
	Intech	ADC5215	928-3
	MicroNet	MN5215	930-37
		MN5215H	930-38
	TeledyneP	TP5215	931-21
		TP5215-HR	931-22
5216	**Datel**	**ADC5216**	⋆ **2575**
			931-2
		ADC5216H	⋆ **2574**
			931-3
	HybridSys	HS5216B	936-29
		HS5216C	936-30
	Intech	ADC5216	928-4
	MicroNet	MN5216	931-10
		MN5216H	931-11
	TeledyneP	TP5216	931-23
		TP5216-HR	931-24
52160	**HoneywellSPT**		
		HDAC52160	⋆ **2997**
			973-12
52164	National	MM52164	1390-92
5217	Intech	ADC5217	928-5
	Qualogy	MC5217B	4827-32
			4858-32
	TeledyneP	TP5217	931-25
		TP5217-HR	931-26
5218	OKI	MSM5218	1122-110
5219	OKI	MSM5219	980-74
		M5219B	978-12
522	AD	AD522A	1102-103
			1144-42
		AD522B	1102-104
			1143-26
			(Continued)

Base Number	Source	Device	Page-Line
522	AD		(Cont'd)
		AD522S	1102-105
			1143-27
	Marconi	MA522	1194-31
	Sanyo	STK522	1208-15
	Signetics	**NE522**	⋆ **3123**
			1113-10
		SE522	1113-11
5220	**GoldStar**	**GCL5220**	⋆ **4242**
			4048-13
		LL5220	4048-14
	Laserpath	LP5220A	4052-10
	LSI Logic	LL5220	4053-1
	TI	TSP5220C	1123-19
52200	**GE/RCA**	**PA52200**	⋆ **2659**
			4059-20
5221	OKI	M5221	978-13
5222	Motorola	MHW5222	1124-18
52256	**Sharp**	**LH52256-55**	⋆ **2993**
			⋆ **2995**
			1379-7
		LH52256-70	⋆ **2993**
			⋆ **2995**
			1379-32
		LH52256-90	⋆ **2993**
			⋆ **2995**
			1379-55
5229	NEC	MC5229	1104-133
523	Plessey	SL523	1105-2
	Sanyo	STK523	1208-121
5230	**Signetics**	**NE5230**	⋆ **3089**
			1157-5
		SA5230	1157-6
		TDA5230	1125-66
5233	Sprague	SCL5233	1118-107
			1119-70
5238	OKI	MSM5238	981-49
		M5238	978-6
	Sprague	SCL5238	1119-71
524	AD	AD524A	1144-16
		AD524B	1141-4
		AD524C	1139-30
		AD524S	1141-16
	Harris	**HI524-2**	⋆ **2703**
			⋆ **2738**
			⋆ **2749**
			⋆ **2768**
			913-5
		HI524-5	⋆ **2703**
			⋆ **2738**
			⋆ **2749**
			⋆ **2768**
			913-6
	HoneywellSPT		
		HINA524	⋆ **2998**
			1102-91
5240	AD	AD5240K	929-31
		AD5240S	929-32
		AD5240ZK	929-33
		AD5240ZS	929-34
	Dionics	DI5240	980-50
	MicroNet	MN5240	926-20
	Signetics	NE5240	1116-112
	Siliconix	DG5240A	902-33
5241	Siliconix	DG5241A	902-73
5242	Siliconix	DG5242A	906-29
5243	Siliconix	DG5243A	907-63
5244	Siliconix	DG5244A	908-56
5245	**Intech**	**ADC5245**	⋆ **2799**
			928-44
	MicroNet	MN5245A	928-39
	Siliconix	DG5245A	908-79
5246	**Intech**	**ADC5246**	⋆ **2799**
			928-43
	MicroNet	MN5246	928-38
5247	MicroNet	MN5247	928-31
5248	OKI	MSM5248	1123-6
5249	OKI	MSM5249	1193-83
525	Cybernetic	CY525	1003-37
			1228-131
	Marconi	MA525	1194-2
	Sharp	SM525	815-14
5250	**CMD ASIC**	**C5250**	⋆ **4215**
			4043-29
	HybridSys	HS5250B	935-10
		HS5250C	933-9
			(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5250			(Cont'd)
	MicroNet	MN5250	933-13
		MN5250H	933-14
5251	HybridSys	HS5251B	935-11
		HS5251C	933-10
	MicroNet	MN5251	933-15
		MN5251H	933-16
5252	HybridSys	HS5252B	935-12
		HS5252C	933-11
	MicroNet	MN5252	933-17
		MN5252H	933-18
5253	HybridSys	HS5253B	935-13
		HS5253C	933-12
	MicroNet	MN5253	933-19
		MN5253H	933-20
525608S1			
	Mitsubishi	M525608S1N-10	1387-68
		M525608S1N-12	1387-70
5257	National	MM5257	1360-72
		MM5257-25	1360-34
		MM5257-25L	1360-35
		MM5257-3	1360-54
		MM5257-3L	1360-55
		MM5257L	1360-73
5259	OKI	M5259	978-10
526	**AD**	**AD526**	⋆ **2443**
			1143-28
	Siliconix	DG526A	915-48
			¶ 405-35
5260	**GE/RCA**	**CA5260**	⋆ **2646**
			1181-11
		CA5260A	⋆ **2646**
			1175-51
	MicroNet	MN5260	937-3
	OKI	M5260	978-19
5262	Marconi	MA5262	1194-6
5263	Marconi	MA5263	1194-7
5265	OKI	M5265	978-16
5268	**STI**	**STI5268**	⋆ **3211**
			982-5
527	**Signetics**	**NE527**	⋆ **3124**
			1110-41
		SE527	1110-14
	Siliconix	DG527A	914-56
			¶ 405-35
	Stantel-STC	TEL527	1194-16
5271	Marconi	MA5271	1193-106
5272	Marconi	MA5272	1193-124
	Motorola	MHW5272A	1124-21
5273	Marconi	MA5273	1193-125
5274	Marconi	MA5274	1193-126
5278	OKI	M5278	978-14
5278L05			
	Mitsubishi	M5278L05	1202-15
5278L10			
	Mitsubishi	M5278L10	1205-44
5278L12			
	Mitsubishi	M5278L12	1205-78
5279	OKI	M5279	978-17
528	Marconi	MA528	1194-44
	Siliconix	DG528A	914-57
			¶ 405-35
5280	Dionics	DI5280	980-51
	MicroNet	MN5280	938-21
	OKI	M5280	977-133
5282	MicroNet	MN5282	938-16
	OKI	M5282	977-134
5284	MicroNet	MN5284	938-8
	Sprague	SCL5284	1122-80
5285	Sprague	SCL5285	1122-81
529	**Signetics**	**NE529**	⋆ **3125**
			1110-42
		SE529	1110-15
	Siliconix	DG529A	913-8
			¶ 405-35
5290	**Intech**	**ADC5290**	⋆ **2799**
			937-37
	MicroNet	MN5290	938-2
	National	MM5290-1	1337-15
			¶ 446-21
		MM5290-2	1337-19
			¶ 446-21
		MM5290-3	1337-26
			¶ 446-21

(Continued)

Base Number	Source	Device	Page-Line
5290	National		(Cont'd)
		MM5290-4	1337-36
			¶ 446-21
5291	**Intech**	**ADC5291**	⋆ **2799**
			937-38
	MicroNet	MN5291	938-3
5298	OKI	M5298	978-15
52981	Marconi	52981	1194-33
5299	OKI	M5299	978-18
53	Amperex	BGY53	1123-93
	Burr-Brown	PCM53	1119-104
			¶ 420-14
		PCM53J-I	976-7
			¶ 420-14
		PCM53J-V	976-14
			¶ 420-14
		PCM53K-I	974-1
			¶ 420-14
		PCM53K-V	975-3
			¶ 420-14
	Chrislin	CI-V53	4881-10
	NCR	ADP53	4869-23
53C256	Vitelic	V53C256-10	1340-12
		V53C256-12	1340-46
		V53C256-70	1339-57
		V53C256-80	1339-60
		V53C256L-10	1340-13
		V53C256L-12	1340-47
		V53C256L-70	1339-58
		V53C256L-80	1339-61
53C258	Vitelic	V53C258-10	1340-14
		V53C258-12	1340-48
		V53C258-70	1339-59
		V53C258-80	1339-62
53C464	Vitelic	V53C464-10	1338-49
		V53C464-12	1338-65
		V53C464-70	1338-43
		V53C464-80	1338-45
53C466	Vitelic	V53C466-10	1338-50
		V53C466-12	1338-66
		V53C466-70	1338-44
		V53C466-80	1338-46
53C80	**Calmos**	**CA53C80**	⋆ **2553**
			873-32
			879-79
			880-9
			886-48
	LogicDev	L53C80-2	886-41
		L53C80-4	886-42
	Unicorn	UC53C80	886-49
	UMC	**UM53C80**	⋆ **3312**
			886-34
	Zilog	Z53C80-SCSI	878-74
53C81	NCR	NCR53C81	886-52
53DA1643			
	MMI	53DA1643	1322-87
53DA441			
	MMI	53DA441	1318-38
53DA442			
	MMI	53DA442	1318-39
53DA841			
	MMI	53DA841	1319-91
53D1641			
	MMI	53D1641	1322-88
53RA1681			
	MMI	53RA1681	1320-63
		53RA1681A	1320-47
53RA481			
	MMI	53RA481	1317-52
		53RA481A	1317-45
53RS1681			
	MMI	53RS1681	1320-64
		53RS1681A	1320-48
53RS881			
	MMI	53RS881	1318-100
		53RS881A	1318-96
53S080	MMI	53S080	1316-30
53S081	MMI	53S081	1316-36
53S140	MMI	53S140	1316-86
53S141	MMI	53S141	1316-87
		53S141A	1316-75
53S1641			
	MMI	53S1641	1323-27
		53S1641A	1323-16

Base Number	Source	Device	Page-Line
53S1681			
	MMI	53S1681	1322-39
		53S1681A	1322-4
53S240	MMI	53S240	1317-27
53S241	MMI	53S241	1317-30
		53S241A	1317-21
53S280	MMI	53S280	1317-2
53S281	MMI	53S281	1317-3
		53S281A	1316-99
53S3281			
	MMI	53S3281	1323-40
		53S3281A	1323-43
53S440	MMI	53S440	1318-69
53S441	MMI	53S441	1318-71
		53S441A	1318-65
53S480	MMI	53S480	1317-99
53S481	MMI	53S481	1317-100
		53S481A	1317-83
53S485	MMI	53S485	1318-3
53S6481			
	MMI	53S6481	1325-75
		53S6481A	1325-7
53S841	MMI	53S841	1320-15
		53S841A	1320-5
53S881	MMI	53S881	1319-49
		53S881A	1319-33
530	**Fujitsu**	**C530UHB**	⋆ **4229**
			⋆ **4233**
			4045-36
	Gennum	WE530	1103-89
			1116-32
		WV530	1103-91
			1116-34
	Marconi	MA530	1194-65
	MicroInds	mBLC530	4860-7
	SGS	L530	922-3
	Sharp	SM530	815-15
			862-40
	Signetics	NE530	1160-30
		SE530	1153-11
	SiliconSys	SSI530	883-52
	Telefunken	TBA530	1124-83
	Xycom	XVME530	4885-13
5300	Plessey	CLA5300	4058-22
	S-MOS	**SLA5300**	⋆ **4305**
			4059-39
	SMS	OMTI5300	4893-7
	Weitek	WTE5300	4861-18
53012	Sharp	LH53012	1392-42
5307	National	MM5307	691-2
			1009-29
531	Gennum	WS531	1103-90
			1116-33
	Marconi	MA531	1194-63
	Plessey	SL531C	1104-146
	Sanyo	STK531	1206-66
	Sharp	SM531	815-16
			862-35
	Signetics	NE531	1163-34
		SE531	1160-48
5310	Samsung	KS5310A	1119-82
		KS5310B	1119-83
		KS5310C	1119-84
53100	GE/RCA	CDM53100	1392-56
531000	OKI	MSM531000	1392-43
	Sharp	**LH531000**	⋆ **2994**
			1392-64
	Toshiba	**TC531000**	⋆ **3305**
			1392-50
53107	National	MM53107	633-92
			¶ 436-13
53108	National	MM53108	1119-28
5311	Samsung	KS5311A	1119-85
		KS5311B	1119-86
		KS5311C	1119-87
53110	National	MM53110	1119-63
53113	National	MM53113	1119-42
53124	National	MM53124	1119-43
53125	National	MM53125	1199-11
53127	Sharp	LH53127	1391-21
53128	**GE/RCA**	**CDM53128**	⋆ **2644**
			1391-15
	Sharp	LH53128	1391-51
53129	Sharp	LH53129	1391-52
		LH53129A	1391-50
5313	Samsung	KS5313	1119-88

Base Number	Source	Device	Page-Line
53130	National	MM53130	1199-12
5314	Samsung	KS5314	1119-89
53143	National	MM53143	1194-46
53144	National	MM53144	1193-78
5316	Crystal	CS5316	937-33
	Thomson	MK5316	1192-116
5317	Qualogy	MC5317	4827-33
			4858-30
53190	National	MM53190	1193-79
532	AD	AD532J	1223-31
		AD532K	1223-32
		AD532S	1223-33
	Plessey	SL532C	1104-147
	Sanyo	STK532	1208-50
	Signetics	NE532	1134-108
			1178-44
		SA532	1180-12
		SE532	1134-109
			1177-27
	TI	TLC532A	920-18
		TLC532M	920-19
5320	**Burr-Brown**	**SHC5320K**	⋆ **2543**
			1227-135
		SHC5320S	⋆ **2543**
			1227-136
	GoldStar	**GCL5320**	⋆ **4242**
			4048-19
		LL5320	4048-20
	Harris	**HA5320-2**	⋆ **2737**
			⋆ **2747**
			1228-18
		HA5320-5	⋆ **2737**
			⋆ **2747**
			1228-19
	Laserpath	LP5320A	4052-13
	LSI Logic	LL5320	4053-5
	STDMicro	5320	4819-23
	Thomson	MK5320	1192-117
53200	**GE/RCA**	**PA53200**	⋆ **2659**
			4059-21
532000	**Sharp**	**LH532000**	⋆ **2994**
			1392-77
	Toshiba	**TC532000-15**	
			⋆ **3305**
			1392-73
5321	STDMicro	5321	4819-26
532100	**Sharp**	**LH532100**	⋆ **2994**
			1392-76
53210100			
	Inventive	53210100	4860-9
5322	STDMicro	5322	4819-27
53226	National	MM53226	1122-47
5323	STDMicro	5323	4819-24
5324	STDMicro	5324	4819-25
53256	**GE/RCA**	**CDM53256**	⋆ **2644**
			1391-85
	OKI	MSM53256	1391-66
	Sharp	LH53256	1392-24
	Toshiba	TC53256	1380-64
53257	**Sharp**	**LH53257**	⋆ **2994**
			1391-92
	Toshiba	TC53257	1391-69
5326	Thomson	MK5326	1192-76
5327	STDMicro	5327	4819-28
5328	STDMicro	5328	4819-29
5329	STDMicro	5329	4819-30
533	AD	AD533J	1223-34
		AD533K	1223-35
		AD533L	1223-36
		AD533S	1223-37
	Sanyo	STK533	1209-29
	TI	TLC533A	920-44
		TLC533M	920-45
5330	**Harris**	**HA5330-2**	⋆ **2737**
			⋆ **2743**
			⋆ **2747**
			1228-20
		HA5330-5	⋆ **2737**
			⋆ **2743**
			⋆ **2747**
			1228-21
		HA5330/883	⋆ **2737**
			⋆ **2743**
			⋆ **2747**
			1228-22

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5331	Sprague	SCL5331-5	1127-74
		SCL5331-6	1127-75
5332	**GE/RCA**	**CDM5332**	⋆ **2644**
			1389-79
	Sharp	**LH5332**	⋆ **2994**
			1389-89
	Sprague	SCL5332	1127-76
5333	**GE/RCA**	**CDM5333**	⋆ **2644**
			1389-80
5334	Sprague	SCL5334	1127-77
534	AD	AD534J	1223-38
		AD534K	1223-39
		AD534L	1223-40
		AD534S	1223-41
		AD534T	1223-42
	Burr-Brown	**MPY534**	⋆ **2539**
			1223-15
	Comark	MS534	4857-9
	Intel	iSBC534	4853-1
	Sharp	SM534	815-17
	Signetics	SA534	1187-48
	Siliconix	DG534A	911-75
5340	Samsung	KS5340	1119-90
534000	**Sharp**	**LH534000**	⋆ **2994**
			1392-78
5341	**GE/Intersil**	**IH5341**	⋆ **2681**
			903-26
	Maxim	IH5341	903-20
	Sprague	SCL5341	1127-78
	TopazSemi	**CDG5341**	⋆ **3301**
			903-38
		CDG5341AK	⋆ **3301**
			902-1
		CDG5341BJ	⋆ **3301**
			902-2
		CDG5341BK	⋆ **3301**
			903-39
		CDG5341CJ	⋆ **3301**
			902-3
53413	National	MM53413	1193-80
5342	Motorola	MHW5342A	1124-24
53461	Hitachi	HM53461-10	1339-20
		HM53461-12	1339-24
		HM53461-15	1339-27
535	AD	AD535J	1221-34
		AD535K	1221-35
	Gennum	WC535	1103-88
			1116-31
			¶ 435-32
		WV535	1103-92
			1116-35
	Sharp	SM535	815-18
	Siliconix	DG535A	915-72
5350	Signetics	SAA5350	1198-98
53512	Sharp	LH53512	1392-40
5352	Maxim	IH5352	904-29
5356	Thomson	MK5356	1192-77
536	AD	AD536AJ	1227-96
		AD536AK	1227-97
		AD536AS	1227-98
	HybridSys	DG536	915-67
	Siliconix	DG536	915-73
			¶ 405-34
5362	GE/Intersil	IH5362	907-28
5364	**GE/RCA**	**CDM5364**	⋆ **2644**
			1390-12
5365	**GE/RCA**	**CDM5365**	⋆ **2644**
			1390-16
5366	Sharp	LH5366	1390-101
		LH5366A	1390-100
		LH5366S	1390-102
5367	**Sharp**	**LH5367**	⋆ **2994**
			1390-88
5368	National	MM5368	633-110
5369	National	MM5369	633-111
537	AD	AD537J	1230-49
		AD537K	1230-50
		AD537S	1230-51
5370	**GoldStar**	**GM5370**	⋆ **2701**
			1193-113
	Thomson	MK5370	1194-17
5371	**GoldStar**	**GM5371**	⋆ **2701**
			1193-114
	Thomson	MK5371	1194-18
5372	**GoldStar**	**GM5372**	⋆ **2701**
			1193-115

Base Number	Source	Device	Page-Line
53721	**Thomson**	**MK53721**	⋆ **3294**
			1194-19
5373	**GoldStar**	**GM5373**	⋆ **2701**
			1194-1
5374	Thomson	MK5374	1193-131
5375	**GoldStar**	**GM5375**	⋆ **2701**
			1193-123
	Thomson	MK5375	1193-132
5376	GoldStar	GL5376	1193-122
		GM5376	⋆ **2701**
			1194-30
	Thomson	MK5376	1193-133
53762	**Thomson**	**MK53762**	⋆ **3293**
			1194-20
538	AD	AD538	1223-43
	Signetics	NE538	1160-32
		SE538	1153-10
	Siliconix	DG538A	913-11
538C80	NCR	NCR538C80	886-53
5380	AMD	5380	886-69
	GoldStar	**GM5380**	⋆ **2701**
			1199-4
	LogicDev	L5380-2	886-43
		L5380-4	886-44
	NCR	NCR5380	886-54
	Samsung	KS5380	1119-91
	Thomson	MK5380	1199-37
			¶ 433-6
	Zilog	**Z5380-SCSI**	⋆ **3418**
			880-32
5381	NCR	NCR5381	886-55
5382	Motorola	MHW5382A	1124-26
5384	NEC	MC5384	1104-134
5385	NCR	NCR5385	886-56
		NCR5385E	886-57
	NEC	MC5385	1104-135
5386	NCR	NCR5386	886-58
		NCR5386S	886-59
	NEC	MC5386	1104-136
5387	National	MM5387	1119-29
5388	NEC	μPD5388	1119-32
5389	Thomson	MK5389	1199-38
539	AD	AD539J	1223-11
			¶ 431-10
		AD539K	1223-12
			¶ 431-10
		AD539S	1223-13
			¶ 431-10
	Harris	**HI539-2**	⋆ **2738**
			⋆ **2749**
			⋆ **2768**
			912-54
		HI539-5	⋆ **2738**
			⋆ **2749**
			⋆ **2768**
			912-55
	Micro-Link	STD539	4872-36
5390	Samsung	KS5390	1119-134
5393	National	MM5393	1193-81
5394	National	MM5394	1193-82
5395	National	MM5395	1199-13
5396	Sharp	LH5396	1390-104
		LH5396A	1390-103
		LH5396S	1390-105
54	Amperex	BGY54	1123-94
		BGY54A	1123-95
	Burr-Brown	PCM54	1119-105
		PCM54H	974-8
		PCM54J	974-9
		PCM54K	974-10
54pct521			
	Performance		
		p54pct521b	602-81
54ACT00			
	Fairchild	54ACT00	623-53
	GE/RCA	CD54ACT00	623-54
54ACT02			
	GE/RCA	CD54ACT02	625-108
54ACT04			
	Fairchild	54ACT04	607-145
	GE/RCA	CD54ACT04	607-146
54ACT05			
	GE/RCA	CD54ACT05	607-147
54ACT08			
	Fairchild	54ACT08	622-49
	GE/RCA	CD54ACT08	622-50

Base Number	Source	Device	Page-Line
54ACT10			
	GE/RCA	CD54ACT10	622-174
54ACT109			
	GE/RCA	CD54ACT109	620-144
54ACT11000			
	TI	SN54ACT11000	623-56
54ACT11002			
	TI	SN54ACT11002	625-110
54ACT11030			
	TI	SN54ACT11030	623-139
54ACT11032			
	TI	SN54ACT11032	624-124
54ACT11074			
	TI	SN54ACT11074	617-67
54ACT11109			
	TI	SN54ACT11109	620-146
54ACT11138			
	TI	SN54ACT11138	631-170
54ACT112			
	GE/RCA	CD54ACT112	621-67
54ACT11240			
	TI	SN54ACT11240	639-14
54ACT11244			
	TI	SN54ACT11244	639-105
54ACT11245			
	TI	SN54ACT11245	641-107
54ACT11299			
	TI	SN54ACT11299	635-145
54ACT11373			
	TI	SN54ACT11373	627-101
54ACT11374			
	TI	SN54ACT11374	619-155
54ACT11521			
	TI	SN54ACT11521	637-9
54ACT138			
	Fairchild	54ACT138	615-53
	GE/RCA	CD54ACT138	615-55
54ACT139			
	Fairchild	54ACT139	614-138
	GE/RCA	CD54ACT139	614-140
54ACT151			
	GE/RCA	CD54ACT151	632-12
54ACT153			
	GE/RCA	CD54ACT153	630-130
54ACT157			
	Fairchild	54ACT157	631-34
	GE/RCA	CD54ACT157	631-36
54ACT158			
	Fairchild	54ACT158	631-73
	GE/RCA	CD54ACT158	631-75
54ACT161			
	GE/RCA	CD54ACT161	608-170
54ACT163			
	GE/RCA	CD54ACT163	608-115
54ACT164			
	GE/RCA	CD54ACT164	635-35
54ACT174			
	Fairchild	54ACT174	618-64
	GE/RCA	CD54ACT174	618-66
54ACT175			
	GE/RCA	CD54ACT175	617-139
54ACT191			
	GE/RCA	CD54ACT191	609-58
54ACT193			
	GE/RCA	CD54ACT193	609-59
54ACT20			
	GE/RCA	CD54ACT20	622-117
54ACT2152			
	TI	SMJ54ACT2152	630-95
54ACT238			
	GE/RCA	CD54ACT238	615-56

Base Number	Source	Device	Page-Line
54ACT240			
	Fairchild	54ACT240	639-10
	GE/RCA	CD54ACT240	639-12
	VTC	**V54ACT240**	⋆ **3370**
			639-16
54ACT241			
	Fairchild	54ACT241	639-97
	GE/RCA	CD54ACT241	639-101
	VTC	**V54ACT241**	⋆ **3370**
			640-25
54ACT244			
	Fairchild	54ACT244	639-98
	GE/RCA	CD54ACT244	639-102
	VTC	**V54ACT244**	⋆ **3370**
			639-107
54ACT245			
	GE/RCA	CD54ACT245	641-105
	VTC	**V54ACT245**	⋆ **3370**
			641-109
54ACT251			
	GE/RCA	CD54ACT251	632-95
54ACT253			
	Fairchild	54ACT253	631-5
	GE/RCA	CD54ACT253	631-7
54ACT257			
	Fairchild	54ACT257	631-107
	GE/RCA	CD54ACT257	631-109
54ACT258			
	GE/RCA	CD54ACT258	631-138
54ACT273			
	GE/RCA	CD54ACT273	618-129
54ACT280			
	GE/RCA	CD54ACT280	604-123
54ACT283			
	GE/RCA	CD54ACT283	602-30
54ACT299			
	GE/RCA	CD54ACT299	635-142
	Motorola	54ACT299	635-144
54ACT32			
	GE/RCA	CD54ACT32	624-122
54ACT323			
	GE/RCA	CD54ACT323	635-135
54ACT373			
	Fairchild	54ACT373	627-93
	GE/RCA	CD54ACT373	627-97
	VTC	**V54ACT373**	⋆ **3370**
			627-103
54ACT374			
	Fairchild	54ACT374	619-150
	VTC	**V54ACT374**	⋆ **3370**
			619-157
54ACT377			
	Fairchild	54ACT377	618-172
54ACT465			
	VTC	**V54ACT465**	⋆ **3370**
			606-168
54ACT466			
	VTC	**V54ACT466**	⋆ **3370**
			608-93
			608-94
			608-95
			608-96
54ACT467			
	VTC	**V54ACT467**	⋆ **3370**
			606-169
54ACT468			
	VTC	**V54ACT468**	⋆ **3370**
			608-102
			608-103
			608-97
			608-98
54ACT533			
	Calmos	CA54ACT533	628-54
	GE/RCA	CD54ACT533	628-55
	VTC	**V54ACT533**	⋆ **3370**
			628-58
54ACT534			
	GE/RCA	CD54ACT534	619-38
	VTC	**V54ACT534**	⋆ **3370**
			619-41
54ACT540			
	GE/RCA	CD54ACT540	606-164
	VTC	**V54ACT540**	⋆ **3370**
			639-17

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54ACT541			
	GE/RCA	CD54ACT541	606-165
	VTC	**V54ACT541**	*** 3370** 606-170
54ACT547			
	MMI	54ACT547	627-61
54ACT563			
	GE/RCA	CD54ACT563	627-69
	VTC	**V54ACT563**	*** 3370** 628-59
54ACT564			
	GE/RCA	CD54ACT564	618-121
	VTC	**V54ACT564**	*** 3370** 619-42
54ACT567			
	MMI	54ACT567	627-62
54ACT573			
	Fairchild	54ACT573	627-94
	GE/RCA	CD54ACT573	627-98
	VTC	**V54ACT573**	*** 3370** 627-104
54ACT574			
	Fairchild	54ACT574	619-151
	VTC	**V54ACT574**	*** 3370** 619-158
54ACT575			
	VTC	**V54ACT575**	*** 3370** 620-104
54ACT576			
	VTC	**V54ACT576**	*** 3370** 619-43
54ACT577			
	VTC	**V54ACT577**	*** 3370** 619-133
54ACT580			
	VTC	**V54ACT580**	*** 3370** 628-60
54ACT620			
	VTC	**V54ACT620**	*** 3370** 641-11
54ACT623			
	VTC	**V54ACT623**	*** 3370** 641-12
54ACT640			
	VTC	**V54ACT640**	*** 3370** 641-48
54ACT643			
	VTC	**V54ACT643**	*** 3370** 641-49
54ACT645			
	VTC	**V54ACT645**	*** 3370** 641-110
54ACT646			
	GE/RCA	CD54ACT646	640-102
	MMI	54ACT646	640-104
54ACT648			
	GE/RCA	CD54ACT648	640-53
	MMI	54ACT648	640-55
54ACT651			
	MMI	54ACT651	640-56
54ACT652			
	MMI	54ACT652	640-105
54ACT7060			
	GE/RCA	CD54ACT7060	611-53
54ACT7201			
	TI	SMJ54ACT7201	630-89
54ACT7202			
	GE/RCA	CD54ACT7202	630-93
	TI	SMJ54ACT7202	630-90
54ACT74			
	GE/RCA	CD54ACT74	617-65
54ACT7402			
	GE/RCA	CD54ACT7402	630-62
54ACT793			
	MMI	54ACT793	627-63
54ACT794			
	MMI	54ACT794	642-32
54ACT821			
	VTC	**V54ACT821**	*** 3370** 620-127
54ACT822			
	VTC	**V54ACT822**	*** 3370** 620-124
54ACT823			
	VTC	**V54ACT823**	*** 3370** 620-119

Base Number	Source	Device	Page-Line
54ACT824			
	VTC	**V54ACT824**	*** 3370** 620-130
54ACT825			
	VTC	**V54ACT825**	*** 3370** 619-159
54ACT826			
	VTC	**V54ACT826**	*** 3370** 619-44
54ACT827			
	VTC	**V54ACT827**	*** 3370** 607-113
54ACT828			
	VTC	**V54ACT828**	*** 3370** 607-108
54ACT841			
	VTC	**V54ACT841**	*** 3370** 629-118
54ACT842			
	VTC	**V54ACT842**	*** 3370** 629-115
54ACT843			
	VTC	**V54ACT843**	*** 3370** 629-131
54ACT844			
	VTC	**V54ACT844**	*** 3370** 629-128
54ACT845			
	VTC	**V54ACT845**	*** 3370** 629-125
54ACT846			
	VTC	**V54ACT846**	*** 3370** 629-122
54ACT86			
	GE/RCA	CD54ACT86	626-8
54ACT861			
	VTC	**V54ACT861**	*** 3370** 643-34
54ACT862			
	VTC	**V54ACT862**	*** 3370** 643-30
54ACT863			
	VTC	**V54ACT863**	*** 3370** 642-137
54ACT864			
	VTC	**V54ACT864**	*** 3370** 642-133
54ACT874			
	VTC	**V54ACT874**	*** 3370** 617-126
54ACT876			
	VTC	**V54ACT876**	*** 3370** 617-127
54ACT878			
	VTC	**V54ACT878**	*** 3370** 617-128
54ACT879			
	VTC	**V54ACT879**	*** 3370** 617-129
54ACT880			
	VTC	**V54ACT880**	*** 3370** 626-151
54AC00	Fairchild	54AC00	623-48
	GE/RCA	CD54AC00	623-45
54AC02	Fairchild	54AC02	625-101
	GE/RCA	CD54AC02	625-103
54AC04	Fairchild	54AC04	607-136
	GE/RCA	CD54AC04	607-138
54AC05	GE/RCA	CD54AC05	607-139
54AC08	Fairchild	54AC08	622-42
	GE/RCA	CD54AC08	622-44
54AC10	Fairchild	54AC10	622-167
	GE/RCA	CD54AC10	622-169
54AC109			
	Fairchild	54AC109	620-137
	GE/RCA	CD54AC109	620-139
54AC11	Fairchild	54AC11	621-181
54AC11000			
	TI	SN54AC11000	623-50
54AC11002			
	TI	SN54AC11002	625-105
54AC11004			
	TI	SN54AC11004	607-142
54AC11008			
	TI	SN54AC11008	622-46
54AC11010			
	TI	SN54AC11010	622-171

Base Number	Source	Device	Page-Line
54AC11011			
	TI	SN54AC11011	621-183
54AC11020			
	TI	SN54AC11020	622-114
54AC11021			
	TI	SN54AC11021	621-180
54AC11027			
	TI	SN54AC11027	625-52
54AC11030			
	TI	SN54AC11030	623-137
54AC11032			
	TI	SN54AC11032	624-119
54AC11034			
	TI	SN54AC11034	605-158
54AC11074			
	TI	SN54AC11074	617-63
54AC11109			
	TI	SN54AC11109	620-141
54AC11112			
	TI	SN54AC11112	621-64
54AC11138			
	TI	54AC11138	615-48
54AC11151			
	TI	SN54AC11151	632-10
54AC11153			
	TI	SN54AC11153	630-98
54AC11157			
	TI	SN54AC11157	631-32
54AC11158			
	TI	SN54AC11158	631-70
54AC11161			
	TI	SN54AC11161	610-39
54AC11163			
	TI	SN54AC11163	610-40
54AC11169			
	TI	SN54AC11169	610-56
54AC11174			
	TI	SN54AC11174	618-61
54AC11175			
	TI	SN54AC11175	617-136
54AC11191			
	TI	SN54AC11191	609-53
54AC11194			
	TI	SN54AC11194	634-14
54AC112			
	GE/RCA	CD54AC112	621-62
54AC11238			
	TI	54AC11238	615-38
54AC11240			
	TI	SN54AC11240	639-3
54AC11241			
	TI	SN54AC11241	639-87
54AC11244			
	TI	SN54AC11244	639-88
54AC11245			
	TI	SN54AC11245	640-41
54AC11251			
	TI	SN54AC11251	632-63
54AC11253			
	TI	SN54AC11253	631-3
54AC11257			
	TI	SN54AC11257	631-105
54AC11258			
	TI	SN54AC11258	631-134
54AC11280			
	TI	SN54AC11280	642-146
		54AC11280	604-121
54AC11352			
	TI	SN54AC11352	630-142
54AC11353			
	TI	SN54AC11353	630-146
54AC11373			
	TI	SN54AC11373	628-33
54AC11374			
	TI	SN54AC11374	619-139
54AC11533			
	TI	SN54AC11533	629-45
54AC11534			
	TI	SN54AC11534	618-123
54AC138			
	Fairchild	54AC138	615-42
	GE/RCA	CD54AC138	615-44
54AC139			
	Fairchild	54AC139	614-133
	GE/RCA	CD54AC139	614-135
54AC14	Fairchild	54AC14	638-121
54AC151			
	Fairchild	54AC151	632-6
	GE/RCA	CD54AC151	632-8

Base Number	Source	Device	Page-Line
54AC153			
	Fairchild	54AC153	630-96
	GE/RCA	CD54AC153	630-128
54AC157			
	Fairchild	54AC157	631-28
	GE/RCA	CD54AC157	631-30
54AC158			
	Fairchild	54AC158	631-66
	GE/RCA	CD54AC158	631-68
54AC161			
	GE/RCA	CD54AC161	608-166
54AC163			
	GE/RCA	CD54AC163	608-111
54AC164			
	GE/RCA	CD54AC164	635-33
54AC174			
	Fairchild	54AC174	618-57
	GE/RCA	CD54AC174	618-59
54AC175			
	GE/RCA	CD54AC175	617-134
54AC191			
	GE/RCA	CD54AC191	609-49
54AC193			
	GE/RCA	CD54AC193	609-50
54AC20	Fairchild	54AC20	622-110
	GE/RCA	CD54AC20	622-112
54AC238			
	GE/RCA	CD54AC238	615-45
54AC240			
	Fairchild	54AC240	639-1
	GE/RCA	CD54AC240	607-69
	VTC	**V54AC240**	*** 3370** 639-6
54AC241			
	Fairchild	54AC241	639-83
	GE/RCA	CD54AC241	607-73
	VTC	**V54AC241**	*** 3370** 639-93
54AC244			
	Fairchild	54AC244	639-84
	GE/RCA	CD54AC244	607-71
	VTC	**V54AC244**	*** 3370** 639-94
54AC245			
	GE/RCA	CD54AC245	636-90
	VTC	**V54AC245**	*** 3370** 641-100
54AC251			
	Fairchild	54AC251	632-88
	GE/RCA	CD54AC251	632-90
54AC253			
	Fairchild	54AC253	630-148
	GE/RCA	CD54AC253	631-1
54AC257			
	GE/RCA	CD54AC257	631-103
54AC273			
	Fairchild	54AC273	618-125
54AC280			
	GE/RCA	CD54AC280	604-119
54AC283			
	GE/RCA	CD54AC283	602-28
54AC299			
	GE/RCA	CD54AC299	635-137
54AC32	Fairchild	54AC32	624-115
	GE/RCA	CD54AC32	624-117
54AC323			
	GE/RCA	CD54AC323	635-133
54AC373			
	Fairchild	54AC373	627-84
	GE/RCA	CD54AC373	627-86
	VTC	**V54AC373**	*** 3370** 628-34
54AC374			
	Fairchild	54AC374	619-135
	GE/RCA	CD54AC374	619-20
	VTC	**V54AC374**	*** 3370** 619-143
54AC377			
	Fairchild	54AC377	618-170
54AC465			
	VTC	**V54AC465**	*** 3370** 607-56
54AC466			
	VTC	**V54AC466**	*** 3370** 608-89
54AC467			
	VTC	**V54AC467**	*** 3370** 607-57

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54AC468			
	VTC	**V54AC468**	*** 3370** 608-90
54AC533			
	GE/RCA	CD54AC533	628-44
	VTC	**V54AC533**	*** 3370** 628-48
54AC534			
	GE/RCA	CD54AC534	619-26
	VTC	**V54AC534**	*** 3370** 619-30
54AC540			
	Fairchild	54AC540	606-155
	GE/RCA	CD54AC540	606-158
	VTC	**V54AC540**	*** 3370** 639-7
54AC541			
	GE/RCA	CD54AC541	606-159
	VTC	**V54AC541**	*** 3370** 607-58
54AC563			
	GE/RCA	CD54AC563	627-67
	VTC	**V54AC563**	*** 3370** 628-49
54AC564			
	GE/RCA	CD54AC564	618-119
	VTC	**V54AC564**	*** 3370** 619-31
54AC573			
	GE/RCA	CD54AC573	627-87
	VTC	**V54AC573**	*** 3370** 628-35
54AC574			
	GE/RCA	CD54AC574	619-137
	VTC	**V54AC574**	*** 3370** 619-144
54AC575			
	VTC	**V54AC575**	*** 3370** 620-102
54AC576			
	VTC	**V54AC576**	*** 3370** 619-32
54AC577			
	VTC	**V54AC577**	*** 3370** 619-131
54AC580			
	VTC	**V54AC580**	*** 3370** 628-50
54AC620			
	VTC	**V54AC620**	*** 3370** 641-5
54AC623			
	VTC	**V54AC623**	*** 3370** 641-6
54AC640			
	VTC	**V54AC640**	*** 3370** 641-42
54AC643			
	VTC	**V54AC643**	*** 3370** 641-43
54AC645			
	VTC	**V54AC645**	*** 3370** 641-101
54AC646			
	GE/RCA	CD54AC646	640-98
54AC648			
	GE/RCA	CD54AC648	640-49
54AC7060			
	GE/RCA	CD54AC7060	611-51
54AC7202			
	GE/RCA	CD54AC7202	630-91
54AC74	Fairchild	54AC74	617-59
	GE/RCA	CD54AC74	617-61
54AC7402			
	GE/RCA	CD54AC7402	630-60
54AC821			
	VTC	**V54AC821**	*** 3370** 643-47
54AC822			
	VTC	**V54AC822**	*** 3370** 643-39
54AC823			
	VTC	**V54AC823**	*** 3370** 643-7
54AC824			
	VTC	**V54AC824**	*** 3370** 620-110
54AC825			
	VTC	**V54AC825**	*** 3370** 619-145
54AC826			
	VTC	**V54AC826**	*** 3370** 619-33
54AC827			
	VTC	**V54AC827**	*** 3370** 607-99
54AC828			
	VTC	**V54AC828**	*** 3370** 607-90
54AC841			
	VTC	**V54AC841**	*** 3370** 629-105
54AC842			
	VTC	**V54AC842**	*** 3370** 629-94
54AC843			
	VTC	**V54AC843**	*** 3370** 629-78
54AC844			
	VTC	**V54AC844**	*** 3370** 629-65
54AC845			
	VTC	**V54AC845**	*** 3370** 629-79
54AC846			
	VTC	**V54AC846**	*** 3370** 629-66
54AC86	GE/RCA	CD54AC86	626-5
54AC861			
	VTC	**V54AC861**	*** 3370** 643-14
54AC862			
	VTC	**V54AC862**	*** 3370** 643-15
54AC863			
	VTC	**V54AC863**	*** 3370** 642-120
54AC864			
	VTC	**V54AC864**	*** 3370** 642-121
54AC874			
	VTC	**V54AC874**	*** 3370** 617-116
54AC876			
	VTC	**V54AC876**	*** 3370** 617-117
54AC878			
	VTC	**V54AC878**	*** 3370** 617-118
54AC879			
	VTC	**V54AC879**	*** 3370** 617-119
54AC880			
	VTC	**V54AC880**	*** 3370** 626-144
54AHCT138			
	IDT	**IDT54AHCT138**	*** 2810** 615-60
54AHCT139			
	IDT	**IDT54AHCT139**	*** 2810** 614-154
54AHCT148			
	Samsung	KS54AHCT148	616-85
54AHCT161			
	IDT	**IDT54AHCT161**	*** 2811** 608-173
54AHCT163			
	IDT	**IDT54AHCT163**	*** 2811** 608-118
54AHCT182			
	IDT	**IDT54AHCT182**	*** 2811** 603-54
54AHCT191			
	IDT	**IDT54AHCT191**	*** 2811** 610-45
54AHCT193			
	IDT	**IDT54AHCT193**	*** 2811** 612-60
54AHCT240			
	IDT	**IDT54AHCT240**	*** 2811** 639-35
54AHCT244			
	IDT	**IDT54AHCT244**	*** 2811** 639-127
54AHCT245			
	IDT	**IDT54AHCT245**	*** 2811** 641-113
54AHCT273			
	IDT	**IDT54AHCT273**	*** 2811** 618-141
54AHCT280			
	Samsung	KS54AHCT280	642-148
54AHCT299			
	IDT	**IDT54AHCT299**	*** 2811** 635-156
54AHCT373			
	IDT	**IDT54AHCT373**	*** 2811** 627-131
54AHCT374			
	IDT	**IDT54AHCT374**	*** 2811** 620-29
54AHCT377			
	IDT	**IDT54AHCT377**	*** 2811** 619-9
	Samsung	KS54AHCT377	618-174
54AHCT399			
	IDT	**IDT54AHCT399**	*** 2811** 634-1
54AHCT42			
	Samsung	KS54AHCT42	614-53
54AHCT465			
	Samsung	KS54AHCT465	606-174
54AHCT466			
	Samsung	KS54AHCT466	608-85
54AHCT467			
	Samsung	KS54AHCT467	606-175
54AHCT468			
	Samsung	KS54AHCT468	608-86
54AHCT521			
	IDT	**IDT54AHCT521**	*** 2811** 602-136
54AHCT533			
	IDT	**IDT54AHCT533**	*** 2811** 628-81
54AHCT534			
	IDT	**IDT54AHCT534**	*** 2811** 619-70
54AHCT573			
	IDT	**IDT54AHCT573**	*** 2811** 627-107
54AHCT574			
	IDT	**IDT54AHCT574**	*** 2811** 619-162
54AHCT590			
	Samsung	KS54AHCT590	610-140
54AHCT591			
	Samsung	KS54AHCT591	610-141
54AHCT592			
	Samsung	KS54AHCT592	610-138
54AHCT593			
	Samsung	KS54AHCT593	610-139
54AHCT595			
	Samsung	KS54AHCT595	635-92
54AHCT596			
	Samsung	KS54AHCT596	635-93
54AHCT597			
	Samsung	KS54AHCT597	635-84
54AHCT640			
	IDT	**IDT54AHCT640**	*** 2811** 641-22
54AHCT645			
	IDT	**IDT54AHCT645**	*** 2811** 641-135
	Samsung	KS54AHCT645	640-43
54AHCT651			
	Samsung	KS54AHCT651	640-62
54AHCT652			
	Samsung	KS54AHCT652	640-110
54AHCT658			
	Samsung	KS54AHCT658	636-86
54AHCT659			
	Samsung	KS54AHCT659	636-87
54AHCT664			
	Samsung	KS54AHCT664	640-157
54AHCT665			
	Samsung	KS54AHCT665	640-158
54AHCT670			
	Samsung	KS54AHCT670	630-19
54AHCT679			
	Samsung	KS54AHCT679	602-88
54AHCT680			
	Samsung	KS54AHCT680	602-89
54AHCT682			
	Samsung	KS54AHCT682	602-141
54AHCT684			
	Samsung	KS54AHCT684	602-142
54AHCT686			
	Samsung	KS54AHCT686	602-143
54AHCT689			
	Samsung	KS54AHCT689	603-12
54AHCT793			
	Samsung	KS54AHCT793	627-71
54AHCT794			
	Samsung	KS54AHCT794	634-12
54AHCT821			
	Samsung	KS54AHCT821	636-7
54AHCT822			
	Samsung	KS54AHCT822	636-8
54AHCT823			
	Samsung	KS54AHCT823	636-2
54AHCT824			
	Samsung	KS54AHCT824	636-3
54AHCT825			
	Samsung	KS54AHCT825	634-139
54AHCT826			
	Samsung	KS54AHCT826	634-140
54AHCT841			
	Samsung	KS54AHCT841	629-87
54AHCT842			
	Samsung	KS54AHCT842	629-88
54AHCT843			
	Samsung	KS54AHCT843	629-58
54AHCT844			
	Samsung	KS54AHCT844	629-59
54ALS00			
	National	DM54ALS00	672-107
	TI	SN54ALS00A	672-111
54ALS01			
	National	DM54ALS01	673-67
	TI	SN54ALS01	673-73
54ALS02			
	National	DM54ALS02	675-109
	TI	SN54ALS02	675-115
54ALS03			
	National	DM54ALS03	673-68
	TI	SN54ALS03B	673-74
54ALS04			
	National	DM54ALS04	659-80
	TI	SN54ALS04B	659-84
54ALS05			
	National	DM54ALS05	659-146
	TI	SN54ALS05A	659-150
54ALS056			
	TI	SN54ALS056	689-14
54ALS08			
	National	DM54ALS08	670-177
	TI	SN54ALS08	671-4
54ALS09			
	National	DM54ALS09	671-58
	TI	SN54ALS09	671-60
54ALS10			
	National	DM54ALS10	672-31
	TI	SN54ALS10A	672-35
54ALS1000			
	National	DM54ALS1000	672-108
54ALS1002			
	National	DM54ALS1002	675-110

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
54ALS1003			
	National	DM54ALS1003	673-69
54ALS1004			
	National	DM54ALS1004	659-81
54ALS1005			
	National	DM54ALS1005	659-147
54ALS1008			
	National	DM54ALS1008	670-178
54ALS1010			
	National	DM54ALS1010	672-32
	TI	SN54ALS1010A	672-36
54ALS1011			
	National	DM54ALS1011	670-103
54ALS1020			
	National	DM54ALS1020	671-97
54ALS1032			
	National	DM54ALS1032	674-119
54ALS1034			
	National	DM54ALS1034	658-148
	TI	SN54ALS1034	658-150
54ALS1035			
	National	DM54ALS1035	658-124
	TI	SN54ALS1035	658-126
54ALS109			
	National	DM54ALS109	669-57
	TI	SN54ALS109A	669-59
54ALS11			
	National	DM54ALS11	670-104
	TI	SN54ALS11A	670-107
54ALS112			
	TI	SN54ALS112A	670-7
54ALS113			
	National	DM54ALS113	669-152
	TI	SN54ALS113A	669-153
54ALS114			
	TI	SN54ALS114A	670-37
54ALS12			
	National	DM54ALS12	672-82
	TI	SN54ALS12A	672-84
54ALS1240			
	National	DM54ALS1240	685-4
54ALS1241			
	National	DM54ALS1241	685-57
54ALS1242			
	National	DM54ALS1242	684-72
54ALS1243			
	National	DM54ALS1243	684-73
54ALS1244			
	National	DM54ALS1244	685-110
	TI	SN54ALS1244A	685-114
54ALS1245			
	National	DM54ALS1245	686-126
	TI	SN54ALS1245A	686-132
54ALS13			
	National	DM54ALS13	688-124
54ALS131			
	National	DM54ALS131	665-99
54ALS132			
	National	DM54ALS132	689-30
54ALS133			
	National	DM54ALS133	673-168
	TI	SN54ALS133	673-170
54ALS136			
	National	DM54ALS136	676-11
54ALS137			
	National	DM54ALS137	665-91
54ALS138			
	National	DM54ALS138	665-43
	TI	SN54ALS138	665-45
54ALS139			
	TI	SN54ALS139	665-29
54ALS14			
	National	DM54ALS14	689-62
54ALS15			
	National	DM54ALS15	670-147
	TI	SN54ALS15A	670-149
54ALS151			
	National	DM54ALS151	681-51
	TI	SN54ALS151	681-53
54ALS153			
	National	DM54ALS153	679-20
	TI	SN54ALS153	679-22
54ALS157			
	TI	SN54ALS157	680-84
54ALS160			
	National	DM54ALS160	662-124
	TI	SN54ALS160	685-163
54ALS161			
	National	DM54ALS161	660-126
	TI	SN54ALS161B	660-128
54ALS162			
	National	DM54ALS162	662-156
	TI	SN54ALS162B	662-158
54ALS1620			
	National	DM54ALS1620	687-105
54ALS1621			
	National	DM54ALS1621	687-106
54ALS1623			
	National	DM54ALS1623	687-107
54ALS163			
	National	DM54ALS163	660-170
	TI	SN54ALS163B	660-172
54ALS1638			
	National	DM54ALS1638	685-165
54ALS1639			
	National	DM54ALS1639	685-166
54ALS1640			
	National	DM54ALS1640	686-32
54ALS165			
	National	DM54ALS165	683-111
54ALS166			
	National	DM54ALS166	683-128
54ALS168			
	National	DM54ALS168	663-51
54ALS169			
	National	DM54ALS169	661-107
	TI	SN54ALS169B	661-109
54ALS174			
	National	DM54ALS174	667-155
	TI	SN54ALS174	667-157
54ALS175			
	National	DM54ALS175	667-40
	TI	SN54ALS175	667-42
54ALS176			
	TI	SN54ALS176	684-70
54ALS190			
	National	DM54ALS190	663-124
54ALS191			
	National	DM54ALS191	661-151
	TI	SN54ALS191	661-153
54ALS192			
	National	DM54ALS192	663-93
54ALS193			
	National	DM54ALS193	662-17
	TI	SN54ALS193	662-19
54ALS20			
	National	DM54ALS20	671-98
	TI	SN54ALS20A	671-101
54ALS21			
	National	DM54ALS21	670-63
	TI	SN54ALS21A	670-67
54ALS22			
	National	DM54ALS22	670-64
	TI	SN54ALS22B	672-4
54ALS240			
	National	DM54ALS240	684-154
	TI	SN54ALS240A	685-8
54ALS241			
	National	DM54ALS241	685-58
	TI	SN54ALS241A	685-61
54ALS242			
	National	DM54ALS242	684-74
	TI	SN54ALS242B	684-80 994-24
54ALS243			
	National	DM54ALS243	684-75
	TI	SN54ALS243A	684-81 994-25
54ALS244			
	National	DM54ALS244	685-111
	TI	SN54ALS244A	685-115 986-45
54ALS245			
	National	DM54ALS245	686-127
	TI	SN54ALS245A	686-133 996-39
54ALS251			
	National	DM54ALS251	681-107
	TI	SN54ALS251	681-109
54ALS253			
	TI	SN54ALS253	679-113
54ALS257			
	National	DM54ALS257	680-120
	TI	SN54ALS257	680-124
54ALS258			
	National	DM54ALS258	680-27
	TI	SN54ALS258	680-29
54ALS259			
	TI	SN54ALS259	677-53
54ALS27			
	National	DM54ALS27	675-42
	TI	SN54ALS27	675-44
54ALS273			
	National	DM54ALS273	668-93
	TI	SN54ALS273	668-95
54ALS28			
	National	DM54ALS28	675-111
	TI	SN54ALS28A	675-116
54ALS299			
	TI	SN54ALS299	684-5
54ALS30			
	National	DM54ALS30	673-126
	TI	SN54ALS30A	673-128
54ALS32			
	National	DM54ALS32	674-120
	TI	SN54ALS32	674-123
54ALS323			
	TI	SN54ALS323	684-6
54ALS33			
	National	DM54ALS33	675-80
	TI	SN54ALS33A	675-82
54ALS352			
	National	DM54ALS352	679-63
	TI	SN54ALS352	679-65
54ALS353			
	National	DM54ALS353	679-86
	TI	SN54ALS353	679-88
54ALS37			
	National	DM54ALS37	672-169
	TI	SN54ALS37A	672-171
54ALS373			
	National	DM54ALS373	677-80
	TI	SN54ALS373	677-84
54ALS374			
	National	DM54ALS374	668-119
	TI	SN54ALS374	668-123
54ALS38			
	National	DM54ALS38	673-16
	TI	SN54ALS38A	673-18
54ALS40			
	National	DM54ALS40	671-155
54ALS465			
	National	DM54ALS465	659-40
54ALS466			
	National	DM54ALS466	660-63
54ALS467			
	National	DM54ALS467	659-41
54ALS468			
	National	DM54ALS468	660-64
54ALS518			
	National	DM54ALS518	656-106
54ALS520			
	National	DM54ALS520	656-83
	TI	SN54ALS520	656-89
54ALS521			
	National	DM54ALS521	656-84
54ALS522			
	National	DM54ALS522	656-85
54ALS533			
	National	DM54ALS533	677-147
54ALS534			
	National	DM54ALS534	668-56
	TI	SN54ALS534	668-62
54ALS541			
	TI	SN54ALS541	685-62 986-46
54ALS563			
	National	DM54ALS563	677-148
	TI	SN54ALS563A	677-153
54ALS564			
	National	DM54ALS564	668-57
	TI	SN54ALS564A	668-63
54ALS569			
	TI	SN54ALS569A	662-1
54ALS573			
	National	DM54ALS573	677-81
	TI	SN54ALS573B	677-85
54ALS574			
	National	DM54ALS574	668-120
	TI	SN54ALS574A	668-124
54ALS576			
	National	DM54ALS576	670-179
	TI	SN54ALS576A	668-64
54ALS580			
	National	DM54ALS580	677-149
	TI	SN54ALS580A	677-154
54ALS620			
	National	DM54ALS620	687-108
54ALS622			
	National	DM54ALS622	687-77
54ALS623			
	National	DM54ALS623	687-109
54ALS6301			
	TI	SN54ALS6301	688-31
54ALS632			
	National	MM54ALS632	982-35
54ALS633			
	National	MM54ALS633	982-36
54ALS634			
	National	MM54ALS634	982-37
54ALS635			
	National	MM54ALS635	982-38
54ALS638			
	National	DM54ALS638	685-167
54ALS639			
	National	DM54ALS639	685-168
54ALS640			
	National	DM54ALS640A	686-33
	TI	SN54ALS640A	686-38
54ALS641			
	National	DM54ALS641	686-103
54ALS642			
	National	DM54ALS642	686-11
54ALS643			
	National	DM54ALS643	686-34
54ALS644			
	National	DM54ALS644	687-10
54ALS645			
	National	DM54ALS645	686-128
	TI	SN54ALS645A	686-134 996-40
54ALS646			
	National	DM54ALS646	688-2
54ALS647			
	National	DM54ALS647	687-26
54ALS648			
	National	DM54ALS648	688-3
54ALS649			
	National	DM54ALS649	687-27
54ALS652			
	TI	SN54ALS652	686-39
54ALS688			
	TI	SN54ALS688	656-126
54ALS689			
	National	DM54ALS689	656-107
54ALS74			
	National	DM54ALS74	666-149
	TI	SN54ALS74A	666-151
54ALS804			
	National	DM54ALS804	666-83
	TI	SN54ALS804A	666-85
54ALS805			
	National	DM54ALS805	666-92
	TI	SN54ALS805A	666-94
54ALS808			
	National	DM54ALS808	666-75
	TI	SN54ALS808	666-77
54ALS810			
	National	DM54ALS810	676-79
54ALS811			
	National	DM54ALS811	676-92
54ALS832			
	National	DM54ALS832	666-101 675-3
	TI	SN54ALS832	666-103 675-5
54ALS857			
	TI	SN54ALS857	681-28
54ALS86			
	National	DM54ALS86	676-39
	TI	SN54ALS86	676-41
54ALS873			
	National	DM54ALS873	676-112
	TI	SN54ALS873B	676-114

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54ALS874			
	TI	54ALS874B	666-119
54ALS876			
	National	DM54ALS876	666-112
54ALS880			
	National	DM54ALS880	677-22
54AS00	National	DM54AS00	672-114
	TI	SN54AS00	672-118
54AS02	National	DM54AS02	675-120
	TI	SN54AS02	675-68
54AS04	National	DM54AS04	659-88
	TI	SN54AS04	659-85
54AS08	National	DM54AS08	671-7
	TI	SN54AS08	671-11
54AS10	National	DM54AS10	672-39
	TI	SN54AS10	672-41
54AS1000			
	National	DM54AS1000	672-115
	TI	SN54AS1000A	673-112
54AS1004			
	National	DM54AS1004	659-89
	TI	SN54AS1004A	659-92
54AS1008			
	National	DM54AS1008	671-8
54AS1032			
	National	DM54AS1032	674-126
	TI	SN54AS1032A	674-130
54AS1034			
	National	DM54AS1034	658-114
			658-152
	TI	SN54AS1034A	658-116
			658-154
54AS1036			
	National	DM54AS1036	666-7
			675-121
	TI	SN54AS1036A	666-23
54AS109			
	National	DM54AS109	669-61
	TI	SN54AS109	669-63
54AS11	National	DM54AS11	670-110
	TI	SN54AS11	670-112
54AS138			
	TI	SN54AS138	665-49
54AS151			
	TI	SN54AS151	681-55
54AS153			
	TI	SN54AS153	679-147
54AS158			
	National	DM54AS158	679-163
54AS160			
	National	DM54AS160	662-127
54AS161			
	National	DM54AS161	660-130
	TI	SN54AS161	660-134
54AS162			
	National	DM54AS162	660-131
54AS163			
	National	DM54AS163	660-174
	TI	SN54AS163	660-176
54AS168			
	National	DM54AS168	663-54
54AS169			
	National	DM54AS169	661-111
	TI	SN54AS169A	661-113
54AS174			
	National	DM54AS174	667-159
	TI	SN54AS174	667-161
54AS175			
	National	DM54AS175	667-44
	TI	SN54AS175A	667-46
54AS1804			
	National	DM54AS1804	673-115
54AS1805			
	National	DM54AS1805	675-166
54AS1808			
	National	DM54AS1808	671-82
54AS181			
	National	DM54AS181B	657-13
	TI	SN54AS181B	657-17
54AS182			
	National	DM54AS182	657-69
54AS1832			
	National	DM54AS1832	675-1
54AS194			
	TI	SN54AS194	683-13
54AS20	National	DM54AS20	671-104
	TI	SN54AS20	671-106
54AS21	National	DM54AS21	670-69
	TI	SN54AS21	670-71
54AS230			
	National	DM54AS230	685-120
54AS231			
	National	DM54AS231	685-121
54AS240			
	National	DM54AS240	685-5
	TI	SN54AS240	685-9
			987-19
54AS241			
	National	DM54AS241	685-68
	TI	SN54AS241	685-70
			986-47
54AS242			
	National	DM54AS242	684-86
	TI	SN54AS242	684-90
			995-3
54AS243			
	National	DM54AS243	684-87
54AS244			
	National	DM54AS244	685-122
	TI	SN54AS244	685-126
			986-48
54AS245			
	National	DM54AS245	686-142
	TI	SN54AS245	686-146
54AS250			
	TI	SN54AS250	681-155
54AS257			
	National	DM54AS257	680-121
54AS258			
	National	DM54AS258	680-31
54AS2620			
	National	DM54AS2620	686-87
54AS264			
	National	DM54AS264	657-70
54AS27	National	DM54AS27	675-46
	TI	SN54AS27	675-48
54AS280			
	National	DM54AS280	690-50
	TI	SN54AS280	690-52
54AS282			
	National	DM54AS282	657-71
54AS286			
	National	DM54AS286	690-80
54AS30	National	DM54AS30	673-130
	TI	SN54AS30	673-132
54AS32	National	DM54AS32	674-127
	TI	SN54AS32	674-131
54AS34	National	DM54AS34	658-119
	TI	SN54AS34	658-121
54AS373			
	National	DM54AS373	677-87
	TI	SN54AS373	677-91
54AS374			
	National	DM54AS374	668-129
	TI	SN54AS374	668-137
54AS533			
	National	DM54AS533	677-157
54AS534			
	National	DM54AS534	668-58
54AS573			
	National	DM54AS573	677-88
	TI	SN54AS573	677-92
54AS574			
	National	DM54AS574	668-130
	TI	SN54AS574	668-138
54AS575			
	National	DM54AS575	668-131
	TI	SN54AS575	668-139
54AS576			
	National	DM54AS576	668-69
	TI	SN54AS576	668-71
54AS577			
	National	DM54AS577	668-132
54AS580			
	National	DM54AS580	677-158
54AS620			
	National	DM54AS620	687-119
54AS621			
	National	DM54AS621	687-83
54AS622			
	National	DM54AS622	687-84
54AS623			
	National	DM54AS623	687-120
54AS638			
	National	DM54AS638	686-5
54AS639			
	National	DM54AS639	686-6
54AS640			
	National	DM54AS640	686-48
	TI	SN54AS640	686-58
54AS641			
	National	DM54AS641	686-107
54AS642			
	National	DM54AS642	686-15
54AS643			
	National	DM54AS643	686-49
54AS644			
	National	DM54AS644	686-50
54AS645			
	National	DM54AS645	686-143
	TI	SN54AS645	686-147
54AS646			
	National	DM54AS646	687-48
	TI	SN54AS646	687-51
54AS648			
	National	DM54AS648	687-49
54AS651			
	National	DM54AS651	686-51
	TI	SN54AS651	686-59
54AS652			
	National	DM54AS652	686-52
	TI	SN54AS652	686-60
54AS74	National	DM54AS74	666-153
	TI	SN54AS74	666-155
54AS804			
	TI	SN54AS804B	666-89
54AS805			
	TI	SN54AS805B	666-98
54AS808			
	TI	SN54AS808B	666-80
54AS821			
	TI	SN54AS821	669-34
54AS822			
	TI	SN54AS822	669-32
54AS823			
	TI	SN54AS823	669-27
54AS825			
	TI	SN54AS825	669-21
54AS826			
	TI	SN54AS826	669-18
54AS832			
	TI	SN54AS832B	666-106
54AS86	National	DM54AS86	676-43
54AS867			
	TI	SN54AS867	661-97
54AS869			
	TI	SN54AS869	661-98
54AS873			
	National	DM54AS873	676-116
	TI	SN54AS873	676-118
54AS874			
	National	DM54AS874	666-120
	TI	SN54AS874	666-128
54AS876			
	National	DM54AS876	666-121
54AS877			
	TI	SN54AS877	690-1
54AS878			
	National	DM54AS878	666-122
54AS879			
	National	DM54AS879	666-123
54AS880			
	National	DM54AS880	677-25
54AS881			
	National	DM54AS881B	657-14
54AS882			
	TI	SN54AS882	657-75
54AS885			
	TI	SN54AS885	656-128
54AS888			
	TI	SN54AS888	646-36
			861-129
54AS890			
	TI	SN54AS890	688-73
			861-130
54AS897			
	TI	SN54AS897	656-27
54AS95	National	DM54AS95	682-133
54BCT29818			
	TI	SN54BCT29818	637-65
54BCT29821			
	TI	SN54BCT29821	636-12
54BCT29822			
	TI	SN54BCT29822	636-11
54BCT29823			
	TI	SN54BCT29823	636-6
54BCT29824			
	TI	SN54BCT29824	636-1
54BCT29825			
	TI	SN54BCT29825	634-143
54BCT29826			
	TI	SN54BCT29826	634-144
54BCT29833			
	TI	SN54BCT29833	637-27
54BCT29841			
	TI	SN54BCT29841	629-91
54BCT29842			
	TI	SN54BCT29842	629-92
54BCT29843			
	TI	SN54BCT29843	629-63
54BCT29844			
	TI	SN54BCT29844	629-62
54BCT29845			
	TI	SN54BCT29845	629-82
54BCT29846			
	TI	SN54BCT29846	629-69
54BCT29861			
	TI	SN54BCT29861	643-18
54BCT29863			
	TI	SN54BCT29863	642-123
54BCT373			
	TI	SN54BCT373	628-38
54BCT374			
	TI	SN54BCT374	619-166
54BCT533			
	TI	SN54BCT533	628-66
54BCT534			
	TI	SN54BCT534	628-145
54BCT620			
	TI	SN54BCT620	640-156
54BCT623			
	TI	SN54BCT623	641-53
54BCT640			
	TI	SN54BCT640	641-16
54BCT646			
	TI	SN54BCT646	640-113
54BCT648			
	TI	SN54BCT648	640-64
54BCT651			
	TI	SN54BCT651	640-65
54BCT652			
	TI	SN54BCT652	640-114
54C00	National	MM54C00	623-59
54C02	National	MM54C02	625-113
54C04	Micrel	MM54C04	607-153
	National	MM54C04	607-154
54C08	National	MM54C08	622-54
54C10	National	MM54C10	622-179
54C107	National	MM54C107	621-101
54C138	**Harris**	**HS54C138RH**	
			⋆ 2709
			615-61
54C14	Micrel	MM54C14	638-123
	National	MM54C14	638-125
			¶ 406-27
54C150	National	MM54C150	632-132
54C151	National	MM54C151	632-15
54C154	National	MM54C154	616-66
54C157	National	MM54C157	631-39
54C160	Micrel	MM54C160	612-19
	National	MM54C160	612-20
54C161	Micrel	MM54C161	609-1
	National	MM54C161	609-2

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54C162	Micrel	MM54C162	611-145
	National	MM54C162	611-146
54C163	Micrel	MM54C163	608-120
	National	MM54C163	608-121
54C164	National	MM54C164	635-38
			1395-57
54C165	National	MM54C165	634-165
			1395-31
54C173	Micrel	MM54C173	618-18
	National	MM54C173	618-19
54C174	Micrel	MM54C174	618-70
	National	MM54C174	618-71
54C175	Micrel	MM54C175	617-143
	National	MM54C175	617-144
54C192	Micrel	MM54C192	612-62
	National	MM54C192	612-63
54C193	Micrel	MM54C193	609-67
	National	MM54C193	609-68
54C195	National	MM54C195	634-78
			1394-9
54C20	National	MM54C20	622-120
54C200	Micrel	MM54C200	630-64
			1349-7
	National	MM54C200	630-65
			1349-8
54C221	National	MM54C221	632-157
54C240	Micrel	MM54C240	639-22
	National	MM54C240	639-23
54C244	Micrel	MM54C244	639-109
	National	MM54C244	639-110
54C30	National	MM54C30	623-141
54C32	National	MM54C32	624-127
54C374	Micrel	MM54C374	619-167
	National	MM54C374	620-1
54C42	Micrel	MM54C42	614-55
	National	MM54C42	614-56
54C48	National	MM54C48	614-102
54C73	National	MM54C73	621-102
54C74	National	MM54C74	617-70
54C76	National	MM54C76	620-149
54C83	National	MM54C83	602-32
54C85	Micrel	MM54C85	603-80
	National	MM54C85	603-81
54C86	Micrel	MM54C86	626-11
	National	MM54C86	626-12
54C89	Micrel	MM54C89	630-43
	National	MM54C89	630-44
54C90	National	MM54C90	612-13
54C901	Micrel	MM54C901	606-44
	National	MM54C901	606-45
54C902	Micrel	MM54C902	606-47
	National	MM54C902	606-48
54C903	Micrel	MM54C903	606-38
	National	MM54C903	606-39
54C904	Micrel	MM54C904	606-41
	National	MM54C904	606-42
54C905	Micrel	MM54C905	637-111
	National	MM54C905	637-112
54C906	Micrel	MM54C906	606-32
	National	MM54C906	606-33
54C907	Micrel	MM54C907	606-35
	National	MM54C907	606-36
54C909	National	MM54C909	636-117
			1114-29
54C910	National	MM54C910	630-85
54C914	Micrel	MM54C914	638-124
	National	MM54C914	638-126
54C915	National	MM54C915	617-55
			980-85
54C922	National	MM54C922	984-4
54C923	National	MM54C923	984-8
54C93	National	MM54C93	608-108
54C941	Micrel	MM54C941	606-152
			986-23
	National	MM54C941	606-153
			986-39
54C95	National	MM54C95	634-16
			1394-20
54DCT827			
	Motorola	IDT54DCT827B	607-115

Base Number	Source	Device	Page-Line
54FCT138			
	IDT	IDT54FCT138	
		* 2808	615-62
		IDT54FCT138A	
		* 2808	615-63
54FCT139			
	IDT	IDT54FCT139	
		* 2808	614-146
		IDT54FCT139A	
		* 2808	614-147
54FCT161			
	IDT	IDT54FCT161	
		* 2808	609-5
		IDT54FCT161A	
		* 2808	609-6
54FCT163			
	IDT	IDT54FCT163	
		* 2808	608-124
		IDT54FCT163A	
		* 2808	608-125
54FCT182			
	IDT	IDT54FCT182	
		* 2808	603-55
		IDT54FCT182A	
		* 2808	603-56
54FCT191			
	IDT	IDT54FCT191	
		* 2808	609-70
		IDT54FCT191A	
		* 2808	609-71
54FCT193			
	IDT	IDT54FCT193	
		* 2808	611-85
		IDT54FCT193A	
		* 2808	611-86
54FCT240			
	IDT	IDT54FCT240	
		* 2808	639-25
		IDT54FCT240A	
		* 2808	639-26
	VTC	V54FCT240 * 3370	639-29
54FCT241			
	VTC	V54FCT241 * 3370	639-116
54FCT244			
	IDT	IDT54FCT244	
		* 2808	639-112
		IDT54FCT244A	
		* 2808	639-113
	VTC	V54FCT244 * 3370	639-117
54FCT245			
	IDT	IDT54FCT245	
		* 2808	641-117
		IDT54FCT245A	
		* 2808	641-118
	VTC	V54FCT245 * 3370	641-125
54FCT273			
	IDT	IDT54FCT273	
		* 2808	618-133
		IDT54FCT273A	
		* 2808	618-134

Base Number	Source	Device	Page-Line
54FCT299			
	IDT	IDT54FCT299	
		* 2808	635-148
		IDT54FCT299A	
		* 2808	635-149
54FCT373			
	IDT	IDT54FCT373	
		* 2808	627-111
		IDT54FCT373A	
		* 2808	627-112
	VTC	V54FCT373 * 3370	627-119
54FCT374			
	IDT	IDT54FCT374	
		* 2808	620-3
		IDT54FCT374A	
		* 2808	620-4
	VTC	V54FCT374 * 3370	620-15
54FCT377			
	IDT	IDT54FCT377	
		* 2808	
		* 2810	618-176
		IDT54FCT377A	
		* 2808	
		* 2810	618-177
54FCT399			
	IDT	IDT54FCT399	
		* 2808	
		* 2810	634-2
		IDT54FCT399A	
		* 2808	
		* 2810	634-3
54FCT521			
	IDT	IDT54FCT521	
		* 2808	
		* 2810	619-1
		IDT54FCT521A	
		* 2808	
		* 2810	602-137
54FCT533			
	IDT	IDT54FCT533	
		* 2808	
		* 2810	628-67
		IDT54FCT533A	
		* 2808	
		* 2810	628-68
	VTC	V54FCT533 * 3370	628-71
54FCT534			
	IDT	IDT54FCT534	
		* 2808	
		* 2810	619-50
		IDT54FCT534A	
		* 2808	
		* 2810	619-51
	VTC	V54FCT534 * 3370	619-58
54FCT540			
	IDT	IDT54FCT540	
		* 2808	
		* 2810	607-75
		IDT54FCT540A	
		* 2808	
		* 2810	607-76

Base Number	Source	Device	Page-Line
54FCT541			
	IDT	IDT54FCT541	
		* 2808	
		* 2810	607-80
		IDT54FCT541A	
		* 2808	
		* 2810	607-81
54FCT543			
	IDT	IDT54FCT543	
		* 2808	
		* 2810	642-42
		IDT54FCT543A	
		* 2808	
		* 2810	642-43
54FCT573			
	IDT	IDT54FCT573	
		* 2808	
		* 2810	627-113
		IDT54FCT573A	
		* 2808	
		* 2810	627-114
	VTC	V54FCT573 * 3370	627-120
54FCT574			
	IDT	IDT54FCT574	
		* 2808	
		* 2810	620-5
		IDT54FCT574A	
		* 2808	
		* 2810	620-6
	VTC	V54FCT574 * 3370	620-16
54FCT640			
	IDT	IDT54FCT640	
		* 2809	641-54
		IDT54FCT640A	
		* 2809	641-18
	VTC	V54FCT640 * 3370	641-56
54FCT645			
	IDT	IDT54FCT645	
		* 2809	641-119
		IDT54FCT645A	
		* 2809	641-120
	VTC	V54FCT645 * 3370	641-126
54FCT646			
	IDT	IDT54FCT646	
		* 2809	642-46
		IDT54FCT646A	
		* 2809	642-47
54FCT648			
	IDT	IDT54FCT648	
		* 2809	642-34
		IDT54FCT648A	
		* 2809	642-35
54FCT651			
	IDT	IDT54FCT651	
		* 2809	642-48
		IDT54FCT651A	
		* 2809	642-49
54FCT652			
	IDT	IDT54FCT652	
		* 2809	642-36
		IDT54FCT652A	
		* 2809	642-37

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54FCT821			
	IDT	IDT54FCT821A	
		* 2809	643-50
		IDT54FCT821B	
		* 2809	643-51
	VTC	V54FCT821A * 3370	643-55
54FCT822			
	IDT	IDT54FCT822A	
		* 2809	643-41
		IDT54FCT822B	
		* 2809	643-42
	VTC	V54FCT822A * 3370	643-45
54FCT823			
	IDT	IDT54FCT823A	
		* 2809	636-104
		IDT54FCT823B	
		* 2809	643-9
	VTC	V54FCT823A * 3370	643-10
54FCT824			
	IDT	IDT54FCT824A	
		* 2809	620-112
		IDT54FCT824B	
		* 2809	620-113
	VTC	V54FCT824A * 3370	620-116
54FCT825			
	IDT	IDT54FCT825A	
		* 2809	620-7
		IDT54FCT825B	
		* 2809	620-8
	VTC	V54FCT825A * 3370	620-17
54FCT826			
	IDT	IDT54FCT826A	
		* 2809	619-52
		IDT54FCT826B	
		* 2809	619-53
	VTC	V54FCT826A * 3370	619-59
54FCT827			
	IDT	IDR54FCT827B	607-98
		IDT54FCT827A	
		* 2809	607-102
		IDT54FCT827B	
		* 2809	607-103
	VTC	V54FCT827A * 3370	607-105
54FCT828			
	IDT	IDT54FCT828A	
		* 2809	607-93
		IDT54FCT828B	
		* 2809	607-94
	VTC	V54FCT828A * 3370	607-97
54FCT833			
	IDT	IDT54FCT833A	
		* 2809	642-102
		IDT54FCT833B	
		* 2809	642-103
54FCT834			
	IDT	IDT54FCT834A	
		* 2809	642-104
		IDT54FCT834B	
		* 2809	642-105

Base Number	Source	Device	Page-Line
54FCT841			
	IDT	IDT54FCT841A	
		* 2809	629-107
		IDT54FCT841B	
		* 2809	629-108
	VTC	V54FCT841A * 3370	629-111
54FCT842			
	IDT	IDT54FCT842A	
		* 2809	629-96
		IDT54FCT842B	
		* 2809	629-97
	VTC	V54FCT842A * 3370	629-102
54FCT843			
	IDT	IDT54FCT843A	
		* 2809	636-102
		IDT54FCT843B	
		* 2809	629-83
	VTC	V54FCT843A * 3370	629-85
54FCT844			
	IDT	IDT54FCT844A	
		* 2809	629-98
		IDT54FCT844B	
		* 2809	629-70
	VTC	V54FCT844A * 3370	629-74
54FCT845			
	IDT	IDT54FCT845A	
		* 2809	629-55
		IDT54FCT845B	
		* 2809	629-71
	VTC	IDT54FCT845B	629-73
		V54FCT845A * 3370	629-75
54FCT846			
	IDT	IDT54FCT846A	
		* 2809	629-48
		IDT54FCT846B	
		* 2809	629-49
	VTC	V54FCT846A * 3370	629-52
54FCT853			
	IDT	IDT54FCT853A	
		* 2809	642-106
		IDT54FCT853B	
		* 2809	642-107
54FCT854			
	IDT	IDT54FCT854A	
		* 2809	642-108
		IDT54FCT854B	
		* 2809	642-109
54FCT861			
	IDT	IDT54FCT861A	
		* 2809	643-19
		IDT54FCT861B	
		* 2809	643-20
	VTC	V54FCT861A * 3370	643-25
54FCT862			
	IDT	IDT54FCT862A	
		* 2809	643-21
		IDT54FCT862B	
		* 2809	643-22
	VTC	V54FCT862A * 3370	643-26

Base Number	Source	Device	Page-Line
54FCT863			
	IDT	IDT54FCT863A	
		* 2809	636-106
		IDT54FCT863B	
		* 2809	642-124
	VTC	V54FCT863A * 3370	642-128
54FCT864			
	IDT	IDT54FCT864A	
		* 2809	642-125
		IDT54FCT864B	
		* 2809	642-126
	VTC	V54FCT864A * 3370	642-129
54F00	Fairchild	54F00	672-121
	Motorola	MC54F00	672-123
	Signetics	54F00	672-125
	TI	SN54F00	673-113
54F02	Fairchild	54F02	675-126
	Motorola	MC54F02	675-128
	TI	SN54F02	675-165
54F04	Fairchild	54F04	659-95
	Motorola	MC54F04	659-97
	Signetics	54F04	659-101
	TI	SN54F04	659-103
54F08	Fairchild	54F08	671-14
	Motorola	MC54F08	671-16
	TI	SN54F08	671-19
54F10	Fairchild	54F10	672-43
	Motorola	MC54F10	672-22
	TI	SN54F10	672-95
54F109	Fairchild	54F109	669-65
	Motorola	MC54F109	669-67
	TI	SN54F109	669-50
54F11	Fairchild	54F11	670-114
	Motorola	MC54F11	670-116
	TI	SN54F11	670-119
54F112	Motorola	MC54F112	670-10
	TI	SN54F112	670-13
54F113	Motorola	MC54F113	669-156
	TI	SN54F113	669-159
54F114	Motorola	MC54F114	670-40
	TI	SN54F114	670-43
54F13	Motorola	MC54F13	659-60
54F138	Fairchild	54F138	665-51
	Motorola	MC54F138	665-53
	TI	SN54F138	665-42
54F139	Fairchild	54F139	664-117
	Motorola	MC54F139	664-120
	Signetics	54F139	664-122
54F14	Motorola	MC54F14	659-98
54F148	Motorola	MC54F148	690-2
54F151	Fairchild	54F151	681-57
	Motorola	MC54F151	681-59
	TI	SN54F151	681-62
54F153	Fairchild	54F153	679-25
	Motorola	MC54F153	679-27
	TI	SN54F153	679-30
54F157	Fairchild	54F157	680-87
	Motorola	MC54F157	680-89
	Signetics	54F157	680-91
	TI	SN54F157A	680-93
54F158	Fairchild	54F158	679-166
	Motorola	MC54F158	679-168
	Signetics	54F158	679-170
	TI	SN54F158A	679-172
54F160	Fairchild	54F160A	662-130
	Motorola	MC54F160A	662-132
	TI	SN54F160A	662-135
54F161	Fairchild	54F161A	660-136
	Motorola	MC54F161A	660-138
	TI	SN54F161A	660-141
54F162	Fairchild	54F162A	662-161
	Motorola	MC54F162A	662-163
	TI	SN54F162A	662-166
54F163	Fairchild	54F163A	660-178
	Motorola	MC54F163A	660-180
	TI	SN54F163A	661-3
54F164	Fairchild	54F164	683-65
	Motorola	MC54F164	683-67
54F168	Motorola	MC54F168	663-58
	TI	SN54F168	663-61

Base Number	Source	Device	Page-Line
54F169	Motorola	MC54F169	661-116
	TI	SN54F169	661-121
54F174	Fairchild	54F174	667-163
	Motorola	MC54F174	667-165
	TI	SN54F174	667-168
54F175	Fairchild	54F175	667-48
	Motorola	MC54F175	667-50
	TI	SN54F175	667-53
54F181	Fairchild	54F181	657-21
	Motorola	MC54F181	657-25
	Signetics	54F181	657-30
54F182	Motorola	MC54F182	657-79
54F189	Fairchild	54F189	678-123
	Motorola	MC54F189	678-127
54F190	Fairchild	54F190	663-127
	Motorola	MC54F190	663-129
54F191	Fairchild	54F191	661-155
	Motorola	MC54F191	661-157
54F192	Fairchild	54F192	663-96
	Motorola	MC54F192	663-98
54F193	Fairchild	54F193	662-21
	Motorola	MC54F193	662-23
54F194	Fairchild	54F194	683-15
	Motorola	MC54F194	683-17
54F20	Fairchild	54F20	671-108
	Motorola	MC54F20	671-110
			684-149
	Signetics	54F20	671-112
	TI	SN54F20	671-114
54F21	Motorola	MC54F21	670-73
			685-52
	TI	SN54F21	671-115
54F219	Fairchild	54F219	678-124
54F240	Fairchild	54F240	685-13
			987-3
	Signetics	54F240	685-17
	TI	SN54F240	685-23
54F241	Fairchild	54F241	685-72
	Signetics	54F241	685-76
	TI	SN54F241	685-81
54F242	Motorola	MC54F242	684-136
	Signetics	54F242	684-97
	TI	SN54F242	684-103
54F243	Fairchild	54F243	684-93
	Motorola	MC54F243	684-137
	Signetics	54F243	684-98
	TI	SN54F243	684-104
54F244	Fairchild	54F244	685-128
	Motorola	MC54F244	685-53
	Signetics	54F244	685-131
	TI	SN54F244	685-135
54F245	Fairchild	54F245	686-150
	Motorola	MC54F245	686-98
			997-11
	Signetics	54F245	686-155
	TI	SN54F245	686-122
54F251	Fairchild	54F251A	681-111
	Motorola	MC54F251	681-113
	TI	SN54F251	681-101
54F253	Fairchild	54F253	679-115
	Motorola	MC54F253	679-117
	TI	SN54F253	679-120
54F257	Fairchild	54F257	680-127
	Motorola	MC54F257	680-129
	Signetics	54F257	680-131
	TI	SN54F257	680-133
54F258	Fairchild	54F258	680-34
	Motorola	MC54F258	680-36
	Signetics	54F258	680-38
	TI	SN54F258	680-40
54F269	Signetics	54F269	661-118
54F27	TI	SN54F27	675-50
54F273	Signetics	54F273	668-97
	TI	SN54F273	668-99
54F280	Fairchild	54F280	690-54
	Motorola	MC54F280	690-56
	Signetics	54F280	690-58
	TI	SN54F280A	690-60
54F283	Fairchild	54F283	658-3
	Motorola	MC54F283	658-5
	TI	SN54F283	658-8
54F286	TI	SN54F286	658-55
54F2960			
	Motorola	MC54F2960	860-122
54F2961			
	Motorola	MC54F2961	860-130

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54F2962			
	Motorola	MC54F2962	860-131
54F2968			
	Motorola	MC54F2968	860-113
54F2969			
	Motorola	MC54F2969	861-2
54F2970			
	Motorola	MC54F2970	861-5
54F299	TI	SN54F299	684-15
54F30	TI	SN54F30	673-135
54F3037			
	Signetics	54F3037	689-50
54F3040			
	Signetics	54F3040	689-11
54F32	Fairchild	54F32	674-134
	Motorola	MC54F32	674-136
	TI	SN54F32	674-139
54F322	Fairchild	54F322	683-145
54F350	Motorola	MC54F350	644-132
	TI	SN54F350	657-136
54F352	Fairchild	54F352	679-68
	Motorola	MC54F352	679-70
	TI	SN54F352	679-148
54F353	Fairchild	54F353	679-91
	Motorola	MC54F353	679-93
	TI	SN54F353	679-96
54F36	TI	SN54F36	675-69
54F365	Signetics	54F365	658-157
54F366	Signetics	54F366	660-19
			666-62
54F367	Signetics	54F367	658-158
54F368	Signetics	54F368	660-20
54F373	Fairchild	54F373	677-95
	Motorola	MC54F373	677-102
	Signetics	54F373	677-104
	TI	SN54F373	677-109
54F374	Fairchild	54F374	668-144
	Motorola	MC54F374	668-147
	Signetics	54F374	668-149
	TI	SN54F374	668-151
54F377	Signetics	54F377	669-3
54F378	Fairchild	54F378	668-15
	Motorola	MC54F378	682-73
54F379	Fairchild	54F379	667-95
	Motorola	MC54F379	682-72
	TI	SN54F379	668-152
54F381	Motorola	MC54F381	657-26
	TI	SN54F381	657-35
54F382	TI	SN54F382	657-36
54F385	Fairchild	54F385	656-3
54F398	Fairchild	54F398	680-168
	Motorola	MC54F398	681-18
54F399	Fairchild	54F399	680-169
	Motorola	MC54F399	681-19
54F412	Fairchild	54F412	677-96
54F518	TI	SN54F518	656-151
54F519	TI	SN54F519	656-152
54F520	TI	SN54F520	656-149
54F521	Fairchild	54F521	656-93
	Motorola	MC54F521	656-95
	Signetics	54F521	656-97
	TI	SN54F521	656-150
54F533	Fairchild	54F533	677-163
	Motorola	MC54F533	677-167
	Signetics	54F533	677-169
	TI	SN54F533	677-172
54F534	Fairchild	54F534	668-73
	Motorola	MC54F534	668-77
	Signetics	54F534	668-79
	TI	SN54F534	668-82
54F537	Motorola	MC54F537	665-32
54F538	Motorola	MC54F538	665-84
54F539	Motorola	MC54F539	664-101
54F540	Signetics	54F540	685-18
54F543	TI	SN54F543	687-68
54F544	Fairchild	54F544	687-54
	TI	SN54F544	687-69
54F545	Fairchild	54F545	686-151
	Signetics	54F545	686-156
54F547	Fairchild	54F547	665-33
54F548	Fairchild	54F548	665-34
54F563	Fairchild	54F563	677-164
54F564	Fairchild	54F564	668-74
54F573	Fairchild	54F573	677-97
	TI	SN54F573	677-110
54F579	Signetics	54F579	663-44
54F583	Fairchild	54F583	657-1
54F604	Signetics	54F604	677-32
54F605	Signetics	54F605	677-33
54F620	Signetics	54F620	687-127
	TI	SN54F620	687-130
54F621	TI	SN54F621	687-91
54F623	TI	SN54F623	687-131
54F630	Signetics	54F630	982-44
54F631	Signetics	54F631	982-45
54F64	Fairchild	54F64	674-86
	Motorola	MC54F64	674-85
	Signetics	54F64	674-89
54F646	Signetics	54F646	687-60
54F647	Signetics	54F647	687-28
54F648	Signetics	54F648	687-61
54F649	Signetics	54F649	687-29
54F655	Signetics	54F655	660-59
54F656	Signetics	54F656	659-36
54F657	Signetics	54F657	687-20
54F676	Fairchild	54F676	684-60
			1395-84
54F74	Fairchild	54F74	666-157
	Motorola	MC54F74	666-140
	TI	SN54F74	667-1
54F86	Fairchild	54F86	676-45
	Motorola	MC54F86	676-47
	Signetics	54F86	676-49
54HCT00			
	GE/RCA	**CD54HCT00 * 2631**	
			623-76
	National	MM54HCT00	623-79
54HCT02			
	GE/RCA	**CD54HCT02 * 2631**	
			625-134
54HCT03			
	GE/RCA	**CD54HCT03 * 2631**	
			623-118
54HCT04			
	GE/RCA	**CD54HCT04 * 2631**	
			608-22
	Motorola	MC54HCT04	608-26
	National	MM54HCT04	608-29
	TI	SN54HCT04	608-39
54HCT05			
	Motorola	MC54HCT05	608-27
	National	MM54HCT05	608-30
54HCT08			
	GE/RCA	**CD54HCT08 * 2631**	
			622-73
54HCT10			
	GE/RCA	**CD54HCT10 * 2631**	
			623-14
54HCT107			
	GE/RCA	**CD54HCT107 * 2631**	
			621-132
	National	MM54HCT107	621-138
54HCT109			
	GE/RCA	**CD54HCT109 * 2631**	
			621-17
	National	MM54HCT109	621-21
54HCT11			
	GE/RCA	**CD54HCT11 * 2631**	
			622-18
54HCT112			
	GE/RCA	**CD54HCT112 * 2631**	
			621-84
	National	MM54HCT112	621-87
54HCT123			
	GE/RCA	**CD54HCT123 * 2632**	
			633-51
54HCT125			
	GE/RCA	**CD54HCT125 * 2631**	
			605-64
54HCT126			
	GE/RCA	**CD54HCT126 * 2631**	
			605-65
54HCT132			
	GE/RCA	**CD54HCT132 * 2631**	
			638-93
54HCT137			
	GE/RCA	**CD54HCT137 * 2632**	
			615-159
	Marconi	54HCT137SOS	615-165
	Supertex	54HCT137	615-172
	TI	SN54HCT137	615-176
			615-177
54HCT138			
	GE/RCA	**CD54HCT138 * 2632**	
			615-89
	Marconi	54HCT138SOS	615-93
	Mitel	MD54HCT138R	
			615-97
	National	MM54HCT138	615-99
	Supertex	54HCT138	615-107
	TI	SN54HCT138	615-111
54HCT139			
	GE/RCA	**CD54HCT139 * 2632**	
			615-1
	Marconi	54HCT139SOS	615-5
	Mitel	MD54HCT139R	
			615-9
	National	MM54HCT139	615-11
	Supertex	54HCT139	615-20
54HCT14			
	GE/RCA	**CD54HCT14 * 2631**	
			638-141
54HCT147			
	GE/RCA	**CD54HCT147 * 2632**	
			616-100
54HCT149			
	National	MM54HCT149	616-89
54HCT151			
	GE/RCA	**CD54HCT151 * 2632**	
			632-34
54HCT153			
	GE/RCA	**CD54HCT153 * 2632**	
			630-138
	National	MM54HCT153	630-140
54HCT154			
	GE/RCA	**CD54HCT154 * 2632**	
			616-82
54HCT155			
	National	MM54HCT155	615-12
54HCT157			
	GE/RCA	**CD54HCT157 * 2632**	
			631-59
54HCT158			
	GE/RCA	**CD54HCT158 * 2632**	
			631-94
54HCT160			
	GE/RCA	**CD54HCT160 * 2632**	
			612-36
	National	MM54HCT160	612-38
54HCT161			
	GE/RCA	**CD54HCT161 * 2632**	
			609-25
	National	MM54HCT161	609-28
54HCT162			
	GE/RCA	**CD54HCT162 * 2632**	
			611-162
	National	MM54HCT162	611-165
54HCT163			
	GE/RCA	**CD54HCT163 * 2632**	
			608-143
	National	MM54HCT163	608-146
54HCT164			
	GE/RCA	**CD54HCT164 * 2631**	
			635-56
	National	MM54HCT164	635-59
54HCT165			
	GE/RCA	**CD54HCT165 * 2631**	
			635-16
54HCT166			
	GE/RCA	**CD54HCT166 * 2631**	
			635-78
	National	MM54HCT166	635-81
54HCT169			
	National	MM54HCT169	610-62
54HCT173			
	GE/RCA	**CD54HCT173 * 2631**	
			618-37
54HCT174			
	GE/RCA	**CD54HCT174 * 2631**	
			618-90
	National	MM54HCT174	618-93
54HCT175			
	GE/RCA	**CD54HCT175 * 2631**	
			617-162
54HCT181			
	GE/RCA	**CD54HCT181 * 2632**	
			603-36
54HCT182			
	GE/RCA	**CD54HCT182 * 2632**	
			603-67
54HCT190			
	GE/RCA	**CD54HCT190 * 2632**	
			612-165
54HCT191			
	GE/RCA	**CD54HCT191 * 2632**	
			609-100
	National	MM54HCT191	609-108
54HCT192			
	GE/RCA	**CD54HCT192 * 2632**	
			612-79
54HCT193			
	GE/RCA	**CD54HCT193 * 2632**	
			609-101
	National	MM54HCT193	609-109
54HCT194			
	GE/RCA	**CD54HCT194 * 2631**	
			634-34
54HCT195			
	GE/RCA	**CD54HCT195 * 2631**	
			634-97
54HCT20			
	GE/RCA	**CD54HCT20 * 2631**	
			622-137
54HCT21			
	GE/RCA	**CD54HCT21 * 2631**	
			621-159
54HCT221			
	GE/RCA	**CD54HCT221 * 2632**	
			633-17
54HCT237			
	GE/RCA	**CD54HCT237 * 2632**	
			615-160
	Marconi	54HCT237SOS	615-166
	Supertex	54HCT237	615-173
	TI	SN54HCT237	615-128
			615-129
54HCT238			
	GE/RCA	**CD54HCT238 * 2632**	
			615-66
	Marconi	54HCT238SOS	615-94
	Supertex	54HCT238	615-108
	TI	SN54HCT238	615-130
			615-131
54HCT239			
	Marconi	54HCT239SOS	615-6
	Supertex	54HCT239	615-21
54HCT240			
	GE/RCA	**CD54HCT240 * 2631**	
			639-49
	Hitachi	HD54HCT240	640-37
	Marconi	54HCT240SOS	639-53
	Mitel	MD54HCT240R	
			639-56
	Motorola	MC54HCT240	639-58
	National	MM54HCT240	639-60
	Signetics	54HCT240	639-68
	Supertex	54HCT240	639-70
	TI	SN54HCT240	639-72
54HCT241			
	GE/RCA	**CD54HCT241 * 2631**	
			639-151
	Marconi	54HCT241SOS	639-159
	Mitel	MD54HCT241R	
			639-165
	Motorola	MC54HCT241	639-169
	National	MM54HCT241	640-31
	Signetics	54HCT241	640-4
	Supertex	54HCT241	640-8
	TI	SN54HCT241	640-34
54HCT242			
	GE/RCA	**CD54HCT242 * 2631**	
			638-38
	Supertex	54HCT242	638-45
54HCT243			
	GE/RCA	**CD54HCT243 * 2631**	
			638-64
	Supertex	54HCT243	638-69
54HCT244			
	GE/RCA	**CD54HCT244 * 2631**	
			639-152
	Marconi	54HCT244SOS	639-160
	Mitel	MD54HCT244R	
			639-166
	Motorola	MC54HCT244	639-170

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54HCT244			(Cont'd)
	National	MM54HCT244	639-173
	Signetics	54HCT244	640-5
	Supertex	54HCT244	640-9
	TI	SN54HCT244	640-12
54HCT245			
	GE/RCA	**CD54HCT245 ⋆ 2631**	641-156
	Marconi	54HCT245SOS	641-160
	Mitel	MD54HCT245R	641-163
	Motorola	MC54HCT245	641-165
	National	MM54HCT245	641-167
	Supertex	54HCT245	641-174
	TI	SN54HCT245	641-176
54HCT251			
	GE/RCA	**CD54HCT251 ⋆ 2632**	632-119
54HCT253			
	GE/RCA	**CD54HCT253 ⋆ 2632**	631-18
	National	MM54HCT253	631-20
54HCT257			
	GE/RCA	**CD54HCT257 ⋆ 2632**	631-125
54HCT258			
	GE/RCA	**CD54HCT258 ⋆ 2632**	631-149
54HCT259			
	GE/RCA	**CD54HCT259 ⋆ 2632**	629-17
54HCT27			
	GE/RCA	**CD54HCT27 ⋆ 2631**	625-70
54HCT273			
	GE/RCA	**CD54HCT273 ⋆ 2631**	618-153
	National	MM54HCT273	618-156
	Supertex	54HCT273	618-161
54HCT280			
	GE/RCA	**CD54HCT280 ⋆ 2632**	604-135
54HCT283			
	GE/RCA	**CD54HCT283 ⋆ 2632**	602-47
54HCT297			
	GE/RCA	**CD54HCT297 ⋆ 2632**	637-39
			1190-12
	Signetics	54HCT297	1190-16
54HCT299			
	GE/RCA	**CD54HCT299 ⋆ 2631**	635-166
	National	MM54HCT299	635-169
54HCT30			
	GE/RCA	**CD54HCT30 ⋆ 2631**	623-158
54HCT32			
	GE/RCA	**CD54HCT32 ⋆ 2631**	624-146
54HCT34			
	Motorola	MC54HCT34	608-28
	National	MM54HCT34	608-31
54HCT354			
	GE/RCA	**CD54HCT354 ⋆ 2632**	632-120
54HCT356			
	GE/RCA	**CD54HCT356 ⋆ 2632**	632-121
54HCT365			
	GE/RCA	**CD54HCT365 ⋆ 2631**	606-81
54HCT366			
	GE/RCA	**CD54HCT366 ⋆ 2631**	606-136
54HCT367			
	GE/RCA	**CD54HCT367 ⋆ 2631**	606-82
54HCT368			
	GE/RCA	**CD54HCT368 ⋆ 2631**	606-137
54HCT373			
	GE/RCA	**CD54HCT373 ⋆ 2632**	627-154
	Marconi	54HCT373SOS	627-162
	Mitel	MD54HCT373R	628-1

(Continued)

Base Number	Source	Device	Page-Line
54HCT373			(Cont'd)
	Motorola	MC54HCT373	628-5
	National	MM54HCT373	628-7
	Supertex	54HCT373	628-17
	TI	SN54HCT373	628-21
54HCT374			
	GE/RCA	**CD54HCT374 ⋆ 2631**	620-52
	Marconi	54HCT374SOS	620-60
	Mitel	MD54HCT374R	620-66
	Motorola	MC54HCT374	620-70
	National	MM54HCT374	620-72
	Supertex	54HCT374	620-84
	TI	SN54HCT374	620-88
54HCT377			
	GE/RCA	**CD54HCT377 ⋆ 2631**	619-14
54HCT384			
	Signetics	54HCT384	644-34
54HCT390			
	GE/RCA	**CD54HCT390 ⋆ 2632**	613-14
54HCT393			
	GE/RCA	**CD54HCT393 ⋆ 2632**	610-21
	Supertex	54HCT393	609-177
54HCT4002			
	GE/RCA	**CD54HCT4002 ⋆ 2631**	625-24
	Signetics	54HCT4002	625-26
54HCT40102			
	GE/RCA	**CD54HCT40102 ⋆ 2632**	612-121
54HCT40103			
	GE/RCA	**CD54HCT40103 ⋆ 2632**	610-110
54HCT40104			
	GE/RCA	**CD54HCT40104 ⋆ 2631**	634-49
54HCT40105			
	GE/RCA	**CD54HCT40105 ⋆ 2631**	630-1
54HCT4015			
	GE/RCA	**CD54HCT4015 ⋆ 2631**	633-122
54HCT4017			
	GE/RCA	**CD54HCT4017 ⋆ 2632**	611-119
54HCT4020			
	GE/RCA	**CD54HCT4020 ⋆ 2632**	611-29
54HCT4024			
	GE/RCA	**CD54HCT4024 ⋆ 2632**	610-77
54HCT4027			
	TI	SN54HCT4027	610-80
54HCT4040			
	GE/RCA	**CD54HCT4040 ⋆ 2632**	610-157
54HCT4046			
	GE/RCA	**CD54HCT4046 ⋆ 2632**	637-40
54HCT4049			
	GE/RCA	CD54HCT4049	605-105
54HCT4051			
	GE/RCA	**CD54HCT4051 ⋆ 2632**	913-36
54HCT4052			
	GE/RCA	**CD54HCT4052 ⋆ 2632**	911-92
54HCT4053			
	GE/RCA	**CD54HCT4053 ⋆ 2632**	908-23

Base Number	Source	Device	Page-Line
54HCT4059			
	GE/RCA	**CD54HCT4059 ⋆ 2632**	613-97
54HCT4060			
	GE/RCA	**CD54HCT4060 ⋆ 2632**	611-66
54HCT4066			
	GE/RCA	**CD54HCT4066 ⋆ 2631**	904-16
54HCT4067			
	GE/RCA	**CD54HCT4067 ⋆ 2632**	915-28
54HCT4075			
	GE/RCA	**CD54HCT4075 ⋆ 2631**	624-96
54HCT4094			
	GE/RCA	**CD54HCT4094 ⋆ 2631**	634-149
54HCT42			
	GE/RCA	**CD54HCT42 ⋆ 2632**	614-75
54HCT423			
	GE/RCA	**CD54HCT423 ⋆ 2632**	633-18
54HCT4510			
	GE/RCA	**CD54HCT4510 ⋆ 2632**	612-148
54HCT4511			
	GE/RCA	**CD54HCT4511 ⋆ 2632**	617-20
54HCT4514			
	GE/RCA	**CD54HCT4514 ⋆ 2632**	616-23
54HCT4515			
	GE/RCA	**CD54HCT4515 ⋆ 2632**	616-24
54HCT4516			
	GE/RCA	**CD54HCT4516 ⋆ 2632**	609-102
54HCT4518			
	GE/RCA	**CD54HCT4518 ⋆ 2632**	613-27
54HCT4520			
	GE/RCA	**CD54HCT4520 ⋆ 2632**	609-164
54HCT4538			
	GE/RCA	**CD54HCT4538 ⋆ 2632**	633-19
54HCT4543			
	GE/RCA	**CD54HCT4543 ⋆ 2632**	616-135
54HCT521			
	National	MM54HCT521	603-100
54HCT533			
	GE/RCA	**CD54HCT533 ⋆ 2632**	628-103
	Marconi	54HCT533SOS	628-111
	Motorola	MC54HCT533	628-117
	National	MM54HCT533	628-119
	Supertex	54HCT533	628-129
54HCT534			
	GE/RCA	**CD54HCT534 ⋆ 2631**	619-94
	Marconi	54HCT534SOS	619-102
	Motorola	MC54HCT534	619-108
	National	MM54HCT534	619-110
	Supertex	54HCT534	619-119
54HCT540			
	GE/RCA	**CD54HCT540 ⋆ 2631**	607-14
	Marconi	54HCT540SOS	607-22
	Mitel	MD54HCT540R	607-28

(Continued)

Base Number	Source	Device	Page-Line
54HCT540			(Cont'd)
	Motorola	MC54HCT540	607-32
	National	MM54HCT540	607-36
	Supertex	54HCT540	607-68
	TI	SN54HCT540	639-73
54HCT541			
	GE/RCA	**CD54HCT541 ⋆ 2631**	607-15
	Marconi	54HCT541SOS	607-23
	Mitel	MD54HCT541R	607-29
	Motorola	MC54HCT541	607-33
	National	MM54HCT541	607-37
	Supertex	54HCT541	607-48
	TI	SN54HCT541	607-51
54HCT543			
	National	MM54HCT543	642-28
54HCT544			
	National	MM54HCT544	642-29
54HCT550			
	National	MM54HCT550	642-58
54HCT551			
	National	MM54HCT551	642-59
54HCT563			
	GE/RCA	**CD54HCT563 ⋆ 2632**	628-104
	Marconi	54HCT563SOS	628-112
	Supertex	54HCT563	628-130
54HCT564			
	GE/RCA	**CD54HCT564 ⋆ 2631**	619-95
	Marconi	54HCT564SOS	619-103
	Supertex	54HCT564	619-120
54HCT573			
	GE/RCA	**CD54HCT573 ⋆ 2632**	627-155
	Marconi	54HCT573SOS	627-163
	Mitel	MD54HCT573R	628-2
	Supertex	54HCT573	628-18
54HCT574			
	GE/RCA	**CD54HCT574 ⋆ 2631**	620-53
	Marconi	54HCT574SOS	620-61
	Mitel	MD54HCT574R	620-67
	National	MM54HCT574	620-73
	Supertex	54HCT574	620-85
54HCT583			
	GE/RCA	**CD54HCT583 ⋆ 2632**	602-4
54HCT590			
	National	MM54HCT590	610-136
54HCT597			
	GE/RCA	**CD54HCT597 ⋆ 2631**	635-30
54HCT623			
	Motorola	MC54HCT623	641-36
54HCT640			
	GE/RCA	**CD54HCT640 ⋆ 2631**	641-73
	Motorola	MC54HCT640	641-77
	National	MM54HCT640	641-79
54HCT643			
	GE/RCA	**CD54HCT643 ⋆ 2631**	642-11
	Motorola	MC54HCT643	642-15
	National	MM54HCT643	641-80
54HCT646			
	GE/RCA	**CD54HCT646 ⋆ 2631**	640-135
54HCT648			
	GE/RCA	**CD54HCT648 ⋆ 2631**	640-87
54HCT670			
	GE/RCA	**CD54HCT670 ⋆ 2631**	630-25
54HCT688			
	GE/RCA	**CD54HCT688 ⋆ 2632**	602-109
	National	MM54HCT688	603-10
54HCT7030			
	GE/RCA	**CD54HCT7030 ⋆ 2631**	630-58

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54HCT7038			
	GE/RCA	**CD54HCT7038**	
			*** 2631**
			642-142
54HCT7046			
	GE/RCA	**CD54HCT7046**	
			*** 2632**
			633-114
54HCT73			
	GE/RCA	**CD54HCT73**	*** 2631**
			621-133
54HCT74			
	GE/RCA	**CD54HCT74**	*** 2631**
			617-87
	National	MM54HCT74	617-90
54HCT75			
	GE/RCA	**CD54HCT75**	*** 2632**
			628-161
54HCT76			
	National	MM54HCT76	621-22
54HCT85			
	GE/RCA	**CD54HCT85**	*** 2632**
			603-98
54HCT86			
	GE/RCA	**CD54HCT86**	*** 2631**
			626-36
54HCT93			
	GE/RCA	**CD54HCT93**	*** 2632**
			610-35
54HCU04			
	GE/RCA	**CD54HCU04**	*** 2631**
			608-1
			¶ 437-10
	Motorola	MC54HCU04	608-66
	National	MM54HCU04	608-68
	TI	SN54HCU04	608-72
54HC00			
	GE/RCA	**CD54HC00**	*** 2631**
			623-61
	Motorola	MC54HC00	623-65
	National	MM54HC00	623-67
	TI	SN54HC00	623-72
54HC02			
	GE/RCA	**CD54HC02**	*** 2631**
			625-115
	Motorola	MC54HC02	625-119
	National	MM54HC02	625-121
	TI	SN54HC02	625-127
54HC03			
	GE/RCA	**CD54HC03**	*** 2631**
			623-114
	Motorola	MC54HC03	623-123
	National	MM54HC03	623-125
	TI	SN54HC03	623-129
54HC04			
	GE/RCA	**CD54HC04**	*** 2631**
			608-2
	Motorola	MC54HC04	608-8
	National	MM54HC04	608-11
	TI	SN54HC04	608-16
54HC05			
	Motorola	MC54HC05	608-9
	TI	SN54HC05	608-17
54HC08			
	GE/RCA	**CD54HC08**	*** 2631**
			622-56
	Motorola	MC54HC08	622-60
	National	MM54HC08	622-62
	TI	SN54HC08	622-68
54HC09			
	TI	SN54HC09	622-100
54HC10			
	GE/RCA	**CD54HC10**	*** 2631**
			622-181
	Motorola	MC54HC10	622-185
	National	MM54HC10	623-2
	TI	SN54HC10	623-10
54HC107			
	GE/RCA	**CD54HC107**	*** 2631**
			621-105
	Motorola	MC54HC107	621-113
	National	MM54HC107	621-117
	TI	SN54HC107	621-127
54HC109			
	GE/RCA	**CD54HC109**	*** 2631**
			620-151
	Motorola	MC54HC109	620-157
	National	MM54HC109	620-161
	TI	SN54HC109	621-11
54HC11			
	GE/RCA	**CD54HC11**	*** 2631**
			622-3
	Motorola	MC54HC11	622-7
	National	MM54HC11	622-9
	TI	SN54HC11	622-15
54HC112			
	GE/RCA	**CD54HC112**	*** 2631**
			621-70
	Motorola	MC54HC112	621-74
	National	MM54HC112	621-76
	TI	SN54HC112	621-82
54HC113			
	Motorola	MC54HC113	621-52
	National	MM54HC113	621-54
	TI	SN54HC113	621-58
54HC114			
	TI	SN54HC114	621-95
54HC123			
	GE/RCA	**CD54HC123**	*** 2632**
			633-41
	National	MM54HC123	633-45
		MM54HC123A	633-46
54HC125			
	GE/RCA	**CD54HC125**	*** 2631**
			605-42
	Motorola	MC54HC125	605-50
	National	MM54HC125	605-54
	TI	SN54HC125	605-60
54HC126			
	GE/RCA	**CD54HC126**	*** 2631**
			605-43
	Motorola	MC54HC126	605-51
	National	MM54HC126	605-72
	TI	SN54HC126	638-60
54HC132			
	GE/RCA	**CD54HC132**	*** 2631**
			638-79
	Motorola	MC54HC132	638-83
	National	MM54HC132	638-85
	TI	SN54HC132	638-90
54HC133			
	Motorola	MC54HC133	623-176
	National	MM54HC133	623-178
	TI	SN54HC133	623-183
54HC137			
	GE/RCA	**CD54HC137**	*** 2632**
			615-134
	Motorola	MC54HC137	615-142
	National	MM54HC137	615-146
	TI	SN54HC137	615-156
54HC138			
	GE/RCA	**CD54HC138**	*** 2632**
			615-67
	Motorola	MC54HC138	615-75
	National	MM54HC138	615-77
	TI	SN54HC138	615-86
54HC139			
	GE/RCA	**CD54HC139**	*** 2632**
			614-150
	Motorola	MC54HC139	614-155
	National	MM54HC139	614-158
	TI	SN54HC139	614-165
54HC14			
	GE/RCA	**CD54HC14**	*** 2631**
			638-129
	Motorola	MC54HC14	638-133
	National	MM54HC14	638-164
	TI	SN54HC14	638-139
54HC147			
	GE/RCA	**CD54HC147**	*** 2632**
			616-92
	Motorola	MC54HC147	616-96
	National	MM54HC147	632-127
			632-129
54HC149			
	National	MM54HC149	616-87
54HC151			
	GE/RCA	**CD54HC151**	*** 2632**
			632-18
	Motorola	MC54HC151	632-22
	National	MM54HC151	632-24
	TI	SN54HC151	632-30
54HC152			
	TI	SN54HC152	632-40
54HC153			
	GE/RCA	**CD54HC153**	*** 2632**
			630-132
	Motorola	MC54HC153	630-102
	National	MM54HC153	630-135
	TI	SN54HC153	630-106
54HC154			
	GE/RCA	**CD54HC154**	*** 2632**
			616-68
	Motorola	MC54HC154	616-72
	National	MM54HC154	616-74
54HC157			
	GE/RCA	**CD54HC157**	*** 2632**
			631-41
	Motorola	MC54HC157	631-45
	National	MM54HC157	631-47
	TI	SN54HC157	631-55
54HC158			
	GE/RCA	**CD54HC158**	*** 2632**
			631-78
	Motorola	MC54HC158	631-83
	National	MM54HC158	631-48
	TI	SN54HC158	631-90
54HC160			
	GE/RCA	**CD54HC160**	*** 2632**
			612-22
	Motorola	MC54HC160	612-25
	National	MM54HC160	612-27
	TI	SN54HC160	612-32
54HC161			
	GE/RCA	**CD54HC161**	*** 2632**
			609-9
	Motorola	MC54HC161	609-13
	National	MM54HC161	609-15
	TI	SN54HC161	609-21
54HC162			
	GE/RCA	**CD54HC162**	*** 2632**
			611-148
	Motorola	MC54HC162	611-152
	National	MM54HC162	611-154
54HC163			
	GE/RCA	**CD54HC163**	*** 2632**
			608-128
	Motorola	MC54HC163	608-132
	National	MM54HC163	608-134
54HC164			
	GE/RCA	**CD54HC164**	*** 2631**
			635-41
	Motorola	MC54HC164	635-45
			1394-57
	National	MM54HC164	635-47
	TI	SN54HC164	635-52
54HC165			
	GE/RCA	**CD54HC165**	*** 2631**
			634-168
	Motorola	MC54HC165	635-4
			1394-61
	National	MM54HC165	635-6
	TI	SN54HC165	635-12
54HC166			
	GE/RCA	**CD54HC166**	*** 2631**
			635-68
	National	MM54HC166	635-72
	TI	SN54HC166	635-75
54HC169			
	National	MM54HC169	610-60
54HC173			
	GE/RCA	**CD54HC173**	*** 2631**
			618-22
	Motorola	MC54HC173	618-26
	National	MM54HC173	618-28
	TI	SN54HC173	618-33
54HC174			
	GE/RCA	**CD54HC174**	*** 2631**
			618-74
	Motorola	MC54HC174	618-78
	National	MM54HC174	618-80
	TI	SN54HC174	618-86
54HC175			
	GE/RCA	**CD54HC175**	*** 2631**
			617-147
	Motorola	MC54HC175	617-151
	National	MM54HC175	617-153
	TI	SN54HC175	617-158
54HC180			
	TI	SN54HC180	643-1
54HC181			
	GE/RCA	**CD54HC181**	*** 2632**
			603-26
	National	MM54HC181	603-31
54HC182			
	GE/RCA	**CD54HC182**	*** 2632**
			603-59
	National	MM54HC182	603-62
54HC190			
	GE/RCA	**CD54HC190**	*** 2632**
			612-153
	National	MM54HC190	612-158
	TI	SN54HC190	612-161
54HC191			
	GE/RCA	**CD54HC191**	*** 2632**
			609-74
	National	MM54HC191	609-87
	TI	SN54HC191	610-49
54HC192			
	GE/RCA	**CD54HC192**	*** 2632**
			612-65
	National	MM54HC192	612-70
	TI	SN54HC192	612-75
54HC193			
	GE/RCA	**CD54HC193**	*** 2632**
			609-75
	National	MM54HC193	609-88
	TI	SN54HC193	610-50
54HC194			
	GE/RCA	**CD54HC194**	*** 2631**
			634-19
	Motorola	MC54HC194	634-23
			1393-24
	National	MM54HC194	634-25
	TI	SN54HC194	634-30
54HC195			
	GE/RCA	**CD54HC195**	*** 2631**
			634-81
	Motorola	MC54HC195	634-86
			1393-25
	National	MM54HC195	634-88
	TI	SN54HC195	634-93
54HC20			
	GE/RCA	**CD54HC20**	*** 2631**
			622-122
	Motorola	MC54HC20	622-127
	National	MM54HC20	623-3
	TI	SN54HC20	622-133
54HC21			
	GE/RCA	**CD54HC21**	*** 2631**
			621-149
	TI	SN54HC21	621-155
54HC221			
	GE/RCA	**CD54HC221**	*** 2632**
			632-159
	National	MM54HC221A	632-174
54HC237			
	GE/RCA	**CD54HC237**	*** 2632**
			615-135
	Motorola	MC54HC237	615-143
	National	MM54HC237	615-147
	TI	SN54HC237	615-120
54HC238			
	GE/RCA	**CD54HC238**	*** 2632**
			615-68
	TI	SN54HC238	615-121
54HC240			
	GE/RCA	**CD54HC240**	*** 2631**
			639-31
	Motorola	MC54HC240	639-36
			¶ 412-17
	National	MM54HC240	639-38
	Signetics	54HC240	639-44
	TI	SN54HC240	639-46

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54HC241			
	GE/RCA	CD54HC241	⋆ 2631
			639-119
	Motorola	MC54HC241	639-128
			¶ 412-17
	Signetics	54HC241	639-142
	TI	SN54HC241	640-29
54HC242			
	GE/RCA	CD54HC242	⋆ 2631
			638-22
	Motorola	MC54HC242	638-26
			¶ 412-17
	National	MM54HC242	638-28
	TI	SN54HC242	638-35
54HC243			
	GE/RCA	CD54HC243	⋆ 2631
			638-50
	Motorola	MC54HC243	638-53
			¶ 412-17
	National	MM54HC243	638-55
	TI	SN54HC243	638-61
54HC244			
	GE/RCA	CD54HC244	⋆ 2631
			639-120
	Motorola	MC54HC244	639-129
			¶ 412-17
	National	MM54HC244	639-132
	Signetics	54HC244	639-143
	TI	SN54HC244	639-148
54HC245			
	GE/RCA	CD54HC245	⋆ 2631
			641-129
	Motorola	MC54HC245	641-137
			¶ 412-17
	National	MM54HC245	635-174
	TI	SN54HC245	641-145
54HC251			
	GE/RCA	CD54HC251	⋆ 2632
			632-97
	Motorola	MC54HC251	632-106
	National	MM54HC251	632-61
	TI	SN54HC251	632-75
54HC253			
	GE/RCA	CD54HC253	⋆ 2632
			631-9
	Motorola	MC54HC253	631-13
	National	MM54HC253	631-15
	TI	SN54HC253	630-124
54HC257			
	GE/RCA	CD54HC257	⋆ 2632
			631-112
	Motorola	MC54HC257	631-115
	National	MM54HC257	631-117
	TI	SN54HC257	631-122
54HC258			
	GE/RCA	CD54HC258	⋆ 2632
			631-141
	TI	SN54HC258	631-146
54HC259			
	GE/RCA	CD54HC259	⋆ 2632
			628-172
	Motorola	MC54HC259	629-4
	National	MM54HC259	629-6
	TI	SN54HC259	629-13
54HC266			
	Motorola	MC54HC266	626-103
	National	MM54HC266	624-85
	TI	SN54HC266	626-85
54HC27			
	GE/RCA	CD54HC27	⋆ 2631
			625-55
	Motorola	MC54HC27	625-59
	National	MM54HC27	625-61
	TI	SN54HC27	625-67
54HC273			
	GE/RCA	CD54HC273	⋆ 2631
			618-137
	Motorola	MC54HC273	618-142
	National	MM54HC273	618-144
	TI	SN54HC273	618-150
54HC280			
	GE/RCA	CD54HC280	⋆ 2632
			604-125
	Motorola	MC54HC280	604-129
	National	MM54HC280	604-131
	TI	SN54HC280	643-2

Base Number	Source	Device	Page-Line
54HC283			
	GE/RCA	CD54HC283	⋆ 2632
			602-35
	National	MM54HC283	602-41
54HC292			
	National	MM54HC292	637-70
54HC294			
	National	MM54HC294	637-71
54HC297			
	GE/RCA	CD54HC297	⋆ 2632
			637-32
			1190-13
	Signetics	54HC297	1190-17
54HC298			
	National	MM54HC298	631-157
54HC299			
	GE/RCA	CD54HC299	⋆ 2631
			635-152
	Motorola	MC54HC299	635-157
	National	MM54HC299	635-159
54HC30			
	GE/RCA	CD54HC30	⋆ 2631
			623-143
	Motorola	MC54HC30	623-147
	National	MM54HC30	623-149
	TI	SN54HC30	623-155
54HC32			
	GE/RCA	CD54HC32	⋆ 2631
			624-129
	Motorola	MC54HC32	624-133
	National	MM54HC32	624-135
	TI	SN54HC32	624-141
54HC323			
	National	MM54HC323	635-175
54HC354			
	GE/RCA	CD54HC354	⋆ 2632
			632-98
	Motorola	MC54HC354	632-107
	National	MM54HC354	632-84
54HC356			
	GE/RCA	CD54HC356	⋆ 2632
			632-99
	Motorola	MC54HC356	632-108
	National	MM54HC356	632-85
54HC36			
	TI	SN54HC36	625-128
54HC365			
	GE/RCA	CD54HC365	⋆ 2631
			606-55
	Motorola	MC54HC365	606-63
	National	MM54HC365	606-67
	TI	SN54HC365	606-78
54HC366			
	GE/RCA	CD54HC366	⋆ 2631
			606-108
	Motorola	MC54HC366	606-116
	National	MM54HC366	606-120
	TI	SN54HC366	606-132
54HC367			
	GE/RCA	CD54HC367	⋆ 2631
			606-56
	Motorola	MC54HC367	606-64
	National	MM54HC367	606-68
	TI	SN54HC367	638-118
54HC368			
	GE/RCA	CD54HC368	⋆ 2631
			606-109
	Motorola	MC54HC368	606-117
	National	MM54HC368	606-121
	TI	SN54HC368	606-133
54HC373			
	GE/RCA	CD54HC373	⋆ 2632
			627-123
	Motorola	MC54HC373	627-132
	National	MM54HC373	627-136
	TI	SN54HC373	627-148
54HC374			
	GE/RCA	CD54HC374	⋆ 2631
			620-21
	Motorola	MC54HC374	620-30
	National	MM54HC374	620-34
	TI	SN54HC374	620-47
54HC377			
	GE/RCA	CD54HC377	⋆ 2631
			619-5
	TI	SN54HC377	619-11

Base Number	Source	Device	Page-Line
54HC378			
	TI	SN54HC378	618-116
54HC379			
	TI	SN54HC379	618-15
54HC386			
	TI	SN54HC386	626-30
54HC390			
	GE/RCA	CD54HC390	⋆ 2632
			612-172
	Motorola	MC54HC390	613-4
	National	MM54HC390	613-5
	TI	SN54HC390	613-10
54HC393			
	GE/RCA	CD54HC393	⋆ 2632
			610-11
	Motorola	MC54HC393	609-169
	National	MM54HC393	610-15
	TI	SN54HC393	609-174
54HC4002			
	GE/RCA	CD54HC4002	
			⋆ 2631
			625-8
	Motorola	MC54HC4002	625-12
	National	MM54HC4002	625-14
	TI	SN54HC4002	625-21
54HC40102			
	GE/RCA	CD54HC40102	
			⋆ 2632
			612-118
54HC40103			
	GE/RCA	CD54HC40103	
			⋆ 2632
			610-107
54HC40104			
	GE/RCA	CD54HC40104	
			⋆ 2631
			634-46
54HC40105			
	GE/RCA	CD54HC40105	
			⋆ 2631
			629-139
54HC4015			
	GE/RCA	CD54HC4015	
			⋆ 2631
			633-119
54HC4016			
	Motorola	MC54HC4016	905-27
	National	MM54HC4016	905-33
	TI	SN54HC4016	902-7
54HC4017			
	GE/RCA	CD54HC4017	
			⋆ 2632
			611-108
	Motorola	MC54HC4017	611-111
	National	MM54HC4017	611-113
54HC4018			
	National	MM54HC4018	625-172
54HC4020			
	GE/RCA	CD54HC4020	
			⋆ 2632
			611-18
	Motorola	MC54HC4020	611-21
	National	MM54HC4020	611-23
54HC4024			
	GE/RCA	CD54HC4024	
			⋆ 2632
			610-65
	Motorola	MC54HC4024	610-68
	National	MM54HC4024	610-70
54HC4040			
	GE/RCA	CD54HC4040	
			⋆ 2632
			610-145
	Motorola	MC54HC4040	610-148
	National	MM54HC4040	610-150
54HC4046			
	GE/RCA	CD54HC4046	
			⋆ 2632
			637-33
	National	MM54HC4046	637-36
54HC4049			
	GE/RCA	CD54HC4049	
			⋆ 2631
			605-126
	Motorola	MC54HC4049	605-128
	National	MM54HC4049	605-130

Base Number	Source	Device	Page-Line
54HC4050			
	GE/RCA	CD54HC4050	
			⋆ 2631
			606-2
	Motorola	MC54HC4050	606-4
	National	MM54HC4050	606-6
54HC4051			
	GE/RCA	CD54HC4051	
			⋆ 2632
			913-37
	Motorola	MC54HC4051	913-45
	National	MM54HC4051	913-51
54HC4052			
	GE/RCA	CD54HC4052	
			⋆ 2632
			912-1
	Motorola	MC54HC4052	912-11
	National	MM54HC4052	912-17
54HC4053			
	GE/RCA	CD54HC4053	
			⋆ 2632
			908-24
	Motorola	MC54HC4053	908-32
54HC4059			
	GE/RCA	CD54HC4059	
			⋆ 2632
			613-94
54HC4060			
	GE/RCA	CD54HC4060	
			⋆ 2632
			611-55
	Motorola	MC54HC4060	611-58
	National	MM54HC4060	611-60
54HC4066			
	GE/RCA	CD54HC4066	
			⋆ 2631
			904-17
	Motorola	MC54HC4066	904-94
	National	MM54HC4066	904-98
	TI	SN54HC4066	902-8
54HC4067			
	GE/RCA	CD54HC4067	
			⋆ 2632
			915-29
54HC4075			
	GE/RCA	CD54HC4075	
			⋆ 2631
			624-80
	Motorola	MC54HC4075	624-83
	National	MM54HC4075	624-86
	TI	SN54HC4075	624-93
54HC4078			
	Motorola	MC54HC4078	625-170
	National	MM54HC4078	625-173
	TI	SN54HC4078A	625-179
54HC4094			
	GE/RCA	CD54HC4094	
			⋆ 2631
			634-145
54HC42			
	GE/RCA	CD54HC42	⋆ 2632
			614-58
	Motorola	MC54HC42	614-63
	National	MM54HC42	614-65
	TI	SN54HC42	614-71
54HC423			
	GE/RCA	CD54HC423	⋆ 2632
			632-160
	National	MM54HC423A	633-1
54HC4301			
	National	MM54HC4301	628-143
54HC4302			
	National	MM54HC4302	628-141
54HC4303			
	National	MM54HC4303	618-168
54HC4304			
	National	MM54HC4304	618-166
54HC4305			
	National	MM54HC4305	606-150
54HC4316			
	Motorola	MC54HC4316	905-28
	National	MM54HC4316	905-34
54HC4351			
	Motorola	MC54HC4351	913-46
	National	MM54HC4351	913-52
54HC4352			
	Motorola	MC54HC4352	912-12
	National	MM54HC4352	912-18

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54HC4353			
	Motorola	MC54HC4353	908-33
54HC4510			
	GE/RCA	**CD54HC4510 * 2632**	612-145
54HC4511			
	GE/RCA	**CD54HC4511 * 2632**	617-7
	Motorola	MC54HC4511	617-10
	National	MM54HC4511	617-12
54HC4514			
	GE/RCA	**CD54HC4514 * 2632**	616-10
	Motorola	MC54HC4514	616-15
	National	MM54HC4514	616-18
54HC4515			
	GE/RCA	**CD54HC4515 * 2632**	616-11
54HC4516			
	GE/RCA	**CD54HC4516 * 2632**	609-76
54HC4518			
	GE/RCA	**CD54HC4518 * 2632**	613-19
54HC4520			
	GE/RCA	**CD54HC4520 * 2632**	609-161
54HC4538			
	GE/RCA	**CD54HC4538 * 2632**	632-161
	Motorola	MC54HC4538	632-170
	National	MM54HC4538	633-2
54HC4543			
	GE/RCA	**CD54HC4543 * 2632**	616-126
	Motorola	MC54HC4543	616-129, 979-99
	National	MM54HC4543	617-13
54HC51			
	Motorola	MC54HC51	624-42
	National	MM54HC51	624-44
	TI	SN54HC51	624-49
54HC521			
	National	MM54HC521	603-88
54HC533			
	GE/RCA	**CD54HC533 * 2632**	628-73
	Motorola	MC54HC533	628-82
	National	MM54HC533	628-86
	TI	SN54HC533	628-97
54HC534			
	GE/RCA	**CD54HC534 * 2631**	619-62
	Motorola	MC54HC534	619-72
	National	MM54HC534	619-76
	TI	SN54HC534	619-88
54HC540			
	GE/RCA	**CD54HC540 * 2631**	606-179
	Motorola	MC54HC540	607-1
	TI	SN54HC540	607-11
54HC541			
	GE/RCA	**CD54HC541 * 2631**	606-180
	Motorola	MC54HC541	607-2
	TI	SN54HC541	641-146
54HC543			
	National	MM54HC543	642-24
54HC544			
	National	MM54HC544	642-25
54HC550			
	National	MM54HC550	642-54
54HC551			
	National	MM54HC551	642-55
54HC563			
	GE/RCA	**CD54HC563 * 2632**	628-74
	Motorola	MC54HC563	628-83
	National	MM54HC563	628-87

(Continued)

Base Number	Source	Device	Page-Line
54HC563			(Cont'd)
	TI	SN54HC563	628-98
54HC564			
	GE/RCA	**CD54HC564 * 2631**	619-63
	Motorola	MC54HC564	619-73
	National	MM54HC564	619-77
	TI	SN54HC564	619-89
54HC573			
	GE/RCA	**CD54HC573 * 2632**	627-124
	Motorola	MC54HC573	627-133
	National	MM54HC573	627-137
	TI	SN54HC573	627-149
54HC574			
	GE/RCA	**CD54HC574 * 2631**	620-22
	Motorola	MC54HC574	620-31
	National	MM54HC574	620-35
	TI	SN54HC574	620-48
54HC58			
	Motorola	MC54HC58	624-19
	National	MM54HC58	624-21
54HC583			
	GE/RCA	**CD54HC583 * 2632**	602-1
54HC589			
	Motorola	MC54HC589	635-110, 1394-54
	National	MM54HC589	635-112
54HC590			
	National	MM54HC590	610-130
	TI	SN54HC590A	610-132
54HC592			
	National	MM54HC592	610-120
54HC593			
	National	MM54HC593	610-121
54HC595			
	Motorola	MC54HC595	635-98, 1394-58
	National	MM54HC595	635-100
	TI	SN54HC595	635-104
54HC597			
	GE/RCA	**CD54HC597 * 2631**	635-25
	Motorola	MC54HC597	635-87
	National	MM54HC597	635-27
54HC620			
	Hitachi	HD54HC620	641-21
	Motorola	MC54HC620	641-24
	TI	SN54HC620	626-148
	Toshiba	TC54HC620	641-33
54HC623			
	Motorola	MC54HC623	641-25
	TI	SN54HC623	641-147
54HC640			
	GE/RCA	**CD54HC640 * 2631**	641-58
	Motorola	MC54HC640	641-63
	TI	SN54HC640	641-69
54HC643			
	GE/RCA	**CD54HC643 * 2631**	642-7
	Motorola	MC54HC643	641-26
	TI	SN54HC643	641-70
54HC645			
	TI	SN54HC645	641-148
54HC646			
	GE/RCA	**CD54HC646 * 2631**	640-116
	Motorola	MC54HC646	640-121
	National	MM54HC646	640-126
54HC648			
	GE/RCA	**CD54HC648 * 2631**	640-68
	Motorola	MC54HC648	640-73
	National	MM54HC648	640-78
54HC651			
	Motorola	MC54HC651	640-74
54HC652			
	Motorola	MC54HC652	640-122
54HC670			
	GE/RCA	**CD54HC670 * 2631**	630-21

Base Number	Source	Device	Page-Line
54HC688			
	GE/RCA	**CD54HC688 * 2632**	602-104
	Motorola	MC54HC688	602-152
	National	MM54HC688	603-2
	TI	SN54HC688	603-6
54HC7030			
	GE/RCA	**CD54HC7030 * 2631**	630-56
54HC7038			
	GE/RCA	**CD54HC7038 * 2631**	642-140
54HC7046			
	GE/RCA	**CD54HC7046 * 2632**	633-112
54HC7266			
	GE/RCA	**CD54HC7266 * 2631**	626-76
	Motorola	MC54HC7266	626-105
54HC73			
	GE/RCA	**CD54HC73 * 2631**	621-106
	Motorola	MC54HC73	621-114
	National	MM54HC73	621-118
54HC74			
	GE/RCA	**CD54HC74 * 2631**	617-72
	Motorola	MC54HC74	617-76
	National	MM54HC74	617-78
	TI	SN54HC74	617-84
54HC75			
	GE/RCA	**CD54HC75 * 2632**	628-146
	Motorola	MC54HC75	628-150
	National	MM54HC75	628-152
	TI	SN54HC75	628-158
54HC76			
	Motorola	MC54HC76	620-158
	National	MM54HC76	621-1
54HC77			
	National	MM54HC77	629-7
54HC7793			
	Motorola	MC54HC7793	627-80
54HC793			
	Motorola	MC54HC793	628-39
54HC85			
	GE/RCA	**CD54HC85 * 2632**	603-83
	Motorola	MC54HC85	603-86
	National	MM54HC85	603-89
54HC86			
	GE/RCA	**CD54HC86 * 2631**	626-14
	Motorola	MC54HC86	626-20
	National	MM54HC86	626-24
	TI	SN54HC86	626-31
54HC9000			
	Motorola	MC54HC9000	637-128
54HC9014			
	Motorola	MC54HC9014	608-106
54HC9015			
	Motorola	MC54HC9015	607-85
54HC9114			
	Motorola	MC54HC9114	607-87
54HC9135			
	Motorola	MC54HC9135	607-84
54HC93			
	GE/RCA	**CD54HC93 * 2632**	610-30
54H00	National	DM54H00	672-128
54H01	National	DM54H01	673-78
54H04	National	DM54H04	659-105
54H08	National	DM54H08	671-22
54H10	National	DM54H10	672-48
54H106			
	National	DM54H106	670-15
54H11	National	DM54H11	670-121
54H20	National	DM54H20	671-118
54H21	National	DM54H21	670-76
54H30	National	DM54H30	673-137
54H40	National	DM54H40	671-160
54H50	National	DM54H50	674-46
54H51	National	DM54H51	674-12

Base Number	Source	Device	Page-Line
54LS00	Fairchild	54LS00	672-130
	Motorola	SN54LS00	672-136
	National	DM54LS00	672-138
	SGS	T54LS00	672-141
		54LS00	672-145
	Signetics	54LS00	672-149
	TI	SN54LS00	672-151
54LS01	Motorola	SN54LS01	673-84
	National	DM54LS01	673-88
	Signetics	54LS01	673-96
	TI	SN54LS01	673-99
54LS02	Fairchild	54LS02	675-132
	Motorola	SN54LS02	675-138
	National	DM54LS02	675-142
	SGS	T54LS02	675-74
		54LS02	675-148
	Signetics	54LS02	675-150
	TI	SN54LS02	675-153
54LS03	Fairchild	54LS03	673-80
	Motorola	SN54LS03	673-85
	National	DM54LS03	673-89
	SGS	54LS03	673-94
	Signetics	54LS03	673-97
	TI	SN54LS03	673-100
54LS04	Fairchild	54LS04	659-107
	Motorola	SN54LS04	659-113
	National	DM54LS04	659-115
	SGS	T54LS04	659-118
		54LS04	659-124
	Signetics	54LS04	659-126
	TI	SN54LS04	659-128
54LS05	Fairchild	54LS05	659-153
	Motorola	SN54LS05	659-159
	National	DM54LS05	659-161
	SGS	T54LS05A	659-119
		54LS05	659-164
	Signetics	54LS05	659-166
	TI	SN54LS05	659-168
54LS08	Fairchild	54LS08	671-24
	Motorola	SN54LS08	671-30
	National	DM54LS08	671-32
	Signetics	54LS08	671-39
	TI	SN54LS08	671-41
54LS09	Fairchild	54LS09	671-62
	Motorola	SN54LS09	671-66
	National	DM54LS09	671-68
	SGS	T54LS09	671-35
		54LS09	671-72
	Signetics	54LS09	671-74
	TI	SN54LS09	671-76
54LS10	Fairchild	54LS10	672-50
	Motorola	SN54LS10	672-55
	National	DM54LS10	672-57
	SGS	T54LS10	672-60
		54LS10	672-63
	Signetics	54LS10	672-66
	TI	SN54LS10	672-68
54LS107			
	Motorola	SN54LS107A	669-116
	National	DM54LS107A	669-119
	Signetics	54LS107	669-125
	TI	SN54LS107A	669-129
54LS109			
	Fairchild	54LS109	669-71
	Motorola	SN54LS109A	669-75
	National	DM54LS109	669-77
	Signetics	54LS109	669-80
	TI	SN54LS109A	669-82
54LS11	Fairchild	54LS11	670-123
	Motorola	SN54LS11	670-126
	National	DM54LS11	670-128
	SGS	T54LS11	670-131
		54LS11	670-134
	Signetics	54LS11	670-136
	TI	SN54LS11	670-138
54LS112			
	Fairchild	54LS112	670-17
	Motorola	SN54LS112A	670-21
	National	DM54LS112	670-23
	Signetics	54LS112	670-26
54LS113			
	Fairchild	54LS113	669-161
	Motorola	SN54LS113A	669-163
	National	DM54LS113A	669-165
	Signetics	54LS113	669-168

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54LS114			
	Fairchild	54LS114	670-45
	Motorola	SN54LS114A	670-47
	National	DM54LS114A	670-49
	SGS	T54LS114	670-52
54LS12	Motorola	SN54LS12	672-88
	National	DM54LS12	672-90
	TI	SN54LS12	672-93
54LS122			
	Motorola	SN54LS122	682-14
	TI	SN54LS122	682-17
54LS123			
	Motorola	SN54LS123	682-46
	TI	SN54LS123	682-50
		¶	406-30
54LS125			
	Fairchild	54LS125A	658-69
	Motorola	SN54LS125A	658-74
	National	DM54LS125A	658-76
	SGS	54LS125A	658-79
	Signetics	54LS125A	658-81
	TI	SN54LS125A	658-83
54LS126			
	Fairchild	54LS126	658-92
	Motorola	SN54LS126A	658-96
	National	DM54LS126	658-98
	SGS	54LS126	658-100
	Signetics	54LS126A	658-102
	TI	SN54LS126A	658-104
54LS13	Fairchild	54LS13	688-127
	Motorola	SN54LS13	688-131
	National	DM54LS13	688-133
	SGS	T54LS13	689-2
	Signetics	54LS13	689-6
	TI	SN54LS13	689-8
54LS132			
	Motorola	SN54LS132	689-37
	National	DM54LS132	689-39
	SGS	T54LS132	659-63
		54LS132	689-4
	Signetics	54LS132	689-42
		54LS132A	689-43
	TI	SN54LS132	689-45
54LS133			
	Fairchild	54LS133	673-172
	Motorola	SN54LS133	673-174
54LS136			
	Fairchild	54LS136	676-14
	Motorola	SN54LS136	676-17
	National	DM54LS136	676-19
	SGS	T54LS136	676-7
		54LS136	676-22
	Signetics	54LS136	676-24
	TI	SN54LS136	676-26
54LS137			
	TI	SN54LS137	665-97
54LS138			
	Fairchild	54LS138	665-58
	Motorola	SN54LS138	665-63
	National	DM54LS138	665-65
	SGS	T54LS138	665-39
		54LS138	665-68
	Signetics	54LS138	665-70
	TI	SN54LS138	665-72
54LS139			
	Fairchild	54LS139	664-129
	Motorola	SN54LS139	664-141
	National	DM54LS139	664-147
	SGS	T54LS139	664-93
		54LS139	665-3
	Signetics	54LS139	665-9
	TI	SN54LS139A	665-15
54LS14	Fairchild	54LS14	689-65
	Motorola	SN54LS14	689-70
	National	DM54LS14	689-72
	SGS	T54LS14	659-179
		54LS14	689-75
	Signetics	54LS14	689-77
	TI	SN54LS14	689-79
54LS145			
	TI	SN54LS145	664-56
54LS147			
	TI	SN54LS147	690-91
54LS148			
	Motorola	SN54LS148	690-22
	TI	SN54LS148	690-25
54LS15	Fairchild	54LS15	670-151
	Motorola	SN54LS15	670-154
	National	DM54LS15	670-156
	SGS	T54LS15	674-3
		54LS15	670-159
	TI	SN54LS15	670-161
54LS151			
	Fairchild	54LS151	681-64
	Motorola	SN54LS151	681-68
	National	DM54LS151	681-70
	SGS	T54LS151	681-96
		54LS151	681-73
	Signetics	54LS151	681-75
	TI	SN54LS151	681-77
54LS152			
	Fairchild	54LS152	681-87
54LS153			
	Fairchild	54LS153	679-32
	Motorola	SN54LS153	679-36
	National	DM54LS153	679-38
	Signetics	54LS153	679-45
	TI	SN54LS153	679-47
54LS154			
	National	DM54LS154	665-117
	Signetics	54LS154	665-119
54LS155			
	Fairchild	54LS155	664-130
	Motorola	SN54LS155	664-142
	National	DM54LS155	664-148
	SGS	T54LS155	664-95
		54LS155	665-4
	Signetics	54LS155	665-10
	TI	SN54LS155A	665-16
54LS156			
	Fairchild	54LS156	664-131
	Motorola	SN54LS156	664-143
	National	DM54LS156	664-149
	SGS	T54LS156	664-96
		54LS156	665-5
	Signetics	54LS156	665-11
	TI	SN54LS156	665-17
54LS157			
	Fairchild	54LS157	680-95
	Motorola	SN54LS157	680-99
	National	DM54LS157	680-101
	SGS	T54LS157	679-149
		54LS157	680-104
	Signetics	54LS157	680-106
	TI	SN54LS157	680-108
54LS158			
	Fairchild	54LS158	680-1
	Motorola	SN54LS158	680-5
	National	DM54LS158	680-7
	SGS	T54LS158	679-150
		54LS158	680-10
	Signetics	54LS158	680-12
	TI	SN54LS158	680-14
54LS160			
	Fairchild	54LS160A	662-137
	Motorola	SN54LS160A	662-141
	National	DM54LS160A	662-143
	Signetics	54LS160A	662-146
	TI	SN54LS160A	662-148
54LS161			
	Fairchild	54LS161	660-143
	Motorola	SN54LS161A	660-148
	National	DM54LS161A	660-150
	Signetics	54LS161A	660-153
	TI	SN54LS161A	660-155
54LS162			
	Fairchild	54LS162A	662-168
	Motorola	SN54LS162A	662-172
	National	DM54LS162	663-1
	Signetics	54LS162A	663-4
	TI	SN54LS162A	663-6
54LS163			
	Fairchild	54LS163A	661-5
	Motorola	SN54LS163A	661-9
	National	DM54LS163A	661-11
	Signetics	54LS163A	661-14
	TI	SN54LS163A	661-16
54LS164			
	Fairchild	54LS164	683-70
			1395-34
	Motorola	SN54LS164	683-74
			1395-39
	National	DM54LS164	683-76
			1395-41
	Signetics	54LS164	683-80
			1395-48
		54LS164B	683-81
	TI	SN54LS164	683-83
			1395-52
54LS165			
	Fairchild	54LS165	683-113
			1394-104
	Motorola	SN54LS165	683-117
			1395-1
	TI	SN54LS165A	683-119
			1395-9
54LS166			
	Motorola	SN54LS166	683-132
	National	DM54LS166	683-134
	TI	SN54LS166A	683-136
			1395-10
54LS168			
	Fairchild	54LS168	663-65
	Motorola	SN54LS168	663-67
	National	DM54LS168A	663-70
	SGS	T54LS168	663-72
	Signetics	54LS168A	663-74
54LS169			
	Fairchild	54LS169	661-123
	Motorola	SN54LS169	661-126
	National	DM54LS169A	661-128
	SGS	T54LS169	661-130
	Signetics	54LS169A	661-132
	TI	SN54LS169B	661-134
54LS170			
	Fairchild	54LS170	678-79
			1347-2
	Motorola	SN54LS170	678-87
	National	DM54LS170	678-91
			1347-7
	SGS	T54LS170	683-49
		54LS170	678-96
	Signetics	54LS170	1347-12
	TI	SN54LS170	678-103
			1347-14
54LS173			
	Fairchild	54LS173A	667-132
	Motorola	SN54LS173A	667-135
	National	DM54LS173	667-137
	Signetics	54LS173	667-140
	TI	SN54LS173A	667-142
54LS174			
	Fairchild	54LS174	667-172
	Motorola	SN54LS174	667-176
	National	DM54LS174	667-178
	SGS	T54LS174	667-144
		54LS174	667-181
	Signetics	54LS174	668-2
	TI	SN54LS174	668-4
54LS175			
	Fairchild	54LS175	667-55
	Motorola	SN54LS175	667-59
	National	DM54LS175	667-61
	SGS	T54LS175	667-28
		54LS175	667-64
	Signetics	54LS175	667-66
	TI	SN54LS175	667-68
54LS181			
	Fairchild	54LS181	657-41
	Motorola	SN54LS181	657-44
	Signetics	54LS181	657-47
	TI	SN54LS181	657-49
54LS182			
	Motorola	SN54LS182	657-83
54LS183			
	TI	SN54LS183	657-5
54LS189			
	TI	SN54LS189A	1348-18
54LS190			
	Motorola	SN54LS190	663-137
	National	DM54LS190	663-139
	Signetics	54LS190	663-143
	TI	SN54LS190	663-144
54LS191			
	Motorola	SN54LS191	661-164
	National	DM54LS191	661-166
	Signetics	54LS191	661-170
	TI	SN54LS191	661-172
54LS192			
	Fairchild	54LS192	663-103
	Motorola	SN54LS192	663-106
	National	DM54LS192	663-108
	SGS	T54LS192	661-96
		54LS192	663-111
	Signetics	54LS192	663-113
	TI	SN54LS192	663-115
54LS193			
	Fairchild	54LS193	662-26
	Motorola	SN54LS193	662-30
	National	DM54LS193	662-32
	SGS	T54LS193	662-46
		54LS193	662-35
	Signetics	54LS193	662-37
	TI	SN54LS193	662-39
54LS194			
	Fairchild	54LS194A	683-20
			1393-57
	Motorola	SN54LS194A	683-23
			1393-70
	National	DM54LS194A	683-25
	SGS	T54LS194A	683-6
	Signetics	54LS194A	683-29
	TI	SN54LS194A	683-31
			1393-48
54LS195			
	Fairchild	54LS195A	1393-58
	Motorola	SN54LS195A	682-107
			1393-71
	National	DM54LS195A	682-109
	SGS	T54LS195A	683-7
		54LS195A	682-82
	Signetics	54LS195A	1393-87
	TI	SN54LS195A	682-114
			1393-90
54LS196			
	Motorola	SN54LS196	662-104
	National	DM54LS196	662-106
	TI	SN54LS196	662-110
54LS197			
	Motorola	SN54LS197	660-95
	National	DM54LS197	660-97
	Signetics	54LS197	660-101
	TI	SN54LS197	660-103
54LS20	Fairchild	54LS20	671-120
	Motorola	SN54LS20	671-124
	National	DM54LS20	671-126
	SGS	T54LS20	671-129
		54LS20	671-133
	Signetics	54LS20	671-135
	TI	SN54LS20	671-137
54LS21	Fairchild	54LS21	670-78
	Motorola	SN54LS21	670-82
	National	DM54LS21	670-84
	Signetics	54LS21	670-89
	TI	SN54LS21	670-91
54LS210			
	MMI	SN54LS210	685-31
54LS219			
	TI	SN54LS219A	1348-19
54LS22	Fairchild	54LS22	672-6
	Motorola	SN54LS22	672-8
	National	DM54LS22	672-10
	SGS	T54LS22	671-130
		54LS22	672-13
	TI	SN54LS22	672-15
54LS221			
	Motorola	SN54LS221	682-26
	National	DM54LS221	682-28
	Signetics	54LS221	682-30
	TI	SN54LS221	682-31
54LS222			
	TI	SN54LS222	1304-5
54LS224			
	TI	SN54LS224	1304-6

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54LS240			
	Fairchild	54LS240	685-25
			987-4
	MMI	SN54LS240	685-32
			987-8
	Motorola	SN54LS240	685-34
			987-10
	National	DM54LS240	685-37
	SGS	T54LS240	659-30
		54LS240	659-26
	Signetics	54LS240	685-46
	TI	SN54LS240	685-41
			987-20
54LS241			
	Fairchild	54LS241	685-83
			986-18
	MMI	SN54LS241	685-88
			986-24
	Motorola	SN54LS241	685-91
			986-30
	National	DM54LS241	685-94
	Signetics	54LS241	685-96
	TI	SN54LS241	685-100
			986-49
54LS242			
	Motorola	SN54LS242	684-111
			994-22
	National	DM54LS242	684-115
	Signetics	54LS242	684-119
	TI	SN54LS242	684-127
			994-26
54LS243			
	Motorola	SN54LS243	684-112
			994-23
	National	DM54LS243	684-116
	Signetics	54LS243	684-120
	TI	SN54LS243	684-128
			994-27
54LS244			
	Fairchild	54LS244	685-137
	MMI	SN54LS244	685-141
			986-25
	Motorola	SN54LS244	685-143
			986-31
	Signetics	54LS244	685-145
	TI	SN54LS244	685-146
			986-50
54LS245			
	Fairchild	54LS245	686-163
			996-60
	MMI	SN54LS245	686-168
			986-26
	Motorola	SN54LS245	686-170
			996-61
	National	DM54LS245	686-174
	Signetics	54LS245	686-179
	TI	SN54LS245	687-1
54LS247			
	Fairchild	54LS247	979-32
	Motorola	SN54LS247	979-123
	National	DM54LS247	979-47
	TI	SN54LS247	979-58
54LS248			
	Fairchild	54LS248	978-114
	Motorola	SN54LS248	979-124
	National	DM54LS248	979-14
	TI	SN54LS248	979-26
54LS249			
	Fairchild	54LS249	978-115
	Motorola	SN54LS249	979-125
	National	DM54LS249	979-15
	TI	SN54LS249	979-27
54LS251			
	Fairchild	54LS251	681-117
	Motorola	SN54LS251	681-121
	National	DM54LS251	681-123
	Signetics	54LS251	681-134
	TI	SN54LS251	681-128
			877-50
54LS253			
	Fairchild	54LS253	679-122
	Motorola	SN54LS253	679-125
	National	DM54LS253	679-127
	Signetics	54LS253	679-131
	TI	SN54LS253	679-133
54LS256			
	Fairchild	54LS256	676-122
	Motorola	SN54LS256	676-124
	SGS	T54LS256	676-126
	Signetics	54LS256	680-54
54LS257			
	Fairchild	54LS257A	680-135
	Motorola	SN54LS257A	680-140
	National	DM54LS257B	680-142
	Signetics	54LS257A	680-146
	TI	SN54LS257B	680-148
54LS258			
	Fairchild	54LS258A	680-42
	Motorola	SN54LS258A	680-47
	National	DM54LS258B	680-49
	SGS	T54LS258A	679-151
		54LS258	680-52
	Signetics	54LS258A	680-55
	TI	SN54LS258B	680-57
54LS259			
	Fairchild	54LS259	677-57
	Motorola	SN54LS259	677-61
	National	DM54LS259	677-63
	SGS	T54LS259	677-75
		54LS259	677-65
	Signetics	54LS259	677-67
	TI	SN54LS259B	677-69
			877-45
54LS26	Fairchild	54LS26	673-38
	Motorola	SN54LS26	673-41
	National	DM54LS26	673-43
	Signetics	54LS26	673-47
	TI	SN54LS26	673-49
54LS260			
	Fairchild	54LS260	675-20
	Motorola	SN54LS260	675-22
	SGS	T54LS260	675-25
	Signetics	54LS260A	675-28
54LS261			
	Signetics	54LS261	657-100
	TI	SN54LS261	657-101
54LS266			
	Fairchild	54LS266	676-96
	Motorola	SN54LS266	676-99
	National	DM54LS266	676-101
	SGS	T54LS266	676-78
		54LS266	676-104
	Signetics	54LS266	676-108
	TI	SN54LS266	676-109
54LS27	Fairchild	54LS27	675-52
	Motorola	SN54LS27	675-56
	National	DM54LS27	675-58
	SGS	T54LS27	675-61
		54LS27	675-62
	Signetics	54LS27	675-64
	TI	SN54LS27	675-66
54LS273			
	Fairchild	54LS273	668-102
	MMI	SN54LS273	668-105
	Motorola	SN54LS273	668-106
	SGS	T54LS273	683-50
		54LS273	683-52
	Signetics	54LS273	668-109
	TI	SN54LS273	668-111
54LS275			
	TI	SN54LS275	644-31
54LS279			
	Fairchild	54LS279	677-7
	Motorola	SN54LS279	677-10
	National	DM54LS279	677-12
	SGS	T54LS279	689-21
		54LS279	677-15
	Signetics	54LS279	677-17
	TI	SN54LS279A	677-18
54LS28	Fairchild	54LS28	675-133
	Motorola	SN54LS28	675-139
	SGS	T54LS28	675-146
	Signetics	54LS28	675-151
	TI	SN54LS28	675-154
54LS280			
	SGS	T54LS280	662-57
		54LS280	658-53
	TI	SN54LS280	690-66
54LS283			
	Fairchild	54LS283	658-10
	Motorola	SN54LS283	658-18
	National	DM54LS283	658-22

(Continued)

Base Number	Source	Device	Page-Line
54LS283			(Cont'd)
	SGS	54LS283	658-28
	Signetics	54LS283	658-32
	TI	SN54LS283	658-36
54LS289			
	TI	SN54LS289A	1348-15
54LS290			
	Motorola	SN54LS290	662-72
	National	DM54LS290	662-76
	SGS	54LS290	662-82
	Signetics	54LS290	662-84
	TI	SN54LS290	662-88
54LS293			
	Motorola	SN54LS293	661-56
	National	DM54LS293	661-60
	SGS	T54LS293	660-109
		54LS293	661-66
	Signetics	54LS293	661-70
	TI	SN54LS293	661-74
54LS295			
	Fairchild	54LS295A	1393-59
	Motorola	SN54LS295A	682-86
			1393-72
	Signetics	54LS295B	682-89
	TI	SN54LS295B	682-91
			1393-91
54LS298			
	Fairchild	54LS298	680-182
	Motorola	SN54LS298	680-185
	National	DM54LS298	681-3
	SGS	54LS298	681-5
	Signetics	54LS298	681-7
	TI	SN54LS298	681-9
54LS299			
	Fairchild	54LS299	684-22
			1394-77
	TI	SN54LS299	684-30
			1394-81
54LS30	Fairchild	54LS30	673-139
	Motorola	SN54LS30	673-143
	National	DM54LS30	673-145
	SGS	T54LS30	673-148
		54LS30	673-149
	Signetics	54LS30	673-151
	TI	SN54LS30	673-153
54LS301			
	Signetics	54LS301	1348-96
54LS310			
	MMI	SN54LS310	685-89
54LS319			
	TI	SN54LS319A	1348-16
54LS32	Fairchild	54LS32	674-142
	Motorola	SN54LS32	674-146
	National	DM54LS32	674-148
	SGS	T54LS32	674-151
		54LS32	674-152
	Signetics	54LS32	674-154
	TI	SN54LS32	674-156
54LS320			
	TI	SN54LS320	688-77
54LS321			
	TI	SN54LS321	688-78
54LS322			
	AMD	SN54LS322	658-46
	Fairchild	54LS322	658-48
	TI	SN54LS322A	658-51
54LS323			
	AMD	SN54LS323	684-20
			1394-75
	Fairchild	54LS323	684-23
			1394-78
	TI	SN54LS323	684-31
			1394-82
54LS33	Fairchild	54LS33	675-84
	Motorola	SN54LS33	675-86
	SGS	T54LS33	675-89
	Signetics	54LS33	675-91
	TI	SN54LS33	675-93
54LS340			
	MMI	SN54LS340	685-33
			987-9
54LS341			
	MMI	SN54LS341	685-90
			986-27
54LS344			
	MMI	SN54LS344	685-142
			986-28

Base Number	Source	Device	Page-Line
54LS347			
	Fairchild	54LS347	979-33
	TI	SN54LS347	979-59
54LS348			
	TI	SN54LS348	690-31
54LS352			
	Fairchild	54LS352	679-74
	National	DM54LS352	679-77
	SGS	T54LS352	679-79
	Signetics	54LS352	679-81
	TI	SN54LS352	679-83
54LS353			
	Fairchild	54LS353	679-98
	National	DM54LS353	679-101
	SGS	T54LS353	679-103
	Signetics	54LS353	679-105
	TI	SN54LS353	679-107
54LS356			
	TI	SN54LS356	681-98
54LS363			
	Signetics	54LS363	677-127
54LS364			
	Signetics	54LS364	668-53
54LS365			
	Fairchild	54LS365	658-161
	Motorola	SN54LS365A	658-169
	National	DM54LS365A	658-173
	SGS	T54LS365A	658-112
		54LS365	659-6
	Signetics	54LS365A	659-10
	TI	SN54LS365A	659-14
			987-32
54LS366			
	Fairchild	54LS366	660-23
	Motorola	SN54LS366A	660-30
	National	DM54LS366A	660-34
	SGS	T54LS366A	659-120
		54LS366	660-42
	Signetics	54LS366A	660-46
	TI	SN54LS366A	660-50
			987-38
54LS367			
	Fairchild	54LS367	658-162
	Motorola	SN54LS367A	658-170
	National	DM54LS367A	658-174
	SGS	T54LS367A	658-113
		54LS367	659-7
	Signetics	54LS367A	659-11
	TI	SN54LS367A	659-15
			987-33
54LS368			
	Fairchild	54LS368	660-24
	Motorola	SN54LS368A	660-31
	National	DM54LS368A	660-35
	SGS	T54LS368A	659-121
		54LS368	660-43
	Signetics	54LS368A	660-47
	TI	SN54LS368A	660-51
			987-39
54LS37	Fairchild	54LS37	672-175
	Motorola	SN54LS37	672-178
	National	DM54LS37	672-180
	SGS	T54LS37	658-108
		54LS37	672-183
	Signetics	54LS37	672-185
	TI	SN54LS37	672-187
54LS373			
	MMI	SN54LS373	677-117
	Motorola	SN54LS373	677-118
	National	DM54LS373	677-120
	SGS	T54LS373	677-20
		54LS373	677-29
	Signetics	54LS373	677-128
	TI	SN54LS373	677-131
54LS374			
	Fairchild	54LS374	668-155
	MMI	SN54LS374	668-160
	Motorola	SN54LS374	668-161
	National	DM54LS374	668-163
	SGS	T54LS374	668-40
		54LS374	668-42
	Signetics	54LS374	668-166
	TI	SN54LS374	668-168
54LS375			
	Fairchild	54LS375	676-144
	Motorola	SN54LS375	676-149
	Signetics	54LS375	676-156

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54LS375			(Cont'd)
	TI	SN54LS375	676-160
54LS377			
	Fairchild	54LS377	669-6
	MMI	SN54LS377	669-9
	Motorola	SN54LS377	669-10
	National	DM54LS377	676-167
	SGS	T54LS377	668-41
		54LS377	668-43
	Signetics	54LS377	669-13
	TI	SN54LS377	669-15
54LS378			
	AMD	SN54LS378	668-24
	Fairchild	54LS378	668-26
	Motorola	SN54LS378	668-28
	SGS	T54LS378	668-30
	Signetics	54LS378	668-32
	TI	SN54LS378	668-34
54LS379			
	AMD	SN54LS379	667-104
	Fairchild	54LS379	667-106
	Motorola	SN54LS379	667-108
	SGS	T54LS379	667-110
	TI	SN54LS379	667-112
54LS38	Fairchild	54LS38	673-21
	Motorola	SN54LS38	673-25
	National	DM54LS38	673-27
	SGS	T54LS38	658-109
		54LS38	673-106
	Signetics	54LS38	673-30
	TI	SN54LS38	673-32
54LS380			
	MMI	SN54LS380	684-1
	National	DM54LS380	684-3
54LS381			
	TI	SN54LS381A	657-50
54LS382			
	TI	SN54LS382A	657-51
54LS384			
	AMD	SN54LS384	657-114
54LS385			
	AMD	SN54LS385	656-8
	Motorola	SN54LS385	656-10
	TI	SN54LS385	656-12
54LS386			
	Motorola	SN54LS386	676-56
	National	DM54LS386	676-60
	TI	SN54LS386A	676-68
54LS388			
	AMD	SN54LS388	667-89
54LS390			
	Motorola	SN54LS390	663-19
	National	DM54LS390	663-23
	SGS	T54LS390	663-27
		54LS390	662-53
	Signetics	54LS390	663-31
	TI	SN54LS390	663-35
54LS393			
	Motorola	SN54LS393	661-28
	National	DM54LS393	661-30
	SGS	T54LS393	661-33
	Signetics	54LS393	661-35
	TI	SN54LS393	661-37
54LS395			
	Fairchild	54LS395	1393-60
	Motorola	SN54LS395	1393-73
	SGS	T54LS395	682-158
			1393-84
	Signetics	54LS395A	682-160
	TI	SN54LS395A	683-2
			1393-92
54LS396			
	TI	SN54LS396	678-61
54LS398			
	Motorola	SN54LS398	680-186
	TI	SN54LS398	681-10
54LS399			
	AMD	SN54LS399	680-180
	Motorola	SN54LS399	680-187
	TI	SN54LS399	681-11
54LS40	Fairchild	54LS40	671-162
	Motorola	SN54LS40	671-165
	National	DM54LS40	671-167
	SGS	T54LS40	658-57
		54LS40	671-170
	Signetics	54LS40	671-172
	TI	SN54LS40	671-174
54LS42	Fairchild	54LS42	664-70
	Motorola	SN54LS42	664-74
	National	DM54LS42	664-76
	SGS	T54LS42	665-41
		54LS42	664-79
	Signetics	54LS42	664-81
	TI	SN54LS42	664-83
54LS442			
	TI	SN54LS442	684-140
			994-14
54LS445			
	Signetics	54LS445	664-37
54LS447			
	Fairchild	54LS447	979-34
54LS450			
	MMI	SN54LS450	681-151
	National	DM54LS450	681-153
54LS451			
	MMI	SN54LS451	679-143
	National	DM54LS451	679-144
54LS453			
	MMI	SN54LS453	681-24
	National	DM54LS453	681-26
54LS460			
	MMI	SN54LS460	688-21
54LS461			
	MMI	SN54LS461	661-80
	National	DM54LS461	661-82
54LS469			
	MMI	SN54LS469	661-104
	National	DM54LS469	611-83
54LS47	Fairchild	54LS47	979-35
	Motorola	SN54LS47	979-126
	National	DM54LS47	979-48
	TI	SN54LS47	979-60
54LS471			
	National	DM54LS471	1317-5
54LS48	Fairchild	54LS48	978-116
	Motorola	SN54LS48	979-127
	National	DM54LS48	979-16
	TI	SN54LS48	979-28
54LS49	Fairchild	54LS49	978-117
	Motorola	SN54LS49	979-128
	National	DM54LS49	979-17
	TI	SN54LS49	979-29
54LS490			
	Fairchild	54LS490	663-13
	Motorola	SN54LS490	663-20
	SGS	T54LS490	663-28
	Signetics	54LS490	663-32
	TI	SN54LS490	663-36
54LS491			
	MMI	SN54LS491	664-19
	National	DM54LS491	664-21
54LS498			
	MMI	SN54LS498	683-162
	National	DM54LS498	683-165
54LS502			
	Fairchild	54LS502	689-152
54LS503			
	Fairchild	54LS503	689-153
54LS51	Fairchild	54LS51	674-14
	Motorola	SN54LS51	674-19
	National	DM54LS51	674-21
	Signetics	54LS51	674-27
	TI	SN54LS51	674-29
54LS533			
	MMI	SN54LS533	678-1
54LS534			
	MMI	SN54LS534	668-85
54LS54	Fairchild	54LS54	674-71
	Motorola	SN54LS54	674-74
	National	DM54LS54	674-76
	SGS	T54LS54	674-63
		54LS54	674-79
	Signetics	54LS54	674-81
	TI	SN54LS54	674-83
54LS540			
	Signetics	54LS540	987-15
	TI	SN54LS540	685-42
			987-21
54LS541			
	Signetics	54LS541	685-97
	TI	SN54LS541	685-101
54LS546			
	MMI	SN54LS546	683-87
54LS547			
	MMI	SN54LS547	677-76
54LS548			
	MMI	SN54LS548	646-63
54LS549			
	MMI	SN54LS549	678-17
54LS55	Fairchild	54LS55	674-51
	Motorola	SN54LS55	674-54
	National	DM54LS55	674-56
	SGS	T54LS55	674-59
		54LS55	674-60
54LS566			
	MMI	SN54LS566	683-85
54LS567			
	MMI	SN54LS567	677-73
54LS568			
	Motorola	SN54LS568	663-82
54LS569			
	Motorola	SN54LS569	662-5
54LS590			
	TI	SN54LS590	661-88
54LS592			
	TI	SN54LS592	661-84
54LS593			
	TI	SN54LS593	661-85
54LS595			
	TI	SN54LS595	683-152
54LS597			
	TI	SN54LS597	683-140
54LS598			
	TI	SN54LS598	683-141
54LS610			
	TI	SN54LS610	688-54
			¶ 410-32
54LS620			
	Signetics	54LS620	687-137
54LS621			
	Signetics	54LS621	687-96
54LS622			
	Signetics	54LS622	687-97
54LS623			
	Signetics	54LS623	687-138
54LS624			
	TI	SN54LS624	688-95
54LS626			
	TI	SN54LS626	688-111
54LS628			
	TI	SN54LS628	688-96
54LS629			
	TI	SN54LS629	688-112
54LS63	TI	SN54LS63	689-53
54LS630			
	TI	SN54LS630	688-38
			982-48
			¶ 426-21
			¶ 445-36
54LS640			
	Motorola	SN54LS640	686-70
			997-1
	Signetics	54LS640	686-76
	TI	SN54LS640	686-78
			996-41
54LS641			
	Motorola	SN54LS641	686-114
			996-58
	Signetics	54LS641	686-116
			996-14
	TI	SN54LS641	686-119
			996-20
54LS642			
	Motorola	SN54LS642	686-24
			996-59
	Signetics	54LS642	996-15
	TI	SN54LS642	686-28
			996-21
54LS643			
	Motorola	SN54LS643	686-71
54LS644			
	Motorola	SN54LS644	687-15
	TI	SN54LS644	687-17
			996-22
54LS645			
	MMI	SN54LS645	686-169
			996-29
		SN54LS645-1	996-30
	Motorola	SN54LS645	686-171
			997-2
	Signetics	54LS645	686-180
			(Continued)
54LS645			(Cont'd)
	TI	SN54LS645	687-2
			996-42
54LS646			
	MMI	SN54LS646	686-99
54LS647			
	MMI	SN54LS647	686-93
54LS648			
	MMI	SN54LS648	686-83
54LS649			
	MMI	SN54LS649	686-20
54LS651			
	MMI	SN54LS651	686-84
54LS652			
	MMI	SN54LS652	686-100
54LS653			
	MMI	SN54LS653	686-21
54LS654			
	MMI	SN54LS654	686-94
54LS668			
	TI	SN54LS668	663-78
54LS669			
	TI	SN54LS669	661-135
54LS670			
	Fairchild	54LS670	678-80
			1347-18
	Motorola	SN54LS670	678-88
			1347-21
	National	DM54LS670	678-92
			1347-23
	SGS	54LS670	678-97
	Signetics	54LS670	678-100
			1347-26
	TI	SN54LS670	678-104
			1347-28
54LS673			
	TI	SN54LS673	684-68
54LS674			
	TI	SN54LS674	684-58
54LS681			
	TI	SN54LS681	657-132
54LS682			
	TI	SN54LS682	656-135
54LS683			
	TI	SN54LS683	656-122
54LS684			
	TI	SN54LS684	656-136
54LS685			
	TI	SN54LS685	656-123
54LS688			
	TI	SN54LS688	656-137
54LS689			
	TI	SN54LS689	656-124
54LS691			
	TI	SN54LS691	660-107
54LS693			
	TI	SN54LS693	660-108
54LS696			
	TI	SN54LS696	663-40
54LS697			
	TI	SN54LS697	661-91
54LS699			
	TI	SN54LS699	661-92
54LS73	National	DM54LS73A	669-120
	Signetics	54LS73	669-126
	TI	SN54LS73A	669-130
54LS74	Fairchild	54LS74	667-6
	Motorola	SN54LS74A	667-10
	National	DM54LS74	667-12
	SGS	T54LS74A	666-137
		54LS74	667-15
	Signetics	54LS74A	667-17
	TI	SN54LS74A	667-19
54LS75	Motorola	SN54LS75	676-150
	National	DM54LS75	676-153
	Signetics	54LS75	676-157
	TI	SN54LS75	676-161
54LS76	Motorola	SN54LS76A	669-143
	National	DM54LS76	669-145
	Signetics	54LS76	669-148
	TI	SN54LS76A	669-150
54LS764			
	Signetics	54LS764	999-93
54LS77	Motorola	SN54LS77	676-165
54LS78	Motorola	SN54LS78A	669-86
	National	DM54LS78	669-88
	TI	SN54LS78A	669-91

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54LS793			
	MMI	SN54LS793	677-78
54LS794			
	MMI	SN54LS794	683-89
54LS83	Fairchild	54LS83A	658-11
	Motorola	SN54LS83A	658-19
	National	DM54LS83A	658-23
	SGS	54LS83A	658-29
	Signetics	54LS83A	658-33
	TI	SN54LS83A	658-37
54LS85	Fairchild	54LS85	656-42
	Motorola	SN54LS85	656-50
	National	DM54LS85	656-52
	Signetics	54LS85	656-58
	TI	SN54LS85	656-62
54LS86	Motorola	SN54LS86	676-57
	National	DM54LS86	676-61
	Signetics	54LS86	676-66
	TI	SN54LS86A	676-69
54LS90	Motorola	SN54LS90	662-73
	National	DM54LS90	662-77
	Signetics	54LS90	662-85
	TI	SN54LS90	662-89
54LS91	TI	SN54LS91	683-160
			1395-65
54LS92	Motorola	SN54LS92	663-158
	National	DM54LS92	663-160
	Signetics	54LS92	663-163
	TI	SN54LS92	663-165
54LS93	Motorola	SN54LS93	661-57
	National	DM54LS93	661-61
	SGS	T54LS93	661-95
		54LS93	661-67
	Signetics	54LS93	661-71
	TI	SN54LS93	661-75
54LS95	Fairchild	54LS95B	682-136
			1393-61
	Motorola	SN54LS95B	682-140
			1393-74
	Signetics	54LS95B	682-144
	TI	SN54LS95B	682-146
			1393-49
54LS96	Signetics	54LS96	683-44
			1394-39
	TI	SN54LS96	1394-45
54L164	National	DM54L164A	1395-33
54L5280			
	SGS	T54L5280	690-37
54L91	National	DM54L91	1395-59
54L95	National	DM54L95	1393-30
54PCT240			
	Performance		
		P54PCT240	639-62
		P54PCT240A	607-62
54PCT241			
	Performance		
		P54PCT241	640-33
		P54PCT241A	607-63
54PCT244			
	Performance		
		P54PCT244	639-175
		P54PCT244A	607-64
54PCT245			
	Performance		
		P54PCT245	641-169
		P54PCT245A	638-166
54PCT273			
	Performance		
		P54PCT273	618-158
		P54PCT273A	619-18
54PCT373			
	Performance		
		P54PCT373	628-9
		P54PCT373A	628-40
54PCT374			
	Performance		
		P54PCT374	620-76
		P54PCT374A	619-22
54PCT521			
	Performance		
		P54PCT521	603-102
		P54PCT521A	602-82
		P54PCT521B	602-83
54PCT533			
	Performance		
		P54PCT533	628-121
		P54PCT533A	628-41

Base Number	Source	Device	Page-Line
54PCT534			
	Performance		
		P54PCT534	619-112
		P54PCT534A	619-23
54PCT545			
	Performance		
		P54PCT545	641-83
		P54PCT545A	638-167
54PCT632			
	Performance		
		P54PCT632	605-12
		P54PCT632A	605-13
		P54PCT632B	605-14
54PCT633			
	Performance		
		P54PCT633	605-15
		P54PCT633A	605-16
		P54PCT633B	605-17
54PCT634			
	Performance		
		P54PCT634	605-18
		P54PCT634A	605-19
		P54PCT634B	605-20
54PCT635			
	Performance		
		P54PCT635	605-21
		P54PCT635A	605-22
		P54PCT635B	605-23
54PCT640			
	Performance		
		P54PCT640	641-84
		P54PCT640A	638-168
54PCT643			
	Performance		
		P54PCT643	641-85
		P54PCT643A	638-169
54PCT645			
	Performance		
		P54PCT645	640-48
		P54PCT645A	638-170
54S00	National	DM54S00	672-155
	Signetics	54S00	672-157
	TI	SN54S00	672-159
54S02	National	DM54S02	675-159
	Signetics	54S02	675-161
	TI	SN54S02	675-163
54S03	National	DM54S03	673-104
	Signetics	54S03	673-108
	TI	SN54S03	673-110
54S04	National	DM54S04	659-132
	Signetics	54S04	659-134
	TI	SN54S04	659-136
54S05	National	DM54S05	659-172
	Signetics	54S05	659-174
	TI	SN54S05	659-176
54S08	National	DM54S08	671-45
	Signetics	54S08	671-47
	TI	SN54S08	671-49
54S09	National	DM54S09	671-78
	TI	SN54S09	671-79
54S10	National	DM54S10	672-72
	Signetics	54S10	672-74
	TI	SN54S10	672-76
54S11	National	DM54S11	670-141
	Signetics	54S11	670-143
	TI	SN54S11	670-145
54S112	National	DM54S112	670-31
	Signetics	54S112	670-33
	TI	SN54S112	670-35
54S113	National	DM54S113	670-1
	Signetics	54S113	670-3
	TI	SN54S113	670-5
54S114	TI	SN54S114	670-55
54S124	TI	SN54S124	1191-64
54S13	Signetics	54S13	689-10
54S132	TI	SN54S132	689-48
54S133	National	DM54S133	673-180
	Signetics	54S133	673-182
	TI	SN54S133	674-1
54S134	National	DM54S134	673-161
	Signetics	54S134	673-163
	TI	SN54S134	673-165
54S135	National	DM54S135	675-170
	Signetics	54S135	675-172
	TI	SN54S135	676-2

Base Number	Source	Device	Page-Line
54S138	National	DM54S138	665-77
	Signetics	54S138	665-79
	TI	SN54S138	665-81
54S139	National	DM54S139	665-23
	Signetics	54S139	665-25
	TI	SN54S139	665-27
54S140	National	DM54S140	665-125
	Signetics	54S140	665-127
			988-2
	TI	SN54S140	665-129
			988-4
54S148	MMI	SN54S148	690-27
54S15	National	DM54S15	670-163
	TI	SN54S15	670-165
54S151	National	DM54S151	681-80
	Signetics	54S151	681-82
	TI	SN54S151	681-84
54S153	National	DM54S153	679-50
	Signetics	54S153	679-52
	TI	SN54S153	679-54
54S157	National	DM54S157	680-113
	Signetics	54S157	680-115
	TI	SN54S157	680-117
54S158	National	DM54S158	680-17
	Signetics	54S158	680-19
	TI	SN54S158	680-21
54S160	AMD	SN54S160	662-150
54S161	AMD	SN54S161	660-159
54S162	TI	SN54S162	663-8
54S163	TI	SN54S163	661-20
54S168	Signetics	54S168A	663-75
	TI	SN54S168	663-79
54S169	Signetics	54S169A	661-139
	TI	SN54S169	661-141
54S172	Signetics	54S172	678-108
54S174	National	DM54S174	668-9
	Signetics	54S174	668-11
	TI	SN54S174	668-13
54S175	National	DM54S175	667-73
	Signetics	54S175	667-75
	TI	SN54S175	667-77
54S181	Signetics	54S181	657-59
	TI	SN54S181	657-61
54S182	MMI	SN54S182	657-86
	Signetics	54S182	657-90
	TI	SN54S182	657-92
54S188	National	DM54S188	1316-41
		DM54S188A	1316-31
54S189	AMD	SN54S189	1347-101
	National	DM54S189	1347-102
		DM54S189A	1347-72
	Signetics	54S189	1347-104
54S194	National	DM54S194	683-34
	TI	SN54S194	683-36
			1393-105
54S195	National	DM54S195	682-118
	Signetics	54S195	682-120
	TI	SN54S195	682-122
			1393-106
54S196	TI	SN54S196	662-112
54S197	TI	SN54S197	660-105
54S20	National	DM54S20	671-141
	Signetics	54S20	671-143
	TI	SN54S20	671-145
54S210	MMI	SN54S210	660-74
			684-150
54S22	National	DM54S22	672-16
	TI	SN54S22	672-18
54S226	TI	SN54S226	689-124
54S240	National	DM54S240	987-13
	Signetics	54S240	685-47
	TI	SN54S240	685-49
			987-22
54S241	National	DM54S241	986-35
	Signetics	54S241	685-104
	TI	SN54S241	685-106
			986-51
54S242	National	DM54S242	684-131
	Signetics	54S242	684-121
54S243	National	DM54S243	684-132
	Signetics	54S243	684-122
54S244	MMI	SN54S244	986-29
	Signetics	54S244	685-148
	TI	SN54S244	685-150
			986-52

Base Number	Source	Device	Page-Line
54S251	National	DM54S251	681-132
	Signetics	54S251	681-135
	TI	SN54S251	681-137
54S253	National	DM54S253	679-137
	Signetics	54S253	679-139
54S257	National	DM54S257	680-153
	Signetics	54S257	680-155
	TI	SN54S257	680-157
54S258	National	DM54S258	680-61
	Signetics	54S258	680-63
	TI	SN54S258	680-65
54S260	Signetics	54S260	675-31
	TI	SN54S260	675-33
54S273	MMI	SN54S273	668-113
	Signetics	54S273	668-114
54S280	National	DM54S280	690-73
	Signetics	54S280	690-76
	TI	SN54S280	690-78
54S283	TI	SN54S283	658-40
54S287	National	DM54S287	1316-92
54S288	National	DM54S288	1316-42
		DM54S288A	1316-37
54S289	AMD	SN54S289	1347-94
	National	DM54S289	1347-97
54S299	National	DM54S299	684-35
	TI	SN54S299	684-37
			1394-84
54S30	National	DM54S30	673-157
	TI	SN54S30	673-159
54S301	Signetics	54S301	1348-97
54S32	National	DM54S32	674-160
	Signetics	54S32	674-162
	TI	SN54S32	674-164
54S348	MMI	SN54S348	690-33
54S350	AMD	SN54S350	644-120
	Signetics	54S350	644-128
54S37	Signetics	54S37	673-1
	TI	SN54S37	673-3
54S373	MMI	SN54S373	677-135
	National	DM54S373	677-136
	Signetics	54S373	677-138
	TI	SN54S373	677-140
54S374	MMI	SN54S374	668-174
	National	DM54S374	668-175
	Signetics	54S374	668-177
	TI	SN54S374	668-179
54S377	MMI	SN54S377	669-17
54S378	AMD	SN54S378	668-38
54S379	AMD	SN54S379	667-116
54S38	Signetics	54S38	673-34
	TI	SN54S38	673-36
54S381	MMI	SN54S381	657-57
	TI	SN54S381	657-62
54S382	MMI	SN54S382	657-87
54S387	National	DM54S387	1316-90
54S388	AMD	SN54S388	667-93
54S399	AMD	SN54S399	681-16
54S40	National	DM54S40	671-177
	Signetics	54S40	671-179
	TI	SN54S40	671-181
54S408	MMI	SN54S408	999-34
		SN54S408-2	999-35
54S409	MMI	SN54S409	999-44
		SN54S409-2	999-45
		SN54S409-3	999-46
54S472	National	DM54S472	1318-7
		DM54S472A	1318-8
		DM54S472B	1318-9
54S473	National	DM54S473	1318-17
		DM54S473A	1318-4
54S474	National	DM54S474	1318-25
		DM54S474A	1318-10
		DM54S474B	1318-11
54S475	National	DM54S475	1318-18
		DM54S475A	1318-6
54S508	MMI	SN54S508	657-95
54S51	National	DM54S51	674-33
	Signetics	54S51	674-35
	TI	SN54S51	674-37
54S516	MMI	SN54S516	657-98
54S533	MMI	SN54S533	678-5
54S534	MMI	SN54S534	668-88
	Signetics	54S534	668-89
54S556	MMI	SN54S556	644-80
54S557	MMI	SN54S557	644-46
54S558	MMI	SN54S558	644-47

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
54S570	National	DM54S570	1317-36
		DM54S570A	1317-37
54S571	National	DM54S571	1317-38
		DM54S571A	1317-39
		DM54S571B	1317-40
54S572	National	DM54S572	1318-83
		DM54S572A	1318-72
54S573	National	DM54S573	1318-84
		DM54S573A	1318-73
		DM54S573B	1318-66
54S64	National	DM54S64	674-93
	Signetics	54S64	674-95
	TI	SN54S64	674-97
54S65	National	DM54S65	674-99
	Signetics	54S65	674-101
	TI	SN54S65	674-102
54S700	MMI	SN54S700	1000-25
54S730	MMI	SN54S730	1000-26
		54S730	861-90
54S731	MMI	SN54S731	1000-27
54S734	MMI	SN54S734	1000-28
		54S734	861-91
54S74	Signetics	54S74	667-24
	TI	SN54S74	667-26
54S818	MMI	SN54S818	678-48
			682-70
54S85	Signetics	54S85	656-69
	TI	SN54S85	656-71
54S86	Signetics	54S86	676-74
	TI	SN54S86	676-76
540	**Fujitsu**	**C540AVB**	⋆ **4229**
			⋆ **4231**
			4045-38
		C540AVL	⋆ **4229**
			⋆ **4231**
			4045-39
	Sharp	SM540	815-19
			862-36
	Telefunken	TBA540	1124-84
	TI	TLC540	920-7
		TLC540M	920-8
	Xycom	XVME540	4885-7
5400	Fairchild	5400	672-96
	National	DM5400	672-98
	Plessey	CLA5400	4058-25
	SMS	OMTI5400	4869-41
	Siemens	TDA5400-2	1126-122
	Signetics	5400	672-101
	Siliconix	SD5400	905-60
	TI	SN5400	672-103
	TopazSemi	**SD5400CY**	⋆ **3301**
			910-15
5401	National	DM5401	673-55
	Siliconix	SD5401	905-61
	TI	SN5401	673-62
	TopazSemi	**SD5401CY**	⋆ **3301**
			910-16
	Transmag	5401C	4859-11
		5401C-14	4859-13
		5401C-17	4859-14
		5401C-22	4859-12
5402	Fairchild	5402	675-97
	Marconi	MA5402	1194-8
	National	DM5402	675-99
		MM5402	1119-30
	Signetics	5402	675-101
	Siliconix	SD5402	905-62
	TI	SN5402	675-105
	TopazSemi	**SD5402CY**	⋆ **3301**
			910-13
5403	Marconi	MA5403	1194-9
	National	DM5403	673-56
	Signetics	5403	673-60
	TI	SN5403	673-63
5404	Fairchild	5404	659-65
	National	DM5404	659-67
	Signetics	5404	659-74
	TI	SN5404	659-76
5405	National	DM5405	659-139
		MM5405	1119-31
	Signetics	5405	659-142
	TI	SN5405	659-144
	Transmag	5405C	4872-19
5406	National	DM5406	666-41
	Signetics	5406	666-47
	TI	SN5406	666-51
5407	National	DM5407	666-26
	Signetics	5407	666-30
	TI	SN5407	666-34
5408	Fairchild	5408	670-167
	National	DM5408	670-169
	Signetics	5408	670-171
	TI	SN5408	670-173
5409	Fairchild	5409	671-52
	National	DM5409	671-54
	TI	SN5409	671-56
541	**Burr-Brown**	**OPA541**	⋆ **2536**
			1130-134
	Exar	XR541	885-3
	MicroLinear	ML541	887-115
	MicroNet	MN541	1157-42
	Micro-Link	STD541	4872-35
	Plessey	SL541	1104-96
	Sanyo	STK541	1205-122
	TI	TLC541	924-21
		TLC541M	920-9
5410	Fairchild	5410	672-20
	Faraday	FE5410	4850-34
	Motorola	MC5410	672-23
	National	DM5410	672-24
	Signetics	NE5410	951-25
		SE5410	951-26
		5410	672-26
	TI	SN5410	672-28
	Transmag	5410C	4883-35
54100	TI	SN54100	676-111
54104	National	MM54104	1122-129
54107	National	DM54107	669-96
	Signetics	54107	669-100
	TI	SN54107	669-104
54109	National	DM54109	669-51
	Signetics	54109	669-53
	TI	SN54109	669-55
5411	National	DM5411	670-99
	Sprague	SCL5411	633-91
54111	TI	SN54111	669-133
54116	Signetics	54116	676-132
	TI	SN54116	676-134
5412	Marconi	MA5412	1194-10
	TI	SN5412	672-80
54120	TI	SN54120	688-109
54121	Fairchild	54121	681-159
	National	DM54121	681-161
	Signetics	54121	681-163
	TI	SN54121	682-2
54122	Fairchild	54122	682-9
	TI	SN54122	682-10
54123	Fairchild	54123	682-34
	National	DM54123	682-36
	Signetics	54123	682-38
	TI	SN54123	682-40
54125	Fairchild	54125	658-58
	National	DM54125	658-60
	Signetics	54125	658-64
	TI	SN54125	658-66
54126	Signetics	54126	658-87
	TI	SN54126	658-89
54128	Signetics	54128	988-37
	TI	SN54128	666-15
			988-38
5413	Marconi	MA5413	1194-11
	National	DM5413	688-118
	Signetics	5413	688-120
	TI	SN5413	688-122
54132	National	DM54132	689-24
	Signetics	54132	689-26
	TI	SN54132	689-28
54136	TI	SN54136	676-9
5414	Fairchild	5414	689-54
	National	DM5414	689-56
	Signetics	5414	689-58
	TI	SN5414	689-60
54141	Motorola	MC54141	979-120
	National	DM54141	979-121
54144	TI	SN54144	664-13
54145	National	DM54145	664-47
	Signetics	54145	664-49
54147	Signetics	54147	690-85
	TI	SN54147	690-87
54148	National	DM54148	690-6
	Signetics	54148	690-10
	TI	SN54148	690-12
5415	Sprague	SCL5415	633-108
54150	Fairchild	54150	681-143
	National	DM54150	681-145
	Signetics	54150	681-147
	TI	SN54150	681-149
54151	Fairchild	54151	681-42
	National	DM54151A	681-44
	Signetics	54151	681-46
	TI	SN54151A	681-48
54153	Fairchild	54153	679-9
	National	DM54153	679-13
	Signetics	54153	679-15
	TI	SN54153	679-17
54154	Fairchild	54154	665-103
	National	DM54154	665-106
	Signetics	54154	665-110
	TI	SN54154	665-112
54155	National	DM54155	664-104
	Signetics	54155	664-108
	TI	SN54155	664-112
54156	National	DM54156	664-105
	Signetics	54156	664-109
	TI	SN54156	664-113
54157	Fairchild	54157	680-68
	National	DM54157	680-72
	Signetics	54157	680-79
	TI	SN54157	680-81
54158	Signetics	54158	679-159
5416	National	DM5416	666-42
	Signetics	5416	666-48
	TI	SN5416	666-52
54160	National	DM54160A	662-115
	Signetics	54160	662-120
	TI	SN54160	662-122
54161	Fairchild	54161	660-113
	National	DM54161A	660-117
	Signetics	54161	660-122
	TI	SN54161	660-124
54162	National	DM54162A	662-153
	TI	SN54162	662-155
54163	National	DM54163	660-163
	Signetics	54163	660-165
	TI	SN54163	660-167
54164	Fairchild	54164	683-55
			1395-35
	National	DM54164	683-57
			1395-42
	Signetics	54164	683-61
			1395-49
	TI	SN54164	683-63
			1395-53
54165	Fairchild	54165	683-103
			1394-96
	National	DM54165	683-105
			1394-98
	Signetics	54165	683-107
			1394-100
	TI	SN54165	683-109
			1394-102
54166	National	DM54166	683-122
			1395-4
	Signetics	54166	683-124
			1395-7
	TI	SN54166	683-126
			1395-11
54167	TI	SN54167	688-91
5417	National	DM5417	666-27
	Signetics	5417	666-31
	TI	SN5417	666-35
54170	Fairchild	ZN54170	1347-1
		54170	678-72
			1347-3
	National	DM54170	1347-8
	Signetics	54170	678-75
	TI	SN54170	678-77
			1347-15
54173	Fairchild	54173	667-120
	National	DM54173	667-122
	Signetics	54173	667-128
	TI	SN54173	667-130
54174	Fairchild	54174	667-146
	National	DM54174	667-148
	Signetics	54174	667-150
	TI	SN54174	667-152
54175	Fairchild	54175	667-31
	National	DM54175	667-33
	Signetics	54175	667-35
	TI	SN54175	667-37
54176	National	DM54176	662-92
	TI	SN54176	662-98
54177	National	DM54177	660-79
	TI	SN54177	660-89
54178	TI	SN54178	682-149
			1393-50
54179	TI	SN54179	682-153
			1393-51
54180	National	DM54180	690-40
	Signetics	54180	690-45
	TI	SN54180	690-47
54181	National	DM54181	657-9
	Signetics	54181	657-10
	TI	SN54181	657-12
54182	TI	SN54182	657-68
54184	National	DM54184	688-104
	TI	SN54184	688-106
			1303-5
54185	National	DM54185A	688-100
	TI	SN54185A	688-103
			1303-4
5419	Sprague	SCL5419	633-101
54190	National	DM54190	663-118
	Signetics	54190	663-119
	TI	SN54190	663-121
54191	Fairchild	54191	661-143
	National	DM54191	661-144
	Signetics	54191	661-146
	TI	SN54191	661-148
54192	National	DM54192	663-84
	Signetics	54192	663-88
	TI	SN54192	663-90
54193	National	DM54193	662-8
	Signetics	54193	662-12
	TI	SN54193	662-14
54194	National	DM54194	683-8
			1393-39
	Signetics	54194	683-10
			1393-43
54195	National	DM54195	682-95
			1393-80
	Signetics	54195	682-99
	TI	SN54195	682-101
			1393-93
54196	TI	SN54196	662-99
54197	National	DM54197	660-80
	TI	SN54197	660-90
54198	National	DM54198	683-91
			1394-64
	TI	SN54198	683-93
			1394-69
54199	National	DM54199	1394-65
	Signetics	54199	683-96
	TI	SN54199	683-98
			1394-70
542	AD	AD542J	1150-28
			¶ 428-28
		AD542K	1148-24
			¶ 428-28
		AD542L	1145-31
			¶ 428-28
		AD542S	1148-23
			¶ 428-28
	Datel	**AM542MC**	⋆ **2577**
			1103-19
			1139-35
	HybridSys	ADC542B-8	919-15
		ADC542C-8	919-16
	Marconi	MA542	1194-32
	MicroNet	MN542	1147-45
	Sanyo	STK542	1208-16
	Signetics	NE542	1118-46
	VTC	VM542	888-2
5420	Fairchild	5420	671-88
	GE/RCA	**CA5420**	⋆ **2646**
			1180-22
		CA5420A	⋆ **2646**
			1176-31
	GoldStar	**GCL5420**	⋆ **4242**
			4048-21
		LL5420	4048-22
	Laserpath	LP5420A	4052-16

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5420			(Cont'd)
	LSI Logic	LL5420	4053-8
	MicroNet	MN5420	938-25
	National	DM5420	671-90
	Signetics	5420	671-92
	TI	SN5420	671-94
54200	**GE/RCA**	**PA54200**	⋆ **2659**
			4059-22
5421	Signetics	5421	670-61
5422	**GE/RCA**	**CA5422**	⋆ **2645**
			1180-23
	TI	SN5422	672-2
54221	Signetics	54221	682-20
	TI	SN54221	682-22
5423	TI	SN5423	675-17
54240	National	MM54240	1009-11
54245	Toshiba	TC54245A	1331-44
54246	TI	SN54246	979-61
54247	TI	SN54247	979-62
5425	Fairchild	5425	675-9
	National	DM5425	675-11
	Signetics	5425	675-13
	TI	SN5425	675-15
54251	TI	SN54251	681-104
54259	National	DM54259	677-45
	TI	SN54259	677-51
5426	National	DM5426	665-146
	Signetics	5426	665-153
	TI	SN5426	665-155
54265	TI	SN54265	689-17
5427	National	DM5427	675-36
	Signetics	5427	675-38
	TI	SN5427	675-40
54278	TI	SN54278	689-125
54279	Fairchild	54279	677-1
	Signetics	54279	677-3
	TI	SN54279	677-5
5428	Signetics	5428	675-102
	TI	SN5428	675-106
54283	Fairchild	54283	657-151
	TI	SN54283	657-158
54284	National	DM54284	657-109
54290	TI	SN54290	662-64
54293	TI	SN54293	661-45
54298	Fairchild	54298	680-162
	Signetics	54298	680-163
	TI	SN54298	680-165
543	**Datel**	**AM543MC**	⋆ **2577**
			1103-20
			1139-20
5430	Fairchild	5430	673-118
	National	DM5430	673-120
		MM5430	1120-80
	Signetics	5430	673-122
	TI	SN5430	673-124
5432	Fairchild	5432	674-110
	National	DM5432	674-112
	Signetics	5432	674-114
	TI	SN5432	674-116
5433	Signetics	5433	675-76
	TI	SN5433	675-78
54365	National	DM54365	658-131
	Signetics	54365A	658-139
	TI	SN54365A	658-143
54366	National	DM54366	660-3
			666-66
	Signetics	54366A	660-11
			666-70
	TI	SN54366A	660-15
			666-72
54367	National	DM54367	658-132
			666-67
	Signetics	54367A	658-140
			666-71
	TI	SN54367A	658-144
			666-73
54368	National	DM54368	660-4
	Signetics	54368A	660-12
	TI	SN54368A	660-16
5437	Fairchild	5437	672-161
	National	DM5437	672-163
		MM5437	1116-67
	Signetics	5437	672-165
	TI	SN5437	672-167
54376	TI	SN54376	670-57
5438	National	DM5438	673-7
	Signetics	5438	673-9
	TI	SN5438	673-13
5439	Signetics	5439	673-10
54390	TI	SN54390	663-11
54393	TI	SN54393	661-22
544	AD	AD544J	1150-31
		AD544K	1148-19
		AD544L	1145-28
		AD544S	1148-22
	ILC-DDC	DSC544	1221-33
	Intel	iSBC544	4809-10
			4852-31
	Signetics	NE544	1127-70
5440	Fairchild	5440	671-147
	National	DM5440	671-149
	Signetics	5440	671-151
	TI	SN5440	671-153
5441	National	DM5441A	979-116
5442	Fairchild	5442	664-58
	National	DM5442	664-62
	Signetics	5442	664-66
	TI	SN5442A	664-68
5445	National	DM5445	664-40
	Signetics	5445	664-42
	TI	SN5445	664-44
5446	National	DM5446A	979-49
	TI	SN5446A	979-63
54468	Motorola	MC54468	687-165
5447	National	DM5447A	979-50
	TI	SN5447A	979-64
5448	National	DM5448	979-18
	TI	SN5448	979-30
545	AD	AD545J	1148-4
		AD545K	1132-27
			1148-3
		AD545L	1132-28
			1157-43
		AD545M	1132-29
			1143-39
	SGS	L545	1192-2
	TI	TLC545I	922-38
		TLC545M	922-39
5450	National	DM5450	674-40
		MM5450	979-142
	SGS	M5450	978-37
	Signetics	5450	674-42
	TI	SN5450	674-44
5451	National	DM5451	674-5
		MM5451	979-143
	SGS	LS5451	674-24
		M5451	978-38
	Signetics	5451	674-7
	TI	SN5451	674-9
5452	Marconi	MA5452	1193-139
	National	MM5452	981-50
5453	Marconi	MA5453	1193-140
	National	DM5453	674-68
		MM5453	981-51
	TI	SN5453	674-70
5454	National	DM5454	674-64
	TI	SN5454	674-66
5455	National	MM5455	1119-44
	Sprague	SCL5455	1119-72
5456	National	MM5456	1119-45
5457	National	MM5457	1119-46
5458	Sprague	SCL5458	1119-57
54580	Mitsubishi	M54580	1107-141
546	**Harris**	**HI546-2**	⋆ **2703**
			⋆ **2738**
			⋆ **2748**
		HI546-5	⋆ **2703**
			⋆ **2738**
			⋆ **2748**
	TI	TLC546I	922-40
		TLC546M	922-41
5460	Signetics	5460	674-49
5462	National	MM5462	1119-47
5463	National	MM5463	1119-48
	Sprague	SCL5463	1119-73
5466	National	MM5466	1119-49
	Sprague	SCL5466	1119-58
5467	Sprague	SCL5467	1119-59
5468	Sprague	SCL5468	1119-74
547	AD	AD547J	1148-27
			¶ 428-28
		AD547K	1145-26
			¶ 428-28
		AD547L	1132-93
			1144-5
			¶ 428-28
		AD547S	1145-27
			¶ 428-28
	Gennum	LC547	1103-80
			1116-13
		LD547	1103-83
			1116-20
			¶ 430-34
		LU547	1103-86
			1116-28
	Harris	**HI547-2**	⋆ **2703**
			⋆ **2738**
			⋆ **2748**
			914-71
		HI547-5	⋆ **2703**
			⋆ **2738**
			⋆ **2748**
			914-74
	Marconi	MA547	1193-141
5470	National	DM5470	669-38
	TI	SN5470	669-40
5472	National	DM5472	669-42
	TI	SN5472	669-44
5473	Fairchild	5473	669-94
	National	DM5473	669-97
	Signetics	5473	669-101
	TI	SN5473	669-105
5474	Fairchild	5474	666-141
	National	DM5474	666-143
	Signetics	5474	666-145
	Sprague	SCL5474	1119-75
	TI	SN5474	666-147
54741	Mitsubishi	M54741A-1	1318-40
5475	Fairchild	5475	676-136
	National	DM5475	676-138
	Signetics	5475	676-140
	TI	SN5475	676-142
5476	Fairchild	5476	669-134
	National	DM5476	669-136
	Signetics	5476	669-138
	TI	SN5476	669-140
548	**AD**	**AD548**	⋆ **2430**
			1144-1
		AD548A	⋆ **2430**
			1152-13
		AD548B	⋆ **2430**
			1146-12
		AD548C	⋆ **2430**
			1144-10
		AD548J	⋆ **2430**
			1152-14
		AD548K	⋆ **2430**
			1146-13
		AD548S	⋆ **2430**
			1152-15
		AD548T	⋆ **2430**
			1146-14
	Gennum	LD548	1103-84
			1116-21
			¶ 430-34
	Harris	**HI548-2**	⋆ **2703**
			⋆ **2738**
			⋆ **2740**
			⋆ **2748**
			914-15
		HI548-5	⋆ **2703**
			⋆ **2738**
			⋆ **2740**
			⋆ **2748**
			914-16
	Intel	iSBC548	4857-1
	MicroDesigns		
		µDX548	4855-7
	TI	TLC548C	925-2
			¶ 419-2
		TLC548M	925-3
			¶ 419-2
5480	SGS	M5480	979-141
5481	SGS	M5481	979-135
5482	SGS	M5482	979-136
	TI	SN5482	657-6
5483	Fairchild	5483	657-152
	National	DM5483	657-154
		MM5483	981-54
	Signetics	5483	657-156
	TI	SN5483A	657-159
5484	National	MM5484	981-25
5485	Fairchild	5485	656-43
	National	DM5485	656-53
		MM5485	981-14
	Signetics	5485	656-59
	TI	SN5485	656-63
5486	Fairchild	5486	676-29
	National	DM5486	676-31
		MM5486	978-35
	SGS	M5486	978-36
	Signetics	5486	676-35
	TI	SN5486	676-37
5489	AMD	AM5489	1348-12
		SN5489-1	1347-95
549	**AD**	**AD549C**	⋆ **2431**
			1143-30
	Gennum	LC549	1103-81
			1116-14
			¶ 425-21
		LD549	1103-85
			1116-22
			¶ 425-21
			¶ 431-19
		LV549	1103-87
			1116-30
	Harris	**HI549-2**	⋆ **2703**
			⋆ **2738**
			⋆ **2740**
			⋆ **2748**
			912-64
		HI549-5	⋆ **2703**
			⋆ **2738**
			⋆ **2740**
			⋆ **2748**
			912-69
	TI	TLC549	920-34
		TLC549C	925-4
		TLC549M	920-35
5490	Fairchild	5490	662-58
	National	DM5490	662-60
	Signetics	5490	662-62
	TI	SN5490A	662-65
5491	Motorola	MC5491A	1395-60
	National	SN5491A	1395-61
	Signetics	5491	683-156
			1395-63
	TI	SN5491A	683-157
			1395-66
5492	National	DM5492A	663-150
	Signetics	5492	663-152
	TI	SN5492A	663-154
5493	National	DM5493A	661-41
	Signetics	5493	661-43
	TI	SN5493A	661-46
5494	Signetics	5494	1394-23
	TI	SN5494	683-5
			1394-25
5495	Fairchild	5495	682-124
			1393-36
	National	DM5495	682-128
			1393-40
	Signetics	5495A	682-130
			1393-44
	TI	SN5495A	682-131
			1393-52
5496	National	DM5496	683-38
			1394-37
	Signetics	5496	683-40
			1394-40
	TI	SN5496	683-42
			1394-43
5497	Fairchild	5497	689-130
	TI	SN5497	689-132
55	Amperex	BGY55	1123-96
		BGY55A	1123-97
	Burr-Brown	PCM55	1119-106
		PCM55H	974-6
		PCM55J	974-7
	NCR	ADP55	4869-22

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
55ALS057			
	TI	SN55ALS057	689-82
			1009-21
55ALS161			
	TI	SN55ALS161	685-164
55ALS192			
	TI	SN55ALS192	989-9
55ALS193			
	TI	SN55ALS193	993-17
55ALS194			
	TI	SN55ALS194	988-42
55ALS195			
	TI	SN55ALS195	992-48
55B33	SEEQ	55B33-250	1312-63
		55B33H-250	1312-64
55L12	Raytheon	CGA55L12	4058-48
55S20	Fairchild	55S20	1008-7
55S234	Fairchild	55S234	1008-8
55S24	Fairchild	55S24	1008-10
550	GE/Intersil	MM550	911-28
	Gennum	LC550	1103-82
			1116-15
	National	CIM550	4846-31
	Plessey	SL550	1104-97
	SBE	SBE550	4717-12
	Sharp	SM550	815-20
			862-41
5500	Plessey	CLA5500	4058-28
55001	Harris	HIO55001-6	1222-121
5501	**GoldStar**	**GL5501**	⋆ **2699**
			1118-29
	MicroPwr	MP5501A	1147-26
		MP5501C	1160-16
		MP5501E	1152-55
		MP5501F	1152-56
		MP5501G	1160-17
		MP5501H	1147-27
	TI	TMS5501	871-86
			¶ 416-19
5502	**Harris**	**HC5502A**	⋆ **2768**
			1198-54
	MicroPwr	MP5502	1130-22
			1153-3
		MP5502A	1146-52
		MP5502B	1160-25
		MP5502D	1160-26
		MP5502E	1146-53
5504	**Harris**	**HC5504**	⋆ **2768**
			1198-55
			¶ 431-31
5505	MicroPwr	MP5505A	1132-24
			1132-98
			1142-38
		MP5505B	1146-32
		MP5505C	1149-54
		MP5505E	1146-35
5507	MicroPwr	MP5507A	1132-77
			1138-11
		MP5507B	1140-30
		MP5507C	1170-38
		MP5507D	1143-4
		MP5507E	1132-78
			1140-42
5508	Harris	HC5508	1198-56
	MicroPwr	MP5508	1144-34
5509	Harris	HC5509	1198-57
	MicroPwr	MP5509A	1183-14
		MP5509E	1183-15
	OKI	MSM5509	1119-67
551	**Datel**	**AM551MM**	⋆ **2574**
			1102-93
	GE/Intersil	MM551	911-19
	Gennum	LC551	1103-93
			¶ 431-5
	National	CIM551	4846-32
	Sharp	SM551	815-21
			862-42
	TI	TLC551	1201-75
5510	MicroPwr	MP5510A	1132-108
		MP5510B	1132-109
		MP5510C	1173-25
		MP5510E	1132-110
	Siemens	TDA5510-2	1126-123

Base Number	Source	Device	Page-Line
55107	National	DS55107	991-21
			991-32
	TI	SN55107A	991-23
			¶ 425-23
		SN55107B	991-34
			¶ 425-23
55108	National	DS55108	991-26
			991-36
	TI	SN55108A	991-28
		SN55108B	991-38
55109	TI	SN55109A	988-22
5511	MicroPwr	MP5511A	1183-16
		MP5511E	1183-17
55110	TI	SN55110A	988-26
55111	TI	SN55111	988-31
55113	National	DS55113	988-11
	TI	SN55113	988-13
55114	National	DS55114	987-48
	TI	SN55114	987-50
55115	National	DS55115	991-52
	TI	SN55115	991-54
55116	TI	SN55116	997-52
55117	TI	SN55117	997-58
55118	TI	SN55118	997-54
55119	TI	SN55119	997-56
5512	**Harris**	**HC5512**	⋆ **2768**
			1195-33
		HC5512A	⋆ **2768**
			1195-34
		HC5512C	⋆ **2768**
			1195-35
		HC5512D	⋆ **2768**
			1195-36
	Signetics	NE5512	1130-9
			1177-4
		SE5512	1130-11
			1175-22
55121	National	DS55121	985-15
	TI	SN55121	985-19
55122	National	DS55122	990-11
	TI	SN55122	990-13
55138	TI	SN55138	995-40
5514	Signetics	NE5514	1130-10
		SE5514	1130-12
55150	TI	SN55150	985-8
55154	Fairchild	55154	990-20
	TI	SN55154	992-11
55157	TI	SN55157	991-48
5516	**SEEQ**	**5516A-250**	⋆ **2991**
			1310-55
		5516A-300	⋆ **2991**
			1310-81
5517	**SEEQ**	**5517A**	⋆ **2991**
			1310-34
		5517A-250	⋆ **2991**
			1310-63
		5517A-300	⋆ **2991**
			1311-8
		5517AH	⋆ **2991**
			1310-35
		5517AH-250	⋆ **2991**
			1310-71
		5517AH-300	⋆ **2991**
			1311-9
	Signetics	NE5517	1177-5
		NE5517A	1177-6
	Toshiba	TC5517C-20	1358-67
55173	TI	SN55173	992-45
55182	TI	SN55182	991-58
55183	TI	SN55183	988-5
55188	TI	SN55188	985-44
55189	TI	SN55189	990-31
		SN55189A	990-40
552	GE/Intersil	MM552	911-4
	Gennum	LC552	1103-94
			¶ 435-25
	Intel	iSBC552A	4858-13
	Sharp	SM552	815-22
			862-43
	TI	TLC552	1201-76
		TLC552C	1201-77
5520	MicroPwr	MP5520A	941-19
		MP5520B	941-20
		MP5520C	941-21
		MP5520D	941-34
		MP5520F	941-22
			(Continued)

Base Number	Source	Device	Page-Line
5520	MicroPwr		(Cont'd)
		MP5520H	941-23
	SMS	OMTI5520	4848-29
	Signetics	NE5520	1004-16
5521	**Signetics**	**NE5521**	⋆ **3126**
			1222-110
		SE5521	1222-111
5523	OKI	MSM5523	1119-77
55234	SiliconG	SG55234	1008-13
		SG55234A	1008-14
	TI	SN55234	1008-9
5524	SiliconG	SG5524	1008-11
5525	ILC-DDC	DDC5525	4866-27
	OKI	MSM5525	1119-78
			1120-65
55257	**Toshiba**	**TC55257A-10**	
			⋆ **3303**
			1379-85
		TC55257A-12	
			⋆ **3303**
			1380-20
		TC55257A-85	
			⋆ **3303**
			1379-49
5526	OKI	MSM5526	1120-48
	SMS	OMTI5526	4848-30
5527	MicroPwr	MP5527	1137-38
	SMS	OMTI5527	4848-31
5528	OKI	MSM5528	1119-68
5529	**GoldStar**	**GL5529**	⋆ **2699**
			1116-73
	SMS	OMTI5529	4848-32
553	NEC	μPB553A	1190-112
5532	Exar	XR5532	1176-11
		XR5532A	1176-12
	Signetics	**NE5532**	⋆ **3090**
			1176-15
		NE5532A	⋆ **3090**
			1176-16
		SE5532	1174-46
		SE5532A	1174-47
	TI	NE5532	1176-9
		NE5532A	1176-10
55325	National	DS5325	999-56
	SiliconG	SG55325	999-52
	TI	SN55325	999-59
55326	TI	SN55326	999-62
55327	TI	SN55327	999-63
5533	Exar	XR5533	1176-13
		XR5533A	1176-14
	Signetics	NE5533	1176-17
		NE5533A	1176-18
5534	Exar	XR5534	1157-23
		XR5534A	1157-24
		XR5534C	1157-25
		XR5534M	1153-46
	Raytheon	RC5534	1157-26
		RM5534	⋆ **2979**
			1153-47
	Signetics	**NE5534**	⋆ **3091**
			1157-27
		NE5534A	⋆ **3091**
			1157-28
		SE5534	1153-48
		SE5534A	1153-49
	TI	NE5534	1157-29
		NE5534A	1157-30
		SE5534A	1153-50
5535	Signetics	NE5535	1178-38
		SE5535	1175-53
55365	TI	SN55365	1000-3
5537	MicroPwr	MP5537	1137-39
	Signetics	NE5537	1228-90
		SE5537	1228-91
5539	**AD**	**AD5539**	⋆ **2439**
			1156-34
			¶ 431-10
	Signetics	**NE5539**	⋆ **3087**
			1136-15
			1161-42
			¶ 428-36
		SE5539	1136-16
			1161-43
			¶ 428-36
554	Intel	iSBC554	4858-12
5540	MicroPwr	MP5540	1225-121

Base Number	Source	Device	Page-Line
55416	Toshiba	TC55416-35	1374-4
		TC55416-45	1375-3
55417	Toshiba	TC55417-35	1374-33
		TC55417-45	1375-29
55426	TI	SN55426B	979-129
55427	TI	SN55427B	979-130
55450	National	DS55450	1005-2
	SiliconG	SG55450	1005-9
		SG55450B	1005-10
	TI	SN55450B	1005-21
55451	National	DS55451	1005-3
	SiliconG	SG55451	1005-11
		SG55451B	1005-141
	TI	SN55451B	1005-22
55452	National	DS55452	1005-42
	SiliconG	SG55452	1005-46
		SG55452B	1005-129
	TI	SN55452B	1005-50
55453	National	DS55453	1005-98
	SiliconG	SG55453	1005-102
		SG55453B	1005-137
	TI	SN55453B	1005-106
55454	National	DS55454	1005-70
	SiliconG	SG55454	1005-74
		SG55454B	1005-133
	TI	SN55454B	1005-78
55460	SiliconG	SG55460	1005-12
		SG55460B	1005-13
55461	National	DS55461	1005-4
	SiliconG	SG55461	1005-14
	TI	SN55461	1005-23
55462	National	DS55462	1005-43
	SiliconG	SG55462	1005-47
	TI	SN55462	1005-51
55463	National	DS55463	1005-99
	SiliconG	SG55463	1005-103
	TI	SN55463	1005-107
55464	National	DS55464	1005-71
	SiliconG	SG55464	1005-75
	TI	SN55464	1005-79
55471	SiliconG	SG55471	1005-127
	TI	SN55471	1005-24
55472	SiliconG	SG55472	1005-130
	TI	SN55472	1005-52
55473	SiliconG	SG55473	1005-138
	TI	SN55473	1005-108
55474	SiliconG	SG55474	1005-134
	TI	SN55474	1005-80
55493	National	DS55493	980-40
55494	National	PS55494	980-69
555	AdvLinear	ALD555	1201-70
		ALD555-1	1201-71
	Exar	XRL555	1201-33
		XR555C	1201-34
		XR555M	1201-35
	Fairchild	μA555C	1201-36
	GE/Intersil	MM555	910-58
		NE555	1201-37
	GE/RCA	CA555	1201-38
		CA555C	1201-39
	GoldStar	**GLC555**	⋆ **2700**
			1201-65
	National	LM555C	1201-45
	Raytheon	RC555	1201-47
	Samsung	KS555	1201-69
		NE555	1201-48
	Sharp	SM555	815-23
	Signetics	NE555	1201-49
		SE555	1201-50
		SE555C	1201-51
	TI	NE555	1201-55
		SA555	1201-56
		SE555	1201-57
		TLC555C	1201-72
		TLC555I	1201-73
		TLC555M	1201-74
	Thomson	LM555	1201-58
5550	**Motorola**	**TCA5550**	⋆ **2946**
			⋆ **2948**
			1116-60
			1118-81
	OKI	MSM5550	1119-34
	Signetics	TEA5550	1120-24
55500	TI	SN55500D	981-41
55501	TI	SN55501E	978-91

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
55536	Harris	HC55536	1122-104
			1193-54
5555	NEC	μPD5555	1201-67
55551	TI	SN55551	977-64
55552	TI	SN55552	977-55
55553	TI	SN55553	977-61
55554	TI	SN55554	977-52
5556	NEC	μPD5556	1201-68
55564	**Harris**	**HC55564**	⋆ **2768**
			1122-105
			1193-55
5557	OKI	MSM5557	1119-56
5558	OKI	MSM5558	1119-69
556	Exar	XRL556C	1201-87
		XRL556M	1201-88
		XR556C	1201-89
		XR556M	1201-90
	Fairchild	μA556C	1201-91
	GoldStar	**GLC556**	⋆ **2700**
			1201-85
	Intel	iSBC556	4853-5
	Marconi	MA556	1192-38
	MicroInds	mBLC556	4860-44
	National	LM556	1201-94
		LM556C	1201-95
	NEC	μPB556	1190-87
	Samsung	NE556	1201-96
	Sharp	SM556	815-24
	Signetics	NE556	1201-97
		NE556-1	1201-98
		SA556	1201-99
		SA556-1	1201-100
		SE556	1201-101
		SE556-1	1201-102
		SE556-1C	1201-103
	TI	NE556	1201-104
		SA556	1201-105
		SE556	1201-106
		TLC556C	1201-111
		TLC556I	1201-112
		TLC556M	1201-113
	Thomson	LM556	1201-107
5560	Cherry	CS5560N	1216-20
		CS5560S	1216-21
	Harris	HC5560	1197-60
	IPS	**IP5560**	⋆ **2854**
			1216-96
		IP5560C	⋆ **2854**
			1216-97
	Siemens	TDA5560	1125-67
	Signetics	**NE5560**	⋆ **3129**
			1217-71
		SE5560	1217-75
		TEA5560	1121-17
5561	Cherry	CS5561N	1216-22
		CS5561S	1216-23
	IPS	**IP5561**	⋆ **2854**
			1216-98
		IP5561C	⋆ **2854**
			1216-99
	Signetics	**NE5561**	⋆ **3130**
			1217-72
		SE5561	1217-76
5562	**Signetics**	**NE5562**	⋆ **3131**
			1217-73
		SE5562	1217-77
5563	Toshiba	tc5563a-15	1369-60
5564	Toshiba	TC5564A-12	1369-4
		TC5564A-15	1369-61
5565	Toshiba	TC5565A-10	1368-49
		TC5565A-12	1369-5
		TC5565A-15	1369-62
5568	**IPS**	**IP5568**	⋆ **2854**
			1215-109
	Signetics	**NE5568**	⋆ **3133**
			1217-74
557	LogicDev	LMU557	644-43
		LMU557C	604-3
		LMU557M	604-4
	Sharp	SM557	815-25
5570	Signetics	NE5570	1003-29
		SA5570	1003-30
		SE5570	1003-31
		TEA5570	1120-88

Base Number	Source	Device	Page-Line
558	AD	AD558J	946-21
			¶ 419-15
			¶ 421-13
		AD558K	943-40
			¶ 419-15
			¶ 421-13
		AD558S	947-17
			¶ 419-15
			¶ 421-13
		AD558T	943-47
			¶ 419-15
			¶ 421-13
	Exar	XR558C	1201-116
		XR558M	1201-117
	Ferranti	ZN558E-8	945-46
		ZN558J-8	945-47
	LogicDev	LMU558	644-44
		LMU558C	604-5
		LMU558M	604-6
	Samsung	NE558	1201-118
	Signetics	NE558	1201-119
		SA558	1201-120
		SE558	1201-121
5580	Signetics	TEA5580	1121-154
5581	Signetics	TEA5581	1116-118
559	Exar	XR559C	1201-122
		XR559M	1201-123
	Ferranti	ZN559E	948-3
		ZN559J	948-4
5592	**Signetics**	**NE5592**	⋆ **3088**
			1104-105
56	Amperex	BGY56	1123-98
	Burr-Brown	PCM56	1119-107
560	Cherry	CS560	1229-69
	Gennum	lv560	1229-88
	Hitachi	SAS560	1127-83
	Plessey	SL560	1104-98
			¶ 433-28
	SBE	560	4811-32
	Telefunken	TBA560	1124-85
	Xycom	XVME560	4885-6
	Zendex	ZX560	4861-10
5600	**Exar**	**XRT5600**	⋆ **2610**
			1197-35
	GoldStar	**GCL5600**	⋆ **4242**
			4048-25
		LL5600	4048-26
	Laserpath	LP5600A	4052-19
	LSI Logic	LL5600	4053-13
	Motorola	TCA5600	889-66
			1221-7
		TCF5600	889-67
	Plessey	CLA5600	4058-29
56000	**GE/RCA**	**PA56000**	⋆ **2659**
			4059-23
	Motorola	**DSP56000**	⋆ **2893**
			⋆ **4754**
			645-108
			888-109
		DSP56000ADS	
			⋆ **2893**
			⋆ **4754**
			4711-27
			4893-34
56001	**Motorola**	**DSP56001**	⋆ **2893**
			646-54
5601	**EG&G-Reticon**		
		RT5601A	⋆ **2590**
			1229-106
		R5601	646-90
			¶ 444-3
	Sprague	SCL5601	1119-76
5602	**EG&G-Reticon**		
		RT5602A	⋆ **2590**
			1229-107
	Sprague	SCL5602	633-107
5603	Sprague	SCL5603	633-109
5604	**EG&G-Reticon**		
		RM5604A	⋆ **2590**
			1221-56
	Sprague	SCL5604	1119-60
5605	**EG&G-Reticon**		
		RM5605A	⋆ **2590**
			1221-55

Base Number	Source	Device	Page-Line
5606	**EG&G-Reticon**		
		RM5606A	⋆ **2590**
			1221-54
5609	**EG&G-Reticon**		
		RF5609A	⋆ **2590**
			1221-60
561	AD	AD561J	951-23
		AD561K	951-5
		AD561S	951-24
		AD561T	951-6
	Plessey	SL561B	1118-5
		SL561C	1118-6
5610	**Intech**	**ADC5610**	⋆ **2799**
			928-6
	MicroNet	MN5610	930-39
561003	Hitachi	HB561003A-12	1343-35
		HB561003A-15	1343-46
		HB561003A-20	1343-57
		HB561003B-12	1343-36
		HB561003B-15	1343-47
		HB561003B-20	1343-58
		HM561003-15	1343-44
		HM561003-20	1343-56
561004	Hitachi	HB561004A-12	1342-13
		HB561004A-15	1342-29
		HB561004A-20	1342-36
561005	Hitachi	HB561005A-12	1342-57
		HB561005A-15	1342-61
		HB561005A-20	1342-65
561008	Hitachi	HB561008B-12	1343-4
		HB561008B-15	1343-12
		HB561008B-20	1343-19
561009	Hitachi	HB561009A-12	1343-37
		HB561009A-15	1343-48
		HB561009A-20	1343-59
		HB561009B-12	1343-38
		HB561009B-15	1343-49
		HB561009B-20	1343-60
5611	**EG&G-Reticon**		
		RF5611	⋆ **2590**
			1195-10
		RF5611A	⋆ **2590**
			1221-57
	Intech	ADC5611	928-7
5612	**EG&G-Reticon**		
		RF5612	⋆ **2590**
			1195-25
	Intech	ADC5612	928-8
5613	**EG&G-Reticon**		
		RF5613	⋆ **2590**
			1195-15
	Intech	ADC5613	928-9
	Sanyo	LC5613	1119-100
5614	**EG&G-Reticon**		
		RF5614A	⋆ **2590**
			1221-58
	Intech	ADC5614	928-10
5615	Intech	ADC5615	928-11
5616	**EG&G-Reticon**		
		RF5616A	⋆ **2590**
			1221-59
	Intech	ADC5616	928-12
5617	Intech	ADC5617	928-13
5618	Harris	HI5618A-2	942-32
		HI5618A-5	942-33
		HI5618B-2	944-16
		HI5618B-5	944-17
562	AD	AD562A/BCD	963-31
		AD562A/BIN	963-32
		AD562K/BCD	971-8
		AD562K/BIN	962-18
		AD562S/BCD	971-9
		AD562S/BIN	956-30
	Datel	**DAC562C**	⋆ **2576**
			958-30
	Harris	**HI562A-2**	⋆ **2703**
			⋆ **2738**
			⋆ **2749**
			⋆ **2768**
			956-19
			¶ 420-21

(Continued)

Base Number	Source	Device	Page-Line
562	**Harris**		**(Cont'd)**
		HI562A-5	⋆ **2703**
			⋆ **2738**
			⋆ **2749**
			⋆ **2768**
			959-7
			¶ 420-21
		HI562A/883	⋆ **2703**
			⋆ **2738**
			⋆ **2749**
			⋆ **2768**
			956-20
			¶ 420-21
	MicroPwr	MP562H	962-15
		MP562J	962-16
		MP562K	962-17
	NEC	μPB562	1190-88
	Plessey	SL562	1149-22
	PMI	**PM562A**	⋆ **2974**
			956-29
		PM562B	⋆ **2974**
			962-12
		PM562F	⋆ **2974**
			962-13
		PM562H	⋆ **2974**
			962-14
5620	**EG&G-Reticon**		
		RU5620	⋆ **2590**
			1219-19
	Exar	**XRT5620**	⋆ **2610**
			1197-36
56200	**Motorola**	**DSP56200**	⋆ **2894**
			645-74
			1195-9
5621	**EG&G-Reticon**		
		RU5621	⋆ **2590**
			1219-14
			1219-30
	Sanyo	LC5621	1119-99
5622	**EG&G-Reticon**		
		RU5622	⋆ **2590**
			1219-15
			1219-31
56256	Sharp	LH56256J-20	1331-55
5626	EG&G-Reticon		
		RU5626	4069-4
5628	Tech80	5628	4848-13
5629	Tech80	5629	4848-14
563	AD	AD563J/BCD	971-10
		AD563J/BIN	962-19
		AD563K/BCD	971-11
		AD563K/BIN	956-31
		AD563S/BCD	971-12
		AD563S/BIN	956-32
		AD563T/BCD	971-13
		AD563T/BIN	956-33
	Sharp	SM563	815-26
			862-37
5630	**EG&G-Reticon**		
		RM5630	⋆ **2590**
			1196-80
5631	**EG&G-Reticon**		
		RM5631	⋆ **2590**
			1197-5
5632	**EG&G-Reticon**		
		RM5632	⋆ **2590**
			1197-13
5635	**EG&G-Reticon**		
		RM5635	⋆ **2590**
			1197-14
5636	**EG&G-Reticon**		
		RM5636	⋆ **2590**
			1196-92
5637	**EG&G-Reticon**		
		RM5637	⋆ **2590**
			1196-93
5638	**EG&G-Reticon**		
		RM5638	⋆ **2590**
			1196-94
564	Signetics	NE564	1190-45
		SE564	1190-47
	Sprague	NE564	1190-64
		SE564	1190-65
	Zendex	ZX564	4860-34
			4863-9

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5640	EG&G-Reticon		
		RT5640	645-13
			927-42
			1195-48
565	AD	AD565AJ	957-39
		AD565AK	955-41
		AD565AS	957-40
		AD565AT	955-42
		AD565J	959-1
		AD565K	956-13
		AD565S	959-2
		AD565T	956-14
	Fairchild	μA565JC	959-3
		μA565KC	956-15
		μA565SM	959-4
		μA565TM	956-16
	Harris	**HI565AJD-5**	⋆ **2738**
			⋆ **2749**
			959-32
		HI565AKD-5	⋆ **2738**
			⋆ **2749**
			956-22
		HI565ASD-5	⋆ **2738**
			⋆ **2749**
			959-33
		HI565ATD-5	⋆ **2738**
			⋆ **2749**
			956-23
	Maxim	AD565AJ	957-41
		AD565AK	955-43
		AD565AS	957-42
		AD565AT	955-44
	MCE	MCE565AJ	957-43
		MCE565AS	957-44
		MCE565J	958-37
		MCE565K	956-17
		MCE565S	958-38
		MCE565T	956-18
	MicroNet	MN565AJ	957-45
		MN565AK	955-45
		MN565AS	957-46
		MN565AT	955-46
	Motorola	LM565	1191-35
		NE565	1191-36
	National	LM565	1191-37
		LM565C	1191-38
	Plessey	SL565C	1104-148
	Signetics	NE565	1191-39
		SE565	1191-40
	Siliconix	DG565A	915-16
5650	**Exar**	**XRT5650**	⋆ **2610**
			1197-33
			¶ 432-40
5651	EG&G-Reticon		
		RF5651	1195-8
566	AD	AD566AJ	958-33
		AD566AK	956-5
		AD566AS	958-34
		AD566AT	956-6
		AD566J	958-35
		AD566K	956-7
		AD566S	958-36
		AD566T	956-8
	Maxim	AD566AJ	958-28
		AD566AK	956-3
		AD566AS	958-29
		AD566AT	956-4
	MCE	MCE566AJ	958-39
		MCE566AK	956-9
		MCE566AS	958-40
		MCE566AT	956-10
		MCE566J	958-41
		MCE566K	956-11
		MCE566S	958-42
		MCE566T	956-12
	National	LM566	1191-46
		LM566C	1191-47
	NEC	μPB566	1191-97
		μPC566	1118-4
	Signetics	NE566	1191-50
		SE566	1191-51
	Siliconix	DG566A	910-10
	Xycom	XVME566	4886-2

Base Number	Source	Device	Page-Line
5660	**Harris**	**HI5660-2**	⋆ **2738**
			⋆ **2749**
			968-16
		HI5660-5	⋆ **2738**
			⋆ **2749**
			968-17
		HI5660A-S	⋆ **2738**
			⋆ **2749**
			968-18
		HI5660A-2	⋆ **2738**
			⋆ **2749**
			968-19
5665	Siemens	TDA5665	1125-69
567	AD	AD567J	959-34
		AD567K	956-24
		AD567S	960-1
	Exar	XRL567C	1191-17
		XRL567M	1191-18
		XR567AC	1191-23
			1198-122
			¶ 432-21
		XR567AM	1191-24
			1198-123
			¶ 432-21
	MicroNet	MN567J	960-2
		MN567K	956-25
		MN567S	960-3
	National	LM567	1191-25
		LM567C	1191-26
			1198-124
	Samsung	LM567C	1191-29
			1198-127
	Signetics	NE567	1191-30
			1198-128
		SE567	1191-31
			1198-129
5670	Exar	XRT5670	1192-15
568	**AD**	**AD568**	⋆ **2403**
			965-17
		AD568J	⋆ **2403**
			957-8
		AD568K	⋆ **2403**
			957-9
		AD568S	⋆ **2403**
			957-10
	National	LMC568	1190-71
	Signetics	NE568	1190-46
	SiliconSys	SSI568	886-66
	Siliconix	DG568B	915-1
5680	**Harris**	**HI5680I**	⋆ **2738**
			⋆ **2749**
			958-15
		HI5680V	⋆ **2738**
			⋆ **2749**
			963-26
5681	**Exar**	**XRT5681**	⋆ **2608**
			1197-56
5683	**Exar**	**XRT5683**	⋆ **2608**
			1010-64
			1197-59
5684	**Exar**	**XRT5684**	⋆ **2609**
			1197-57
5685	**Harris**	**HI5685I**	⋆ **2738**
			⋆ **2749**
			958-16
		HI5685V	⋆ **2738**
			⋆ **2749**
			963-27
5687	**Harris**	**HI5687I**	⋆ **2703**
			⋆ **2738**
			⋆ **2749**
			958-17
		HI5687V	⋆ **2703**
			⋆ **2738**
			⋆ **2749**
			963-28
569	AD	AD569J	976-15
		AD569K	976-16
		AD569S	973-5
	Intel	iSBC569	4809-13
			4852-32
	Siliconix	DG569B	912-84

Base Number	Source	Device	Page-Line
5690	**Exar**	**XRT5690**	⋆ **2609**
			1197-58
	Harris	**HI5690V**	⋆ **2738**
			⋆ **2741**
			⋆ **2749**
			960-15
5695	**Harris**	**HI5695V**	⋆ **2738**
			⋆ **2741**
			⋆ **2749**
			960-16
5697	**Harris**	**HI5697V**	⋆ **2703**
			⋆ **2738**
			⋆ **2741**
			⋆ **2749**
			960-17
57	Amperex	BGY57	1123-99
57C128	**Waferscale**	**WS57C128F-55**	
			⋆ **3376**
			1328-22
		WS57C128F-70	
			⋆ **3376**
			1328-29
		WS57C128F-70M	
			⋆ **3376**
			1328-30
57C191	**Waferscale**	**WS57C191-45**	
			⋆ **3376**
			1321-40
		WS57C191-50	
			⋆ **3376**
			1322-16
		WS57C191-50M	
			⋆ **3376**
			1321-31
		WS57C191-55M	
			⋆ **3376**
			1322-17
57C256	**Waferscale**	**WS57C256-70**	
			⋆ **3376**
			1330-33
		WS57C256-70M	
			⋆ **3376**
			1330-34
		WS57C256F-55	
			⋆ **3376**
			1330-24
57C257	**Waferscale**	**WS57C257-55**	
			⋆ **3376**
			1328-21
		WS57C257-70	
			⋆ **3376**
			1330-14
		WS57C257-70M	
			⋆ **3376**
			1330-15
57C291	**Waferscale**	**WS57C291-45**	
			⋆ **3376**
			1321-41
		WS57C291-50	
			⋆ **3376**
			1322-18
		WS57C291-50M	
			⋆ **3376**
			1321-42
		WS57C291-55M	
			⋆ **3376**
			1322-19
57C43	**Waferscale**	**WS57C43-55**	⋆ **3376**
			1323-48
		WS57C43-70	⋆ **3376**
			1323-59
		WS57C43-70M	
			⋆ **3376**
			1323-60
		WS57C43B-35	
			⋆ **3376**
			1323-32
		WS57C43B-45	
			⋆ **3376**
			1323-38
		WS57C43B-45M	
			⋆ **3376**
			1323-39
		WS57C43B-55M	
			⋆ **3376**
			1323-49

Base Number	Source	Device	Page-Line
57C49	**Waferscale**	**WS57C49-55**	⋆ **3376**
			1325-40
		WS57C49-70	⋆ **3376**
			1326-16
		WS57C49-70M	
			⋆ **3376**
			1326-15
			1326-6
		WS57C49-90	⋆ **3376**
			1326-21
			1326-28
		WS57C49-90M	
			⋆ **3376**
			1325-45
			1326-22
		WS57C49B-35	
			⋆ **3376**
			1324-30
		WS57C49B-45	
			⋆ **3376**
			1324-63
		WS57C49B-45M	
			⋆ **3376**
			1324-66
57C51	**Waferscale**	**WS57C51-70**	⋆ **3376**
			1328-31
		WS57C51-70M	
			⋆ **3376**
			1328-32
		WS57C51B-40	
			⋆ **3376**
			1328-6
		WS57C51B-45	
			⋆ **3376**
			1328-11
		WS57C51B-45M	
			⋆ **3376**
			1328-12
		WS57C51B-55	
			⋆ **3376**
			1328-19
		WS57C51B-70M	
			⋆ **3376**
			1328-20
57C64	**Waferscale**	**WS57C64F-55**	
			⋆ **3376**
			1325-46
		WS57C64F-70	
			⋆ **3376**
			1326-10
		WS57C64F-70M	
			⋆ **3376**
			1326-11
57C65	**Waferscale**	**WS57C65-55**	⋆ **3376**
			1324-13
		WS57C65-70	⋆ **3376**
			1324-14
		WS57C65-70M	
			⋆ **3376**
			1324-15
		WS57C65-90M	
			⋆ **3376**
			1324-16
57HC64			
	GoldStar	GM57HC64-35	1311-49
			1324-27
		GM57HC64-45	1311-50
			1324-60
		GM57HC64-55	1311-54
			1325-37
570	AD	AD570J	921-5
		AD570S	921-6
	Cherry	CS570	884-103
	GE/RCA	CA570	884-104
	Hitachi	SAS570	1127-84
	MCE	MCE570J	921-7
		MCE570S	921-8
	Signetics	**NE570**	⋆ **3099**
			1193-17
5700	MicroNet	MN5700	933-21
	National	TP5700	1198-23
		TP5700A	1198-24
	Plessey	CLA5700	4058-32
	Sanyo	LA5700	1224-98
5702	**Signetics**	**TDA5702**	⋆ **3119**
			944-15

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5703	**Signetics**	**TDA5703**	⋆ **3120**
			925-9
	Sprague	**UDN5703A**	⋆ **3203**
			1007-7
		UDS5703H	1007-8
5706	**Sprague**	**UDN5706A**	⋆ **3203**
			665-144
			1006-135
		UDS5706H	665-145
			1006-136
5707	**Sprague**	**UDN5707A**	⋆ **3203**
			1006-143
		UDS5707H	1006-144
5708	Signetics	TDA5708	1224-48
5709	Signetics	TDA5709	1225-19
571	AD	AD571J	927-26
		AD571K	927-2
		AD571S	927-27
	Fairchild	μA571JC	927-30
		μA571KC	927-3
		μA571SM	927-31
	Marconi	MA571	1195-65
	MCE	MCE571J	927-28
		MCE571S	927-29
	NEC	μPB571	1191-96
	Signetics	**NE571**	⋆ **3099**
			1193-18
		SA571	⋆ **3099**
			1193-20
	Siliconix	DG571A	904-45
5710	Commodore	5710	884-8
571000	**Toshiba**	**TC571000-200**	
			⋆ **3304**
			1335-3
		TC571000-250	
			⋆ **3304**
			1335-21
571001	Toshiba	TC571001-200	1335-4
		TC571001-250	1335-22
571024	Toshiba	TC571024-200	1334-21
		TC571024-250	1334-34
5711	**Sprague**	**UDN5711M**	⋆ **3203**
			1005-39
		UDS5711H	1005-41
5712	**Intech**	**DAS5712**	⋆ **2799**
			928-27
			1220-133
	Sprague	**UDN5712M**	⋆ **3203**
			1005-67
		UDS5712H	1005-69
57126	**Sharp**	**LH57126-90**	⋆ **2994**
			1328-35
		LH57126J-70	⋆ **2994**
			1328-33
		LH57126J-90	⋆ **2994**
			1328-36
57127	**Sharp**	**LH57127-12**	⋆ **2994**
			1328-40
		LH57127J-10	⋆ **2994**
			1328-38
57128	**Sharp**	**LH57128-20**	⋆ **2994**
			1328-69
		LH57128-25	⋆ **2994**
			1329-25
		LH57128J-20	⋆ **2994**
			1329-6
		LH57128J-25	⋆ **2994**
			1329-34
5713	**Sprague**	**UDN5713M**	⋆ **3203**
			1005-124
		UDS5713H	1005-126
5714	**Intech**	**DAS5714**	⋆ **2799**
			936-39
			1220-134
	Sprague	**UDN5714M**	⋆ **3203**
			1005-95
		UDS5714H	1005-97
5716	**Intech**	**DAS5716**	⋆ **2799**
			937-16
			1220-135
572	AD	AD572A	932-6
		AD572B	932-7
		AD572S	932-8
	NEC	μPB572	1191-107
	Signetics	**NE572**	⋆ **3100**
			1193-19

(Continued)

Base Number	Source	Device	Page-Line
572	Signetics		(Cont'd)
		SA572	1193-21
	Zendex	ZX572	4861-9
5720	**Commodore**		
		5720	⋆ **2555**
			637-31
			885-97
	Exar	XRT5720	1197-37
5721	Sprague	UDN5721M	1005-32
5722	Sprague	UDN5722M	1005-60
5723	Sprague	UDN5723M	1005-117
5724	Sprague	UDN5724M	1005-87
5725	**Sprague**	**UDN5725M**	⋆ **3203**
			1005-142
57256	**Sharp**	**LH57256-20**	⋆ **2994**
			1331-29
		LH57256-25	⋆ **2994**
			1331-78
		LH57256-30	⋆ **2994**
			1332-34
		LH57256J-25	⋆ **2994**
			1332-9
		LH57256J-30	⋆ **2994**
			1332-47
	Toshiba	TC57256-20	1331-45
		TC57256-25	1331-93
		TC57256A-150	1330-64
		TC57256A-200	1331-30
573	AD	AD573J	927-17
		AD573K	926-28
		AD573S	926-29
	Sharp	SM573	815-27
			862-32
5733	**Sprague**	**UDN5733A**	⋆ **3203**
			1007-1
		UDS5733H	1007-2
574	AD	AD574AJ	934-21
		AD574AK	931-49
		AD574AS	934-22
		AD574AT	932-17
		AD574J	934-32
		AD574K	932-18
		AD574L	932-19
		AD574S	932-20
		AD574T	932-21
		AD574U	932-22
		AD574ZJ	935-5
		AD574ZK	935-6
		AD574ZL	932-31
		AD574ZS	932-32
		AD574ZT	932-33
		AD574ZU	932-34
	Burr-Brown	**ADC574AJ**	⋆ **2541**
			934-25
		ADC574AK	⋆ **2541**
			932-2
		ADC574AS	⋆ **2541**
			932-3
		ADC574AT	⋆ **2541**
			934-26
	Datel	**ADC574AJ**	⋆ **2575**
			934-15
		ADC574AK	⋆ **2575**
			931-47
		ADC574AL	⋆ **2575**
			931-48
	GoldStar	gl574	1228-127
		GL574	⋆ **2701**
			1230-47
	Harris	**HI574AJD-5**	⋆ **2703**
			⋆ **2738**
			⋆ **2744**
			⋆ **2748**
			934-16
		HI574AKD-5	⋆ **2703**
			⋆ **2738**
			⋆ **2744**
			⋆ **2748**
			935-20
		HI574ALD-5	⋆ **2703**
			⋆ **2738**
			⋆ **2744**
			⋆ **2748**
			935-21

(Continued)

Base Number	Source	Device	Page-Line
574	**Harris**		**(Cont'd)**
		HI574ASD-2	⋆ **2703**
			⋆ **2738**
			⋆ **2744**
			⋆ **2748**
			934-17
		HI574ASD/883	
			⋆ **2703**
			⋆ **2738**
			⋆ **2744**
			⋆ **2748**
			934-18
		HI574ATD-2	⋆ **2703**
			⋆ **2738**
			⋆ **2744**
			⋆ **2748**
			935-22
		HI574ATD/883	
			⋆ **2703**
			⋆ **2738**
			⋆ **2744**
			⋆ **2748**
			935-23
		HI574AUD-2	⋆ **2703**
			⋆ **2738**
			⋆ **2744**
			⋆ **2748**
			935-24
		HI574AUD-8	⋆ **2703**
			⋆ **2738**
			⋆ **2744**
			⋆ **2748**
			935-25
	HoneywellSPT		
		HADC574Z	⋆ **2998**
			⋆ **3000**
			935-19
	HybridSys	HS574AJ	934-30
		HS574AK	932-13
		HS574AL	932-14
		HS574ASB	934-31
		HS574ATB	932-15
		HS574AUB	932-16
		HS574J	927-43
		HS574K	931-38
		HS574L	931-39
		HS574S	927-44
		HS574T	934-7
		HS574U	934-8
	Intech	**ADC574A**	⋆ **2799**
			931-44
	MicroNet	MN574A	932-1
	MicroPwr	MP574J	934-23
		MP574K	935-29
		MP574L	935-30
		MP574S	934-24
		MP574T	935-31
		MP574U	936-1
	NEC	μPC574J	1127-114
	TeledyneP	TP574AJ	934-19
		TP574AK	935-26
		TP574AS	934-20
		TP574AT	935-27
		TP574AU	935-28
57401	MMI	C57401	1304-40
		C57401A	1304-51
		57401	1304-41
		57401A	1304-53
57402	MMI	C57402	1304-78
		C57402A	1304-84
		57402	1304-79
		57402A	1304-86
57409	National	MM57409	889-59
5741	**Sprague**	**UDN5741M**	⋆ **3203**
			1005-34
57411	MMI	57411A	1304-75
57412	MMI	57412A	1304-112
57413	MMI	57413A	1304-109
5743	**Sprague**	**UDN5743M**	⋆ **3203**
			1005-119
5744	**Sprague**	**UDN5744M**	⋆ **3203**
			1005-89
57455	National	MM57455	888-35

Base Number	Source	Device	Page-Line
5749	**Sharp**	**LH5749-70**	⋆ **2994**
			1325-76
		LH5749J-55	⋆ **2994**
			1325-47
		LH5749J-70	⋆ **2994**
			1326-12
575	AD	AD575J	927-23
		AD575K	926-34
		AD575S	927-24
	GE/RCA	CA575	884-105
	NEC	μPC575	1125-125
	Signetics	NE575	1116-58
	Siliconix	DG575A	908-49
5750	Exar	XRT5750	1197-34
5751	**Sprague**	**UDN5751M**	⋆ **3203**
			1005-33
5752	**Sprague**	**UDN5752M**	⋆ **3203**
			1005-61
5753	Fujitsu	FT5753	1006-7
	Sprague	**UDN5753M**	⋆ **3203**
			1005-118
5754	Fujitsu	FT5754	1006-8
	Sprague	**UDN5754M**	⋆ **3203**
			1005-88
5755	Fujitsu	FT5755	1006-9
57558	MMI	57558	644-50
		57558-1	657-117
576	Siemens	S576A	1127-99
		S576B	1127-100
		S576C	1127-101
		S576D	1127-102
5762	**Sharp**	**LH5762-70**	⋆ **2994**
			1325-77
		LH5762J-70	⋆ **2994**
			1326-13
5763	**Sharp**	**LH5763-90**	⋆ **2994**
			1326-19
		LH5763J-70	⋆ **2994**
			1326-14
		LH5763J-90	⋆ **2994**
			1326-27
5764	**Sharp**	**LH5764-20**	⋆ **2994**
			1327-4
		LH5764-25	⋆ **2994**
			1327-37
		LH5764-30	⋆ **2994**
			1327-68
		LH5764-45	⋆ **2994**
			1327-84
		LH5764J-20	⋆ **2994**
			1327-3
		LH5764J-25	⋆ **2994**
			1327-36
		LH5764J-30	⋆ **2994**
			1327-67
		LH5764J-45	⋆ **2994**
			1327-83
578	AD	AD578J	929-37
		AD578K	929-24
		AD578L	929-16
		AD578S	929-39
		AD578T	929-27
	Maxim	AD578	645-17
		AD578J	929-38
		AD578K	929-25
		AD578L	929-17
		AD578S	929-26
		AD578T	929-18
	Sharp	SM578	815-28
579	AD	AD579B	926-16
		AD579J	926-19
		AD579K	926-17
		AD579T	926-18
	Sharp	SM579	815-29
5791	Sprague	UDS5791H	692-106
			1006-112
			1224-51
58	Amperex	BGY58	1123-100
		BGY58A	1123-101
	Burr-Brown	PCM58	1119-108
58C65	Hitachi	HN58C65-20	1312-28
		HN58C65-25	1312-57
58L00	USDesign	B58L00	4880-28
58M00	USDesign	B58M00	4880-27
58V00	USDesign	B58V00	4880-29

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
580	AD	AD580J	1225-93
		AD580K	1225-94
		AD580L	1225-95
		AD580S	1225-96
		AD580T	1225-97
		AD580U	1225-98
	Gennum	LF580	1116-74
	Intel	iSBC580	4853-4
	LinearTech	AD580J	1225-99
		AD580K	1225-100
		AD580L	1225-101
		AD580S	1225-102
		AD580T	1225-103
		AD580U	1225-104
	Maxim	AD580J	1225-114
		AD580K	1225-115
		AD580L	1225-116
		AD580M	1225-117
		AD580S	1225-118
		AD580T	1225-119
		AD580U	1225-120
5800	NEC	MC5800	1104-137
	Plessey	CLA5800	4058-33
	Sprague	**UCN5800A**	⋆ **3203**
			1001-4
		UCS5800H	1001-73
5801	NEC	MC5801	1104-138
	Sprague	**UCN5801A**	⋆ **3203**
			1001-5
		UCS5801H	1002-95
5802	NEC	MC5802	1104-139
5804	Samsung	KS5804	1193-92
	Sprague	**UCN5804B**	⋆ **3203**
			1004-43
5805	NEC	MC5805	1104-140
	Samsung	KS5805	1193-93
5806	Samsung	KS5806	1193-94
58064	Hitachi	HN58064-25	1312-54
		HN58064-30	1312-71
		HN58064-35	1313-8
5808	**GoldStar**	**GL5808**	⋆ **2699**
			1116-2
	Samsung	KS5808	1199-21
581	AD	AD581J	1226-112
		AD581K	1226-113
		AD581L	1226-114
		AD581S	1226-115
		AD581T	1226-116
		AD581U	1226-117
	Gennum	LF581	1219-8
	LinearTech	AD581J	1226-134
		AD581K	1226-135
		AD581L	1226-136
		AD581S	1226-137
		AD581T	1226-138
		AD581U	1226-139
	Maxim	AD581	1227-15
		AD581J	1226-84
		AD581K	1226-85
		AD581L	1226-86
		AD581S	1226-87
		AD581T	1226-88
		AD581U	1226-89
	Micro-Link	STD581	4872-33
	NEC	μPB581C	1190-110
5810	**Sprague**	**UCN5810A**	⋆ **3203**
			⋆ **3205**
			978-102
			1001-6
		UCN5810F	⋆ **3203**
			⋆ **3205**
			1002-133
		UCS5810H	1002-135
5811	Harris	HI5811J-5	962-10
	Sprague	**UCN5811A**	⋆ **3203**
			⋆ **3205**
			981-15
5812	**Sprague**	**UCN5812A**	⋆ **3203**
			⋆ **3205**
			1001-7
		UCN5812F	⋆ **3203**
			⋆ **3205**
			1002-137
	TI	TL5812	981-27
		TL5812I	978-103
5813	**Sprague**	**UCN5813B**	⋆ **3203**
			1006-106
5814	NEC	MC5814	1104-141
	Sprague	**UCN5814B**	⋆ **3203**
			1006-107
58142	National	MM58142	1119-79
58146	National	MM58146	1124-34
5815	MicroNet	MN5815	918-19
	NEC	MC5815	1104-142
	Sprague	**UCN5815A**	⋆ **3203**
			978-101
			1007-20
		UCS5815H	981-61
5816	OKI	MSM5816	1127-61
	Sprague	**UCN5816A**	⋆ **3203**
			1002-136
58167	National	MM58167A	886-23
58174	National	MM58174	888-90
		MM58174A	886-24
5818	**Sprague**	**UCN5818A**	⋆ **3203**
			⋆ **3205**
			1001-8
		UCN5818F	⋆ **3203**
			⋆ **3205**
			1002-140
5819	OKI	MSM5819	1004-5
582	AD	AD582K	1227-116
		AD582S	1227-117
	NEC	μPB582C	1190-111
58201	National	MM58201	978-87
			¶ 425-14
5821	Sharp	LH5821	977-127
	Sprague	**UCN5821A**	⋆ **3203**
			1002-126
5822	**Sprague**	**UCN5822A**	⋆ **3203**
			1002-128
		UCS5822A	1002-123
5823	Sharp	LH5823	977-128
	Sprague	**UCN5823A**	⋆ **3203**
			1002-124
58241	National	MM58241	981-37
			¶ 425-33
58242	National	MM58242	981-26
			¶ 425-33
58248	National	MM58248	981-38
			¶ 425-33
5825	MicroNet	MN5825	918-27
	Sprague	**UCN5825B**	⋆ **3203**
			1006-104
58250	National	MM58250	1122-66
5826	Sharp	LH5826	977-129
	Sprague	**UCN5826B**	⋆ **3203**
			1006-105
58274	National	MM58274	888-91
			¶ 409-35
			¶ 409-36
			¶ 414-2
		MM58274A	888-92
			¶ 409-35
			¶ 409-36
			¶ 414-2
58282	OKI	MSM58282	863-65
58283	OKI	MSM58283	863-66
58292	OKI	MSM58292	863-67
		M58292	978-2
58293	OKI	MSM58293	863-68
583	AD	AD583K	1227-118
		AD583S	1227-119
	SGS	L583	1118-117
5830	Siemens	TDA5830-2	1126-150
5832	EDI	5832-30MHR	1314-32
		5832-35MHR	1314-37
	OKI	MSM5832	863-59
			886-30
	SGS	L5832	863-61
			886-31
	Sprague	**UCN5832**	⋆ **3203**
			1007-35
58321	OKI	MSM58321	863-60
5833	**Sprague**	**UCN5833A**	⋆ **3203**
			1007-36
58341	National	MM58341	981-39
			¶ 425-12
			¶ 425-33
58348	National	MM58348	981-40
			¶ 425-33
5835	Siemens	TDA5835	1126-124
5837	National	MM5837	1119-119
			1223-64
58371	OKI	MSM58371	863-64
5838	OKI	MSM5838	863-63
5839	OKI	MSM5839	863-62
		M5839B	978-11
584	Amperex	BGY584	1123-102
		BGY584A	1123-103
	AD	AD584J	1225-154
		AD584K	1225-155
		AD584L	1225-156
		AD584S	1225-157
		AD584T	1225-158
		AD584U	1225-159
	Maxim	AD584	1226-1
		AD584J	1225-160
		AD584K	1225-161
		AD584L	1225-162
		AD584S	1225-163
		AD584T	1225-164
		AD584U	1225-165
	Toshiba	TC584B	638-120
5840	OKI	MSM5840	811-13
		MSM5840RS	811-14
5841	**Sprague**	**UCN5841A**	⋆ **3203**
			1007-30
5842	OKI	MSM5842	863-57
	Sprague	**UCN5842A**	⋆ **3203**
			1007-31
58421	OKI	MSM58421	863-55
		MSM58421GS	811-15
58422	OKI	MSM58422	863-56
584223	OKI	MSM584223RS	
			811-16
5843	**Sprague**	**UCN5843A**	⋆ **3203**
			1007-29
58438	National	MM58438	981-30
			¶ 425-12
5845	OKI	MSM5845	811-17
			863-58
585	Amperex	BGY585	1123-104
		BGY585A	1123-105
	AD	AD585J	1227-120
		AD585S	1227-121
5850	Siemens	TDA5850	1127-6
5851	**Sprague**	**UCN5851**	⋆ **3203**
			977-41
			¶ 436-21
5852	**Sprague**	**UCN5852**	⋆ **3203**
			977-42
			¶ 436-21
5853	**Sprague**	**UCN5853A**	⋆ **3203**
			981-33
			¶ 436-21
		UCN5853EP	⋆ **3203**
			981-34
			¶ 436-21
58538	National	MM58538	977-118
58539	National	MM58539	977-119
5854	**Sprague**	**UCN5854A**	⋆ **3203**
			981-35
			¶ 436-21
		UCN5854EP	⋆ **3203**
			981-36
			¶ 436-21
58540	National	MM58540	977-120
58548	National	MM58548	977-121
5857	**Sprague**	**UCN5857A**	⋆ **3203**
			977-3
5858	**Sprague**	**UCN5858A**	⋆ **3203**
			977-4
5859	**Sprague**	**UCN5859A**	⋆ **3203**
			977-5
586	Amperex	BGY586	1123-106
	AD	**AD586**	⋆ **2424**
			1226-6
	Intel	iSBX586	4854-7
5860	Sprague	UC5860A	977-6
58653	Mitsubishi	M58653	1308-23
58655	Mitsubishi	M58655	1308-43
58657	Mitsubishi	M58657	1308-47
58658	Mitsubishi	M58658	1308-15
58659	Mitsubishi	M58659	1308-16
587	Amperex	BGY587	1123-107
	AD	**AD587**	⋆ **2425**
			1226-82
	Exar	XRC587	1197-51
	Signetics	NE587	979-107
5871	**Sprague**	**UCN5871**	⋆ **3203**
			1004-68
588	**AD**	**AD588A**	⋆ **2426**
			1225-41
		AD588B	⋆ **2426**
			1225-42
		AD588C	⋆ **2426**
			1225-43
		AD588S	⋆ **2426**
			1225-44
		AD588T	⋆ **2426**
			1225-45
	Exar	XRC588	1197-52
5881	**Sprague**	**UCN5881EP**	⋆ **3203**
			1001-62
5882	**Sprague**	**UCN5882EP**	⋆ **3203**
			1001-19
589	AD	AD589J	1225-69
		AD589K	1225-70
		AD589L	1225-71
		AD589M	1225-72
		AD589S	1225-73
		AD589T	1225-74
		AD589U	1225-75
	Signetics	NE589	979-93
5890	OEI	AH5890	1219-51
	Sprague	**UCN5890A**	⋆ **3203**
			1007-26
5891	**Sprague**	**UCN5891A**	⋆ **3203**
			1007-27
5895	**Sprague**	**UCN5895A**	⋆ **3203**
			1007-28
58990	Mitsubishi	M58990	872-20
59	Amperex	BGY59	1123-108
	Wintek	**MRR59**	⋆ **4913**
			4865-35
59C11	GIM	ER59C11	1308-51
		ER59C11A	1308-31
59C13	Marconi	MA59C13	1192-131
59C14	Marconi	MA59C14	1192-132
59C16	Marconi	MA59C16	1192-96
59C17	Marconi	MA59C17	1192-63
590	AD	AD590I	1229-30
			¶ 442-21
			¶ 442-30
		AD590J	1229-31
			¶ 442-21
			¶ 442-30
		AD590K	1229-32
			¶ 442-21
			¶ 442-30
		AD590L	1229-33
			¶ 442-21
			¶ 442-30
		AD590M	1229-34
			¶ 442-21
			¶ 442-30
	GE/Intersil	**AD590I**	⋆ **2677**
			1229-36
		AD590J	⋆ **2677**
			1229-37
		AD590K	⋆ **2677**
			1229-38
		AD590L	⋆ **2677**
			1229-39
		AD590M	⋆ **2677**
			1229-40
	Motorola	MHW590	1104-41
	SBE	590	4811-34
	Sharp	SM590	815-30
			862-25
	Signetics	NE590	889-20
			1001-1
5900	Plessey	CLA5900	4058-34
	Signetics	**NE5900**	⋆ **3110**
			1192-17
	Sprague	**UCN5900A**	⋆ **3203**
			1006-102
59001	Sharp	LU59001	1122-36

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
5901	GIM	ER5901	1308-59
			¶ 408-21
			¶ 408-32
	GoldStar	**GL5901**	⋆ **2699**
			1120-82
	Sprague	**UCN5901A**	⋆ **3203**
			1007-21
	Waferscale	**W$5901**	⋆ **3376**
			817-30
		WS5901C	⋆ **3376**
			646-33
		WS5901D	⋆ **3376**
			646-34
59016	**Waferscale**	**WS59016**	⋆ **3376**
			646-49
		WS59016C	⋆ **3376**
			646-45
		WS59016D	⋆ **3376**
			646-46
			853-8
5902	OEI	5902	1224-38
59032	GE/RCA	59032-Cell	646-50
	Waferscale	**WS59032C**	⋆ **3376**
			646-52
		WS59032D	⋆ **3376**
			646-51
		WS59032E	⋆ **3376**
			646-53
			855-16
5905	MicroPwr	MP5905	1106-74
5906	MicroPwr	MP5906	1106-75
5907	MicroPwr	MP5907	1106-76
5908	GE/RCA	5908	646-35
	MicroPwr	MP5908	1106-77
5909	MicroPwr	MP5909	1106-78
591	Motorola	MHW591	1104-42
	Sharp	SM591	815-31
			862-26
	Signetics	NE591	889-21
			1001-2
5910	**Sprague**	**UCN5910A**	⋆ **3203**
			1007-34
	Waferscale	**WS5910A**	⋆ **3376**
			644-26
		WS5910B	⋆ **3376**
			644-27
5911	GIM	ER5911	1308-42
			1308-62
	MicroPwr	MP5911	1106-79
5912	MicroPwr	MP5912	1106-80
		MP5912C	1106-81
5913	SGS	M5913	1192-49
5914	SGS	M5914	1192-50
5916	GE/RCA	5916	646-43
		5916-Cell	646-44
	SGS	M5916	1192-51
5917	SGS	M5917	1192-52
592	AD	AD592	1229-35
	Fairchild	μA592C	1102-76
		μA592M	1102-77
	GE/Intersil	NE592	1104-78
		SE592	1104-79
	Motorola	MHW592	1104-43
		NE592	⋆ **2960**
			1104-87
	National	LM592	1102-75
	Signetics	NE592	1104-106
		SE592	1104-107
	TI	NE592	1104-115
		NE592A	1104-116
		SE592	1229-118
		TL592	1104-117
		TL592A	1104-118
		TL592B	1104-119
	VTC	**VA592**	⋆ **3373**
			1126-147
59256	GIM	ER59256	1308-11
593	Cherry	CS593C	1216-24
	Motorola	MHW593	1104-44
594	AD	AD594A	1104-56
			¶ 422-17
		AD594C	1104-57
			¶ 422-17
	Cherry	CS594C	1216-25
		CS594M	1216-26

(Continued)

Base Number	Source	Device	Page-Line
594			(Cont'd)
	Motorola	**TL594C**	⋆ **2931**
			1224-138
		TL594I	⋆ **2931**
			1224-126
		TL594M	⋆ **2931**
			1224-139
	Signetics	NE594	980-99
		SA594	980-100
	TI	TL594	1225-14
		TL594C	1217-117
	VTC	**VC594J**	⋆ **3373**
			929-6
		VC594S	⋆ **3373**
			929-7
595	AD	AD595A	1104-58
			¶ 422-17
		AD595C	1104-59
			¶ 422-17
	Cherry	CS595C	1216-27
	Sharp	SM595	815-32
	TI	TL595	1225-15
		TL595C	1217-118
59510	**Waferscale**	**WS59510**	⋆ **3376**
			603-144
			644-30
59520	**Waferscale**	**WS59520**	⋆ **3376**
			646-61
59521	**Waferscale**	**WS59521**	⋆ **3376**
			646-62
596	AD	AD596	1229-28
	LogicalDes	VAT596	4887-3
597	AD	AD597	1229-29
5981	**Marconi**	**MA5981**	⋆ **2889**
			1198-101
5983	Marconi	MA5983	1198-102
5990	Exar	XRT5990	1193-110
5992	Exar	XRT5992	1193-65
5995	Exar	XRT5995	1198-19
6	AdvDigital	Super 6	4823-2
	Burr-Brown	PWR6XX	1220-142
	Computrol	LV-6	4882-22
	Datel	FLJ-D6	692-69
		SHM6MM	⋆ **2574**
			⋆ **2577**
			1228-3
	Digitronics	60-6MT	4893-40
		60-6MT-232	4894-2
	Force	CPU6	4835-6
		CPU6V	4835-19
		DRAM6	4890-33
		SRAM6	4890-38
	InterconMicro		
		CPS-Q6A	4813-17
	Interdesign	ULA 6P	4067-1
		ULA6DSA	4045-14
		ULA6DSB	4045-15
		ULA6DSC	4045-16
		ULA6G	4066-27
	LSIComp	D6	633-71
	National	MF6	1195-55
	Octagon	Sup-6	4894-37
		SUP-6	4865-38
	Panatech	ASP6AP-55	4076-7
	PEP-Modular		
		MPM6	4807-6
	SiliconSys	SCA6	1228-137
			4069-12
	TeledyneC	CAG6	902-51
		CDA6	906-25
	TLSI	TA6	4061-57
	WinSystems	LPM-SBC6	4817-22
		MCM-SBC6	4815-13
6LP00	**Signetics**	**ACE6LP00**	⋆ **4301**
			4060-23
6L16	MMI	PAL6L16AC	4073-15
6N135	TI	6N135	1223-74
6N136	TI	6N136	1223-75
6N137	TI	6N137	1223-76
6OV12	Lambda	L6OV12	1223-98
6OV15	Lambda	L6OV15	1223-99
6OV24	Lambda	L6OV24	1223-100
6OV5	Lambda	L6OV5	1223-101
6OV6	Lambda	L6OV6	1223-102
6P16	MMI	PLE6P16C	4079-54

Base Number	Source	Device	Page-Line
6T00	**Signetics**	**ACE6T00**	⋆ **4301**
			4060-22
60	AdvMicroSys		
		ST60	4879-2
		ST60S	4871-48
	Amperex	BGY60	1123-109
	Burr-Brown	ADC60OK	968-14
	Digitronics	60IOMUX	4848-3
	LSIComp	D60	633-73
	MCE	MCE60	1162-11
	NCR	ADP60	4863-27
	Polycore	MX60	4068-52
	Raytheon	RF60	688-41
		RG60	675-169
60C20	TI	TSP60C20	1122-106
60C80	Western	WD60C80	885-94
60L256	Motorola	MCM60L256-10	
			1379-72
		MCM60L256-12	
			1380-11
		MCM60L256-15	
			1380-41
		MCM60L256-85	
			1379-44
60L64	Motorola	MCM60L64-10	1368-41
		MCM60L64-12	1368-81
		MCM60L64-15	1369-49
60P12	SGS	S60P12	865-136
60R40	SGS	S60R40	866-5
600	Altera	EP600-1C	4078-42
		EP600-1M	4078-43
		EP600-2C	4078-48
		EP600-2M	4078-49
		EP600-3C	4078-52
		EP600-3M	4078-53
		EP600C	4078-60
		EP600M	4078-61
	AD	RTI600	4885-19
	Burr-Brown	**ADC600**	⋆ **2541**
			645-22
		OPA600/883B	
			⋆ **2535**
			1136-36
		OPA600B	⋆ **2535**
			1168-8
		OPA600C	⋆ **2535**
			1162-43
		OPA600S	⋆ **2535**
			1168-9
		OPA600T	⋆ **2535**
			1162-44
		OPA600U	⋆ **2535**
			1159-9
		OPA600U/883B	
			⋆ **2535**
			⋆ **2545**
			1159-10
		OPA600V	⋆ **2535**
			⋆ **2545**
			1151-43
		OPA600V/MIL	
			⋆ **2535**
			1151-44
		OPA600V/883B	
			⋆ **2535**
			⋆ **2545**
			1151-45
		SHC600B	⋆ **2543**
			1227-137
	CMD ASIC	**CSC600**	⋆ **4216**
			4082-16
	Cybernetic	CY600	888-30
			1001-17
			1220-65
	ECISemi	ECIFE600	4065-50
	Exar	XR-CA600	4066-13
	Fujitsu	**B600**	⋆ **4230**
			4046-1
	Inmos	IMSD600	4707-14
	Maxim	MAX600	1230-41
	Micom Int	NP600	4848-5
	Motorola	**MCA600ECL**	⋆ **4282**
			4055-33
		MCA600ETL	⋆ **4282**
			4056-12
		MVME600	4852-25

(Continued)

Base Number	Source	Device	Page-Line
600			(Cont'd)
	Signetics	**ACE600**	⋆ **4302**
			4060-21
	SiliconG	SM600	1217-97
	Unitrode	PIC600	1217-126
6000	AppBusComp		
		DT6000	4803-23
	Barvon	BC6000	4082-7
	CalDevices	CHA6000	4042-47
	Fairchild	FGC6000	4044-26
	Fujitsu	**C6000UHB**	⋆ **4229**
			⋆ **4233**
			4047-1
	GoldStar	**GSC6000**	⋆ **4243**
			4083-9
	Gould	**GB6000D**	⋆ **4244**
			4048-43
	IntCirSys	**HD6000**	⋆ **4256**
			4051-20
		VGC6000	⋆ **4256**
			4051-21
	ITT	SAA6000	862-68
	MMI	MLA6000	4055-13
	Motorola	**BCA6000ETL**	⋆ **4285**
			⋆ **4291**
			4056-28
		TCF6000	⋆ **2950**
			889-19
	Signetics	TEA6000	1121-18
	Thomson	GB6000D	4055-26
		MKGB6000D	4055-27
	VLSI Tech	**VGC6000**	⋆ **4665**
			4064-8
6001	**Intech**	**ADC6001**	⋆ **2799**
			932-35
	NCM	6001Z	1118-111
	TLIndustries		
		MIKUL6001	4847-42
60011	Mitsubishi	M60011	4054-27
60012	Mitsubishi	M60012	4054-30
60013	Mitsubishi	M60013	4054-31
60014	Mitsubishi	M60014	4054-33
60015	Mitsubishi	M60015	4054-36
60016	Mitsubishi	M60016	4054-37
60017	Mitsubishi	M60017	4054-39
60018	Mitsubishi	M60018	4054-40
60019	Mitsubishi	M60019	4054-42
6002	**Intech**	**ADC6002**	⋆ **2799**
			928-32
	ITT	SAA6002	1193-63
60020	Mitsubishi	M60020	4054-26
60021	Mitsubishi	M60021	4054-28
60022	Mitsubishi	M60022	4054-29
60023	Mitsubishi	M60023	4054-32
60024	Mitsubishi	M60024	4054-34
60025	Mitsubishi	M60025	4054-35
6003	**Intech**	**MDAC6003**	⋆ **2799**
			953-8
	NCM	NCM6003Z	1221-50
60030	Mitsubishi	M60030	4054-38
60031	Mitsubishi	M60031	4054-41
60032	Mitsubishi	M60032	4054-43
60034	Mitsubishi	M60034	4054-44
60035	Mitsubishi	M60035	4055-1
60037	Mitsubishi	M60037	4055-2
6005	Intech	LD6005	985-21
6007	Universal	SL6007	684-41
6008	**Intech**	**PS6008**	⋆ **2799**
			1221-20
	MiniCompTech		
		MCT6008	4839-18
	Universal	SL6008	684-42
6009	**Intech**	**PS6009**	⋆ **2799**
			1221-19
	Universal	SL6009	684-43
601	Brooktree	BT601	649-85
	Maxim	MAX601	1230-45
	Motorola	MVME601	4852-24
	SGS	L601	1107-162
	SiliconG	SM601	1217-98
	TeledyneC	CAM601A	913-20
	TI	TL601C	906-22
		TL601I	906-20
	Unitrode	PIC601	1217-127
	Xycom	XVME601	4890-46

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
6010	Hughes	HCTR6010	613-49
	Intech	**ADC6010**	⋆ **2799**
			929-21
	MiniCompTech		
		MCT6010	4882-34
	SGS	S6010	866-1
	Universal	SL6010	684-44
6011	SGS	S6011	866-2
6012	AMD	AM6012C	956-21
			¶ 419-13
			¶ 419-14
		AM6012M	959-27
			¶ 419-13
			¶ 419-14
	Maxim	AM6012AC	957-37
		AM6012AM	957-38
		AM6012C	959-28
		AM6012M	959-29
	MCE	MCE6012C	959-30
		MCE6012M	959-31
	NEC	μPC6012	959-5
	Raytheon	DAC6012AC	968-42
		DAC6012AM	968-43
		DAC6012C	968-44
		DAC6012M	968-45
	SGS	S6012	866-3
	Signetics	AM6012	969-16
6015	VME-Microsys		
		VMIVME6015	4888-4
6016	Novix	NC6016	849-16
602	AD	RTI602	4885-18
	Burr-Brown	**OPA602**	⋆ **2533**
			1135-92
		OPA602A	⋆ **2533**
			1148-16
		OPA602B	⋆ **2533**
			1145-5
		OPA602C	⋆ **2533**
			1143-40
		OPA602S	⋆ **2533**
			1145-6
	Datel	DVME602T	4883-36
	Maxim	MAX602	1230-42
	Micro-Link	STD602	4872-41
	SGS	L602	1107-163
	Signetics	**NE602**	⋆ **3101**
			1219-77
		SA602	1219-78
	SiliconG	SM602	1217-99
	Unitrode	PIC602	1218-1
6020	AD	AD6020K	916-15
	LSI Logic	**LMb6020**	⋆ **4268**
			4052-45
	MiniCompTech		
		MCT6020	4883-15
	Siemens	SDA6020	644-142
			916-16
	SiliconSys	SSI6020C	926-11
		SSI6020M	926-12
6021	Fujitsu	MB6021	1192-90
	MiniCompTech		
		MCT6021	4883-16
6022	Fujitsu	MB6022	1192-59
	Samsung	KS6022	1119-2
6024	Samsung	KS6024	1119-3
60256	Motorola	MCM60256-10	1379-73
		MCM60256-12	1380-12
		MCM60256-15	1380-42
		MCM60256-85	1379-45
603	Micro-Link	STD603	4871-18
	NEC	μPC603	941-24
	SGS	L603	1107-164
6030	SiliconSys	SSI6030C	948-35
		SSI6030M	948-36
6032	TLIndustries		
		MIKUL6032	4847-23
6033	**LSI Logic**	**LMb6033**	⋆ **4268**
			4053-6
604	Micro-Link	STD604	4870-38
	SGS	L604	1107-165
	Signetics	**NE604**	⋆ **3103**
			1121-58
		SA604	1121-59
	TeledyneC	CAM604A	911-80
	TI	TL604C	907-20
		TL604I	907-19

Base Number	Source	Device	Page-Line
6040	SGS	S6040	866-4
	SiliconSys	SSI6040	916-31
6041	SiliconSys	SSI6041	916-34
605	**Burr-Brown**	**OPA605**	⋆ **2535**
			1131-54
			1135-93
		OPA605A	⋆ **2535**
			1148-25
		OPA605B	⋆ **2535**
			1145-34
		OPA605C	⋆ **2535**
			1145-32
		OPA605H	⋆ **2535**
			1148-26
		OPA605J	⋆ **2535**
			1145-35
		OPA605K	⋆ **2535**
			1145-33
	Micro-Link	STD605	4870-35
6050	**LSI Logic**	**LMb6050**	⋆ **4268**
			4053-11
	S-MOS	**SLA6050**	⋆ **4305**
			4069-5
	SiliconSys	SSI6050C	917-14
		SSI6050M	917-15
	Siliconix	Si6050	4061-1
6051	SiliconSys	SSI6051C	920-12
		SSI6051M	920-13
6052	SiliconSys	SSI6052C	924-16
		SSI6052M	924-17
606	**Burr-Brown**	**OPA606KM**	⋆ **2532**
			1150-3
		OPA606KP	⋆ **2532**
			1154-32
		OPA606L	⋆ **2532**
			1139-18
		OPA606S	⋆ **2532**
			1150-4
6064	Davidge	DSB6064	4803-7
	Motorola	MCM6064-10	1368-42
		MCM6064-12	1368-82
		MCM6064-15	1369-50
	TLIndustries		
		MIKUL6064-I	4847-24
		MIKUL6064-O	4847-25
60650	**GE/RCA**	**PA60650**	⋆ **2659**
			4059-17
607	TI	TL607C	906-23
		TL607I	906-21
6070	AMD	AM6070C	950-34
			971-4
		AM6070M	950-35
			971-5
	SiliconSys	SSI6070C	927-20
		SSI6070M	926-33
6072	AMD	AM6072C	950-29
			971-1
		AM6072M	950-30
			971-2
	LSI Logic	**LMb6072**	⋆ **4268**
			4053-16
6077	TLIndustries		
		MIKUL6077	4847-10
6078	**GE/RCA**	**CA6078A**	⋆ **2646**
			1133-53
608	**Datel**	**DAC608**	⋆ **2576**
			946-3
6080	AMD	AM6080C	945-8
		AM6080M	945-9
	IMI	IMI6080	4051-44
	S-MOS	**SLA6080**	⋆ **4305**
			4059-33
	SiliconSys	SSI6080AC	917-10
		SSI6080AM	917-11
		SSI6080BC	919-42
		SSI6080BM	919-43
		SSI6080€C	924-6
		SSI6080CM	924-7
	Siliconix	Si6080	4061-6
6081	AMD	AM6081C	945-10
		AM6081M	945-11
6086	MMI	6086	1303-1
6087	MMI	6087	1303-2
6095	**LSI Logic**	**LMb6095**	⋆ **4268**
			4053-20

Base Number	Source	Device	Page-Line
61	Amperex	BGY61	1123-110
	Apex	**PA61**	⋆ **2458**
			1162-27
		PA61A	⋆ **2458**
			1156-4
		PA61M	⋆ **2458**
			1162-28
		PA61Q	⋆ **2458**
			1162-29
	Hitachi	HD61J	4049-14
		HD61K	4049-23
		HD61L	4049-28
		HD61MM	4049-32
61CD16			
	TI	SMJ61CD16-25	1370-75
		SMJ61CD16-35	1371-17
		SMJ61CD16-45	1371-42
61CD64			
	TI	SMJ61CD64-30	1381-63
		SMJ61CD64-40	1382-10
		SMJ61CD64-55	1382-50
61C16	**Hyundai**	**HY61C16-25**	⋆ **2770**
			1355-22
		HY61C16-35	⋆ **2770**
			1355-51
		HY61C16-45	⋆ **2770**
			1355-85
		HY61C16-55	⋆ **2770**
			1356-28
		HY61C16-70	⋆ **2770**
			1356-71
		HY61C16L-25	
			⋆ **2770**
			1355-23
		HY61C16L-35	
			⋆ **2770**
			1355-52
		HY61C16L-45	
			⋆ **2770**
			1355-86
		HY61C16L-55	
			⋆ **2770**
			1356-29
		HY61C16L-70	
			⋆ **2770**
			1356-72
61C16P35			
	Vitelic	V61C16P35L	1355-46
61C16P55			
	Vitelic	V61C16P55L	1356-21
61C16P70			
	Vitelic	V61C16P70L	1356-68
61C32	Vitelic	V61C32-70	1356-88
			¶ 446-29
			¶ 447-19
			¶ 447-36
		V61C32-70L	1356-89
			¶ 446-29
			¶ 447-19
			¶ 447-36
		V61C32-90	1357-35
			¶ 446-29
			¶ 447-19
			¶ 447-36
		V61C32-90L	1357-36
			¶ 446-29
			¶ 447-19
			¶ 447-36
61C33	Vitelic	V61C33-90	1357-37
61C337	Gould	S61C337	888-76
61C34	Vitelic	V61C34-90	1357-38
61C35	Gould	S61C35	999-111
61C62	Vitelic	V61C62-45	1375-4
		V61C62-45L	1375-5
		V61C62-55	1375-83
		V61C62-55L	1375-84
		V61C62-70	1376-32
		V61C62-70L	1376-33
61C64	Vitelic	V61C64-45	1367-14
		V61C64-45L	1367-15
		V61C64-55	1367-58
		V61C64-55L	1367-59
		V61C64-70	1367-85
		V61C64-70L	1367-86

Base Number	Source	Device	Page-Line
61C67	**Hyundai**	**HY61C67-25**	⋆ **2770**
			1370-66
		HY61C67-35	⋆ **2770**
			1371-6
		HY61C67-45	⋆ **2770**
			1371-31
		HY61C67-55	⋆ **2770**
			1371-56
		HY61C67-70	⋆ **2770**
			1371-82
		HY61C67L-25	
			⋆ **2770**
			1370-67
		HY61C67L-35	
			⋆ **2770**
			1371-7
		HY61C67L-45	
			⋆ **2770**
			1371-32
		HY61C67L-55	
			⋆ **2770**
			1371-57
		HY61C67L-70	
			⋆ **2770**
			1371-83
	Vitelic	V61C67-45	1371-44
		V61C67-45L	1371-45
		V61C67-55	1371-70
		V61C67-55L	1371-71
61C67P35			
	Vitelic	V61C67P35L	1371-20
61C68	**Hyundai**	**HY61C68-35**	⋆ **2770**
			1362-76
		HY61C68-45	⋆ **2770**
			1363-79
		HY61C68-55	⋆ **2770**
			1364-53
		HY61C68L-35	
			⋆ **2770**
			1362-77
		HY61C68L-45	
			⋆ **2770**
			1363-80
		HY61C68L-55	
			⋆ **2770**
			1364-54
61C68P35			
	Vitelic	V61C68P35L	1363-18
61C69	Hyundai	HY61C69-35	1363-24
		HY61C69-45	1364-17
		HY61C69-55	1364-70
		HY61C69L-35	1363-25
		HY61C69L-45	1364-18
		HY61C69L-55	1364-71
	Vitelic	V61C69-45	1364-20
		V61C69-45L	1364-21
		V61C69-55	1364-72
		V61C69-55L	1364-73
61H04	Hitachi	HG61H04	4049-13
61H06	Hitachi	HG61H06	4049-17
61H09	Hitachi	HG61H09	4049-20
61H15	Hitachi	HG61H15	4049-27
61H20	Hitachi	HG61H20	4049-31
61H25	Hitachi	HG61H25	4049-34
61L47	Motorola	MCM61L47A-55	
			1359-73
		MCM61L47A-70	
			1359-91
61L64	Motorola	MCM61L64-45	1367-7
		MCM61L64-55	1367-50
610	**Datel**	**DAC610**	⋆ **2576**
			951-35
	IXYS	IXDP610	948-20
		IXPD610	873-54
			874-86
			881-81
			888-79
	Maxim	MAX610	1230-43
	Motorola	MVME610	4884-39
	National	CIM610	4846-39
	NEC	μPC610	955-22
		μPD610	1125-80
	Plessey	SL610C	1104-99
	SiliconG	SM610	1217-100
	TeledyneC	CAG610	902-53
	TI	TL610C	902-64
		TL610I	902-63

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
610			(Cont'd)
	Unitrode	PIC610	1218-2
	VTC	**VS610S**	* **3373**
			1004-75
6100	Harris	HM6100	845-1
	TI	TSP6100	1123-13
	Toshiba	TD6100	663-149
6101	Dallas	DS6101	1196-17
6102	NEC	μPD6102	1122-51
6103	Dallas	DS6103	1196-18
6104	Toshiba	TD6104	1121-105
	UMC	UM6104	1353-51
6105	NEC	μPD6105	1125-81
6108	AMD	AM6108C	919-9
	GE/Intersil	**IH6108C**	* **2681**
			913-83
		IH6108M	* **2681**
			913-72
	Maxim	IH6108C	913-84
		IH6108M	913-77
	Motorola	**MC6108A**	* **2937**
			918-47
			¶ 411-28
6109	Toshiba	TD6109	651-38
			692-59
611	AD	AD611K	1145-15
	Datel	DVME611	4884-5
	Maxim	MAX611	1230-46
	Plessey	SL611C	1104-100
	SiliconG	SM611	1217-101
	Unitrode	PIC611	1218-3
	Zendex	ZX611	4863-16
6110	Siliconix	Si6110	4061-9
61100	Hitachi	HD61100A	978-22
61102	Hitachi	HD61102	977-107
61103	Hitachi	HD61103A	977-108
6111	TriQuint	TQ6111	652-75
6112	AMD	AM6112	934-3
	Dallas	DS6112	888-100
			1193-48
	TriQuint	TQ6112	652-76
			946-28
6115	S-MOS	SMC6115F	813-15
6116	**Cypress**	**CY6116-35C**	* **2564**
			1355-47
		CY6116-45C	* **2564**
			1355-80
		CY6116-45M	* **2564**
			1355-81
		CY6116-55C	* **2564**
			1356-22
		CY6116-55M	* **2564**
			1356-23
	GE/Intersil	**IH6116C**	* **2681**
			915-53
		IH6116M	* **2681**
			915-54
	GE/RCA	**CDM6116A-2**	* **2643**
			1358-45
		CDM6116A-3	* **2643**
			1358-7
		CDM6116A-9	* **2643**
			1358-77
	Hitachi	HM6116-2	1357-68
		HM6116-3	1358-10
		HM6116-4	1358-50
	Hyundai	**HY6116-10**	* **2770**
			1357-53
		HY6116-12	* **2770**
			1357-69
		HY6116-15	* **2770**
			1358-11
		HY6116L-10	* **2770**
			1357-54
		HY6116L-12	* **2770**
			1357-70
		HY6116L-15	* **2770**
			1358-12
	IDT	**IDT6116L-55**	* **2802**
			1356-32
		IDT6116L-55B	
			* **2802**
			1356-33
		IDT6116L-70	* **2802**
			1356-75

(Continued)

Base Number	Source	Device	Page-Line
6116	**IDT**		**(Cont'd)**
		IDT6116L-70B	
			* **2802**
			1356-76
		IDT6116L-90	* **2802**
			1357-24
		IDT6116L-90B	
			* **2802**
			1357-25
		IDT6116LA	* **2802**
			1355-2
		IDT6116LA-120B	
			* **2802**
			1357-71
		IDT6116LA-15	
			* **2802**
			1355-3
		IDT6116LA-150B	
			* **2802**
			1358-13
		IDT6116LA-20	
			* **2802**
			1355-10
		IDT6116LA-25	
			* **2802**
			1355-24
		IDT6116LA-30	
			* **2802**
			1355-36
		IDT6116LA-35	
			* **2802**
			1355-54
		IDT6116LA-35B	
			* **2802**
			1355-55
		IDT6116LA-45	
			* **2802**
			1363-83
		IDT6116LA-45B	
			* **2802**
			1355-89
		IDT6116SA-120B	
			* **2802**
			1357-72
		IDT6116SA-15	
			* **2802**
			1355-4
		IDT6116SA-150B	
			* **2802**
			1358-14
		IDT6116SA-20	
			* **2802**
			1355-11
		IDT6116SA-25	
			* **2802**
			1355-25
		IDT6116SA-30	
			* **2802**
			1355-37
		IDT6116SA-35	
			* **2802**
			1355-56
		IDT6116SA-35B	
			* **2802**
			1355-57
		IDT6116SA-45	
			* **2802**
			1355-90
		IDT6116SA-45B	
			* **2802**
			1355-91
		IDT6116SA-55	
			* **2802**
			1356-34
		IDT6116SA-55B	
			* **2802**
			1356-35
		IDT6116SA-70	
			* **2802**
			1356-77
		IDT6116SA-70B	
			* **2802**
			1356-78
		IDT6116SA-90	
			* **2802**
			1357-26

(Continued)

Base Number	Source	Device	Page-Line
6116	**IDT**		**(Cont'd)**
		IDT6116SA-90B	
			* **2802**
			1357-27
	Marconi	**MA6116SOS**	* **2886**
			1357-84
	Matra-Harris		
		HM6116	1357-73
	Sprague	**UDN6116A**	* **3203**
			980-71
	Stantel-STC	STC6116-55	1356-41
		STC6116-70	1357-14
		STC6116-90	1357-29
		STC6116L-55	1356-42
		STC6116L-70	1357-15
		STC6116L-90	1357-30
		STC6116M-12	1357-77
		STC6116M-15	1358-23
		STC6116M-70	1356-84
		STC6116M-90	1357-31
	Thomson	MKB6116-82	1358-27
		MKB6116-83	1358-61
		MKB6116-84	1358-81
		MKB6116L-82	1358-28
		MKB6116L-83	1358-62
		MKB6116L-84	1358-82
	UMC	UM6116-3	1357-32
		UM6116-4	1356-85
		UM6116-5	1356-44
6117	GE/RCA	CDM6117A-3	1358-8
	S-MOS	SMC6117F	813-16
6118	Exar	XR6118	980-97
	GE/RCA	CDM6118A-3	1358-9
	S-MOS	SMC6118F	813-17
	Sprague	**UDN6118A**	* **3203**
			980-101
612	**Datel**	**DAC612**	* **2576**
			960-19
		DVME612	4884-6
	Maxim	MAX612	1230-44
	National	CIM612	4846-40
	Plessey	SL612C	1104-101
	RTC	MS612	636-42
			1396-5
	Signetics	**NE612**	* **3102**
			1126-75
	SiliconG	SM612	1217-102
	Unitrode	PIC612	1218-4
6120	**IDT**	**IDT6120SA-15**	
			* **2802**
			1355-5
		IDT6120SA-20	
			* **2802**
			1355-12
		IDT6120SA-25	
			* **2802**
			1355-26
		IDT6120SA-30	
			* **2802**
			1355-38
		IDT6120SA-35	
			* **2802**
			1355-58
		IDT6120SA-45	
			* **2802**
			1356-1
		IDT6120SA-55	
			* **2802**
			1356-36
		IDT6120SA-70	
			* **2802**
			1356-79
61200	**GE/RCA**	**PA61200**	* **2659**
			4059-12
6125	OEI	6125A	1222-3
	S-MOS	SMC6125F	813-18
6127	S-MOS	SMC6127F	813-19
6128	Exar	XR6128	980-98
	S-MOS	SMC6128F	813-20
	Sprague	**UDN6128A**	* **3203**
			980-102
	Systek	6128	4878-11

Base Number	Source	Device	Page-Line
61298	**IDT**	**IDT61298I-35**	
			* **2802**
			1383-25
		IDT61298L-25	
			* **2802**
			1382-89
		IDT61298L-45	
			* **2802**
			1383-68
		IDT61298L-55	
			* **2802**
			1383-91
		IDT61298L-70	
			* **2802**
			1384-19
		IDT61298S-25	
			* **2802**
			1382-90
		IDT61298S-35	
			* **2802**
			1383-26
		IDT61298S-45	
			* **2802**
			1384-35
		IDT61298S-55	
			* **2802**
			1384-1
		IDT61298S-70	
			* **2802**
			1384-20
613128	Hitachi	HN613128	1391-16
613256	Hitachi	HN613256	1391-86
6135	S-MOS	SMC6135F	813-21
61364	Hitachi	HN61364	1390-17
61365	Hitachi	HN61365	1390-13
61366	Hitachi	HN61366	1390-14
6137	S-MOS	SMC6137F	813-22
6138	S-MOS	SMC6138F	813-23
	Sprague	UDN6138	980-103
61393	Gould	S61393	885-27
			1003-8
614	**Signetics**	**NE614**	* **3104**
			1120-61
614P0160			
	Hitachi	HD614P0160S	805-4
614P080			
	Hitachi	HD614P080C	805-5
		HD614P080S	805-6
614P180S4			
	Hitachi	HD614P180S4	805-7
6140	IMI	IMI6140	4051-47
	S-MOS	**SLA6140**	* **4305**
			4059-35
	Siliconix	Si6140	4061-12
6141	**LSI Logic**	**LMb6141**	* **4268**
			4053-25
	Motorola	MHW6141	1124-3
6142	Motorola	MHW6142	1124-4
614381	Gould	S614381	602-75
6147	Hitachi	HM6147H	1359-90
		HM6147H-35	1359-44
		HM6147H-45	1359-59
		HM6147H-55	1359-72
	Motorola	MCM6147A-55	1359-74
		MCM6147A-70	1359-92
6148	AMD	AM6148C	918-24
	Hitachi	HM6148H-35	1352-46
		HM6148H-45	1352-68
		HM6148H-55	1352-91
615	Motorola	MVME615	4884-41
6152	Hughes	HVGA6152	4050-10
61534	Crystal	CS61534	1197-32
61544	Crystal	CS61544	1200-2
6159	Bicc-Vero	6159L	4891-22
616	Motorola	MVME616	4884-42
61600	Crystal	CS61600	1195-78
61602	Hitachi	HD61602	978-3
61603	Hitachi	HD61603	978-4
6164	Motorola	MCM6164C-55	1367-51
			¶ 414-8
			¶ 446-27
		MCM6164C-70	1367-80
			¶ 414-8
			¶ 446-27
	UMC	UM6164	1367-88
		UM6164-1	1367-60
		UM6164-2	1367-20

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
6167	Hitachi	HM6167H	1371-81
		HM6167H-45	1371-29
		HM6167H-55	1371-55
		HM6167H-70	1382-55
	Honeywell	HC6167R	1372-12
	IDT	**IDT6167LA-100B**	
		*** 2802**	
		1372-9	
		¶ 447-32	
		IDT6167LA-12	
		*** 2802**	
		1370-48	
		¶ 447-32	
		IDT6167LA-15	
		*** 2802**	
		1370-50	
		¶ 447-32	
		IDT6167LA-20	
		*** 2802**	
		1370-58	
		¶ 447-32	
		IDT6167LA-25	
		*** 2802**	
		1370-70	
		¶ 447-32	
		IDT6167LA-25B	
		*** 2802**	
		1370-71	
		¶ 447-32	
		IDT6167LA-35	
		*** 2802**	
		1371-9	
		¶ 447-32	
		IDT6167LA-35B	
		*** 2802**	
		1371-10	
		¶ 447-32	
		IDT6167LA-45	
		*** 2802**	
		1371-34	
		¶ 447-32	
		IDT6167LA-45B	
		*** 2802**	
		1371-35	
		¶ 447-32	
		IDT6167LA-55	
		*** 2802**	
		1371-59	
		¶ 447-32	
		IDT6167LA-55B	
		*** 2802**	
		1371-60	
		¶ 447-32	
		IDT6167LA-70B	
		*** 2802**	
		1371-84	
		¶ 447-32	
		IDT6167LA-85B	
		*** 2802**	
		1372-6	
		¶ 447-32	
		IDT6167SA-100B	
		*** 2802**	
		1372-10	
		¶ 447-32	
		IDT6167SA-12	
		*** 2802**	
		1370-49	
		¶ 447-32	
		IDT6167SA-15	
		*** 2802**	
		1370-51	
		¶ 447-32	
		IDT6167SA-20	
		*** 2802**	
		1370-59	
		¶ 447-32	
		IDT6167SA-25	
		*** 2802**	
		1370-72	
		¶ 447-32	
		IDT6167SA-25B	
		*** 2802**	
		1370-73	
		¶ 447-32	

(Continued)

Base Number	Source	Device	Page-Line
6167	**IDT**		**(Cont'd)**
		IDT6167SA-35	
		*** 2802**	
		1371-11	
		¶ 447-32	
		IDT6167SA-35B	
		*** 2802**	
		1371-12	
		¶ 447-32	
		IDT6167SA-45	
		*** 2802**	
		1371-36	
		¶ 447-32	
		IDT6167SA-45B	
		*** 2802**	
		1371-37	
		¶ 447-32	
		IDT6167SA-55	
		*** 2802**	
		1371-61	
		¶ 447-32	
		IDT6167SA-55B	
		*** 2802**	
		1371-62	
		¶ 447-32	
		IDT6167SA-70B	
		*** 2802**	
		1371-85	
		¶ 447-32	
		IDT6167SA-85B	
		*** 2802**	
		1372-7	
		¶ 447-32	
	Marconi	**MA6167SOS**	*** 2887**
			1372-13
	Stantel-STC	STC6167-55	1371-66
		STC6167-70	1371-87
		STC6167L-55	1371-67
		STC6167L-70	1371-88
		STC6167M-100	
			1372-11
		STC6167M-55	1371-68
		STC6167M-70	1371-89
	UMC	**UM6167**	*** 3312**
			1371-90
		UM6167-1	*** 3312**
			1371-69
		UM6167-2	*** 3312**
			1371-43
		UM6167L	*** 3312**
			1371-91
		UM6167L-1	*** 3312**
			1371-72
		UM6167L-2	*** 3312**
			1371-46
6168	Hitachi	HM6168H-45	1363-78
		HM6168H-55	1364-52
		HM6168H-70	1365-8
	IDT	**IDT6168L-55**	*** 2802**
			1364-56
		IDT6168L-55B	
		*** 2802**	
		1364-57	
		IDT6168L-70	*** 2802**
			1365-9
		IDT6168L-70B	
		*** 2802**	
		1365-10	
		IDT6168LA-100B	
		*** 2802**	
		1365-37	
		IDT6168LA-15	
		*** 2802**	
		1361-9	
		IDT6168LA-20	
		*** 2802**	
		1361-31	
		IDT6168LA-25	
		*** 2802**	
		1361-78	
		IDT6168LA-25B	
		*** 2802**	
		1361-79	
		IDT6168LA-35	
		*** 2802**	
		1362-80	

(Continued)

Base Number	Source	Device	Page-Line
6168	**IDT**		**(Cont'd)**
		IDT6168LA-35B	
		*** 2802**	
		1362-81	
		IDT6168LA-45	
		*** 2802**	
		1363-84	
		IDT6168LA-45B	
		*** 2802**	
		1363-85	
		IDT6168LA-55	
		*** 2802**	
		1364-58	
		IDT6168LA-55B	
		*** 2802**	
		1364-59	
		IDT6168LA-70B	
		*** 2802**	
		1365-11	
		IDT6168LA-85B	
		*** 2802**	
		1365-30	
		IDT6168S-85	*** 2802**
			1365-31
		IDT6168SA-100B	
		*** 2802**	
		1365-38	
		IDT6168SA-15	
		*** 2802**	
		1361-10	
		IDT6168SA-20	
		*** 2802**	
		1361-32	
		IDT6168SA-25	
		*** 2802**	
		1361-80	
		IDT6168SA-25B	
		*** 2802**	
		1361-81	
		IDT6168SA-35	
		*** 2802**	
		1363-1	
		IDT6168SA-35B	
		*** 2802**	
		1363-2	
		IDT6168SA-45	
		*** 2802**	
		1363-86	
		IDT6168SA-45B	
		*** 2802**	
		1363-87	
		IDT6168SA-55	
		*** 2802**	
		1364-60	
		IDT6168SA-55B	
		*** 2802**	
		1364-61	
		IDT6168SA-70B	
		*** 2802**	
		1365-12	
	Motorola	MCM6168-45	1364-4
		MCM6168-55	1364-65
		MCM6168-70	1365-13
	UMC	**UM6168**	*** 3312**
			1365-15
		UM6168-1	*** 3312**
			1364-68
		UM6168-2	*** 3312**
			1364-11
		UM6168L-1	*** 3312**
			1364-69
		UM6168L-2	*** 3312**
			1364-12
6169	**IDT**	**IDT6169SA-15**	
		*** 2802**	
		1361-11	
		IDT6169SA-20	
		*** 2802**	
		1361-33	
		IDT6169SA-25	
		*** 2802**	
		1361-82	
		IDT6169SA-35	
		*** 2802**	
		1363-3	

(Continued)

Base Number	Source	Device	Page-Line
6169	**IDT**		**(Cont'd)**
		IDT6169SA-45	
		*** 2802**	
		1363-88	
		IDT6169SA-55	
		*** 2802**	
		1364-62	
6170	IMI	IMI6170	4051-49
	S-MOS	**SLA6170**	*** 4305**
			4059-36
	Siliconix	Si6170	4061-15
6171	Motorola	MHW6171	1124-9
6172	Motorola	MHW6172	1124-10
6174	Teltone	TT6174	1199-85
6177	Teltone	TT6177	1195-7
618	RTC	MS618	636-63
			1304-16
6181	Motorola	MHW6181	1124-15
61810	Hitachi	HD61810	645-107
6182	Motorola	MHW6182	1124-16
61825	Hitachi	HD61825A	1193-69
		HD61825B	1193-70
61830	Hitachi	HD61830	977-101
6185	Motorola	MHW6185	1124-29
618839	Gould	S618839	889-48
618840	Gould	S618840	888-105
6190	**LSI Logic**	**LMb6190**	*** 4268**
			4053-26
6198	**IDT**	**IDT6198L-15**	*** 2802**
			1372-17
		IDT6198L-20	*** 2802**
			1372-33
		IDT6198L-25	*** 2802**
			1372-73
		IDT6198L-30	*** 2802**
			1373-32
		IDT6198L-35	*** 2802**
			1374-15
		IDT6198L-45	*** 2802**
			1375-15
		IDT6198L-55	*** 2802**
			1375-87
		IDT6198L-70	*** 2802**
			1376-34
		IDT6198L-85	*** 2802**
			1376-55
		IDT6198S-15	*** 2802**
			1372-18
		IDT6198S-20	*** 2802**
			1372-34
		IDT6198S-25	*** 2802**
			1372-74
		IDT6198S-30	*** 2802**
			1373-33
		IDT6198S-35	*** 2802**
			1374-16
		IDT6198S-45	*** 2802**
			1375-16
		IDT6198S-55	*** 2802**
			1375-88
		IDT6198S-70	*** 2802**
			1376-35
		IDT6198S-85	*** 2802**
			1376-56
62	**Burr-Brown**	**VFC62**	*** 2542**
			1230-89
	LupiData	LD62DA-v	4872-23
		LD62DA-I	4872-22
	Thomson	TPA62	1229-103
		TPB62	1229-105
		TPC62	1229-104
62I88	Motorola	mcm62I88-35	1373-67
62A06	**Motorola**	**HCA62A06**	*** 4282**
			*** 4289**
			4055-34
	NCR	NCR62A06	4057-1
62A10	**Motorola**	**HCA62A10**	*** 4282**
			*** 4289**
			4055-39
	NCR	NCR62A10	4057-2
62A17	**Motorola**	**HCA62A17**	*** 4282**
			*** 4289**
			4055-44
	NCR	NCR62A17	4057-3

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
62A25	**Motorola**	**HCA62A25**	⋆ **4282**
			⋆ **4289**
			4056-1
	NCR	NCR62A25	4057-4
62A36	**Motorola**	**HCA62A36**	⋆ **4282**
			⋆ **4289**
			4056-5
	NCR	NCR62A36	4057-5
62A50	**Motorola**	**HCA62A50**	⋆ **4282**
			⋆ **4289**
			4056-10
	NCR	NCR62A50	4057-6
62A67	**Motorola**	**HCA62A67**	⋆ **4282**
			⋆ **4289**
			4056-13
62A85	**Motorola**	**HCA62A85**	⋆ **4282**
			⋆ **4289**
			4056-18
62C64	**Hyundai**	**HY62C64-45**	⋆ **2770**
			1366-85
		HY62C64-55	⋆ **2770**
			1367-32
		HY62C64-70	⋆ **2770**
			1367-73
	Vitelic	V62C64-12	1369-6
		V62C64-12L	1369-7
		V62C64-15	1369-63
		V62C64-15L	1369-64
62C87	**Hyundai**	**HY62C87-35**	⋆ **2770**
			1381-69
		HY62C87-45	⋆ **2770**
			1382-18
		HY62C87-55	⋆ **2770**
			1382-39
62C88	**Hyundai**	**HY62C88-35**	⋆ **2770**
			1373-76
		HY62C88-45	⋆ **2770**
			1374-80
		HY62C88-55	⋆ **2770**
			1375-67
62E10	Hitachi	HG62E10	4049-21
62E110	Hitachi	HG62E110	4049-40
62E15	Hitachi	HG62E15	4049-25
62E20	Hitachi	HG62E20	4049-30
62E200	Hitachi	HG62E200	4049-41
62E26	Hitachi	HG62E26	4049-35
62E36	Hitachi	HG62E36	4049-36
62E48	Hitachi	HG62E48	4049-37
62E62	Hitachi	HG62E62	4049-38
62E84	Hitachi	HG62E84	4049-39
62KS4	VLSI Tech	VT62KS4-25	1372-67
		VT62KS4-35	1374-5
		VT62KS4-45	1375-7
620	Micro-Link	VME620	4882-35
	Motorola	MVME620	4885-27
	Plessey	SL620C	1102-6
6200	AMCC	Q6200C	4041-26
		Q6200D	4041-27
		Q6200J	4041-28
	Motorola	MCM6200-45	1378-55
	Siemens	TDA6200	1126-11
6201	**GE/Intersil**	**IH6201**	⋆ **2679**
			911-35
		IH6201C	⋆ **2679**
			1004-125
		IH6201M	⋆ **2679**
			1004-126
6202	OKI	MSM6202	1123-7
6203	OKI	MSM6203	604-10
6206	Motorola	HCA6206	4055-35
		MCM6206-45	1378-56
		MCM6206-55	1379-2
		MCM6206-70	1379-28
	National	SCX6206	4056-29
6207	Motorola	MCM6207-25	1386-57
		MCM6207-35	1386-66
6208	**GE/Intersil**	**IH6208C**	⋆ **2681**
			912-40
		IH6208M	⋆ **2681**
			912-32
	Maxim	IH6208C	912-41
		IH6208M	912-36
	Motorola	MCM6208-25	1382-84
		MCM6208-35	1383-15
62093	**GoldStar**	**GM62093**	⋆ **2701**
			911-61
621	National	LM621	1003-26
	Plessey	SL621C	1102-5
6210	SGS	L6210	1108-73
	Systek	6210	4878-10
6212	Motorola	HCA6212	4055-41
	National	SCX6212	4056-31
	OKI	MSM6212	1123-8
	SGS	L6212	1123-10
6216	**GE/Intersil**	**IH6216C**	⋆ **2681**
			914-62
		IH6216M	⋆ **2681**
			914-63
6217	Qualogy	MC6217B	4829-1
			4858-29
6218	National	SCX6218	4056-33
622	LogicalDes	VAT622S	4886-6
622HFC20			
	LogicalDes	VAT622HFC20	4886-5
622MC20			
	LogicalDes	VAT622MC20	4888-12
6220	Siemens	TDA6220	1121-126
	SiliconSys	SSI6220C	946-9
		SSI6220M	946-10
	Siliconix	Si6220	4061-18
6222	Motorola	MHW6222	1124-19
	OKI	M6222	977-92
	SGS	L6222	1006-134
6224	National	SCX6224	4056-34
6225	Motorola	HCA6225	4055-50
	National	SCX6225	4056-36
62256	GE/RCA	CDM62256	1379-61
		CDM62256-10	
			⋆ **2643**
			1379-86
		CDM62256-12	1380-26
	Hitachi	HM62256-10	1379-62
		HM62256-12	1380-5
		HM62256-15	1380-35
		HM62256-8	1379-36
		HM62256L-10	1379-63
		HM62256L-12	1380-6
		HM62256L-15	1380-36
		HM62256L-8	1379-37
		HM62256SL-10	
			1379-64
		HM62256SL-12	
			1380-7
		HM62256SL-8	1379-38
623	Plessey	SL623C	1120-31
62300	ILC-DDC	BUS62300	1009-60
62301	Hitachi	HN62301	1392-71
		HN62301S-25	1392-57
62302	Hitachi	HN62302-20	1392-75
6232	National	SCX6232	4056-38
62350	Motorola	MCM62350-25	1362-30
		MCM62350-30	1362-55
		MCM62350-35	1363-46
62351	Motorola	MCM62351-25	1362-31
		MCM62351-30	1362-56
		MCM62351-35	1363-47
6238	Motorola	HCA6238	4056-6
624	AD	AD624A	1103-29
			1144-17
		AD624B	1103-30
			1141-13
		AD624C	1103-31
			1139-31
		AD624S	1103-32
			1142-11
	Datel	DVME624VI	4883-30
	HoneywellSPT		
		HINA624	⋆ **2998**
			1102-92
	Inmos	**IMSM624-35**	⋆ **2792**
			1385-34
		IMSM624-45	⋆ **2792**
			1385-33
		IMSM624-55	⋆ **2792**
			1385-35
		IMSM624-70	⋆ **2792**
			1385-36
	NEC	μPC624	945-2
	Telefunken	U624BS	692-26
624C1	Datel	DVME624C1	4883-31
624C2	Datel	DVME624C2	4883-32
624V2	Datel	DVME624V2	4883-28
6240	OKI	M6240	977-95
	SiliconSys	SSI6240C	946-11
		SSI6240M	946-12
62402	Hitachi	HN62402-20	1392-72
6243	OKI	MSM6243	1123-9
6244	National	SCX6244	4056-39
6245	AD	AD6245	968-6
6248	Motorola	HCA6248	4056-8
	National	SCX6248	4056-40
625	AD	AD625	1102-106
	Motorola	MVME625	4885-28
	RTC	MS625	636-64
			1396-27
	Unitrode	PIC625	1218-5
6253	OKI	MSM6253	1122-120
6254	OKI	MSM6254	887-3
			1200-6
6255	OKI	M6255	977-96
6256	Motorola	MCM6256B-10	1340-22
		MCM6256B-12	1340-58
		MCM6256B-15	1340-93
6257	Motorola	MCM6257B-10	1340-23
		MCM6257B-12	1340-59
		MCM6257B-15	1340-94
626	Telefunken	U626BS	692-49
	Unitrode	PIC626	1218-6
626V1	Datel	DVME626V1	4884-3
626V2	Datel	DVME626V2	4883-29
6260	National	SCX6260	4056-43
	SiliconSys	SSI6260C	941-30
		SSI6260M	941-31
6264	**GE/RCA**	**CDM6264-3**	⋆ **2643**
			1369-38
		CDM6264-4	⋆ **2643**
			1368-74
	Hitachi	HM6264-10	1368-36
		HM6264A-12	1368-75
		HM6264A-15	1369-40
		HM6264A-20	1369-82
		HM6264AL-12	1368-76
		HM6264AL-15	1369-41
		HM6264AL-20	1369-83
		HM6264L-10	1368-37
	Motorola	MCM6264-35	1366-59
		MCM6264-45	1367-8
	Samsung	KM6264-10	1368-48
		KM6264-12	1369-2
		KM6264-15	1369-58
	Stantel-STC	STC6264-45	1367-11
		STC6264-55	1367-52
		STC6264-70	1367-81
		STC6264-90	1368-21
		STC6264L-55	1367-53
		STC6264L-70	1367-82
		STC6264L-90	1368-22
		STC6264M-12	1369-3
		STC6264M-15	1369-59
		STC6264M-70	1367-83
		STC6264M-90	1368-23
6265	OKI	M6265	977-87
	Rockwell	R6265	884-21
6267	Hitachi	HM6267-35	1371-5
		HM6267-45	1371-30
6268	Hitachi	HM6268-25	1361-76
		HM6268-35	1362-75
	Motorola	MCM6268-25	1361-84
		MCM6268-35	1363-6
6269	Motorola	MCM6269-25	1361-85
		MCM6269-35	1363-7
627	Unitrode	PIC627	1218-7
6270	IMI	IMI6270	4051-54
	Plessey	SL6270	1102-7
	S-MOS	**SLA6270**	⋆ **4305**
			4059-38
	SiliconSys	SSI6270C	946-1
		SSI6270M	946-2
	Siliconix	Si6270	4061-21
628	Datel	DVME628C	4884-1
		DVME628V	4884-2
6280	SiliconSys	SSI6280	940-7
6281	OKI	MSM6281	884-17
6286	OEI	6286	1124-120
6287	Hitachi	HM6287-45	1382-17
		HM6287-55	1382-38
		HM6287-70	1382-57
	Motorola	MCM6287-25	1381-44
6288	Motorola	MCM6288-25	1372-62
		MCM6288-30	1373-26
	OEI	6288	1126-19
6290	Motorola	MCM6290-25	1372-79
		MCM6290-30	1373-38
		MCM6290-35	1374-23
6291	OKI	MSM6291	884-11
	OEI	6291	1125-96
6292	Motorola	MCM6292-25	1373-8
		MCM6292-30	1373-55
		MCM6292-35	1374-51
6293	Motorola	MCM6293-25	1373-9
		MCM6293-30	1373-56
		MCM6293-35	1378-20
6294	Motorola	MCM6294-25	1373-10
		MCM6294-30	1373-57
		MCM6294-35	1374-52
6295	Motorola	MCM6295-25	1373-11
		MCM6295-30	1373-58
		MCM6295-35	1373-86
63	**Burr-Brown**	**DAC63**	⋆ **2542**
			645-67
			¶ 419-32
		DAC63BG	⋆ **2542**
			957-17
			¶ 419-32
		DAC63BM	⋆ **2542**
			957-13
			¶ 419-32
		DAC63CG	⋆ **2542**
			957-14
			¶ 419-32
		DAC63CM	⋆ **2542**
			957-15
			¶ 419-32
		DAC63T	⋆ **2542**
			957-16
			¶ 419-32
63A01X0			
	Hitachi	HD63A01X0	823-20
63A01Y0			
	Hitachi	HD63A01Y0	823-21
63A03	Hitachi	HD63A03R	867-27
		HD63A03X	867-94
63A05U0			
	Hitachi	HD63A05U0	823-22
63A05X0			
	Hitachi	HD63A05X0	823-23
63A05X1			
	Hitachi	HD63A05X1	823-24
63A05X2			
	Hitachi	HD63A05X2	823-25
63A05Y0			
	Hitachi	HD63A05Y0	823-26
63A05Y1			
	Hitachi	HD63A05Y1	823-27
63A05Y2			
	Hitachi	HD63A05Y2	823-28
63A21	Hitachi	HD63A21	868-36
			889-22
63A40	Hitachi	HD63A40	868-54
63A50	Hitachi	HD63A50	867-124
			888-64
63B01X0			
	Hitachi	HD63B01X0	823-29
63B01Y0			
	Hitachi	HD63B01Y0	823-30
63B03	Hitachi	HD63B03R	867-28
		HD63B03X	867-95
63B05U0			
	Hitachi	HD63B05U0	823-31
63B05X0			
	Hitachi	HD63B05X0	823-32
63B05X1			
	Hitachi	HD63B05X1	823-33
63B05X2			
	Hitachi	HD63B05X2	823-34
63B05Y0			
	Hitachi	HD63B05Y0	823-35
63B05Y1			
	Hitachi	HD63B05Y1	823-36
63B05Y2			
	Hitachi	HD63B05Y2	823-37
63B21	Hitachi	HD63B21	868-37
			889-23
63B50	Hitachi	HD63B50	867-125
			888-65

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
63DA1643			
	MMI	63DA1643	1322-84
63DA441			
	MMI	63DA441	1318-35
63DA442			
	MMI	63DA442	1318-36
63DA841			
	MMI	63DA841	1319-89
63D1641			
	MMI	63D1641	1322-85
63KS4	VLSI Tech	VT63KS4-25	1372-96
		VT63KS4-35	1374-36
		VT63KS4-45	1375-32
63L05F1			
	Hitachi	HD63L05F1	823-38
63M1	**UTMC**	**UT63M1**	* **4331**
			1010-29
63PA05Y1			
	Hitachi	HD63PA05Y1	823-39
63PB05Y1			
	Hitachi	HD63PB05Y1	825-1
63P01M1			
	Hitachi	HD63P01M1	825-2
63P05Y0			
	Hitachi	HD63P05Y0	825-3
63P05Y1			
	Hitachi	HD63P05Y1	825-4
63RA1681			
	MMI	63RA1681	1320-49
		63RA1681A	1320-36
63RA481			
	MMI	63RA481	1317-46
		63RA481A	1317-43
63RS1681			
	MMI	63RS1681	1320-50
		63RS1681A	1320-37
63RS881			
	MMI	63RS881	1318-97
		63RS881A	1318-95
63S080	MMI	63S080	1316-19
63S081	MMI	63S081	1316-24
		63S081A	1316-11
63S140	MMI	63S140	1316-77
63S141	MMI	63S141	1316-79
		63S141A	1316-69
63S1641			
	MMI	63S1641	1323-17
		63S1641A	1323-4
63S1681			
	MMI	63S1681	1322-5
		63S1681A	1321-27
63S240	MMI	63S240	1317-18
63S241	MMI	63S241	1317-22
		63S241A	1317-14
63S280	MMI	63S280	1316-101
63S281	MMI	63S281	1316-103
		63S281A	1316-96
63S285	MMI	63S285	1317-1
63S3281			
	MMI	63S3281	1323-44
		63S3281A	1323-33
63S440	MMI	63S440	1318-55
63S441	MMI	63S441	1318-60
		63S441A	1318-49
63S480	MMI	63S480	1317-86
63S481	MMI	63S481	1317-91
		63S481A	1317-61
63S485	MMI	63S485	1317-96
63S6481			
	MMI	63S6481	1325-57
		63S6481A	1325-8
63S841	MMI	63S841	1320-6
		63S841A	1319-97
63S881	MMI	63S881	1319-34
		63S881A	1319-4
630	AD	AD630	1219-79
	Cyberchron	CVM630/8-EDC	
			4867-35
	ILC-DDC	RDC630	1227-75
		SDC630	1229-21
	Maxim	MAX630	1217-2
	National	CIM630	4846-37

Base Number	Source	Device	Page-Line
6300	Fairchild	FGE6300	4044-27
	Lambda	LAS6300L	1216-104
			¶ 421-37
			¶ 422-15
			¶ 438-23
	Signetics	TEA6300	1118-86
6301	Hitachi	HD6301V	825-5
	Toshiba	TD6301A	1120-60
6301X0	Hitachi	HD6301X0	825-6
6301Y0	Hitachi	HD6301Y0	825-7
6303	Hitachi	HD6303	825-8
			867-106
		HD6303R	867-29
		HD6303X	867-96
6304	Toshiba	TD6304A	1123-26
6305	Hitachi	HD6305V	825-10
6305U0			
	Hitachi	HD6305U0	825-9
6305X0	Hitachi	HD6305X0	825-11
6305X1	Hitachi	HD6305X1	825-12
6305X2	Hitachi	HD6305X2	825-13
6305Y0	Hitachi	HD6305Y0	825-14
6305Y1	Hitachi	HD6305Y1	825-15
6305Y2	Hitachi	HD6305Y2	825-16
6306	Motorola	HCA6306	4055-36
	National	SCX6306	4056-30
6308	Toshiba	TD6308A	1123-27
6309	Hitachi	HD6309E	867-87
	Toshiba	TD6309	1123-28
631	Maxim	MAX631	1230-6
	National	CIM631	4846-38
6310	Plessey	SL6310	1103-104
63100	S-MOS	SMM63100C	1392-61
63102	ILC-DDC	BUS63102	1011-74
63104	ILC-DDC	BUS63104	1010-40
63105	ILC-DDC	BUS63105	1011-22
			¶ 423-22
6311	NEC	μPB6311	4057-8
6312	Motorola	HCA6312	4055-42
	National	SCX6312	4056-32
63125	ILC-DDC	BUS63125	1010-41
6313	**S-MOS**	**SMM6313-25**	
			* **3201**
			1391-20
6316	Telefunken	U6316	1125-6
632	AD	AD632	1223-14
	Burr-Brown	**AD632A**	* **2539**
			1223-7
		AD632B	* **2539**
			1223-8
		AD632S	* **2539**
			1223-9
		AD632T	* **2539**
			1223-10
	ILC-DDC	FDC632	1221-73
		RDC632	1227-76
		SDC632	1229-22
	Maxim	MIC632	1230-11
6320	Lambda	LAS6320	1216-105
			¶ 420-35
			¶ 421-37
6321	Hitachi	HD6321	868-38
			889-24
	NEC	μPB6321	4057-10
6324	Motorola	HCA6324	4055-48
	National	SCX6324	4056-35
6325	National	SCX6325	4056-37
	S-MOS	**SMM6325**	* **3201**
			1391-90
63256	Gould	S63256D-150	1391-53
		S63256I-175	1391-62
		S63256M-200	1391-63
6326	S-MOS	SMM6326	1391-91
633	**Burr-Brown**	**OPA633A**	* **2534**
			* **2536**
			1129-13
	Maxim	MAX633	1230-12
6330	IMI	IMI6330	4051-55
	Lambda	LAS6330A	1216-106
	NEC	μPB6330	4057-13
	S-MOS	**SLA6330**	* **4305**
			4059-40
	Siliconix	Si6330	4061-22
	TriQuint	TQ6330-M	652-80
6331	Lambda	LAS6331A	1216-107
	TriQuint	TQ6331-M	652-78

Base Number	Source	Device	Page-Line
634	**Burr-Brown**	**MPY634**	* **2539**
			1223-47
	Datel	DVME634T	4892-15
	ILC-DDC	RDC634	1227-77
		SDC634	1229-23
	Maxim	MAX634	1217-3
6340	Hitachi	HD6340	868-55
	NEC	μPB6340	4057-16
6342	Motorola	MHW6342	1124-25
63463	Hitachi	HD63463	883-59
6348	Motorola	HCA6348	4056-9
	National	SCX6348	4056-41
63484	Hitachi	HD63484	882-52
	Signetics	**SCC63484**	* **3050**
			888-97
635	Maxim	MAX635	1230-1
	Unitrode	PIC635	1218-8
6350	Hitachi	HD6350	867-126
			888-66
	Lambda	LAS6350	1216-108
	NEC	μPB6350	4057-19
6351	Lambda	LAS6351	1216-109
63512	Gould	S63512C-200	1392-30
		S63512D-150	1392-26
636	AD	AD636J	1227-99
		AD636K	1227-100
	Maxim	MAX636	1230-2
	Telefunken	U636BS	692-50
	Unitrode	PIC636	1218-9
6360	National	SCX6360	4056-42
63645	Hitachi	HD63645F	885-36
			977-94
6365	**S-MOS**	**SMM6365**	* **3201**
			1390-20
637	AD	AD637J	1227-101
		AD637K	1227-102
	Maxim	MAX637	1230-3
	Unitrode	PIC637	1218-10
63701	Hitachi	HD63701X	825-17
63705	Hitachi	HD63705V	825-18
638	Maxim	MAX638C	1230-4
		MAX638M	1230-5
6380	Lambda	LAS6380	1216-110
6381	Lambda	LAS6381	1216-111
639	AD	AD639A	1229-110
		AD639B	1229-111
		AD639S	1229-112
64	AdvMicroSys		
		RAM64	4878-13
	AppBusComp		
		MB64	4847-49
	Datricon	MSB-64	4877-51
		TTL64	4873-36
	EG&G-Reticon		
		RO64	1222-18
	Fairchild	F64K-12	1337-70
		F64K-15	1338-8
		F64K-20	1338-25
	IndComp	A/D64-PC	4848-38
		A/D64-100	4869-1
		D/A64-PC	4848-39
		D/A64-100	4869-2
	LMS	NVR64	1314-51
	Matrix	RP64	4877-10
	Onset	DS64	4846-18
		MEM64	4846-19
	RELMS	rMEM64K-BE	4862-33
		rMEM64K-D	4862-32
	VersaLogic	VID64	4871-35
	WinSystems	MCM-DRAM	
		64	4877-30
64A05X0			
	Hitachi	HD64A05X0	825-19
64C08	Calmos	CA64C08	1366-39
64C09	Calmos	CA64C09	1370-18
64C16	TI	SMJ64C16-25	1362-6
		SMJ64C16-35	1363-14
		SMJ64C16-45	1364-10
64C64	TI	SMJ64C64-30	1373-31
		SMJ64C64-40	1374-71
		SMJ64C64-55	1375-82
64E4	Lattice	SR64E4-25C	1372-77
		SR64E4-35	1374-38
		SR64E4-35C	1374-21
		SR64E4-40/883C	
			1374-72

(Continued)

Base Number	Source	Device	Page-Line
64E4	Lattice		(Cont'd)
		SR64E4-45	1375-34
		SR64E4-45/883C	1375-17
		SR64E4-45C	1375-18
		SR64E4-55	1376-3
		SR64E4-55C	1375-89
		SR64E4-70/883C	1376-36
		SR64E4-883C	1375-90
64H1	VLSI Tech	VT64H1	1382-2
		VT64H1-35	1382-3
		VT64H1-40	1382-11
		VT64H1-45	1382-32
		VT64H1-55	1382-52
64KS4	VLSI Tech	VM64KS4	1375-6
		VT64KS4	1374-6
		VT64KS4-25	1372-68
		VT64KS4-45	1375-8
64K16	**Inova**	**S64K16-100CC**	* **2797**
			1385-19
		S64K16-100IC	* **2797**
			1385-20
		S64K16-55CC	* **2797**
			1385-1
		S64K16-55IC	* **2797**
			1385-2
		S64K16-70CC	* **2797**
			1385-10
		S64K16-70IC	* **2797**
			1385-11
		S64K16-85CC	* **2797**
			1385-14
		S64K16-85IC	* **2797**
			1385-15
64K4	Lattice	SR64K4-25C	1372-60
		SR64K4-35	1373-83
		SR64K4-35C	1373-84
		SR64K4-40/883C	1374-70
		SR64K4-45	1374-86
		SR64K4-45/883C	1374-87
		SR64K4-45C	1374-88
		SR64K4-55	1375-74
		SR64K4-55/883C	1375-75
		SR64K4-55C	1375-76
		SR64K4-70/883C	1376-30
64K8	Inova	S64K8-100MC	1385-21
		S64K8-70MC	1385-12
		S64K8-85MC	1385-16
	Lattice	EE64K8-70	1311-59
		SR64K8-35C	1366-58
		SR64K8-40	1366-76
		SR64K8-45	1367-4
		SR64K8-45/883C	1367-5
		SR64K8-45C	1367-6
		SR64K8-55	1367-46
		SR64K8-55/883C	1367-47
		SR64K8-55C	1367-48
64R32	MMI	HAL64R32M	4081-66
		PAL64R32C	4075-95
		PAL64R32M	4080-15
		ZHAL64R32C	4081-65
64X16	**Dense-Pac**	**DPE64X16V**	* **2583**
			1314-58
		DPP64X16	* **2584**
			1384-82
		DPS64X16V	* **2583**
			1384-81
		DPV64X16V	* **2584**
			1333-76
64X18	**Dense-Pac**	**DPF64X18**	* **2585**
			1307-49
64X24	**Dense-Pac**	**DPE64X24V**	* **2583**
			1315-1
		DPS64X24V	* **2583**
			1385-40

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
64X24	**Dense-Pac**		**(Cont'd)**
		DPV64X24	⋆ **2582**
			1334-47
		DPV64X24V	⋆ **2582**
			⋆ **2584**
			1334-46
64X32	**Dense-Pac**	**DPE64X32V**	⋆ **2583**
			1315-2
		DPP64X32	⋆ **2584**
			1385-42
		DPS64X32V	⋆ **2583**
			1385-41
		DPV64X32	⋆ **2582**
			1336-2
		DPV64X32B	⋆ **2582**
			1334-49
		DPV64X32V	⋆ **2582**
			⋆ **2584**
			1334-48
64X36	**Dense-Pac**	**DPF64X36**	⋆ **2585**
			1307-50
640	Matrox	PG640	4848-36
		QG640	4867-2
		VG640	4884-36
	Plessey	SL640C	1219-84
64000	HP	HP64000	4705-14
		HP64000-UX	4707-1
6401	National	SHM6401	1228-70
64010	**LSI Logic**	**L64010**	⋆ **2868**
			603-139
		L64010A	⋆ **2868**
			603-140
64011	**LSI Logic**	**L64011**	⋆ **2868**
			603-128
		L64011A	⋆ **2868**
			603-129
64012	**LSI Logic**	**L64012**	⋆ **2868**
			603-126
		L64012A	⋆ **2868**
			603-127
64016	**LSI Logic**	**L64016**	⋆ **2868**
			604-75
64017	**LSI Logic**	**L64017**	⋆ **2868**
			604-76
6402	**GE/Intersil**	**IM6402**	⋆ **2678**
			877-82
			1011-58
		IM6402-1I	⋆ **2678**
			877-83
		IM6402-1M	⋆ **2678**
			877-84
		IM6402AI	⋆ **2678**
			877-85
		IM6402AM	⋆ **2678**
			877-86
		IM6402M	⋆ **2678**
			1011-59
	GE/RCA	**CDP6402D**	⋆ **2642**
			1011-62
		CDP6402E	⋆ **2642**
			1011-63
	Harris	**HD6402-Cell**	⋆ **2703**
			⋆ **2735**
			⋆ **4249**
			877-91
			1011-64
		HD6402-2	⋆ **2703**
			⋆ **2735**
			⋆ **4249**
			1011-65
	Sanyo	LM6402	862-69
6403	**GE/Intersil**	**IM6403**	⋆ **2678**
			877-87
			1011-60
		IM6403-1I	⋆ **2678**
			877-88
		IM6403AI	⋆ **2678**
			877-89
		IM6403AM	⋆ **2678**
			877-90
		IM6403M	⋆ **2678**
			1011-61
64032	**LSI Logic**	**L64032**	⋆ **2868**
			604-109
		L64032A	⋆ **2868**
			604-110
			(Continued)

Base Number	Source	Device	Page-Line
64032	**LSI Logic**		**(Cont'd)**
		L64032B	⋆ **2868**
			604-111
6405	Sanyo	LM6405	862-70
6406	**Harris**	**HD6406**	⋆ **2735**
			⋆ **2768**
			⋆ **4249**
			876-79
			1011-50
		HD6406-Cell	⋆ **2735**
			⋆ **2768**
			⋆ **4249**
			876-80
			1011-51
6408	**Harris**	**HD6408**	⋆ **2735**
			⋆ **4249**
			1010-3
		HD6408-Cell	⋆ **2735**
			⋆ **4249**
			636-95
			1009-20
		HD6408-9	⋆ **2735**
			⋆ **4249**
			636-94
	Sensoray	**6408**	⋆ **4901**
			4893-11
			4895-11
6409	**Harris**	**HD6409**	⋆ **2735**
			⋆ **2768**
			⋆ **4249**
			637-109
		HD6409-Cell	⋆ **2735**
			⋆ **2768**
			⋆ **4249**
			637-110
			1010-4
		HD6409-2	⋆ **2735**
			⋆ **2768**
			⋆ **4249**
			1010-5
641	Datel	DVME641	4892-14
	Maxim	MAX641C	1230-7
		MAX641M	1230-8
	Plessey	SL641C	1219-85
6410	Dense-Pac	DPS6410	1384-67
		DP6410	⋆ **2579**
			1384-66
64100	ILC-DDC	BUS64100	1010-37
64103	ILC-DDC	BUS64103	1010-23
6412	Dense-Pac	DPS6412	1384-69
		DPX6412	1384-70
		DP6412	⋆ **2579**
			1384-68
64132	**LSI Logic**	**L64132**	⋆ **2869**
			602-132
		L64132A	⋆ **2869**
			602-133
		L64132B	⋆ **2869**
			602-134
6417	Dense-Pac	DPS6417	1384-91
64180	**Zilog**	**Z64180-4**	⋆ **3417**
			843-2
		Z64180-6	⋆ **3417**
			843-3
642	AD	AD642J	1174-5
			¶ 428-28
		AD642K	1172-50
			¶ 428-28
		AD642L	1171-47
			¶ 428-28
		AD642S	1172-51
			¶ 428-28
	Maxim	MAX642C	1230-9
		MAX642M	1230-10
6420	Exar	XRT6420	1198-15
		XRT6420-2	1198-4
6421	Exar	XRT6421	1198-16
64210	**LSI Logic**	**L64210**	⋆ **2870**
			646-107
		L64210A	⋆ **2870**
			646-108
64211	**LSI Logic**	**L64211**	⋆ **2870**
			646-106
		L64211A	⋆ **2870**
			646-109

Base Number	Source	Device	Page-Line
64220	**LSI Logic**	**L64220**	⋆ **2870**
			646-88
		L64220A	⋆ **2870**
			646-89
64230	**LSI Logic**	**L64230**	⋆ **2870**
			646-110
		L64230A	⋆ **2870**
			646-111
64240	**LSI Logic**	**L64240**	⋆ **2870**
			646-91
		L64240A	⋆ **2870**
			646-92
6425	Exar	XRT6425	1198-5
64256	Sharp	LH64256-10	1341-58
		LH64256-12	1342-6
		LH64256-15	1342-24
64257	Sharp	LH64257-12	1342-7
		LH64257-15	1342-25
64258	**Sharp**	**LH64258-10**	⋆ **2993**
			⋆ **2996**
			1341-59
		LH64258-12	⋆ **2993**
			⋆ **2996**
			1342-8
		LH64258-15	⋆ **2993**
			⋆ **2996**
			1342-26
64276	HP	HP64276	4707-2
643	Datel	DVME643H	4892-16
	Maxim	MAX643C	1230-13
		MAX643M	1230-14
	Micro-Link	VME643	4881-28
6430	IMI	IMI6430	4052-1
	S-MOS	**SLA6430**	⋆ **4305**
			4059-41
	Siliconix	Si6430	4061-23
6432	AppBusComp		
		PP6432	4847-48
	Dense-Pac	**DPS6432**	⋆ **2580**
			1385-45
			1386-47
			1387-62
		DPV6432	1334-50
			1335-33
6433	**Dense-Pac**	**DPS6433**	⋆ **2580**
			1385-46
			1386-48
644	AD	AD644J	1174-6
		AD644K	1172-52
		AD644L	1171-48
		AD644S	1171-49
	ILC-DDC	DSC644	1221-31
6440	Plessey	SL6440C	1120-6
	Systek	6440	4877-37
645	Datel	DVME645	4892-13
	Signetics	NE645	1116-113
	Unitrode	PIC645	1218-11
64500	**LSI Logic**	**L64500**	⋆ **2871**
			847-27
64550	**LSI Logic**	**L64550**	⋆ **2872**
			885-81
646	Signetics	NE646	1116-114
	Telefunken	U646	1103-101
	Unitrode	PIC646	1218-12
6463	Plessey	PSM6463	4863-5
647	AD	AD647J	1173-3
			¶ 428-28
		AD647K	1171-44
			¶ 428-28
		AD647L	1171-15
			¶ 428-28
		AD647S	1171-45
			¶ 428-28
		AD647S/883B	1171-46
			¶ 428-28
	Telefunken	U647	1103-102
	Unitrode	PIC647	1218-13
64700	HP	HP64700	4707-3
648	AD	AD648A	1173-40
		AD648B	1172-47
		AD648C	1181-45
		AD648J	1173-41
		AD648K	1172-48
		AD648S	1173-42
		AD648T	1172-49
	NEC	μPC648	959-6

Base Number	Source	Device	Page-Line
649	Signetics	NE649	1116-115
6497	Toshiba	T6497	874-89
65	Amperex	BGY65	1123-111
	Golden	GE65-12K	4868-20
	RCIData	CMC65/04	4811-24
	WDC	W65CRAM	4087-19
		W65CROM	4087-20
65CE02	**Commodore**		
		65CE02	⋆ **2555**
			821-13
			866-29
65CRAMx2			
	WDC	W65CRAMx2	4087-23
65CRAMx3			
	WDC	W65CRAMx3	4087-27
65CROMx2			
	WDC	W65CROMx2	4087-24
65CROMx3			
	WDC	W65CROMx3	4087-28
65CX02	NCR	NCR65CX02	866-42
		NCR65CX02-Cell	
			866-43
65C00	Hyundai	HY65C00/1	825-39
		HY65C00/11	825-40
	NCR	NCR65C00/1	835-26
			866-44
		NCR65C00/2	866-45
		NCR65C00/3	866-46
65C02	Hyundai	HY65C02	825-41
	NCR	NCR65C02	835-27
			866-47
	Panatech	RP65C02	866-49
		RP65C02A	866-50
	Rockwell	**R65C02**	⋆ **2990**
			837-14
	VLSI Tech	65C02-Cell	866-66
	WDC	W65C02	866-67
			4087-21
65C02x2			
	WDC	W65C02x2	4087-25
65C02x3			
	WDC	W65C02x3	4087-29
65C10	**Rockwell**	**R65C10**	⋆ **2988**
			837-15
65C102	**Rockwell**	**R65C102**	⋆ **2990**
			837-16
65C11	HiTech	STD65C11	4825-10
65C112	**Rockwell**	**R65C112**	⋆ **2990**
			837-17
65C124	WDC	W65C124	843-1
			866-9
65C134	WDC	W65C134	866-10
65C162	**Harris**	**HS65C162RH**	
			⋆ **2715**
			1357-20
65C21	NCR	NCR65C21	866-96
	Rockwell	**R65C21**	⋆ **2990**
			866-98
65C22	NCR	NCR65C22	866-97
	Rockwell	**R65C22**	⋆ **2990**
			866-99
	VLSI Tech	VL65C22	866-102
	WDC	W65C22	866-104
65C24	**Rockwell**	**R65C24**	⋆ **2990**
			866-107
65C262	Harris	HS65C262RH	1388-31
65C29	WDC	W65C29	866-105
65C51	**GE/RCA**	**CDP65C51-1**	⋆ **2642**
			865-35
			1011-69
		CDP65C51-2	⋆ **2642**
			1011-70
	Gould	S65C51	881-66
	Rockwell	**R65C51**	⋆ **2990**
			866-81
65C52	**Rockwell**	**R65C52**	⋆ **2990**
			866-85
65C64	Vitelic	V65C64-10	1368-50
		V65C64-12	1369-8
		V65C64-15	1369-65
		V65C64L-10	1368-51
		V65C64L-12	1369-9
		V65C64L-15	1369-66
65C802	WDC	W65C802	851-20
			878-122

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
65C816	Hyundai	HY65C816	843-30
	VLSI Tech	VL65C816	877-105
	WDC	W65C816	851-21
			878-123
			4087-22
65C816x2			
	WDC	W65C816x2	4087-26
65C816x3			
	WDC	W65C816x3	4087-30
65C90	WDC	W65C90	866-106
65F11	HiTech	STD65F11	4825-6
			¶ 412-20
			¶ 412-21
			¶ 412-24
65KS4	VLSI Tech	VM65KS4	1375-30
		VT65KS4	1374-37
		VT65KS4-25	1372-97
		VT65KS4-35	1374-7
		VT65KS4-45	1375-33
65NC02			
	VLSI Tech	VL65NC02	841-36
			866-65
65SC02	**CMD Micro**	**G65SC02**	⋆ **2552**
			819-25
			866-11
65SC03	**CMD Micro**	**G65SC03**	⋆ **2552**
			819-26
			866-12
65SC04	**CMD Micro**	**G65SC04**	⋆ **2552**
			819-27
			866-13
65SC05	**CMD Micro**	**G65SC05**	⋆ **2552**
			819-28
			866-14
65SC06	**CMD Micro**	**G65SC06**	⋆ **2552**
			819-29
			866-15
65SC07	**CMD Micro**	**G65SC07**	⋆ **2552**
			819-30
			866-16
65SC102			
	CMD Micro	**G65SC102**	⋆ **2552**
			819-31
			866-17
65SC103			
	CMD Micro	**G65SC103**	⋆ **2552**
			821-1
			866-18
65SC104			
	CMD Micro	**G65SC104**	⋆ **2552**
			821-2
			866-19
65SC105			
	CMD Micro	**G65SC105**	⋆ **2552**
			821-3
			866-20
65SC106			
	CMD Micro	**G65SC106**	⋆ **2552**
			821-4
			866-21
65SC107			
	CMD Micro	**G65SC107**	⋆ **2552**
			821-5
			866-22
65SC112			
	CMD Micro	**G65SC112**	⋆ **2552**
			821-6
			866-23
65SC115			
	CMD Micro	**G65SC115**	⋆ **2552**
			821-7
			866-24
65SC12	**CMD Micro**	**G65SC12**	⋆ **2552**
			821-8
			866-25
65SC13	**CMD Micro**	**G65SC13**	⋆ **2552**
			821-9
			866-26
65SC14	**CMD Micro**	**G65SC14**	⋆ **2552**
			821-10
			866-27
65SC15	**CMD Micro**	**G65SC15**	⋆ **2552**
			821-11
			866-28
65SC150			
	CMD Micro	**G65SC150**	⋆ **2548**
			821-12
			866-73
			¶ 418-31
65SC151			
	CMD Micro	G65SC151	866-74
65SC21	CMD Micro	G65SC21	866-91
65SC22	CMD Micro	G65SC22	866-92
	Mitel	MD65SC22	866-95
65SC32	CMD Micro	G65SC32	866-110
65SC51	CMD Micro	G65SC51	866-78
	Mitel	MD65SC51B	866-80
65SC802			
	CMD Micro	**G65SC802**	⋆ **2549**
			843-28
			877-103
65SC816			
	CMD Micro	**G65SC816**	⋆ **2549**
			843-29
			877-104
65T162	**Harris**	**HS65T162RH**	⋆ **2715**
			1357-52
65T262	Harris	HS65T262RH	1372-5
65X61	Intel	IM65X61-1	1350-24
650	AD	AD650J	1230-82
			¶ 419-21
		AD650K	1230-83
			¶ 419-21
		AD650S	1230-84
			¶ 419-21
	Plessey	SL650	1191-53
			¶ 439-11
	Signetics	NE650	1116-116
6500	**Commodore**		
		6500/1	⋆ **2555**
			866-6
	Cubit	6500	4803-30
	NCR	NCR6500/1	835-28
			866-7
		NCR6500/11	835-29
			866-68
	Rockwell	**R6500**	⋆ **2988**
			837-18
			866-51
			¶ 432-2
		R6500/1	⋆ **2988**
			837-19
			¶ 432-2
		R6500/1-10	⋆ **2988**
			866-8
			¶ 432-2
		R6500/1E	⋆ **2988**
			866-88
			¶ 432-2
		R6500/11	⋆ **2988**
			837-20
			866-69
			¶ 432-2
		R6500/12	⋆ **2988**
			837-21
			866-70
			¶ 432-2
		R6500/13	⋆ **2988**
			837-22
			866-71
			¶ 432-2
		R6500/15	⋆ **2988**
			837-23
			866-72
			¶ 432-2
		R6500/41	⋆ **2988**
			837-24
			¶ 432-2
		R6500/42	⋆ **2988**
			837-25
			¶ 432-2
		6500	4717-3
65001	NEC	μPD65001	4057-9
65004	NEC	μPD65004	4057-7
6501	Commodore	6501	866-30
	GenMicro	GMS6501	4847-14
	Rockwell	**R6501Q**	⋆ **2988**
			866-52
6502	**Commodore**		
		6502	⋆ **2558**
			866-31
	GenMicro	GMS6502	4847-8
	Magnum	6502GP	4811-21
		6502LB	4811-22
		6502LBE	4811-23
	Motorola	6502-Cell	866-41
	NCR	6502-Cell	866-48
	Rockwell	**R6502**	⋆ **2987**
			⋆ **2990**
			837-26
			866-53
	UMC	UM6502	841-34
65021	NEC	μPD65021	4057-12
65022	NEC	μPB65022	4057-11
6503	**Commodore**		
		6503	⋆ **2558**
			866-32
	GenMicro	GMS6503	4847-7
	Rockwell	R6503	866-54
65030	NEC	μPD65030	4057-14
65031	NEC	μPD65031	4057-15
6504	**Commodore**		
		6504	⋆ **2558**
			866-33
	GenMicro	GMS6504	4847-22
	Harris	**HM6504-2**	⋆ **2704**
			⋆ **2762**
			⋆ **2768**
			1360-40
		HM6504-5	⋆ **2704**
			⋆ **2762**
			⋆ **2768**
			1360-41
		HM6504-8	⋆ **2704**
			⋆ **2762**
			⋆ **2768**
			1360-42
		HM6504-9	⋆ **2704**
			⋆ **2762**
			⋆ **2768**
			1360-43
		HM6504B-8	⋆ **2704**
			⋆ **2762**
			⋆ **2768**
			1360-22
		HM6504B-9	⋆ **2704**
			⋆ **2762**
			⋆ **2768**
			1360-23
		HM6504C-9	⋆ **2704**
			⋆ **2762**
			⋆ **2768**
			1360-44
		HM6504S-8	⋆ **2704**
			⋆ **2762**
			⋆ **2768**
			1360-17
		HM6504S-9	⋆ **2704**
			⋆ **2762**
			⋆ **2768**
			1360-18
		HS6504RH	⋆ **2702**
			⋆ **2714**
			1360-21
	Matra-Harris		
		HM6504	1360-28
	National	NMC6504-9	1360-45
	Rockwell	R6504	866-55
65040	NEC	μPD65040	4057-17
65042	NEC	μPD65042	4057-18
6505	**Commodore**		
		6505	⋆ **2558**
			866-34
	GenMicro	GMS6505	4847-32
	Rockwell	R6505	866-56
	SiliconSys	SSI6505	1225-152
6506	**Commodore**		
		6506	⋆ **2558**
			866-35
	GenMicro	GMS6506	4805-16
	Rockwell	R6506	866-57
	SGS	L6506	866-64
	SiliconSys	SSI6506	1226-52
65060	NEC	μPD65060	4057-20
6507	**Commodore**		
		6507	⋆ **2558**
			866-36
	GenMicro	GMS6507	4805-20
	Rockwell	R6507	866-58
	SiliconSys	SSI6507	1226-97
65070	NEC	μPD65070	4057-21
6508	**Commodore**		
		6508	⋆ **2558**
			866-76
	GenMicro	GMS6508	4847-33
	Harris	**HM6508-5**	⋆ **2704**
			⋆ **2762**
			1351-89
		HM6508-8	⋆ **2704**
			⋆ **2762**
			1351-82
		HM6508-9	⋆ **2704**
			⋆ **2762**
			1351-83
		HM6508B-8	⋆ **2704**
			⋆ **2762**
			1351-78
		HM6508B-9	⋆ **2704**
			⋆ **2762**
			1351-79
		HS6508RH	⋆ **2714**
			1351-88
65080	NEC	μPD65080	4057-23
65081	NEC	μPD65081	4057-22
6509	**Commodore**		
		6509	⋆ **2558**
			866-77
	GenMicro	GMS6509	4847-6
651	AD	AD651	1230-52
		AD651A	1230-53
		AD651B	1230-54
		AD651J	1230-55
		AD651K	1230-56
		AD651S	1230-57
	Plessey	SL651	1191-52
			¶ 439-11
6510	**Commodore**		
		6510	⋆ **2558**
			866-75
	SMS	OMTI6510	4848-28
	Sprague	**UDN6510A**	⋆ **3203**
			1003-5
65100	NEC	μPD65100	4057-25
65101	ILC-DDC	BUS65101	1010-24
			¶ 424-14
	NEC	μPD65101	4057-24
65102	ILC-DDC	BUS65102	1010-25
6511	ConnMicro	SBC6511	4803-2
		SBC6511-KA	4803-21
		SBC6511-KB	4803-22
	GenMicro	GMS6511	4847-5
	Rockwell	**R6511Q**	⋆ **2988**
			837-27
			866-59
65112	ILC-DDC	BUS65112	1010-42
			¶ 423-32
			¶ 424-18
6512	**Commodore**		
		6512	⋆ **2558**
			866-37
	GenMicro	GMS6512	4846-43
	Rockwell	R6512	866-60
	UMC	UM6512	841-35
65125	ILC-DDC	BUS65125	1010-36
6513	**Commodore**		
		6513	⋆ **2558**
			866-38
	GenMicro	GMS6513	4847-38
	Rockwell	R6513	866-61
65132	ILC-DDC	BUS65132	1010-30
6514	**Commodore**		
		6514	⋆ **2558**
			866-39
	GenMicro	GMS6514	4847-1
	Harris	**HM6514-5**	⋆ **2704**
			⋆ **2762**
			⋆ **2768**
			1353-56

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
6514	**Harris**		(Cont'd)
		HM6514-9	★ **2704**
			★ **2762**
			★ **2768**
			1353-57
		HM6514B-8	★ **2704**
			★ **2762**
			★ **2768**
			1353-33
		HM6514B-9	★ **2704**
			★ **2762**
			★ **2768**
			1353-34
		HM6514C-9	★ **2704**
			★ **2762**
			★ **2768**
			1353-58
		HM6514S-8	★ **2704**
			★ **2762**
			★ **2768**
			1353-26
		HM6514S-9	★ **2704**
			★ **2762**
			★ **2768**
			1353-27
		HS6514RH	★ **2702**
			★ **2715**
			1353-47
	Matra-Harris		
		HM6514	1353-48
	Rockwell	R6514	866-62
	Sprague	**UDN6514A**	★ **3203**
			1003-6
65142	**Harris**	**HS65142RH**	★ **2715**
			1353-24
6515	**Commodore**		
		6515	★ **2558**
			866-40
	Rockwell	R6515	866-63
65150	NEC	μPD65150	4057-26
6516	GenMicro	GMS6516	4847-43
	Harris	**HM6516-2**	★ **2704**
			★ **2761**
			★ **2768**
			1358-46
		HM6516-5	★ **2704**
			★ **2761**
			★ **2768**
			1358-47
		HM6516-8	★ **2704**
			★ **2761**
			★ **2768**
			1358-48
		HM6516-9	★ **2704**
			★ **2761**
			★ **2768**
			1358-49
		HM6516B-8	★ **2704**
			★ **2761**
			★ **2768**
			1357-65
		HM6516B-9	★ **2704**
			★ **2761**
			★ **2768**
			1357-66
65161	Matra-Harris		
		HM65161	1356-80
65162	**Harris**	**HM65162-8**	★ **2704**
			★ **2761**
			★ **2768**
			1357-21
		HM65162-9	★ **2704**
			★ **2761**
			★ **2768**
			1357-22
		HM65162B-8	★ **2704**
			★ **2761**
			★ **2768**
			1356-69
		HM65162B-9	★ **2704**
			★ **2761**
			★ **2768**
			1356-70

(Continued)

Base Number	Source	Device	Page-Line
65162	**Harris**		(Cont'd)
		HM65162C-8	★ **2704**
			★ **2761**
			★ **2768**
			1357-67
		HM65162C-9	★ **2704**
			★ **2761**
			★ **2768**
			1357-23
		HM65162S-9	★ **2704**
			★ **2761**
			★ **2768**
			1356-27
		HS65162RH	1368-18
	Matra-Harris		
		HM65162	1356-37
65176	TI	SN65176B	997-48
6518	**Harris**	**HM6518-2**	★ **2704**
			★ **2762**
			1351-84
		HM6518-5	★ **2704**
			★ **2762**
			1351-90
		HM6518-8	★ **2704**
			★ **2762**
			1351-85
		HM6518-9	★ **2704**
			★ **2762**
			1351-86
		HM6518B-8	★ **2704**
			★ **2762**
			1351-80
		HM6518B-9	★ **2704**
			★ **2762**
			1351-81
	Rockwell	**R6518**	★ **2988**
			837-28
6519	GenMicro	GMS6519B	4847-4
652	Plessey	SL652	1190-43
6520	GenMicro	GMS6520	4847-9
	Rockwell	**R6520**	★ **2990**
			866-100
	Siemens	PSB6520	1199-133
65200	NEC	μPD65200	4057-27
65201	ILC-DDC	BUS65201	1011-73
6521	Siemens	PSB6521	1199-134
6522	**Commodore**		
		6522	★ **2559**
			866-93
	GenMicro	GMS6522	4847-27
	Rockwell	**R6522**	★ **2990**
			866-101
	UMC	UM6522	868-50
			889-31
		UM6522A	868-51
			889-32
	VLSI Tech	VL6522	866-103
6523	GenMicro	GMS6523	4847-40
			4847-41
65231	Matra-Harris		
		HM65231-2	1356-53
		HM65231-5	1356-54
		HM65231-8	1356-55
		HM65231-9	1356-56
6524	GenMicro	GMS6524	4847-30
6525	**Commodore**		
		6525	★ **2559**
			866-117
	GenMicro	GMS6525	4805-23
65256	Hitachi	HM65256A-12	1380-23
		HM65256A-15	1380-56
		HM65256A-20	1380-63
		HM65256B-12	1380-24
		HM65256B-15	1380-57
		HM65256B-20	1380-66
65257	Sharp	LH65257-10	1341-60
6526	**Commodore**		
		6526	★ **2559**
			866-94
	GenMicro	GMS6526	4805-29
65261	Matra-Harris		
		HM65261	1371-78
			¶ 446-33

Base Number	Source	Device	Page-Line
65262	**Harris**	**HM65262**	★ **2704**
			★ **2761**
			★ **2768**
			1372-4
		HM65262B	★ **2704**
			★ **2761**
			★ **2768**
			1371-80
		HM65262S	★ **2704**
			★ **2761**
			★ **2768**
			1371-54
		HS65262RH	1372-14
	Matra-Harris		
		HM65262	1371-63
6527	GenMicro	GMS6527	4805-12
6529	**Commodore**		
		6529	★ **2559**
			866-118
	GenMicro	GMS6529	4847-3
	NEC	μPD6529	1118-105
6530	**Commodore**		
		6530	★ **2559**
			866-108
	Rockwell	**R6530**	★ **2990**
			866-109
6531	**Rockwell**	**R6531**	★ **2990**
			866-115
6532	**Commodore**		
		6532	★ **2559**
			866-111
	Rockwell	R6532	866-112
	UMC	UM6532	866-113
		UM6532A	866-114
65321	Matra-Harris		
		HM65321-2	1357-85
		HM65321-9	1357-86
654	AD	AD654	1230-58
			¶ 421-32
654C256			
	GIM	COB654C256E	1331-65
6540	**Sprague**	**UDN6540B**	★ **3203**
			1007-32
65404	GIM	COB65404EE	1309-14
654128	GIM	COB654128E	1329-17
65416	GIM	COB65416EE	1310-39
6545	**Commodore**		
		6545-1	★ **2560**
			866-86
	Rockwell	**R6545**	★ **2990**
			882-42
654512	GIM	COB654512E	1333-27
654512X2			
	GIM	COB654512X2E	
			1335-23
65464	GIM	COB65464E	1327-15
		COB65464EE-20	
			1312-35
6549	Rockwell	R6549	882-39
			1198-97
655	Unitrode	PIC655	1218-14
6550	Panasonic	AN6550	1179-12
65500	TI	SN65500E	977-1
65501	TI	SN65501E	981-42
65502	ILC-DDC	BUS65502	4891-3
65503	ILC-DDC	BUS65503	4891-4
65505	ILC-DDC	BUS65505	1010-19
			4880-25
65506	ILC-DDC	BUS65506	4880-26
65508	ILC-DDC	BUS65508	1010-18
			4863-6
65509	ILC-DDC	BUS65509	4863-7
6551	**Commodore**		
		6551	★ **2556**
			866-79
	Gould	S6551	1009-3
		S6551A	1009-4
	Harris	**HM6551-5**	★ **2704**
			★ **2763**
			1350-55
		HM6551-8	★ **2704**
			★ **2763**
			1350-38
		HM6551-9	★ **2704**
			★ **2763**
			1350-39

(Continued)

Base Number	Source	Device	Page-Line
6551	**Harris**		(Cont'd)
		HM6551B-8	★ **2704**
			★ **2763**
			1350-26
		HM6551B-9	★ **2704**
			★ **2763**
			1350-27
		HS6551RH	★ **2714**
			1350-28
	Panasonic	AN6551	1179-13
	Rockwell	**R6551**	★ **2990**
			866-82
	Unicorn	UC6551	881-65
	UMC	UM6551	866-83
		UM6551A	866-84
65512	TI	SN65512B	981-17
65513	TI	SN65513B	978-96
65515	ILC-DDC	BUS65515	4850-46
65518	TI	SN65518	978-104
6552	Panasonic	AN6552	1179-14
6554	Panasonic	AN6554	1186-6
6555	Panasonic	AN6555	1178-48
65551	TI	SN65551	977-65
65552	TI	SN65552	977-56
65554	TI	SN65554	977-43
65555	TI	SN65555	977-44
65556	TI	SN65556	977-45
6556	Panasonic	AN6556	1178-41
65560	Rockwell	R65560	885-88
65563	TI	SN65563	977-67
65564	TI	SN65564	977-58
65567	TI	SN65567	977-46
65568	TI	SN65568	977-47
6557	Panasonic	AN6557	1175-1
6558	Panasonic	AN6558	1175-2
656	SGS	LS656	1198-30
	Telefunken	U656BS	692-51
	Unitrode	PIC656	1218-15
6560	**Commodore**		
		6560	★ **2560**
			882-121
65600	ILC-DDC	BUS65600	1010-22
			¶ 424-18
6561	**Commodore**		
		6561	★ **2560**
			882-122
	Harris	**HM6561-2**	★ **2704**
			★ **2763**
			1350-35
		HM6561-5	★ **2704**
			★ **2763**
			1350-52
		HM6561-8	★ **2704**
			★ **2763**
			1350-36
		HM6561-9	★ **2704**
			★ **2763**
			1350-37
		HM6561B-8	★ **2704**
			★ **2763**
			1350-22
		HM6561B-9	★ **2704**
			★ **2763**
			1350-23
	Matra-Harris		
		HM6561	1350-25
		HM6561-55	1367-49
	Panasonic	AN6561	1180-3
6562	Panasonic	AN6562	1180-2
6564	Harris	HM5-6564	1370-13
			1376-72
		HM6564	★ **2705**
			★ **2765**
			1370-12
			1376-69
		HM6564-2	★ **2705**
			★ **2765**
			1370-14
			1376-70
		HM6564-5	★ **2705**
			★ **2765**
			1370-16
			1376-73

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
6564	**Harris**		**(Cont'd)**
		HM6564-9	⋆ **2705**
			⋆ **2765**
			1370-15
			1376-71
		HS6564RH	1370-11
	Panasonic	AN6564	1187-39
65641	Matra-Harris		
		HM65641-70	1367-79
		HM65641-90	1368-19
65642	**Harris**	**HM65642**	⋆ **2704**
			⋆ **2761**
			1369-39
6567	**Commodore**		
		6567	⋆ **2560**
			883-1
65681	Matra-Harris		
		HM65681-55	1364-63
6569	**Commodore**		
		6569	⋆ **2560**
			883-2
6569B1	SGS	M6569B1	1194-115
657	Unitrode	PIC657	1218-16
657C256A2			
	GIM	COB657C256A2E	
			1332-73
6570	Panasonic	AN6570	1157-14
6571	Panasonic	AN6571	1176-3
6572	**Commodore**		
		6572	⋆ **2560**
			883-3
	Panasonic	AN6572	1176-2
65728	Matra-Harris		
		HM65728-35	1355-59
		HM65728-45	1356-2
		HM65728-55	1356-38
6573	**Commodore**		
		6573	⋆ **2560**
			883-4
	Panasonic	AN6573	1157-15
65747	Matra-Harris		
		HM65747-25	1359-33
		HM65747-35	1359-47
		HM65747-45	1359-61
65748	Matra-Harris		
		HM65748-25	1352-28
		HM65748-35	1352-51
		HM65748-45	1352-70
65767	Matra-Harris		
		HM65767-25	1370-74
		HM65767-35	1371-13
		HM65767-45	1371-38
65768	Matra-Harris		
		HM65768-25	1361-83
		HM65768-35	1363-4
		HM65768-45	1364-1
65787	Matra-Harris		
		HM65787-25	1381-43
		HM65787-35	1381-75
		HM65787-45	1382-26
65788	Matra-Harris		
		HM65788-25	1372-61
		HM65788-35	1373-85
		HM65788-45	1374-89
6579B1	SGS	M6579B1	1194-116
65802	Magnum	65802LB	4811-25
		65802LBE	4811-26
658128	Hitachi	HM658128-10	1386-19
		HM658128-12	1386-28
		HM658128-15	1386-36
65816	Magnum	65816A	4823-34
6582	**Commodore**		
		6582	⋆ **2557**
			866-116
6592	**Rockwell**	**R6592**	⋆ **2990**
			866-87
6593	Panasonic	AN6593	1162-40
66	MCE	MCE66	1162-10
660	Motorola	MC660	654-49
	Unitrode	PIC660	1218-17
6600	**Fujitsu**	**C6600AV**	⋆ **4229**
			⋆ **4231**
			4047-3
	MiniCompTech		
		MCT6600	4882-40
	MMI	HD6600	689-19

(Continued)

Base Number	Source	Device	Page-Line
6600			(Cont'd)
	National	HD6600	979-154
			1000-7
6605	MMI	HD6605	689-20
661	Motorola	MC661	654-50
	Unitrode	PIC661	1218-18
66101	ILC-DDC	BUS66101	1010-33
66102	ILC-DDC	BUS66102	1010-34
66105	ILC-DDC	BUS66105	1010-31
66106	ILC-DDC	BUS66106	1010-20
66108	ILC-DDC	BUS66108	1010-32
66111	ILC-DDC	BUS66111	1010-21
6616	**Harris**	**HM6616-2**	⋆ **2768**
			1322-60
			¶ 446-14
		HM6616-9	⋆ **2768**
			1322-61
			¶ 446-14
		HM6616B-2	⋆ **2768**
			1322-57
			¶ 446-14
		HM6616B-9	⋆ **2768**
			1322-58
			¶ 446-14
6617	**Harris**	**HM6617**	⋆ **2705**
			⋆ **2766**
			1322-62
		HS6617RH	1322-63
662	Motorola	MC662	654-32
	Unitrode	PIC662	1218-19
6620	IMI	IMI6620	4052-3
	S-MOS	**SLA6620**	⋆ **4305**
			4059-43
	Siliconix	Si6620	4061-24
66202	Hitachi	HM66202-15	1377-71
			1378-8
			1380-53
			1380-76
		HM66202-20	1378-2
			1380-70
		HM66202L-15	1377-72
			1378-9
			1380-54
			1380-77
		HM66202L-20	1378-3
			1380-71
66204	Hitachi	HM66204-12	1387-53
		HM66204-15	1387-56
		HM66204L-12	1387-54
		HM66204L-15	1387-57
662256	GIM	COB662256B	1308-5
663	Maxim	MAX663	1213-14
	Motorola	MC663	654-44
66300	ILC-DDC	BUS66300	1010-39
			¶ 424-6
66305	ILC-DDC	BUS66305	1010-38
664	**AD**	**AD664**	⋆ **2404**
			956-38
	Maxim	MAX664	1214-116
	Motorola	MC664	654-45
	Telefunken	U664B	692-24
		U664BS	692-25
6640	Plessey	SL6640	1121-71
			¶ 435-3
6641	**Harris**	**HM6641-8**	⋆ **2768**
			1318-29
		HM6641-9	⋆ **2768**
			1318-30
6642	**Harris**	**HM6642**	⋆ **2705**
			⋆ **2766**
			1318-28
665	Motorola	MC665	654-103
	Telefunken	U665B	692-56
6651	**EG&G-Reticon**		
		RF6651	⋆ **2590**
			1221-53
6652	Plessey	SL6652C	1120-119
6653	GE/Intersil	IM6653-1	1318-86
		IM6653M	1318-87
	Plessey	SL6653C	1120-120
6654	GE/Intersil	IM6654	1318-33
		IM6654-1	1318-32
		IM6654A	1318-31
		IM6654M	1318-34

Base Number	Source	Device	Page-Line
6658	GE/Intersil	IM6658	1319-84
		IM6658M	1319-85
	Toshiba	**T6658A**	⋆ **3306**
			1123-14
666	Motorola	MC666	654-104
	Telefunken	U666B	692-46
		U666BS	692-47
		U666BST	692-48
6663	Plessey	PSM6663	4862-9
6667	**Toshiba**	**T6667**	⋆ **3306**
			1123-17
6668	**Toshiba**	**T6668**	⋆ **3306**
			1123-15
667	AD	AD667J	957-5
			¶ 420-30
		AD667K	955-40
			¶ 420-30
		AD667S	957-6
			¶ 420-30
	Motorola	MC667	654-90
668	Motorola	MC668	654-56
	National	LMC668A	1137-26
6684	**Toshiba**	**T6684**	⋆ **3306**
			1122-102
6685	AMD	AM6685C	1109-11
		AM6685M	1109-12
	Fairchild	μA6685	1109-6
6687	AMD	AM6687C	1111-8
		AM6687M	1111-9
	Fairchild	μA6687M	1219-113
		μA6687V	1219-114
669	Motorola	MC669	654-82
	National	LMC669	1109-2
			1219-76
6690	Plessey	SL6690	1121-72
			¶ 435-3
6691	Plessey	SL6691	1121-73
		SL6691C	1120-118
67	Amperex	BGY67	1123-112
		BGY67A	1123-113
	Lomas	RAM67	4869-16
67C401	MMI	67C401-10	1304-42
		67C401-15	1304-57
	SiliconSys	SSI67C401	1304-56
67C4013			
	MMI	67C4013-10	1304-43
		67C4013-15	1304-58
67C402	MMI	67C402-10	1304-80
		67C402-15	1304-94
	SiliconSys	SSI67C402	1304-89
67C4023			
	MMI	67C4023-10	1304-81
		67C4023-15	1304-95
67C4033			
	MMI	67C4033-10	1304-96
		67C4033-15	1304-97
67C7016			
	MMI	67C7016-45	604-39
		67C7016-55	604-40
67C7017			
	MMI	67C7017-45	604-44
		67C7017-55	604-45
67C7560			
	MMI	67C7560	604-112
67L401	MMI	C67L401	1304-70
		67L401	1304-39
67L402	MMI	C67L402	1304-105
		67L402	1304-77
67L403	MMI	C67L403	1304-106
670	AD	AD670A	920-15
			¶ 419-10
		AD670B	917-16
			¶ 419-10
		AD670J	920-16
			¶ 419-10
		AD670K	917-17
			¶ 419-10
		AD670S	920-17
			¶ 419-10
	LogicalDes	VAT670	4887-12
	Maxim	MAX670C	1226-92
		MAX670M	1226-93
	Motorola	MC670	654-54
	Unitrode	PIC670	1218-20

Base Number	Source	Device	Page-Line
6700	MiniCompTech		
		MCT6700	4882-2
	Plessey	SL6700A	1119-136
		SL6700C	1119-137
671	Maxim	MAX671C	1226-90
		MAX671M	1226-91
	Motorola	MC671	654-55
	Unitrode	PIC671	1218-21
6710	Telefunken	SAS6710	1127-85
67151	Sharp	LR67151	978-95
672	Micro-Link	STD672	4870-27
	Motorola	MC672	654-57
	Unitrode	PIC672	1218-22
6721	**Toshiba**	**T6721A**	⋆ **3306**
			1123-20
673	AD	AD673J	920-42
		AD673S	920-43
	Motorola	MC673	654-73
			¶ 438-1
6730	OEI	6730	1125-44
673102	MMI	673102	999-38
		673102A	999-39
673103	MMI	673103	999-40
		673103A	999-41
673104	MMI	673104	999-42
		673104A	999-43
674	**AD**	**AD674S**	⋆ **2411**
			931-35
		AD674T	⋆ **2411**
			931-36
		AD674U	⋆ **2411**
			931-37
	Burr-Brown	ADC674AJ	934-9
		ADC674AK	931-40
		ADC674AS	934-10
		ADC674AT	931-41
	Harris	**HI674AJD-5**	⋆ **2703**
			⋆ **2738**
			⋆ **2745**
			⋆ **2748**
			934-11
		HI674AKD-5	⋆ **2703**
			⋆ **2738**
			⋆ **2745**
			⋆ **2748**
			935-15
		HI674AL	⋆ **2703**
			⋆ **2738**
			⋆ **2745**
			⋆ **2748**
			935-16
		HI674ASD-2	⋆ **2703**
			⋆ **2738**
			⋆ **2745**
			⋆ **2748**
			934-12
		HI674ASD/883	
			⋆ **2703**
			⋆ **2738**
			⋆ **2745**
			⋆ **2748**
			934-13
		HI674ATD-2	⋆ **2703**
			⋆ **2738**
			⋆ **2745**
			⋆ **2748**
			935-17
		HI674ATD/883	
			⋆ **2703**
			⋆ **2738**
			⋆ **2745**
			⋆ **2748**
			935-18
	HoneywellSPT		
		HADC674Z	⋆ **2997**
			⋆ **2999**
			935-14
	Intech	**ADC674A**	⋆ **2799**
			930-25
	Motorola	MC674	654-74
67401	MMI	C67401	1304-52
		C67401A	1304-65
		C67401B	1304-68
		67401	1304-54
		67401A	1304-66
		67401B	1304-69

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
67402	MMI	C67402	1304-85
		C67402A	1304-100
		C67402B	1304-103
		67402	1304-87
		67402A	1304-101
		67402B	1304-104
6741	**GE/RCA**	**CA6741**	* **2645**
			1161-10
67411	MMI	67411A	1304-76
67412	MMI	67412A	1305-3
67413	MMI	67413A	1305-2
67417	MMI	67417	1305-10
674219	MMI	674219	1305-22
675	ArrayTech	DHS675	4041-35
	HybridSys	R675B-1	1226-121
		R675B-3	1225-34
		R675B-4	1226-122
		R675B-5	1226-123
		R675C-1	1226-124
		R675C-3	1225-35
		R675C-5	1226-125
	Motorola	MC675	655-4
	National	LM675	1161-32
6750	OEI	6750	1126-17
676	Motorola	MC676	980-121
6765	**Rockwell**	**R6765**	* **2990**
			884-73
	VLSI Tech	VL6765	884-76
677	Motorola	MC677	654-10
6772	**Toshiba**	**T6772**	* **3306**
			1122-103
678	Motorola	MC678	654-7
6787	Hitachi	HM6787	1381-51
6788	Hitachi	HM6788	1373-12
		HM6788-30	1373-21
679501	MMI	679501	637-138
679502	MMI	679502	637-139
68	Alcyon	A68VME	4837-24
		A68VME-020	4845-4
	ApplSys	ACS/68	4817-33
	Datricon	ACS68SBC	4817-35
	Fairchild	F68PEP	4807-32
		PEP68	4705-11
	GW-Three	CPU68K-1	4839-16
	Heurikon	HK68/ME	4827-18
		HK68/M10	4827-19
		HK68/M120	4841-26
		HK68/M220	4843-2
		HK68/VE	4835-28
		HK68/VF	4829-18
		HK68/V10	4835-29
		HK68/V2F	4843-30
		HK68/V20	4845-19
		HK68A	4827-24
	IntSolutions	IS-68XM-XXX	4856-18
		IS68K	4827-10
	Microbar	DBC68K	4837-29
		GPC68K	4837-35
	Motorola	M68RWIN	4852-23
	National	VMC68K/15	4833-33
	Omnibyte	OB68/MPSIO	4861-1
		OB68K/INT-P	4861-8
		OB68K/INT-S	4861-2
		OB68K/MSBC1	4837-36
		OB68K/MSBC30	4843-1
		OB68K/MSIO	4861-5
		OB68K/OCTAL	4861-4
		OB68K/SYSII	4713-21
		OB68K/VIO	4887-23
		OB68K/VME1	4845-12
		OB68K/VSBC1	4835-39
		OB68K/VSBC20	4845-1
		OB68K/VSRM	4858-27
		OB68K/V022	4845-18
	PacificM	PM68D	4837-37
		PM68K	4837-31
	PEP-Modular	VMPM68KA	4837-16
		VMPM68KB	4837-22
		VMPM68KC	4845-2
	PlesseyMicro	PME 68-12	4837-20
		PME 68-14	4837-21
		PME 68-2	4837-19

(Continued)

Base Number	Source	Device	Page-Line
68	PlesseyMicro		(Cont'd)
		PME 68-21	4845-23
		PME 68-22	4845-22
		PME 68-23	4845-20
		PME 68-25	4845-21
		PME 68-32	4845-24
		PME68-2/102	4839-26
	RCIData	CMC68/04A	4811-31
		CMC68/15	4811-27
		CMC68/15B	4811-30
		CMC68/15C	4811-28
		CMC68/15G	4811-29
	SBE	M68CPU	4839-9
	Synergy	SM68F	4837-33
		SM68M	4837-34
	Wintek	**MCH68**	* **4913**
			4805-4
68A00	Hitachi	HD68A00	867-76
	Motorola	MC68A00	867-78
	Thomson	EF68A00	867-81
68A01	Motorola	MC68A01	866-119
68A02	Motorola	MC68A02	867-107
	Thomson	EF68A02	867-111
68A03	Motorola	MC68A03	831-29
			867-45
	Thomson	EF68A03	867-51
68A08	Thomson	EF68A08	867-115
68A09	Hitachi	HD68A09	867-97
	Motorola	MC68A09	867-100
		MC68A09E	867-88
	Thomson	EF68A09	867-103
		EF68A09E	867-91
68A10	Fairchild	F68A10	1348-61
	Motorola	MCM68A10	1348-63
	Thomson	EF68A10	1348-64
68A21	Hitachi	HD68A21	868-39
	Motorola	MC68A21	868-44
			889-25
	Thomson	EF68A21	868-47
			889-28
68A29	Motorola	C68A29	868-34
68A332	Fairchild	F68A332	1389-83
68A364	Gould	S68A364	1390-82
68A39	Motorola	MC68A39	868-19
68A40	Hitachi	HD68A40	868-56
	Motorola	MC68A40	868-59
	Thomson	EF68A40	868-63
68A43	Hitachi	HD68A43	868-21
68A44	Hitachi	HD68A44	868-11
	Motorola	MC68A44	868-14
68A45	Hitachi	HD68A45	867-147
	Motorola	MC68A45	867-150
68A46	Motorola	MC68A46	868-67
68A488	Motorola	MC68A488	868-29
68A50	Hitachi	HD68A50	867-127
	Motorola	MC68A50	867-129
			888-67
	Thomson	EF68A50	867-132
			888-70
68A52	Hitachi	HD68A52	868-74
	Motorola	MC68A52	868-76
	Thomson	EF68A52	868-79
68A54	Motorola	MC68A54	867-118
	Thomson	EF68A54	867-121
68B00	Hitachi	HD68B00	867-77
	Motorola	MC68B00	867-79
	Thomson	EF68B00	867-82
68B01	Motorola	MC68B01	866-120
68B02	Motorola	MC68B02	867-108
	Thomson	EF68B02	867-112
68B03	Motorola	MC68B03	831-30
			867-46
	Thomson	EF68B03	867-52
68B08	Thomson	EF68B08	867-116
68B09	Hitachi	HD68B09	867-98
	Motorola	MC68B09	867-101
			¶ 417-2
		MC68B09E	867-89
			¶ 417-2
	Thomson	EF68B09	867-104
		EF68B09E	867-92
68B10	Fairchild	F68B10	1348-57
	Motorola	MCM68B10	1348-58
			¶ 411-21
	Thomson	EF68B10	1348-60

Base Number	Source	Device	Page-Line
68B21	Hitachi	HD68B21	868-40
	Motorola	MC68B21	868-45
			889-26
	Thomson	EF68B21	868-48
			889-29
68B308	Fairchild	F68B308	1389-16
68B39	Motorola	MC68B39	868-20
68B40	Hitachi	HD68B40	868-57
	Motorola	MC68B40	868-60
	Thomson	EF68B40	868-64
68B44	Hitachi	HD68B44	868-12
	Motorola	MC68B44	868-15
68B45	Hitachi	HD68B45	867-148
	Motorola	MC68B45	867-151
68B488	Motorola	MC68B488	868-30
68B50	Motorola	MC68B50	867-130
			888-68
	Thomson	EF68B50	867-133
			888-71
68B52	Motorola	MC68B52	868-77
	Thomson	EF68B52	868-80
68B54	Motorola	MC68B54	867-119
	Thomson	EF68B54	867-122
68CE16	TI	SMJ68CE16-30	1355-43
		SMJ68CE16-40	1355-79
		SMJ68CE16-55	1356-43
68CE64	TI	SMJ68CE64-30	1366-38
		SMJ68CE64-40	1367-54
		SMJ68CE64-55	1367-55
68C05	NCR	NCR68C05-Cell	867-85
68C18	Unicorn	UC68C18	889-41
68C45	VLSI Tech	VL68C45R	882-49
		VL68C45S	882-50
68C552	**Rockwell**	**R68C552**	* **2989**
			879-38
68C681	**Exar**	**XR68C681**	* **2612**
			1009-61
68HC000			
	Motorola	**MC68HC000**	* **2896**
			853-10
68HC04			
	Motorola	M68HC04EVM	4895-17
68HC04J2			
	Motorola	MC68HC04J2	867-22
68HC04J3			
	Motorola	**MC68HC04J3**	* **2901**
			867-23
68HC04P2			
	Motorola	**MC68HC04P2**	* **2901**
			867-24
68HC04P3			
	Motorola	**MC68HC04P3**	* **2901**
			867-25
	Thomson	EF68HC04P3	841-16
			867-15
68HC05			
	Motorola	M68HC05EVM	4895-3
68HC05C2			
	Motorola	**MC68HC05C2**	* **2901**
			867-66
68HC05C3			
	Motorola	**MC68HC05C3**	* **2901**
			867-67
68HC05C4			
	GE/RCA	**CDP68HC05C4**	* **2641**
			867-69
			¶ 408-19
			¶ 408-20
	Motorola	**MC68HC05C4**	* **2901**
			831-31
			867-71
68HC05C8			
	Motorola	**MC68HC05C8**	* **2901**
			831-32
			867-72
68HC05D2			
	GE/RCA	**CDP68HC05D2**	* **2641**
			867-70

Base Number	Source	Device	Page-Line
68HC05E9			
	Thomson	EF68HC05E9	867-53
68HC05L6			
	Motorola	MC68HC05L6	831-33
68HC11			
	Motorola	MC68HC11	831-34
			¶ 409-19
		M68HC11EVB	* **2899**
			4895-6
		M68HC11EVM	* **2899**
			4895-4
68HC11A1			
	Motorola	**MC68HC11A1**	* **2900**
			867-56
68HC11A8			
	Motorola	**MC68HC11A8**	* **2900**
			867-75
68HC11E9			
	Motorola	**MC68HC11E9**	* **2900**
			867-58
68HC138			
	Universal	USC68HC138	879-26
68HC200			
	Thomson	MK68HC200	879-16
68HC221			
	Universal	USC68HC221	879-77
68HC24			
	Motorola	**MC68HC24**	* **2902**
			868-52
68HC331			
	Universal	USC68HC331	879-78
68HC34			
	Motorola	MCM68HC34	629-135
			1350-93
		MC68HC34	* **2902**
			868-66
68HC551			
	Universal	USC68HC551	879-34
68HC68A1			
	GE/RCA	**CDP68HC68A1**	* **2651**
			925-36
68HC68T1			
	Motorola	MC68HC68T1	889-44
68HC805C4			
	Motorola	MC68HC805C4	867-68
			¶ 445-2
68HC81A2			
	Motorola	MC68HC81A2	831-35
68HC811A0			
	Motorola	**MC68HC811A0**	* **2900**
			867-74
68HC811A2			
	Motorola	**MC68HC811A2**	* **2900**
			867-59
68HC811D3			
	Motorola	**MC68HC811D3**	* **2900**
			867-73
68HC908			
	Universal	USC68HC908	879-40
68HC99			
	Motorola	**MC68HC99**	* **2902**
			884-131
		M68HC99EVM	4895-5
68HDS300			
	Motorola	M68HDS300SPA	4895-18
68H68	GE/RCA	CDP68H68	925-37
68KVME1			
	Omnibyte	OB68KVME1-M	4839-25
68KVM02			
	Motorola	M68KVM02	4833-34
68KVM04			
	Motorola	M68KVM04	4843-15
68KVM11			
	Motorola	M68KVM11-2	4892-30
		M68KVM11-3	4890-28
		M68KVM11-4	4890-29

Arranged alphanumerically from left to right.

Base Number	Source	Device	Page-Line
68KVM12			
	Motorola	M68KVM12	4892-23
68KVM20			
	Motorola	M68KVM20	4892-17
68KVM21			
	Motorola	M68KVM21	4892-19
68KVM30			
	Motorola	M68KVM30	4892-37
68KVM33			
	Motorola	M68KVM33	4846-41
68K1	Omnibyte	OB68K1A-128	4837-30
		OB68K1A-512	4827-25
68K10	SBE	M68K10	4839-10
68K2	Microbar	DBC68K2	4837-32
68K230	Omnibyte	OB68K230	4861-13
68P01M0			
	Hitachi	HD68P01M0	825-20
68P01V07			
	Hitachi	HD68P01V07	825-21
68P05V07			
	Hitachi	HD68P05V07	825-22
68RAD1			
	Motorola	M68RAD1-1	4852-26
68RIO1	Motorola	M68RIO1-1	4888-8
68SC21	Mitel	MD68SC21	868-42
68SC40	Mitel	MD68SC40	868-92
68SC49	Mitel	MD68SC49B	867-135
			870-135
			872-28
			873-57
			874-88
			879-30
			880-25
680	AD	RTI680	4888-31
	Maxim	MAX680	1221-18
		MAX680C	1230-16
		MAX680E	1230-17
		MAX680M	1230-18
	Motorola	MC680	654-3
	PacificM	M680R	4839-1
	RTC	MS680	1119-93
6800	Motorola	MC6800	833-1
			867-80
			¶ 408-24
			¶ 411-26
			¶ 413-11
	Signetics	TDA6800	1126-152
	Thomson	EF6800	841-17
			867-83
			¶ 411-20
68000	Hitachi	HD68000	878-124
		HD68000-10	878-125
		HD68000-12	879-1
		HD68000-4	879-2
		HD68000-6	879-3
		HD68000-8	879-4
	Motorola	**MC68000-10**	⋆ **2896**
			879-5
			¶ 409-9
			¶ 411-19
			¶ 411-21
		MC68000-12	⋆ **2896**
			879-6
			¶ 409-9
			¶ 411-19
			¶ 411-21
		MC68000-8	⋆ **2896**
			879-7
			¶ 409-9
			¶ 411-19
			¶ 411-21
		M68000 (EXORmacs)	⋆ **2895**
			4713-5
	Rockwell	**R68000**	⋆ **2987**
			⋆ **2989**
			879-8
	Signetics	SCN68000	849-35
			879-9
	Thomson	EF68000	879-10
		EF68000-10	879-11
		EF68000-12	879-12
		EF68000-16	879-13
		EF68000-8	879-14
		MKB68000	853-12
			879-15

(Continued)

Base Number	Source	Device	Page-Line
68000	Thomson		(Cont'd)
		MK68000	853-13
		MK68000-10	879-17
		MK68000-4	879-18
		MK68000-6	879-19
		MK68000-8	879-20
		TS68000	⋆ **3281**
			881-5
68000ML10			
	DUAL	CPU68000ML10	
			4833-8
68008	**Motorola**	**MC68008**	⋆ **2896**
			833-2
			879-22
	PEP-Modular		
		MPM68008	4827-9
	Thomson	EF68008	879-23
		EF68008-10	841-18
		EF68008-8	841-19
		MK68008	853-14
6801	**GoldStar**	**GL6801**	⋆ **2701**
			1199-3
	Motorola	**MC6801**	⋆ **2900**
			833-3
			866-121
			¶ 408-8
			¶ 409-32
			¶ 411-18
		MC6801-1	⋆ **2900**
			866-122
			¶ 408-8
			¶ 409-32
			¶ 411-18
		MC6801C	⋆ **2900**
			866-123
			¶ 408-8
			¶ 409-32
			¶ 411-18
	Thomson	EF6801	867-4
6801S5	Hitachi	HD6801S5	825-23
6801U4			
	Motorola	**MC6801U4**	⋆ **2900**
			833-4
			867-1
		MC6801U4-1	⋆ **2900**
			833-5
			867-2
6801V0	Hitachi	HD6801V0	825-24
68010	Cambridge	UNIVAX68010	4839-14
	Motorola	**MC68010**	⋆ **2896**
			853-11
			879-24
	Signetics	SCN68010	879-25
	Thomson	MK68010	853-15
680190	Hitachi	HD680190	825-26
6802	**Motorola**	**MC6802**	⋆ **2902**
			833-6
			867-109
		MC6802NS	⋆ **2902**
			867-110
	Thomson	EF6802	867-113
68020	Microbar	GPC68020	4841-22
		MT68020	4841-23
		MT68020A	4839-13
	Motorola	**MC68020**	⋆ **2896**
			853-25
			881-6
			¶ 409-24
			¶ 411-1
	STI	**STEL68020**	⋆ **3213**
			4841-25
6803	Hitachi	HD6803	825-27
		HD6803-1	825-28
	Motorola	**MC6803**	⋆ **2900**
			833-7
			867-47
			¶ 411-18
		MC6803-1	⋆ **2900**
			867-48
			¶ 411-18
		MC6803C	⋆ **2900**
			867-49
			¶ 411-18
	Thomson	EF6803	867-54
	Toshiba	**T6803**	⋆ **3306**
			1123-21

Base Number	Source	Device	Page-Line
6803U4			
	Motorola	**MC6803U4**	⋆ **2900**
			833-9
			867-50
		MC6803U4-1	⋆ **2900**
			867-3
	Thomson	EF6803U4	867-55
68030	**Motorola**	**MC68030**	⋆ **2895**
			853-26
6804J1	**Motorola**	**MC6804J1**	⋆ **2901**
			833-10
			867-12
6804J2	**Motorola**	**MC6804J2**	⋆ **2901**
			833-11
			867-13
	Thomson	EF6804J2	841-20
			867-16
6804P2	**Motorola**	**MC6804P2**	⋆ **2901**
			833-12
			867-14
	Thomson	EF6804P2	841-21
			867-17
6805	**Motorola**	**MPU6805EVB**	
			⋆ **4284**
			⋆ **4291**
			4713-4
	Onset	CPU6805A	4805-7
6805E2	**GE/RCA**	**CDP6805E2**	⋆ **2641**
			821-33
			867-26
			¶ 410-26
			¶ 412-29
6805E3	**GE/RCA**	**CDP6805E3**	⋆ **2641**
			823-1
			867-86
			¶ 410-26
6805F2	**GE/RCA**	**CDP6805F2**	⋆ **2641**
			823-2
			867-20
			¶ 409-17
6805G2	**GE/RCA**	**CDP6805G2**	⋆ **2641**
			823-3
			867-21
			¶ 408-16
			¶ 410-34
6805K3	Motorola	MC6805K3	867-11
6805P2	**Motorola**	**MC6805P2**	⋆ **2901**
			833-15
			867-60
	Thomson	EF6805P2	867-5
6805P4	Thomson	EF6805P4	867-6
6805P6	**Motorola**	**MC6805P6**	⋆ **2901**
			833-16
			867-61
	Thomson	EF6805P6	867-7
6805R2	**Motorola**	**MC6805R2**	⋆ **2901**
			833-17
			867-57
			¶ 411-9
	Thomson	EF6805R2	867-84
6805R3	**Motorola**	**MC6805R3**	⋆ **2901**
			833-18
			867-65
	Thomson	EF6805R3	841-22
6805S1	Hitachi	HD6805S1	825-29
6805S2	**Motorola**	**MC6805S2**	⋆ **2901**
			833-19
			867-9
			¶ 411-9
6805S3	**Motorola**	**MC6805S3**	⋆ **2901**
			833-20
			867-10
6805S6	Hitachi	HD6805S6	825-30
6805T2	Hitachi	HD6805T2	825-31
	Thomson	EF6805T2	867-18
6805U1			
	Hitachi	HD6805U1	825-32
6805U2			
	Motorola	**MC6805U2**	⋆ **2901**
			833-22
			867-62
	Thomson	EF6805U2	867-8

Base Number	Source	Device	Page-Line
6805U3			
	Motorola	**MC6805U3**	⋆ **2901**
			833-23
			867-63
	Thomson	EF6805U3	867-64
6805V1	Hitachi	HD6805V1	825-33
6805W0			
	Hitachi	HD6805W0	825-34
6805W1			
	Hitachi	HD6805W1	825-35
680581	Hitachi	HD680581	825-36
68070	Signetics	SCC68070	879-33
6808	Hitachi	HD6808	867-114
	Thomson	EF6808	867-117
6809	Hitachi	HD6809	825-37
			867-99
		HD6809E	825-38
	Motorola	**MC6809**	⋆ **2902**
			833-25
			867-102
			¶ 408-13
			¶ 411-10
			¶ 411-7
		MC6809E	⋆ **2902**
			833-26
			867-90
			¶ 408-13
			¶ 411-10
			¶ 411-7
	Thomson	EF6809	867-105
		EF6809E	867-93
	TLIndustries		
		MIKUL 6809-6	4805-13
681	AD	RTI681	4884-29
	Motorola	MC681	654-8
	RTC	MS681	1119-94
6810	Fairchild	F6810	1348-66
	IntSolutions	IS6810	4827-11
		VME6810	4839-34
	Motorola	**MCM6810**	⋆ **2902**
			1348-68
	Thomson	EF6810	1348-69
681488	Fairchild	F681488	884-122
68153	**Motorola**	**MC68153**	⋆ **2898**
			879-29
			888-81
68154	Signetics	SCB68154	887-6
68155	Signetics	SCB68155	887-5
6816	Motorola	MEX6816-22S	4847-28
	Samsung	KM6816-15	1358-19
		KM6816-20	1358-57
68172	**Signetics**	**SCB68172**	⋆ **3066**
			879-85
68175	Signetics	SCB68175	887-4
6818	**GE/RCA**	**CDP6818**	⋆ **2642**
			867-142
68184	**Motorola**	**MC68184**	⋆ **2897**
			879-27
			885-71
68194	Motorola	MC68194	879-31
			885-72
682	Motorola	MC682	654-87
	PacificM	M682	4841-8
		M682K	4841-9
		V682	4845-3
	RTC	MS682	1119-95
	Xycom	XVME682	4891-13
68200	Thomson	MK68200	851-18
			879-21
6821	Hitachi	HD6821	868-41
	Motorola	**MC6821**	⋆ **2902**
			868-46
			889-27
			¶ 415-27
	Thomson	EF6821	868-49
			889-30
6822	Motorola	MC6822	868-32
6823	**GE/RCA**	**CDP6823**	⋆ **2642**
			868-35

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
68230	**Motorola**	**MC68230**	⋆ **2898**
			889-18
			¶ 412-5
			¶ 412-6
		MC68230-12	⋆ **2898**
			879-70
			¶ 412-5
			¶ 412-6
	Thomson	EF68230-10	879-73
		EF68230-8	879-74
		MK68230-10	⋆ **3279**
			879-75
		MK68230-8	⋆ **3279**
			879-76
68230L10			
	Motorola	MC68230L10	879-71
68230L8			
	Motorola	MC68230L8	879-72
683	Motorola	MC683	654-81
	RTC	MS683	1119-96
6831	Toshiba	T6831	1122-109
68316	Fairchild	F68316	1389-41
68321	OKI	MSM68321	888-89
68332	Fairchild	F68332	1389-104
68345	Thomson	MK68345	879-56
		MK68345-12	879-57
		MK68345-15	879-58
		MK68345-20	879-59
6835	Panasonic	DN6835	692-70
6837	Panasonic	DN6837	692-71
6838	Panasonic	DN6838	692-72
6839	Panasonic	DN6839	692-73
684	Motorola	MC684	654-17
6840	GoldStar	GL6840	1199-99
		GM6840	⋆ **2701**
			1199-107
	Hitachi	HD6840	868-58
	Motorola	**MC6840**	⋆ **2902**
			868-61
		MC6840M	⋆ **2902**
			868-62
	Thomson	EF6840	868-65
6842	Motorola	MPQ6842	867-138
6843	Hitachi	HD6843	868-22
68430	Signetics	SCB68430	879-48
6844	Hitachi	HD6844	868-13
	Motorola	**MC6844**	⋆ **2902**
			868-16
			¶ 409-1
			¶ 411-17
			¶ 411-23
		MC6844M	⋆ **2902**
			868-17
			¶ 409-1
			¶ 411-17
			¶ 411-23
68440	**Motorola**	**MC68440**	⋆ **2897**
			879-50
			883-79
	Thomson	EF68440	879-51
			883-80
68442	**Motorola**	**MC68442**	⋆ **2897**
			879-49
6845	Gould	S6845E	882-40
	Hitachi	HD6845	867-149
	Motorola	**MC6845**	⋆ **2903**
			882-41
	Unicorn	UC6845	882-45
		UC6845E	882-46
		UC6845R	882-47
	UMC	UM6845	867-152
		UM6845A	867-153
		UM6845B	867-154
		UM6845E	867-155
		UM6845EA	868-1
		UM6845EB	868-2
		UM6845R	868-3
		UM6845RA	868-4
		UM6845RB	868-5
68450	Hitachi	HD68450-10	879-43
		HD68450-4	879-44
		HD68450-6	879-45
		HD68450-8	879-46
	Motorola	**MC68450**	⋆ **2897**
			879-47
68451	**Motorola**	**MC68451**	⋆ **2897**
			879-64
			¶ 445-32
	Thomson	MK68451	879-65
68452	**Motorola**	**MC68452**	⋆ **2898**
			879-28
			881-80
68459	**Signetics**	**SCB68459**	⋆ **3064**
			879-41
6846	Thomson	EF6846	868-70
68461	Motorola	MC68461	889-12
6847	**Motorola**	**MC6847**	⋆ **2903**
			868-89
			879-84
			883-19
			1127-26
			¶ 408-13
			¶ 408-8
			¶ 412-7
68483	Thomson	EF68483	879-42
685	AMD	AM685L	1109-33
			¶ 434-19
		AM685M	1109-34
			¶ 434-19
	Fairchild	μA685	1109-36
	Motorola	MC685	654-13
6850	Fairchild	F6850	1009-2
	Hitachi	HD6850	867-128
	Motorola	**MC6850**	⋆ **2902**
			867-131
			888-69
			1009-5
			¶ 411-19
			¶ 423-33
	Thomson	EF6850	867-134
			888-72
			1009-6
6852	Hitachi	HD6852	868-75
	Motorola	**MC6852**	⋆ **2902**
			868-78
			889-60
			1011-14
	Thomson	EF6852	868-81
			889-61
6853	**GE/RCA**	**CDP6853**	⋆ **2642**
			865-36
6854	**Motorola**	**MC6854**	⋆ **2902**
			867-120
	Thomson	EF6854	867-123
68540	Thomson	MK68540	879-55
6855	Motorola	MC6855	868-18
6856	Fairchild	F6856	1011-10
68561	**Rockwell**	**R68561**	⋆ **2989**
			885-89
68562	**Signetics**	**SCN68562**	⋆ **3060**
			879-39
68564	Thomson	EF68564	879-80
		MK68564	⋆ **3280**
			879-81
6859	**Motorola**	**MC6859**	⋆ **2903**
			691-73
			868-9
68590	**Thomson**	**MK68590**	⋆ **3286**
			879-60
			883-100
68591	Thomson	MK68591	883-103
68592	Thomson	MK68592	879-82
686	AMD	AM686C	688-93
			1109-49
			¶ 434-19
		AM686M	688-94
			1109-35
			¶ 434-19
	Motorola	MC686	654-95
			1394-27
68605	**Motorola**	**MC68605**	⋆ **2898**
			879-86
			888-15
			¶ 424-5
68606	**Motorola**	**MC68606**	⋆ **2898**
			886-5
68641	Motorola	MC68641	879-63
68652	**Motorola**	**MC68652-2**	⋆ **2898**
			1010-54
			¶ 413-29
			¶ 416-24
	Signetics	SCN68652	1010-56
68653	Motorola	MC68653	983-3
			¶ 416-24
	Signetics	SCN68653	983-5
68661	**Motorola**	**MC68661**	⋆ **2898**
			879-37
			¶ 413-29
			¶ 416-24
		MC68661A	⋆ **2898**
			882-4
			1009-73
			¶ 413-29
			¶ 416-24
		MC68661B	⋆ **2898**
			882-5
			1009-85
			¶ 413-29
			¶ 416-24
		MC68661C	⋆ **2898**
			882-6
			1009-84
			¶ 413-29
			¶ 416-24
	Signetics	SCN68661	1009-86
		SCN68661B	883-85
		SCN68661C	883-86
68681	**Motorola**	**MC68681**	⋆ **2898**
			879-87
			1009-64
			¶ 411-14
	Signetics	**SCN68681**	⋆ **3054**
			1009-66
		SCN68681C	⋆ **3054**
			879-88
687	AMD	AM687AL	1111-44
			¶ 434-19
		AM687AM	1111-19
			¶ 434-19
		AM687L	1111-45
			¶ 434-19
		AM687M	1111-21
			¶ 434-19
	Fairchild	μA687	1111-22
		μA687A	1111-20
6870	Motorola	MC6870	867-145
68701	Motorola	MC68701	867-31
			¶ 411-18
			¶ 413-16
			¶ 413-6
		MC68701-1	867-32
			¶ 411-18
			¶ 413-16
			¶ 413-6
		MC68701C	867-33
			¶ 411-18
			¶ 413-16
			¶ 413-6
		MC68701C-1	867-34
			¶ 411-18
			¶ 413-16
			¶ 413-6
68701U4			
	Motorola	MC68701U4	833-29
			867-35
			¶ 413-16
68701U5			
	Motorola	MC68701U5	867-36
68704P2			
	Motorola	**MC68704P2**	⋆ **2901**
			867-37
68705P3			
	Motorola	**MC68705P3**	⋆ **2901**
			833-30
			867-38
			¶ 413-8
68705P5			
	Motorola	**MC68705P5**	⋆ **2901**
			833-31
			867-39
68705R3			
	Motorola	**MC68705R3**	⋆ **2901**
			833-32
			867-40
			867-44
68705R5			
	Motorola	**MC68705R5**	⋆ **2901**
			833-33
			867-41
68705S3			
	Motorola	**MC68705S3**	⋆ **2901**
			833-34
68705U3			
	Motorola	**MC68705U3**	⋆ **2901**
			833-35
			867-42
			¶ 408-10
			¶ 413-8
68705U5			
	Motorola	**MC68705U5**	⋆ **2901**
			833-36
			867-43
6871	Motorola	MC6871	867-146
6875	Motorola	MC6875	867-140
			¶ 414-4
			¶ 415-37
		MC6875A	867-141
			¶ 414-4
			¶ 415-37
688	AllenSys	FX688	4839-15
	Motorola	MC688	654-39
			¶ 438-1
6880	**Motorola**	**MC6880**	⋆ **2951**
			994-53
		MC6880A	⋆ **2951**
			867-136
68802	**Rockwell**	**R68802**	⋆ **2989**
			885-41
6881	Motorola	MC6881	868-91
6882	Motorola	MC6882A	868-99
		MC6882B	868-100
68824	**Motorola**	**MC68824**	⋆ **2897**
			879-83
			885-73
6883	Motorola	MC6883	868-71
6885	**Motorola**	**MC6885**	⋆ **2951**
			868-93
68851	**Motorola**	**MC68851**	⋆ **2897**
			881-9
			999-97
6886	**Motorola**	**MC6886**	⋆ **2951**
			868-94
6887	**Motorola**	**MC6887**	⋆ **2951**
			868-95
6888	**Motorola**	**MC6888**	⋆ **2951**
			868-96
68881	**Motorola**	**MC68881**	⋆ **2896**
			881-8
68882	**Motorola**	**MC68882**	⋆ **2896**
			889-5
6889	**Motorola**	**MC6889**	⋆ **2951**
			689-100
			867-137
			995-7
689	Motorola	MC689	654-9
6890	**Motorola**	**MC6890**	⋆ **2903**
			868-7
			¶ 411-32
		MC6890A	⋆ **2903**
			868-8
			¶ 411-32
68901	**Motorola**	**MC68901**	⋆ **2898**
			879-66
			¶ 416-16
	Thomson	EF68901	879-67
		MK68901	879-68
68905	Signetics	SCC68905	879-61
68906	Signetics	SCC68906	879-62
68930	**Thomson**	**TS68930**	⋆ **3287**
			645-117
68931	**Thomson**	**TS68931**	⋆ **3287**
			645-119
68950	**Thomson**	**TS68950**	⋆ **3288**
			1195-92
68951	**Thomson**	**TS68951**	⋆ **3288**
			1195-93

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
68952	**Thomson**	**TS68952**	⋆ **3288**
			1195-94
6898	**Motorola**	**MC6898**	⋆ **2902**
			881-86
69	RCIData	CMC69/04	4813-3
		CMC69/15	4813-1
69CE72	TI	SMJ69CE72-30	1370-17
		SMJ69CE72-40	1370-23
		SMJ69CE72-55	1370-31
690	Maxim	MAX690C	888-23
		MAX690M	888-24
	Motorola	MC690	654-4
6900	NEC	μPD6900	950-3
6901	**GoldStar**	**GL6901**	⋆ **2701**
			1198-20
691	Maxim	MAX691C	888-25
6912	OKI	MSM6912	1195-40
	Panasonic	AN6912	1114-43
6917	OKI	MSM6917	1193-5
692	Maxim	MAX692	888-26
6920	OKI	MSM6920	1198-130
6926	OKI	MSM6926	1196-47
6927	OKI	MSM6927	1196-46
693	**AD**	**AD693**	⋆ **2444**
			1228-108
	Maxim	MAX693	888-27
6932	OKI	MSM6932AS	1192-71
6933	OKI	MSM6933AS	1192-110
6945	OKI	MSM6945	1198-131
6946	OKI	MSM6946	1196-24
6947	OKI	MSM6947	1196-25
6950	NEC	μPD6950	925-28
	OKI	MSM6950	1192-7
6962	OKI	MSM6962RS	1192-72
6963	OKI	MSM6963	1193-11
6992	OKI	MSM6992	646-9
			881-62
7	Burr-Brown	PWR7XX	1220-145
	Datel	**SHM7MC**	⋆ **2577**
			1228-4
	Octagon	Sup7	4893-44
		SUP-7	4865-30
	Supertex	DC7	637-104
	TeledyneC	CAG7	908-73
	Zendex	ZX7XX	4857-34
7C1024	**GoldStar**	**GM7C1024-60**	
			⋆ **2692**
			1344-60
		GM7C1024-80	
			⋆ **2692**
			1344-65
7C103	VLSI Tech	VL7C103	1197-24
7C122	**Cypress**	**CY7C122-15C**	
			⋆ **2561**
			⋆ **2564**
			1349-37
		CY7C122-25C	
			⋆ **2561**
			⋆ **2564**
			1349-51
		CY7C122-25M	
			⋆ **2561**
			⋆ **2564**
			1349-52
		CY7C122-35C	
			⋆ **2561**
			⋆ **2564**
			1349-60
		CY7C122-35M	
			⋆ **2561**
			⋆ **2564**
			1349-61
	VLSI Tech	VT7C122	1349-40
		VT7C122-15	1349-41
		VT7C122-25	1349-57
		VT7C122-35	1349-66
7C123	**Cypress**	**CY7C123-12C**	
			⋆ **2561**
			⋆ **2564**
			1349-34
		CY7C123-12M	
			⋆ **2561**
			⋆ **2564**
			1349-35

(Continued)

Base Number	Source	Device	Page-Line
7C123	**Cypress**		**(Cont'd)**
		CY7C123-15M	
			⋆ **2561**
			⋆ **2564**
			1349-42
		CY7C123-20M	
			⋆ **2561**
			⋆ **2564**
			1349-49
		CY7C123-7C	⋆ **2561**
			⋆ **2564**
			1349-18
7C128	**Cypress**	**CY7C128-25C**	
			⋆ **2561**
			⋆ **2564**
			1355-21
		CY7C128-35C	
			⋆ **2561**
			⋆ **2564**
			1355-48
		CY7C128-45C	
			⋆ **2561**
			⋆ **2564**
			1355-82
		CY7C128-45M	
			⋆ **2561**
			⋆ **2564**
			1355-83
		CY7C128-55C	
			⋆ **2561**
			⋆ **2564**
			1356-24
		CY7C128-55M	
			⋆ **2561**
			⋆ **2564**
			1356-25
7C130	**Cypress**	**CY7C130-35C**	
			⋆ **2561**
			⋆ **2564**
			1354-2
		CY7C130-45C	
			⋆ **2561**
			⋆ **2564**
			1354-7
		CY7C130-45M	
			⋆ **2561**
			⋆ **2564**
			1354-8
		CY7C130-55C	
			⋆ **2561**
			⋆ **2564**
			1354-11
		CY7C130-55M	
			⋆ **2561**
			⋆ **2564**
			1354-13
7C132	**Cypress**	**CY7C132-35C**	
			⋆ **2562**
			⋆ **2564**
			1355-78
		CY7C132-45C	
			⋆ **2562**
			⋆ **2564**
			1356-19
		CY7C132-45M	
			⋆ **2562**
			⋆ **2564**
			1356-20
		CY7C132-55C	
			⋆ **2562**
			⋆ **2564**
			1356-62
		CY7C132-55M	
			⋆ **2562**
			⋆ **2564**
			1356-63
7C140	**Cypress**	**CY7C140-35C**	
			⋆ **2564**
			1354-1
		CY7C140-45C	
			⋆ **2564**
			1354-5
		CY7C140-45M	
			⋆ **2564**
			1354-6

(Continued)

Base Number	Source	Device	Page-Line
7C140	**Cypress**		**(Cont'd)**
		CY7C140-55C	
			⋆ **2564**
			1354-9
		CY7C140-55M	
			⋆ **2564**
			1354-10
7C142	**Cypress**	**CY7C142-35C**	
			⋆ **2564**
			1355-70
		CY7C142-45C	
			⋆ **2564**
			1354-82
		CY7C142-45M	
			⋆ **2564**
			1356-11
		CY7C142-55C	
			⋆ **2564**
			1356-51
		CY7C142-55M	
			⋆ **2564**
			1356-52
7C147	**Cypress**	**CY7C147-25C**	
			⋆ **2562**
			⋆ **2564**
			1359-30
		CY7C147-35C	
			⋆ **2562**
			⋆ **2564**
			1359-42
		CY7C147-35M	
			⋆ **2562**
			⋆ **2564**
			1359-43
		CY7C147-45C	
			⋆ **2562**
			⋆ **2564**
			1359-57
		CY7C147-45M	
			⋆ **2562**
			⋆ **2564**
			1359-58
7C148	**Cypress**	**CY7C148-25C**	
			⋆ **2562**
			⋆ **2564**
			1352-24
		CY7C148-35C	
			⋆ **2562**
			⋆ **2564**
			1352-42
		CY7C148-35M	
			⋆ **2562**
			⋆ **2564**
			1352-43
		CY7C148-45C	
			⋆ **2562**
			⋆ **2564**
			1352-64
		CY7C148-45M	
			⋆ **2562**
			⋆ **2564**
			1352-65
7C149	**Cypress**	**CY7C149-25C**	
			⋆ **2564**
			1352-25
		CY7C149-35C	
			⋆ **2564**
			1352-44
		CY7C149-35M	
			⋆ **2564**
			1352-45
		CY7C149-45C	
			⋆ **2564**
			1352-66
		CY7C149-45M	
			⋆ **2564**
			1352-67
7C150	**Cypress**	**CY7C150-15C**	
			⋆ **2562**
			⋆ **2564**
			1352-13
		CY7C150-25C	
			⋆ **2562**
			⋆ **2564**
			1352-29

(Continued)

Base Number	Source	Device	Page-Line
7C150	**Cypress**		**(Cont'd)**
		CY7C150-25M	
			⋆ **2562**
			⋆ **2564**
			1352-30
		CY7C150-35C	
			⋆ **2562**
			⋆ **2564**
			1352-49
		CY7C150-35M	
			⋆ **2562**
			⋆ **2564**
			1352-50
7C161	**Cypress**	**CY7C161-25C**	
			⋆ **2562**
			1373-1
		CY7C161-35C	
			⋆ **2562**
			1374-39
		CY7C161-35M	
			⋆ **2562**
			1374-40
		CY7C161-45C	
			⋆ **2562**
			1375-35
		CY7C161-45M	
			⋆ **2562**
			1375-36
7C162	**Cypress**	**CY7C162-25C**	
			⋆ **2562**
			1373-2
		CY7C162-35C	
			⋆ **2562**
			1374-41
		CY7C162-35M	
			⋆ **2562**
			1374-42
		CY7C162-45C	
			⋆ **2562**
			1375-37
		CY7C162-45M	
			⋆ **2562**
			1375-38
7C164	**Cypress**	**CY7C164-25C**	
			⋆ **2562**
			1372-50
		CY7C164-35C	
			⋆ **2562**
			1373-68
		CY7C164-35M	
			⋆ **2562**
			1373-69
		CY7C164-45C	
			⋆ **2562**
			1374-73
		CY7C164-45M	
			⋆ **2562**
			1374-74
7C166	**Cypress**	**CY7C166-25C**	
			⋆ **2562**
			1372-69
		CY7C166-35C	
			⋆ **2562**
			1374-8
		CY7C166-35M	
			⋆ **2562**
			1374-9
		CY7C166-45C	
			⋆ **2562**
			1375-9
		CY7C166-45M	
			⋆ **2562**
			1375-10
7C167	**Cypress**	**CY7C167-25C**	
			⋆ **2562**
			1370-64
		CY7C167-35C	
			⋆ **2562**
			1371-1
		CY7C167-35M	
			⋆ **2562**
			1371-2
		CY7C167-45C	
			⋆ **2562**
			1371-25
		CY7C167-45M	
			⋆ **2562**
			1371-26

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7C167	**Cypress**		**(Cont'd)**
		CY7C167L-25C	
		★ **2562**	1370-65
		CY7C167L-35C	
		★ **2562**	1371-3
		CY7C167L-45C	
		★ **2562**	1371-27
7C168	**Cypress**	**CY7C168-15C**	
		★ **2562**	1361-7
		CY7C168-25C	
		★ **2562**	1361-67
		CY7C168-25M	
		★ **2562**	1361-68
		CY7C168-35C	
		★ **2562**	1362-67
		CY7C168-35M	
		★ **2562**	1362-68
		CY7C168-45C	
		★ **2562**	1363-71
		CY7C168-45M	
		★ **2562**	1363-72
		CY7C168L-25C	
		★ **2562**	1361-69
		CY7C168L-35C	
		★ **2562**	1362-69
		CY7C168L-45C	
		★ **2562**	1363-73
7C169	**Cypress**	**CY7C169-15C**	
		★ **2562**	1361-8
		CY7C169-25C	
		★ **2562**	1361-70
		CY7C169-25M	
		★ **2562**	1361-71
		CY7C169-35C	
		★ **2562**	1362-70
		CY7C169-35M	
		★ **2562**	1362-71
		CY7C169-40C	
		★ **2562**	1363-67
		CY7C169-40M	
		★ **2562**	1363-68
		CY7C169L-25C	
		★ **2562**	1361-72
		CY7C169L-35C	
		★ **2562**	1362-72
		CY7C169L-45C	
		★ **2562**	1363-74
7C170	**Cypress**	**CY7C170-25C**	
		★ **2562**	1362-13
		CY7C170-35C	
		★ **2562**	1363-22
		CY7C170-35M	
		★ **2562**	1363-23
		CY7C170-45C	
		★ **2562**	1364-15
		CY7C170-45M	
		★ **2562**	1364-16

Base Number	Source	Device	Page-Line
7C171	**Cypress**	**CY7C171-25C**	
		★ **2562**	1362-22
		CY7C171-25M	
		★ **2562**	1362-23
		CY7C171-35C	
		★ **2562**	1363-34
		CY7C171-35M	
		★ **2562**	1363-35
		CY7C171-45C	
		★ **2562**	1364-24
		CY7C171-45M	
		★ **2562**	1364-25
		CY7C171L-25C	
		★ **2562**	1361-73
		CY7C171L-35C	
		★ **2562**	1362-73
		CY7C171L-45C	
		★ **2562**	1363-75
7C172	**Cypress**	**CY7C172-15**	★ **2562**
		★ **2564**	1361-18
		CY7C172-25C	
		★ **2562**	
		★ **2564**	1362-24
		CY7C172-25M	
		★ **2562**	
		★ **2564**	1362-25
		CY7C172-35C	
		★ **2562**	
		★ **2564**	1363-36
		CY7C172-35M	
		★ **2562**	
		★ **2564**	1363-37
		CY7C172-45C	
		★ **2562**	
		★ **2564**	1364-26
		CY7C172-45M	
		★ **2562**	
		★ **2564**	1364-27
		CY7C172L-25C	
		★ **2562**	
		★ **2564**	1361-74
		CY7C172L-35C	
		★ **2562**	
		★ **2564**	1362-74
		CY7C172L-45C	
		★ **2562**	
		★ **2564**	1363-76
7C185	**Cypress**	**CY7C185-35C**	
		★ **2562**	1366-40
		CY7C185-45C	
		★ **2562**	1366-77
		CY7C185-45M	
		★ **2562**	1366-78
		CY7C185-55C	
		★ **2562**	1367-26
		CY7C185-55M	
		★ **2562**	1367-27
7C186	**Cypress**	**CY7C186-35C**	
		★ **2562**	1366-41
		CY7C186-45C	
		★ **2562**	1366-79

(Continued)

Base Number	Source	Device	Page-Line
7C186	**Cypress**		**(Cont'd)**
		CY7C186-45M	
		★ **2562**	1366-80
		CY7C186-55C	
		★ **2562**	1367-28
		CY7C186-55M	
		★ **2562**	1367-29
7C187	**Cypress**	**CY7C187-25C**	
		★ **2562**	1381-36
		CY7C187-35C	
		★ **2562**	1381-64
		CY7C187-35M	
		★ **2562**	1381-65
		CY7C187-45C	
		★ **2562**	1382-12
		CY7C187-45M	
		★ **2562**	1382-13
		CY7C187-55M	
		★ **2562**	1382-35
7C189	**Cypress**	**CY7C189-15C**	
		★ **2562**	
		★ **2564**	1347-49
		CY7C189-25C	
		★ **2562**	
		★ **2564**	1347-55
		CY7C189-25M	
		★ **2562**	
		★ **2564**	1347-56
		CY7C189C	★ **2562**
		★ **2564**	630-40
7C190	**Cypress**	**CY7C190-25C**	
		★ **2562**	
		★ **2564**	1347-57
		CY7C190-25M	
		★ **2562**	
		★ **2564**	1347-58
		CY7C190C	★ **2562**
		★ **2564**	630-41
		CY7C190M	★ **2562**
		★ **2564**	630-42
7C191	Cypress	CY7C191-25C	1382-85
		CY7C191-35C	1383-17
		CY7C191-35M	1383-18
		CY7C191-45C	1383-60
		CY7C191-45M	1383-61
7C192	Cypress	CY7C192-25C	1382-86
		CY7C192-35C	1383-19
		CY7C192-35M	1383-20
		CY7C192-45C	1383-62
		CY7C192-45M	1383-63
7C194	Cypress	CY7C194-25C	1382-79
		CY7C194-35C	1383-10
		CY7C194-35M	1383-11
		CY7C194-45C	1383-49
		CY7C194-45M	1383-50
7C196	Cypress	CY7C196-25C	1382-87
		CY7C196-35C	1383-21
		CY7C196-35M	1383-22
		CY7C196-45C	1383-64
		CY7C196-45M	1383-65
7C197	Cypress	CY7C197-25C	1386-53
		CY7C197-35C	1386-67
		CY7C197-35M	1386-61
		CY7C197-45C	1386-77
		CY7C197-45M	1386-78
7C198	Cypress	CY7C198-35C	1378-27
		CY7C198-45C	1378-45
		CY7C198-45M	1378-46
		CY7C198-55C	1378-64
		CY7C198-55M	1378-65

Base Number	Source	Device	Page-Line
7C199	Cypress	CY7C199-35C	1378-28
		CY7C199-45C	1378-47
		CY7C199-45M	1378-48
		CY7C199-55C	1378-66
		CY7C199-55M	1378-67
7C211	VLSI Tech	VL7C211	1197-12
7C212	**VLSI Tech**	**VL7C212A**	★ **3332**
			1196-13
7C225	**Cypress**	**CY7C225-25C**	
		★ **2565**	1317-49
		CY7C225-30C	
		★ **2565**	1317-60
		CY7C225-30M	
		★ **2565**	1317-50
		CY7C225-35M	
		★ **2565**	1317-63
		CY7C225-40C	
		★ **2565**	1317-76
		CY7C225-40M	
		★ **2565**	1317-77
7C235	**Cypress**	**CY7C235-30C**	
		★ **2565**	1319-3
		CY7C235-40C	
		★ **2565**	1319-15
		CY7C235-40M	
		★ **2565**	1319-16
7C245	**Cypress**	**CY7C245-25C**	
		★ **2565**	1320-56
		CY7C245-25WC	
		★ **2565**	1320-54
		CY7C245-25WM	
		★ **2565**	1320-57
		CY7C245-35C	
		★ **2565**	1321-18
		CY7C245-35M	
		★ **2565**	1321-1
		CY7C245-35WC	
		★ **2565**	1320-79
		CY7C245-35WM	
		★ **2565**	1320-80
		CY7C245-45C	
		★ **2565**	1321-49
		CY7C245-45M	
		★ **2565**	1321-50
		CY7C245-45WC	
		★ **2565**	1321-51
		CY7C245-45WM	
		★ **2565**	1321-52
		CY7C245A-18C	
		★ **2565**	1320-38
		CY7C245A-18WC	
		★ **2565**	1320-39
		CY7C245A-25C	
		★ **2565**	1320-58
		CY7C245A-25M	
		★ **2565**	1320-59
		CY7C245A-25WC	
		★ **2565**	1320-60
		CY7C245A-35C	
		★ **2565**	1321-2

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7C245	Cypress		(Cont'd)
		CY7C245A-35M	
		★ 2565	1321-3
		CY7C245A-35WC	
		★ 2565	1321-4
		CY7C245A-35WM	
		★ 2565	1321-5
7C251	Cypress	CY7C251-45C	
		★ 2565	1328-8
		CY7C251-45WC	
		★ 2565	1328-10
		CY7C251-55C	
		★ 2565	1328-13
		CY7C251-55M	
		★ 2565	1328-14
		CY7C251-55WC	
		★ 2565	1328-17
		CY7C251-55WM	
		★ 2565	1328-18
		CY7C251-65C	
		★ 2565	1328-23
		CY7C251-65M	
		★ 2565	1328-24
		CY7C251-65WC	
		★ 2565	1328-27
		CY7C251-65WM	
		★ 2565	1328-28
7C254	Cypress	CY7C254-45C	
		★ 2565	1328-9
		CY7C254-55C	
		★ 2565	1328-15
		CY7C254-55M	
		★ 2565	1328-16
		CY7C254-65C	
		★ 2565	1328-25
		CY7C254-65M	
		★ 2565	1328-26
7C261	Cypress	CY7C261-35C	
		★ 2565	1324-21
		CY7C261-35WC	
		★ 2565	1324-24
		CY7C261-40C	
		★ 2565	1324-35
		CY7C261-45C	
		★ 2565	1324-44
		CY7C261-45M	
		★ 2565	1324-45
		CY7C261-45WC	
		★ 2565	1324-53
		CY7C261-45WM	
		★ 2565	1324-54
		CY7C261-55C	
		★ 2565	1325-21
		CY7C261-55M	
		★ 2565	1325-22
		CY7C261-55WC	
		★ 2565	1325-30
		CY7C261-55WM	
		★ 2565	1325-31
7C263	Cypress	CY7C263-35C	
		★ 2565	1324-22
		CY7C263-35WC	
		★ 2565	1324-25
		CY7C263-40C	
		★ 2565	1324-36
		CY7C263-45C	
		★ 2565	1324-46
		CY7C263-45M	
		★ 2565	1324-47
		CY7C263-45WC	
		★ 2565	1324-55
		CY7C263-45WM	
		★ 2565	1324-56
		CY7C263-55C	
		★ 2565	1325-23
		CY7C263-55M	
		★ 2565	1325-24
		CY7C263-55WC	
		★ 2565	1325-32
		CY7C263-55WM	
		★ 2565	1325-33
7C264	Cypress	CY7C264-35C	
		★ 2565	1324-23
		CY7C264-35WC	
		★ 2565	1324-26
		CY7C264-45C	
		★ 2565	1324-48
		CY7C264-45M	
		★ 2565	1324-49
		CY7C264-45WC	
		★ 2565	1324-57
		CY7C264-45WM	
		★ 2565	1324-58
		CY7C264-55C	
		★ 2565	1325-25
		CY7C264-55M	
		★ 2565	1325-26
		CY7C264-55WC	
		★ 2565	1325-34
		CY7C264-55WM	
		★ 2565	1325-35
7C268	Cypress	CY7C268-40C	
		★ 2565	1324-41
		CY7C268-40WC	
		★ 2565	1324-39
		CY7C268-50C	
		★ 2565	1325-17
		CY7C268-50M	
		★ 2565	1325-18
		CY7C268-50WC	
		★ 2565	1325-11
		CY7C268-50WM	
		★ 2565	1325-12
		CY7C268-60C	
		★ 2565	1325-65
		CY7C268-60M	
		★ 2565	1325-66
7C268	Cypress		(Cont'd)
		CY7C268-60WC	
		★ 2565	1325-61
		CY7C268-60WM	
		★ 2565	1325-62
7C269	Cypress	CY7C269-40C	
		★ 2565	1325-10
		CY7C269-40WC	
		★ 2565	1324-40
		CY7C269-50C	
		★ 2565	1325-15
		CY7C269-50M	
		★ 2565	1325-16
		CY7C269-50WC	
		★ 2565	1325-13
		CY7C269-50WM	
		★ 2565	1325-14
		CY7C269-60C	
		★ 2565	1325-67
		CY7C269-60M	
		★ 2565	1325-68
		CY7C269-60WC	
		★ 2565	1325-63
		CY7C269-60WM	
		★ 2565	1325-64
7C271	Cypress	CY7C271-55C	
		★ 2565	1330-21
		CY7C271-55WC	
		★ 2565	1330-22
		CY7C271-65C	
		★ 2565	1330-25
		CY7C271-65M	
		★ 2565	1330-26
		CY7C271-65WC	
		★ 2565	1330-27
		CY7C271-65WM	
		★ 2565	1316-1
		CY7C271-75C	
		★ 2565	1330-36
		CY7C271-75M	
		★ 2565	1330-37
		CY7C271-75WC	
		★ 2565	1330-38
		CY7C271-75WM	
		★ 2565	1330-39
7C281	Cypress	CY7C281-30C	
		★ 2565	1319-1
		CY7C281-45C	
		★ 2565	1319-23
		CY7C281-45M	
		★ 2565	1319-24
7C282	Cypress	CY7C282-30C	
		★ 2565	1319-2
		CY7C282-45C	
		★ 2565	1319-25
		CY7C282-45M	
		★ 2565	1319-26
7C291	Cypress	CY7C291-20C	
		★ 2565	1320-40
		CY7C291-25C	
		★ 2565	1320-53
		CY7C291-25WC	
		★ 2565	1320-55
		CY7C291-35C	
		★ 2565	1320-76
		CY7C291-35M	
		★ 2565	1320-77
		CY7C291-35WC	
		★ 2565	1320-81
		CY7C291-35WM	
		★ 2565	1320-82
		CY7C291-50C	
		★ 2565	1321-62
		CY7C291-50M	
		★ 2565	1321-63
		CY7C291-50WC	
		★ 2565	1321-68
		CY7C291-50WM	
		★ 2565	1321-69
		CY7C291A-20C	
		★ 2565	1320-41
		CY7C291A-20WC	
		★ 2565	1320-42
		CY7C291A-30M	
		★ 2565	1320-70
		CY7C291A-30WM	
		★ 2565	1320-71
		CY7C291A-35C	
		★ 2565	1321-6
		CY7C291A-35M	
		★ 2565	1321-7
		CY7C291A-35WC	
		★ 2565	1321-8
		CY7C291A-35WM	
		★ 2565	1321-9
		CY7C291A-50C	
		★ 2565	1321-72
		CY7C291A-50M	
		★ 2565	1321-73
		CY7C291A-50WC	
		★ 2565	1321-74
		CY7C291A-50WM	
		★ 2565	1321-75
7C292	Cypress	CY7C292-35C	
		★ 2565	1320-78
		CY7C292-50C	
		★ 2565	1321-64
		CY7C292-50M	
		★ 2565	1321-65
		CY7C292A-20C	
		★ 2565	1320-43
		CY7C292A-20WC	
		★ 2565	1320-44
		CY7C292A-30M	
		★ 2565	1320-72

(Continued)

¶ Indicates page number in Application Note Directory.
★ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7C292	**Cypress**		**(Cont'd)**
		CY7C292A-30WM	
			* 2565
			1320-73
		CY7C292A-35C	
			* 2565
			1321-10
		CY7C292A-35M	
			* 2565
			1321-11
		CY7C292A-35WC	
			* 2565
			1321-12
		CY7C292A-35WM	
			* 2565
			1321-13
		CY7C292A-50C	
			* 2565
			1321-76
		CY7C292A-50M	
			* 2565
			1321-77
		CY7C292A-50WC	
			* 2565
			1321-78
		CY7C292A-50WM	
			* 2565
			1321-79
7C293	**Cypress**	**CY7C293A-20C**	
			* 2565
			1320-45
		CY7C293A-20WC	
			* 2565
			1320-46
		CY7C293A-30M	
			* 2565
			1320-74
		CY7C293A-30WM	
			* 2565
			1320-75
		CY7C293A-35C	
			* 2565
			1321-14
		CY7C293A-35M	
			* 2565
			1321-15
		CY7C293A-35WC	
			* 2565
			1321-16
		CY7C293A-35WM	
			* 2565
			1321-17
		CY7C293A-50C	
			* 2565
			1321-80
		CY7C293A-50M	
			* 2565
			1321-81
		CY7C293A-50WC	
			* 2565
			1321-82
		CY7C293A-50WM	
			* 2565
			1321-83
7C330	**Cypress**	**CY7C330-28WM**	
			* 4219
			4070-26
		CY7C330-33WC	
			* 4219
			4070-24
		CY7C330-40WM	
			* 4219
			4070-25
		CY7C330-50WC	
			* 4219
			4070-23
7C331	**Cypress**	**CY7C331-25WC**	
			* 4220
			4070-18
		CY7C331-30WM	
			* 4220
			4070-19
		CY7C331-35WC	
			* 4220
			4070-20
		CY7C331-40WM	
			* 4220
			4070-21

Base Number	Source	Device	Page-Line
7C401	**Cypress**	**CY7C401-10C**	
			* 2567
			1304-44
		CY7C401-10M	
			* 2567
			1304-45
		CY7C401-15C	
			* 2567
			1304-59
		CY7C401-15M	
			* 2567
			1304-60
		CY7C401-5C	* 2567
			1304-37
7C402	**Cypress**	**CY7C402-10C**	
			* 2567
			1304-82
		CY7C402-10M	
			* 2567
			1304-46
		CY7C402-15C	
			* 2567
			1304-98
		CY7C402-15M	
			* 2567
			1304-61
7C403	**Cypress**	**CY7C403-10C**	
			* 2567
			1304-47
		CY7C403-10M	
			* 2567
			1304-48
		CY7C403-15C	
			* 2567
			1304-62
		CY7C403-15M	
			* 2567
			1304-63
		CY7C403-25C	
			* 2567
			1304-73
		CY7C403-25M	
			* 2567
			1304-74
		CY7C403-5C	* 2567
			1304-38
7C404	**Cypress**	**CY7C404-10C**	
			* 2567
			1304-83
		CY7C404-10M	
			* 2567
			1304-49
		CY7C404-15C	
			* 2567
			1304-99
		CY7C404-15M	
			* 2567
			1304-64
		CY7C404-25C	
			* 2567
			1304-110
		CY7C404-25M	
			* 2567
			1304-111
7C408	**Cypress**	**CY7C408-15C**	
			* 2567
			1305-4
		CY7C408-15M	
			* 2567
			1305-5
		CY7C408-25C	
			* 2567
			1305-14
		CY7C408-25M	
			* 2567
			1305-15
		CY7C408-35C	
			* 2567
			1305-18
		CY7C408-35M	
			* 2567
			1305-19
		CY7C408C	* 2567
			1305-6
		CY7C408M	* 2567
			1305-7

Base Number	Source	Device	Page-Line
7C409	**Cypress**	**CY7C409-15C**	
			* 2567
			1305-11
		CY7C409-15M	
			* 2567
			1305-12
		CY7C409-25C	
			* 2567
			1305-16
		CY7C409-25M	
			* 2567
			1305-17
		CY7C409-35C	
			* 2567
			1305-20
		CY7C409-35M	
			* 2567
			1305-21
7C412	**Cypress**	**CY7C412-15C**	
			* 2567
			1305-73
		CY7C412-15M	
			* 2567
			1305-74
		CY7C412-25C	
			* 2567
			1305-80
		CY7C412-25M	
			* 2567
			1305-81
		CY7C412-30C	
			* 2567
			1305-86
		CY7C412-30M	
			* 2567
			1305-87
		CY7C412-40C	
			* 2567
			1305-88
		CY7C412-40M	
			* 2567
			1305-89
		CY7C412-65C	
			* 2567
			1305-90
		CY7C412-65M	
			* 2567
			1305-91
7C414	**Cypress**	**CY7C414-15**	* 2567
			1306-17
		CY7C414-25	* 2567
			1306-22
		CY7C414-33	* 2567
			1306-29
7C416	**Cypress**	**CY7C416-15**	* 2567
			1306-76
		CY7C416-25	* 2567
			1306-86
		CY7C416-33	* 2567
			1306-91
7C424	Cypress	CY7C424-30C	1306-27
		CY7C424-30M	1306-28
		CY7C424-40C	1306-30
		CY7C424-40M	1306-31
		CY7C424-65C	1306-32
		CY7C424-65M	1306-33
		CY7C424C	1305-101
		CY7C424M	1305-102
7C429	Cypress	CY7C429-30C	1306-89
		CY7C429-30M	1306-90
		CY7C429-40C	1306-92
		CY7C429-65C	1306-95
		CY7C429-65M	1306-96
		CY7C429C	1306-37
		CY7C429M	1306-38
7C510	**Cypress**	**CY7C510**	* 2569
			604-93
		CY7C510C	* 2569
			603-147
		CY7C510M	* 2569
			603-148
			861-40

Base Number	Source	Device	Page-Line
7C516	**Cypress**	**CY7C516**	* 2569
			657-123
		CY7C516C	* 2569
			604-50
			644-70
			861-43
		CY7C516M	* 2569
			604-51
			644-71
			861-44
7C517	**Cypress**	**CY7C517**	* 2569
			657-124
		CY7C517C	* 2569
			604-52
			644-72
			861-45
		CY7C517M	* 2569
			604-53
			644-73
			861-46
7C901	**Cypress**	**CY7C901**	* 2569
			646-18
		CY7C901-23C	
			* 2569
			803-7
		CY7C901-27M	
			* 2569
			803-8
		CY7C901-31C	
			* 2569
			803-9
		CY7C901-32M	
			* 2569
			819-5
			860-58
		CY7C901-69C	
			* 2569
			819-6
		CY7C901-88M	
			* 2569
			819-7
			860-59
		CY7C901C	* 2569
			860-60
		CY7C901M	* 2569
			860-61
7C909	**Cypress**	**CY7C909-30C**	
			* 2569
			861-18
		CY7C909-30M	
			* 2569
			861-19
		CY7C909-40C	
			* 2569
			861-20
		CY7C909-40M	
			* 2569
			861-21
7C910	**Cypress**	**CY7C910C**	* 2569
			877-77
		CY7C910M	* 2569
			877-78
7C9101	**Cypress**	**CY7C9101**	* 2569
			877-98
		CY7C9101-24C	
			* 2569
			845-12
		CY7C9101-28M	
			* 2569
			845-13
		CY7C9101-31C	
			* 2569
			845-14
		CY7C9101-36M	
			* 2569
			845-15
		CY7C9101C	* 2569
			862-13
		CY7C9101M	* 2569
			862-14
7C911	**Cypress**	**CY7C911-30C**	
			* 2569
			861-22
		CY7C911-30M	
			* 2569
			861-23

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7C911	Cypress		(Cont'd)
		CY7C911-40C	
		⋆ 2569	
			861-24
		CY7C911-40M	
		⋆ 2569	
			861-25
7MB624			
	IDT	IDT7MB624-25	
		⋆ 2803	
			1384-72
7MC156			
	IDT	IDT7MC156-25	
		⋆ 2803	
		⋆ 2840	
			1386-59
		IDT7MC156-35	
		⋆ 2803	
		⋆ 2840	
			1386-70
7MC4001			
	IDT	IDT7MC4001-35	
		⋆ 2803	
			1388-18
		IDT7MC4001-45	
		⋆ 2803	
			1388-21
7MC4032			
	IDT	IDT7MC4032-30	
		⋆ 2803	
			1378-17
7MP156			
	IDT	IDT7MP156-25	
		⋆ 2803	
		⋆ 2841	
			1386-60
		IDT7MP156-35	
		⋆ 2803	
		⋆ 2841	
			1386-71
7MP4008			
	IDT	IDT7MP4008-45	
		⋆ 2803	
			1388-3
		IDT7MP4008-55	
		⋆ 2803	
			1388-7
7MP456			
	IDT	IDT7MP456-25	
		⋆ 2803	
			1383-1
7MP6025			
	IDT	IDT7MP6025-40	
		⋆ 2803	
			1384-42
7MP824			
	IDT	IDT7MP824	1385-76
7M134	IDT	IDT7M134S-100	
		⋆ 2804	
			1368-57
		IDT7M134S-100B	
		⋆ 2804	
			1368-58
		IDT7M134S-120	
		⋆ 2804	
			1369-17
		IDT7M134S-120B	
		⋆ 2804	
			1369-18
		IDT7M134S-140B	
		⋆ 2804	
			1369-27
		IDT7M134S-45	
		⋆ 2804	
			1367-18
		IDT7M134S-70	
		⋆ 2804	
			1367-89
		IDT7M134S-90	
		⋆ 2804	
			1368-24
		IDT7M134S-90B	
		⋆ 2804	
			1368-25
7M135	IDT	IDT7M135S-100	
		⋆ 2804	
			1377-23
		IDT7M135S-100B	
		⋆ 2804	
			1368-59
		IDT7M135S-120	
		⋆ 2804	
			1377-29
		IDT7M135S-120B	
		⋆ 2804	
			1377-30
		IDT7M135S-140B	
		⋆ 2804	
			1377-33
		IDT7M135S-45	
		⋆ 2804	
			1377-1
		IDT7M135S-70	
		⋆ 2804	
			1377-10
		IDT7M135S-90	
		⋆ 2804	
			1377-13
		IDT7M135S-90B	
		⋆ 2804	
			1377-14
7M137	IDT	IDT7M137-60	
		⋆ 2804	
			1379-12
		IDT7M137S-55	
		⋆ 2804	
			1379-3
		IDT7M137S-60	
		⋆ 2804	
			1379-9
7M144	IDT	IDT7M144S-100	
		⋆ 2804	
			1368-60
		IDT7M144S-100B	
		⋆ 2804	
			1368-61
		IDT7M144S-120	
		⋆ 2804	
			1369-19
		IDT7M144S-120B	
		⋆ 2804	
			1369-20
		IDT7M144S-140B	
		⋆ 2804	
			1369-28
		IDT7M144S-45	
		⋆ 2804	
			1367-19
		IDT7M144S-60	
		⋆ 2804	
			1367-63
		IDT7M144S-70	
		⋆ 2804	
			1367-90
		IDT7M144S-90	
		⋆ 2804	
			1368-26
		IDT7M144S-90B	
		⋆ 2804	
			1368-27
7M145	IDT	IDT7M145S-100	
		⋆ 2804	
			1377-24
		IDT7M145S-100B	
		⋆ 2804	
			1377-25
		IDT7M145S-120	
		⋆ 2804	
			1377-31
		IDT7M145S-120B	
		⋆ 2804	
			1377-32
		IDT7M145S-140B	
		⋆ 2804	
			1377-34
		IDT7M145S-45	
		⋆ 2804	
			1377-2
		IDT7M145S-60	
		⋆ 2804	
			1377-6
7M145	IDT		(Cont'd)
		IDT7M145S-70	
		⋆ 2804	
			1377-11
		IDT7M145S-90	
		⋆ 2804	
			1377-15
		IDT7M145S-90B	
		⋆ 2804	
			1377-16
7M164	Dense-Pac	DPS7M164	1382-54
7M203	IDT	IDT7M203S-100	
		⋆ 2805	
			1306-64
		IDT7M203S-100B	
		⋆ 2805	
			1306-65
		IDT7M203S-140	
		⋆ 2805	
			1306-58
		IDT7M203S-140B	
		⋆ 2805	
			1306-59
		IDT7M203S-40	
		⋆ 2805	
			1306-87
		IDT7M203S-50	
		⋆ 2805	
			1306-77
		IDT7M203S-50B	
		⋆ 2805	
			1306-78
		IDT7M203S-55	
		⋆ 2805	
			1306-84
		IDT7M203S-55B	
		⋆ 2805	
			1306-85
		IDT7M203S-65	
		⋆ 2805	
			1306-70
		IDT7M203S-65B	
		⋆ 2805	
			1306-71
7M204	IDT	IDT7M204S-100	
		⋆ 2805	
			1307-7
		IDT7M204S-100B	
		⋆ 2805	
			1307-8
		IDT7M204S-40	
		⋆ 2805	
			1307-27
		IDT7M204S-50	
		⋆ 2805	
			1307-19
		IDT7M204S-50B	
		⋆ 2805	
			1307-20
		IDT7M204S-55	
		⋆ 2805	
			1307-25
		IDT7M204S-55B	
		⋆ 2805	
			1307-26
		IDT7M204S-65	
		⋆ 2805	
			1307-13
		IDT7M204S-65B	
		⋆ 2805	
			1307-14
7M205	IDT	IDT7M205-75	
		⋆ 2805	
			1307-36
		IDT7M205-80B	
		⋆ 2805	
			1307-35
7M206	IDT	IDT7M206-75	
		⋆ 2805	
			1307-41
		IDT7M206-80B	
		⋆ 2805	
			1307-40
7M4016			
	IDT	IDT7M4016-45	
		⋆ 2803	
			1387-74
7M4017			
	IDT	IDT7M4017-45	
		⋆ 2803	
			1385-43
		IDT7M4017-60	
		⋆ 2803	
			1385-47
7M464	Dense-Pac	DPS7M464	⋆ 2578
			1374-62
		DPX7M464	1376-66
7M564	IDT	IDT7M564-20	1376-74
		IDT7M564-35	1376-75
7M6001			
	IDT	IDT7M6001-40	
		⋆ 2803	
			1378-14
		IDT7M6001-60	
		⋆ 2803	
			1378-15
7M6026			
	IDT	IDT7M6026-45	
		⋆ 2803	
			1385-44
		IDT7M6026-60	
		⋆ 2803	
			1385-48
7M624	IDT	IDT7M624S-25	
		⋆ 2803	
		⋆ 2842	
			1384-71
		IDT7M624S-30	
		⋆ 2803	
		⋆ 2842	
			1384-73
		IDT7M624S-35	
		⋆ 2803	
		⋆ 2842	
			1384-75
		IDT7M624S-45	
		⋆ 2803	
		⋆ 2842	
			1384-87
		IDT7M624S-45B	
		⋆ 2803	
		⋆ 2842	
			1384-88
			1385-63
			1387-38
		IDT7M624S-55	
		⋆ 2803	
		⋆ 2842	
			1385-3
			1385-72
			1387-41
		IDT7M624S-55B	
		⋆ 2803	
		⋆ 2842	
			1385-4
			1385-73
			1387-42
		IDT7M624S-65	
		⋆ 2803	
		⋆ 2842	
			1385-7
			1386-1
			1387-43
		IDT7M624S-65B	
		⋆ 2803	
		⋆ 2842	
			1385-8
			1386-2
			1387-44
		IDT7M624S-85	
		⋆ 2803	
		⋆ 2842	
			1385-17
			1386-12
			1387-47
		IDT7M624S-85B	
		⋆ 2803	
		⋆ 2842	
			1385-18
			1386-13
			1387-48

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7M656	IDT	IDT7M656L-100B	
		* 2803	1377-64
		IDT7M656L-25	
		* 2803	1377-41
			1378-26
			1383-9
		IDT7M656L-35	
		* 2803	1377-44
			1378-38
			1383-43
		IDT7M656L-35B	
		* 2803	1377-45
			1378-39
			1383-44
		IDT7M656L-55	
		* 2803	1377-54
		IDT7M656L-55B	
		* 2803	1377-55
		IDT7M656L-85	
		* 2803	1377-60
		IDT7M656L-85B	
		* 2803	1377-61
7M812	IDT	IDT7M812-25	
		* 2803	
		* 2844	1384-39
		IDT7M812-35	
		* 2803	
		* 2844	1384-40
		IDT7M812-45	
		* 2803	
		* 2844	1384-43
		IDT7M812S-45	
		* 2803	
		* 2844	1384-45
		IDT7M812S-55	
		* 2803	
		* 2844	1384-46
		IDT7M812S-55B	
		* 2803	
		* 2844	1384-47
		IDT7M812S-65	
		* 2803	
		* 2844	1384-48
		IDT7M812S-65B	
		* 2803	
		* 2844	1384-49
		IDT7M812S-85	
		* 2803	
		* 2844	1384-50
		IDT7M812S-85B	
		* 2803	
		* 2844	1384-51
7M824	IDT	IDT7M824	* 2803 1385-77
		IDT7M824-B	* 2803 1386-10
		IDT7M824S-45	
		* 2803	1385-59
		IDT7M824S-55	
		* 2803	1385-71
7M856	IDT	IDT7M856S-100B	
		* 2803	1379-80
		IDT7M856S-40	
		* 2803	1378-44

(Continued)

Base Number	Source	Device	Page-Line
7M856	IDT		(Cont'd)
		IDT7M856S-50	
		* 2803	1378-62
		IDT7M856S-55B	
		* 2803	1379-5
		IDT7M856S-60	
		* 2803	1379-10
		IDT7M856S-65B	
		* 2803	1379-13
		IDT7M856S-70	
		* 2803	1379-29
		IDT7M856S-75B	
		* 2803	1379-33
		IDT7M856S-85	
		* 2803	1379-50
		IDT7M856S-90B	
		* 2803	1379-53
7M864	IDT	IDT7M864L-120	1369-13
		IDT7M864L-120B	1369-14
		IDT7M864L-150	1369-70
		IDT7M864L-150B	1369-71
		IDT7M864L-200	1370-3
		IDT7M864L-200B	1370-4
		IDT7M864L-65	1367-64
		IDT7M864L-75	1368-3
		IDT7M864L-75B	1368-4
		IDT7M864L-85	1368-14
		IDT7M864L-85B	1368-16
7M912	IDT	IDT7M912-25	
		* 2844	1384-53
		IDT7M912-35	
		* 2844	1384-54
		IDT7M912-45	
		* 2844	1384-57
		IDT7M912S-100B	
		* 2844	1384-65
		IDT7M912S-45	
		* 2844	1384-58
		IDT7M912S-55	
		* 2844	1384-59
		IDT7M912S-55B	
		* 2844	1384-60
		IDT7M912S-65	
		* 2844	1384-61
		IDT7M912S-65B	
		* 2844	1384-62
		IDT7M912S-85	
		* 2844	1384-63
		IDT7M912S-85B	
		* 2844	1384-64
70	Amperex	BGY70	1123-114
	Burr-Brown	DAC70BH-COB-I	975-31
		DAC70BH-CSB-I	975-32
		PWR70	1220-136
	MCE	MCE70	1167-46
	Raytheon	RG70	675-7
70A2400			
	TI	TMS70A2400	888-29
70C00	TI	TMS70C00	868-101

Base Number	Source	Device	Page-Line
70C02	TI	TMS70C02	841-6
70C20	TI	TMS70C20	868-102
70C40	TI	TMS70C40	868-108
			868-68
70C42	TI	TMS70C42	841-7
70C95	National	MM70C95	606-50
70C96	Micrel	MM70C96	608-75
	National	MM70C96	608-77
70C97	National	MM70C97	606-51
70C98	Micrel	MM70C98	608-76
	National	MM70C98	608-78
70E18	Raytheon	CGA70E18	* 4298 4064-15
70HB000			
	OKI	70HB000	4057-39
70H000			
	OKI	70H000	4057-40
70P162	TI	SE70P162	841-4
70V000	OKI	70V000	4057-38
700	AMCC	Q700	4041-6
	Burr-Brown	DAC700B	* 2541 974-2
		DAC700C	* 2541 973-25
		DAC700K	* 2541 974-3
		DAC700L	* 2541 973-26
		DAC700S	* 2541 974-17
	CMD ASIC	CSC700	* 4216 4082-12
	Fujitsu	B700B	* 4230 4046-3
	ITT	TCA700	1118-127
	Micom Int	NP700	4881-12
	Micro-Link	STD700	4874-36
	MMI	MLA700	4055-3
	Motorola	BCA700ETL	* 4285 4055-37
	Sophia	SA700-Z80	4717-17
		SA700-68K	4717-18
		SA700-8085	4717-19
	TeledyneS	TSC700A	980-36
7000	AT&T	T7000A	* 2471 982-17
	Fujitsu	ET7000H	4047-8
	GIM	PIC7000	823-11 868-104
			¶ 408-21
			¶ 408-32
	Motorola	MCA7000ECL	* 4287 4056-14
	SMS	OMTI7000	4869-30
	Signetics	TDA7000	* 3107 1121-114
	TI	EVM7000	4719-3
		TMS7000	841-8 868-105
			¶ 410-3
			¶ 410-4
	Western	WD7000-ASC	4870-10
70000	Sierra	SC70000	4086-2 4107-15
70008	NEC	µPD70008	874-54
		µPD70008A	874-55
7001	AT&T	T7001	* 2472 983-7 1197-68
			¶ 411-3
	GIM	PIC7001	868-116
	Marconi	MA7001	1305-72
	NCM	NCM7001XZ	4056-47 4056-48
	NEC	µPD7001	870-95 888-32 924-44
	Sprague	ULN7001	* 3203 1107-116
		ULN7001A	* 3203 1002-22

Base Number	Source	Device	Page-Line
7002	NEC	µPD7002	870-96 888-33 933-24
	Sprague	ULN7002A	* 3203 1002-42 1107-117
	TI	TMS7002	841-9
7003	NEC	µPD7003	925-8
	Sprague	ULN7003A	* 3203 1001-124 1107-118
7004	NEC	µPD7004	927-14
	Sprague	ULN7004A	* 3203 1001-98 1107-119
7005	Sprague	ULN7005A	* 3203 1001-125 1107-120
70090	IMI	G70090	4051-32
701	Abionics	MX701	4855-21
	Atec	701	4876-34
	Burr-Brown	DAC701B	* 2541 974-34
		DAC701C	* 2541 973-38
		DAC701K	* 2541 974-35
		DAC701L	* 2541 973-39
		DAC701S	* 2541 975-10
	Micro-Link	STD701	4874-40
		VME701	4886-33
	TeledyneS	TSC701AM	980-15
	VTC	VA701J	* 3374 1142-25
		VA701K	* 3374 1139-15
		VA701S	* 3374 1139-36
7010	DataTrans	DT7010	4850-25
	Marconi	MA7010	* 2873 644-29
	Signetics	TDA7010T	* 3108 1121-115
70100	GIM	PIC70100	868-112
70108	NEC	µPD70108-5	877-68
		µPD70108-8	835-30 877-69
		IE70108-5	4713-17
	Sharp	LH70108C-5	875-107
		LH70108C-8	875-108
		LH70108D-5	875-109
		LH70108D-8	875-110
		LH70108G-5	875-111
		LH70108G-8	875-112
		LH70108L-5	875-113
		LH70108L-8	875-114
	Zilog	Z70108-05(V20)	843-4
		Z70108-08(V20)	843-5
7011	AT&T	T7011	1197-17
	NEC	µPD7011	948-9
	Sanyo	LA7011	1229-64
70116	NEC	µPD70116-10	849-9
		µPD70116-5	877-70
		µPD70116-8	877-71
		IE70116-5	4713-18
	Sharp	LH70116C-5	877-106
		LH70116C-8	877-107
		LH70116D-5	877-108
		LH70116D-8	878-1
		LH70116G-5	878-2
		LH70116G-8	878-3
		LH70116L-5	878-4
		LH70116L-8	878-5
	Zilog	Z70116-05(V30)	851-25
		Z70116-08(V30)	851-26
70120	GIM	PIC70120	868-113
7018	AD	ADSP7018	* 2450 644-68 657-122
7019	AT&T	T7019	1195-89

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
702	**Burr-Brown**	**DAC702B**	⋆ **2541**
			974-4
		DAC702C	⋆ **2541**
			973-27
		DAC702J	⋆ **2541**
			976-8
		DAC702K	⋆ **2541**
			974-5
		DAC702L	⋆ **2541**
			973-28
		DAC702S	⋆ **2541**
			974-18
	Micro-Link	VME702	4887-22
	SGS	L702	1106-135
	TI	μA702M	1161-36
	VTC	**VA702J**	⋆ **3373**
			1103-111
7020	DataTrans	DT7020	4850-26
	GIM	PIC7020	823-12
			868-106
	TI	TMS7020	841-10
			868-109
70208	NEC	μPD70208	843-32
	Zilog	Z70208	843-6
7021	Signetics	TDA7021T	1121-106
70216	NEC	μPD70216	849-10
	Zilog	Z70216	851-27
70250	IMI	G70250	4051-37
703	**Burr-Brown**	**DAC703B**	⋆ **2541**
			⋆ **2544**
			975-1
		DAC703C	⋆ **2541**
			⋆ **2544**
			975-14
		DAC703J	⋆ **2541**
			⋆ **2544**
			976-17
		DAC703K	⋆ **2541**
			⋆ **2544**
			975-2
		DAC703L	⋆ **2541**
			⋆ **2544**
			975-15
		DAC703S	⋆ **2541**
			⋆ **2544**
			975-11
	VTC	**VA703**	⋆ **3372**
			1152-36
7030	**LSIComp**	**LS7030**	⋆ **2867**
			691-65
	Thomson	TEA7030	1194-59
7031	**LSIComp**	**LS7031**	⋆ **2867**
			691-62
	Thomson	TEA7031	1102-12
7032	**AT&T**	**T7032**	⋆ **2473**
			982-3
			1192-32
			¶ 406-24
70320	NEC	70320 (V25)	849-13
70322	NEC	70322 (V25)	849-14
7033	**AT&T**	**T7033**	⋆ **2473**
			982-4
			1192-33
7034	Thomson	TEA7034	1118-131
			1202-79
70350	IMI	G70350	4051-40
7036	Thomson	TEA7036	1194-60
7040	GIM	PIC7040	823-13
			868-107
	LSIComp	LS7040	691-56
	Signetics	TDA7040T	1122-1
	TI	TMS7040	841-11
			868-110
			868-69
7041	GIM	PIC7041	823-14
			868-111
			¶ 409-34
7042	TI	TMS7042	841-12
7047	GE/Intersil	ICM7047	1119-92
70490	IMI	G70490	4051-43
705	**Burr-Brown**	**DAC705**	⋆ **2541**
			975-12
		DAC705B	⋆ **2541**
			975-16
		DAC705K	⋆ **2541**
			975-17
			(Continued)

Base Number	Source	Device	Page-Line
705	**Burr-Brown**		**(Cont'd)**
		DAC705S	⋆ **2541**
			975-18
	Motorola	MVME705	4885-26
	VTC	**VA705**	⋆ **3374**
			1135-75
		VA705J	⋆ **3374**
			1166-45
		VA705K	⋆ **3374**
			1161-22
		VA705L	⋆ **3374**
			1149-44
7050	LSIComp	LS7050	691-59
	LSI Logic	LL7050	4052-36
	Signetics	**TDA7050**	⋆ **3093**
			1117-144
7055	**LSIComp**	**LS7055**	⋆ **2867**
			691-60
7056	**LSIComp**	**LS7056**	⋆ **2867**
			691-61
706	**Burr-Brown**	**DAC706**	⋆ **2541**
			973-46
		DAC706B	⋆ **2541**
			974-11
		DAC706K	⋆ **2541**
			974-12
		DAC706S	⋆ **2541**
			974-13
		VTC	**VA706**	⋆ **3374**
			1135-76
		VA706J	⋆ **3374**
			1168-36
		VA706K	⋆ **3374**
			1166-44
7060	GIM	PIC7060	868-114
	LSIComp	**LS7060**	⋆ **2867**
			691-67
			¶ 425-30
	Toshiba	TA7060A	1120-69
7061	**LSIComp**	**LS7061**	⋆ **2867**
			691-68
			¶ 425-30
	Toshiba	TA7061B	1120-70
7062	**LSIComp**	**LS7062**	⋆ **2867**
			691-57
7063	**LSIComp**	**LS7063**	⋆ **2867**
			691-58
	Toshiba	TA7063	1118-15
70630	IMI	G70630	4051-45
7066	**LSIComp**	**LS7066**	⋆ **2867**
			691-66
7067	National	HS7067	1220-21
707	**AD**	**AD707**	⋆ **2432**
			1137-43
	Burr-Brown	**DAC707**	⋆ **2541**
			975-13
		DAC707B	⋆ **2541**
			975-19
		DAC707K	⋆ **2541**
			975-20
		DAC707S	⋆ **2541**
			975-21
	VTC	**VA707**	⋆ **3374**
			1166-46
		VA707J	⋆ **3374**
			1167-15
		VA707K	⋆ **3374**
			1163-30
7072	Fujitsu	MB7072N	648-145
			1349-43
7078	**Sprague**	**UDN7078W**	⋆ **3203**
			1004-34
708	**Burr-Brown**	**DAC708B**	⋆ **2541**
			974-14
		DAC708K	⋆ **2541**
			974-15
		DAC708S	⋆ **2541**
			974-16
	VTC	**VA708J**	⋆ **3374**
			1167-16
		VA708K	⋆ **3374**
			1163-29
7080	GIM	PIC7080	868-115
	GoldStar	**GCL7080**	⋆ **4242**
			4047-39
		LL7080	4047-40
			(Continued)

Base Number	Source	Device	Page-Line
7080			(Cont'd)
	Laserpath	LP7080C	4052-5
		LP7080P	4052-6
	LSI Logic	LL7080	4052-38
	Raytheon	RL7080	4058-36
70801	Fujitsu	MB70801-15	1351-16
70802	Fujitsu	MB70802-20	1351-17
70810	IMI	G70810	4051-46
709	**Burr-Brown**	**DAC709B**	⋆ **2541**
			975-22
		DAC709K	⋆ **2541**
			975-23
		DAC709S	⋆ **2541**
			975-24
	Fairchild	μA709AM	1153-40
		μA709C	1164-27
		μA709M	1161-1
	Motorola	MHW709	1104-45
	National	LM709	1161-2
		LM709A	1153-41
		LM709C	1164-28
	SGS	M709	1125-91
	TI	μA709C	1164-23
7093	National	DM7093	658-61
7094	National	DM7094	658-85
7095	National	DM7095	658-133
7096	National	DM7096	660-5
7097	National	DM7097	658-134
7098	National	DM7098	660-6
70981	IDT	IDT70981S-25	1373-3
71	Amperex	BGY71	1123-115
	AD	ADADC71J	938-4
		ADADC71K	937-39
		ADDAC71-COB-I	
			974-25
		ADDAC71-COB-V	
			975-6
		ADDAC71-CSB-I	
			974-26
		ADDAC71-CSB-V	
			975-7
	Burr-Brown	**ADC71J**	⋆ **2541**
			938-20
		ADC71K	⋆ **2541**
			938-6
		DAC71-CCD-V	
			⋆ **2541**
			976-26
		DAC71-COB-I	⋆ **2541**
			974-21
		DAC71-COB-V	
			⋆ **2541**
			976-27
		DAC71-CSB-I	⋆ **2541**
			974-22
		DAC71-CSB-V	
			⋆ **2541**
			975-30
		PWR71	1220-137
	MicroNet	DAC71	964-20
71C65	**IDT**	**IDT71C65L-30**	
			⋆ **2802**
			1366-28
		IDT71C65L-35	
			⋆ **2802**
			1366-45
		IDT71C65L-45	
			⋆ **2802**
			1366-87
		IDT71C65L-55	
			⋆ **2802**
			1367-34
		IDT71C65S-30	
			⋆ **2802**
			1366-29
		IDT71C65S-35	
			⋆ **2802**
			1366-46
		IDT71C65S-45	
			⋆ **2802**
			1366-88
		IDT71C65S-55	
			⋆ **2802**
			1367-35
71HB000			
	OKI	71HB000	4057-42

Base Number	Source	Device	Page-Line
71H000			
	OKI	71H000	4057-43
71LS95	National	DM71LS95	659-52
71LS97	National	DM71LS97	659-53
71S96	National	DM71S96	660-75
71S98	National	DM71S98	660-76
71V000	OKI	71V000	4057-41
710	AMCC	Q710	4041-5
	Burr-Brown	**DAC710**	⋆ **2541**
			1127-52
	Fairchild	μA710C	1110-35
		μA710M	1109-40
	Motorola	MHW710	1104-46
	National	LM710	1109-41
		LM710C	1110-36
	Robotrol	RMB710	4860-2
	SGS	M710	1125-92
	Sophia	SA710	4717-20
	TeledyneC	CAG710	908-74
	TI	μA710M	1109-42
		TL710C	1110-47
		TL710M	1110-37
7100	**AT&T**	**T7100A**	⋆ **2474**
			886-6
			¶ 423-28
	LSIComp	**LS7100**	⋆ **2867**
			979-96
	SMS	OMTI7100	4869-37
	Weitek	WTE7100	4849-16
71000	**GoldStar**	**GCL71000**	⋆ **4242**
			4048-31
		LL71000	4048-32
	Laserpath	LP71000C	4052-24
		LP71000P	4052-25
	LSI Logic	LL71000	4053-23
	OKI	MSM71000	4057-28
	Raytheon	**RL71000**	⋆ **4297**
			4059-6
7101	**GoldStar**	**GL7101**	⋆ **2701**
			1127-41
71011	NEC	μPD71011	886-87
7102	**AT&T**	**T7102A**	⋆ **2475**
			886-7
71024	IDT	IDT71024L-45	1385-57
		IDT71024L-55	1385-69
		IDT71024L-70	1386-6
		IDT71024L-90	1386-14
		IDT71024S-45	1385-58
		IDT71024S-55	1385-70
		IDT71024S-70	1386-7
		IDT71024S-90	1386-15
71027	IDT	IDT71027L-45	1388-19
		IDT71027L-55	1388-22
		IDT71027L-70	1388-24
		IDT71027L-90	1388-26
		IDT71027S-45	1388-20
		IDT71027S-55	1388-23
		IDT71027S-70	1388-25
		IDT71027S-90	1388-27
71028	IDT	IDT71028L-45	1387-36
		IDT71028L-55	1387-39
		IDT71028L-70	1387-45
		IDT71028L-90	1387-49
		IDT71028S-45	1387-37
		IDT71028S-55	1387-40
		IDT71028S-70	1387-46
		IDT71028S-90	1387-50
7104	**GE/Intersil**	**ICL7104-12**	⋆ **2667**
			936-31
			¶ 422-19
		ICL7104-14	⋆ **2667**
			937-5
			¶ 422-19
		ICL7104-16	⋆ **2667**
			938-22
			¶ 422-19
71051	NEC	μPD71051	869-138
			1009-1
		71051	869-142
			871-78
			872-77
71054	NEC	μPD71054	871-87
			885-31
71055	NEC	μPD71055	871-92
			872-98
			883-76

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
7106	**GE/Intersil**	**ICL7106**	⋆ **2666**
			939-14
			¶ 422-24
			¶ 422-32
			¶ 438-5
	Maxim	ICL7106	939-21
	TeledyneS	TSC7106	939-36
			¶ 422-10
		TSC7106A	939-37
			¶ 422-10
7107	**GE/Intersil**	**ICL7107**	⋆ **2666**
			939-15
			¶ 422-24
			¶ 422-32
			¶ 438-11
	Maxim	ICL7107	939-22
	National	HS7107	1220-22
	TeledyneS	TSC7107	939-38
		TSC7107A	939-39
71071	NEC	μPD71071	883-55
71082	NEC	μPD71082	877-24
71083	NEC	μPD71083	877-16
71084	NEC	μPD71084	876-34
71086	NEC	μPD71086	877-8
71087	NEC	μPD71087	876-118
71088	NEC	μPD71088	876-14
7109	**Datel**	**ADC7109**	⋆ **2575**
			933-38
	GE/Intersil	**ICL7109**	⋆ **2667**
			933-29
			¶ 422-32
	Maxim	ICL7109	933-30
	TeledyneS	TSC7109BC	933-31
			¶ 421-31
			¶ 422-25
			¶ 422-9
		TSC7109C	933-32
			¶ 421-31
			¶ 422-25
			¶ 422-9
		TSC7109M	933-33
			¶ 421-31
			¶ 422-25
			¶ 422-9
711	**AD**	**AD711A**	⋆ **2433**
			1151-2
		AD711B	⋆ **2433**
			1146-1
		AD711C	⋆ **2433**
			1144-6
		AD711J	⋆ **2433**
			1151-3
		AD711K	⋆ **2433**
			1146-2
		AD711S	⋆ **2433**
			1151-4
		AD711T	⋆ **2433**
			1146-3
		RTI711	4860-5
	Burr-Brown	**DAC711**	⋆ **2541**
			1127-53
	DataTrans	DT711	4859-2
	Fairchild	μA711C	1112-33
		μA711M	1111-51
	National	LM711	1111-52
		LM711C	1112-34
	TI	μA711C	1112-35
		μA711M	1111-53
	VTC	**VA711J**	⋆ **3374**
			1147-11
		VA711K	⋆ **3374**
			1141-10
		VA711L	⋆ **3374**
			1139-8
		VA711S	⋆ **3374**
			1139-9
7110	AD	AD7110K	1116-49
	AT&T	**T7110**	⋆ **2476**
			886-8
			1011-12
			¶ 424-8
	LSIComp	**LS7110**	⋆ **2867**
			692-100
			915-10
7111	AD	AD7111K	1116-43
		AD7111L	1116-44

(Continued)

Base Number	Source	Device	Page-Line
7111	AD		(Cont'd)
		AD7111T	1116-45
		AD7111U	1116-46
	AT&T	**T7111**	⋆ **2470**
			⋆ **2477**
			886-86
			1011-11
			¶ 424-1
			¶ 424-20
	Fujitsu	MB7111E	1316-28
		MB7111H	1316-17
		MB7111L	1316-45
7112	**AT&T**	**T7112**	⋆ **2470**
			⋆ **2478**
			1009-19
			1192-9
	Fujitsu	MB7112E	1316-33
		MB7112E-W	1316-34
		MB7112H	1316-22
		MB7112L	1316-49
		MB7112Y	1316-14
7113	Fujitsu	MB7113E	1316-70
		MB7113H	1316-65
		MB7113L	1316-80
7114	Fujitsu	MB7114E	1316-72
		MB7114E-W	1316-73
		MB7114H	1316-67
		MB7114L	1316-83
7115	AD	AD7115K	1116-42
	Fujitsu	MB7115E	1317-17
		MB7115H	1317-12
	GE/Intersil	**ICL7115**	⋆ **2667**
			936-45
7116	Fujitsu	MB7116E	1317-19
		MB7116E-W	1317-20
		MB7116H	1317-13
	GE/Intersil	**ICL7116**	⋆ **2666**
			939-16
			¶ 422-24
	Maxim	ICL7116	939-23
	TeledyneS	TSC7116	939-40
		TSC7116A	939-41
7117	Fujitsu	MB7117E	1316-100
		MB7117H	1316-97
	GE/Intersil	**ICL7117**	⋆ **2666**
			939-17
			¶ 422-24
	Maxim	ICL7117	939-24
	TeledyneS	TSC7117	939-42
7118	AD	AD7118K	1116-50
		AD7118L	1116-51
		AD7118T	1116-47
		AD7118U	1116-48
	Fujitsu	MB7118E	1316-102
		MB7118H	1316-98
71190	Thomson	SFC71190A	1322-51
		SFC71190B	1321-55
		SFC71190C	1321-23
71191	Thomson	SFC71191A	1322-32
		SFC71191B	1321-61
		SFC71191C	1321-30
712	AD	AD712A	1175-6
		AD712B	1173-4
		AD712C	1171-16
		AD712K	1173-5
		AD712S	1175-7
		AD712T	1173-6
	DataTrans	DT712	4859-3
	TI	TL712	1102-86
			1109-1
			1219-108
	VTC	**VA712S**	⋆ **3373**
			1103-112
7120	MicroNet	MN7120	1220-77
		MN7120H	1220-78
	Sanyo	LC7120	1119-21
	Toshiba	TA7120	1118-16
7121	Fujitsu	MB7121E	1318-54
		MB7121H	1318-46
71210	IMI	G71210	4051-50
7122	Fujitsu	MB7122E	1318-58
		MB7122E-W	1318-59
		MB7122H	1318-48
	Toshiba	TA7122B	1118-17

Base Number	Source	Device	Page-Line
7123	Fujitsu	MB7123E	1317-85
		MB7123H	1317-67
	National	DM7123	680-160
7124	Fujitsu	MB7124E	1317-90
		MB7124H	1317-72
71256	**IDT**	**IDT71256L-35**	
			⋆ **2802**
			⋆ **2818**
			1378-29
		IDT71256L-45	
			⋆ **2802**
			⋆ **2818**
			1378-52
		IDT71256L-55	
			⋆ **2802**
			⋆ **2818**
			1378-73
		IDT71256L-55B	
			⋆ **2802**
			⋆ **2818**
			1378-74
		IDT71256L-70	
			⋆ **2802**
			⋆ **2818**
			1379-21
		IDT71256L-70B	
			⋆ **2802**
			⋆ **2818**
			1379-22
		IDT71256L-85B	
			⋆ **2802**
			⋆ **2818**
			1379-39
		IDT71256S-35	
			⋆ **2802**
			⋆ **2818**
			1378-30
		IDT71256S-45	
			⋆ **2802**
			⋆ **2818**
			1378-53
		IDT71256S-55	
			⋆ **2802**
			⋆ **2818**
			1378-75
		IDT71256S-55B	
			⋆ **2802**
			⋆ **2818**
			1378-76
		IDT71256S-70	
			⋆ **2802**
			⋆ **2818**
			1379-23
		IDT71256S-70B	
			⋆ **2802**
			⋆ **2818**
			1379-24
		IDT71256S-85B	
			⋆ **2802**
			⋆ **2818**
			1379-40
71257	**IDT**	**IDT71257L-25**	
			⋆ **2802**
			1386-54
		IDT71257L-35	
			⋆ **2802**
			1386-62
		IDT71257L-45	
			⋆ **2802**
			1387-2
		IDT71257L-45B	
			⋆ **2802**
			1387-3
		IDT71257L-55	
			⋆ **2802**
			1387-14
		IDT71257L-55B	
			⋆ **2802**
			1387-15
		IDT71257L-70	
			⋆ **2802**
			1387-22
		IDT71257L-70B	
			⋆ **2802**
			1387-23

(Continued)

Base Number	Source	Device	Page-Line
71257	**IDT**		**(Cont'd)**
		IDT71257S-25	
			⋆ **2802**
			1386-55
		IDT71257S-35	
			⋆ **2802**
			1386-63
		IDT71257S-45	
			⋆ **2802**
			1387-4
		IDT71257S-45B	
			⋆ **2802**
			1387-5
		IDT71257S-55	
			⋆ **2802**
			1387-16
		IDT71257S-55B	
			⋆ **2802**
			1387-17
		IDT71257S-70	
			⋆ **2802**
			1387-24
		IDT71257S-70B	
			⋆ **2802**
			1387-25
71258	**IDT**	**IDT71258L-25**	
			⋆ **2802**
			1382-80
		IDT71258L-35	
			⋆ **2802**
			1383-12
		IDT71258L-45	
			⋆ **2802**
			1383-53
		IDT71258L-45B	
			⋆ **2802**
			1383-54
		IDT71258L-55	
			⋆ **2802**
			1383-83
		IDT71258L-55B	
			⋆ **2802**
			1383-84
		IDT71258L-70	
			⋆ **2802**
			1384-15
		IDT71258L-70B	
			⋆ **2802**
			1384-16
		IDT71258L-85B	
			⋆ **2802**
			1384-28
		IDT71258S-25	
			⋆ **2802**
			1382-81
		IDT71258S-35	
			⋆ **2802**
			1383-13
		IDT71258S-45	
			⋆ **2802**
			1383-55
		IDT71258S-45B	
			⋆ **2802**
			1383-56
		IDT71258S-55	
			⋆ **2802**
			1383-85
		IDT71258S-55B	
			⋆ **2802**
			1383-86
		IDT71258S-70	
			⋆ **2802**
			1384-17
		IDT71258S-70B	
			⋆ **2802**
			1384-18
		IDT71258S-85B	
			⋆ **2802**
			1384-29
712585	IDT	IDT712585S-25	
			1382-82
7126	**GE/Intersil**	**ICL7126**	⋆ **2666**
			939-18
			¶ 422-24
	Maxim	ICL7126	939-25
	Samsung	KS7126	939-32
	TeledyneS	TSC7126	939-43
		TSC7126A	939-44

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7127	Fujitsu	MB7127E	1320-10
		MB7127H	1319-100
7128	Fujitsu	MB7128E	1320-13
		MB7128E-W	1320-14
		MB7128H	1319-102
71281	**IDT**	**IDT71281L-25**	
		*** 2802**	
		*** 2819**	
			1383-2
		IDT71281L-35	
		*** 2802**	
		*** 2819**	
			1383-27
		IDT71281L-45	
		*** 2802**	
		*** 2819**	
			1383-69
		IDT71281L-55	
		*** 2802**	
		*** 2819**	
			1384-2
		IDT71281L-70	
		*** 2802**	
		*** 2819**	
			1384-21
		IDT71281S-25	
		*** 2802**	
		*** 2819**	
			1383-3
		IDT71281S-35	
		*** 2802**	
		*** 2819**	
			1383-28
		IDT71281S-45	
		*** 2802**	
		*** 2819**	
			1383-70
		IDT71281S-55	
		*** 2802**	
		*** 2819**	
			1384-3
		IDT71281S-70	
		*** 2802**	
		*** 2819**	
			1384-22
71282	**IDT**	**IDT71282L-25**	
		*** 2802**	
		*** 2819**	
			1383-4
		IDT71282L-35	
		*** 2802**	
		*** 2819**	
			1383-29
		IDT71282L-45	
		*** 2802**	
		*** 2819**	
			1383-71
		IDT71282L-55	
		*** 2802**	
		*** 2819**	
			1384-4
		IDT71282L-70	
		*** 2802**	
		*** 2819**	
			1384-23
		IDT71282S-25	
		*** 2802**	
		*** 2819**	
			1383-5
		IDT71282S-35	
		*** 2802**	
		*** 2819**	
			1383-30
		IDT71282S-45	
		*** 2802**	
		*** 2819**	
			1383-72
		IDT71282S-55	
		*** 2802**	
		*** 2819**	
			1384-5
		IDT71282S-70	
		*** 2802**	
		*** 2819**	
			1384-24

Base Number	Source	Device	Page-Line
7129	**GE/Intersil**	**ICL7129**	*** 2666**
			939-63
	Maxim	ICL7129	939-60
		ICL7129A	939-61
	Toshiba	TA7129A	1118-18
71298	IDT	IDT71298L-25	1383-6
		IDT71298L-35	1383-31
		IDT71298L-45	1383-73
		IDT71298L-55	1384-6
		IDT71298L-70	1384-25
		IDT71298S-25	1383-7
		IDT71298S-35	1383-32
		IDT71298S-45	1383-74
		IDT71298S-55	1384-7
		IDT71298S-70	1384-26
713	DataTrans	DT713	4859-5
	VTC	**VA713**	*** 3372**
			1152-37
7130	**IDT**	**IDT7130L-100**	
		*** 2804**	
			1354-38
		IDT7130L-100B	
		*** 2804**	
			1354-39
		IDT7130L-120B	
		*** 2804**	
			1354-52
		IDT7130L-45	*** 2804**
			1354-3
		IDT7130L-55	*** 2804**
			1354-14
		IDT7130L-70	*** 2804**
			1354-20
		IDT7130L-70B	
		*** 2804**	
			1354-21
		IDT7130L-90	*** 2804**
			1354-30
		IDT7130L-90B	
		*** 2804**	
			1354-31
		IDT7130S-100B	
		*** 2804**	
			1354-40
		IDT7130S-120B	
		*** 2804**	
			1354-53
		IDT7130S-35	*** 2804**
			1353-94
		IDT7130S-55	*** 2804**
			1354-15
		IDT7130S-70	*** 2804**
			1354-22
		IDT7130S-70B	
		*** 2804**	
			1354-23
		IDT7130S-90	*** 2804**
			1354-32
		IDT7130S-90B	
		*** 2804**	
			1354-33
	MicroNet	MN7130	1228-56
			¶ 419-31
		MN7130H	1228-57
			¶ 419-31
	National	DM7130	656-144
	Toshiba	TA7130	1125-143
7131	Fujitsu	MB7131E	1319-44
		MB7131H	1319-30
	National	DM7131	656-79
	Sanyo	LC7131	1119-22
7132	Fujitsu	MB7132E	1319-47
		MB7132E-W	1319-48
		MB7132H	1319-32
		MB7132Y	1319-13
	IDT	**IDT7132L-100**	
		*** 2804**	
			1357-57
		IDT7132L-100B	
		*** 2804**	
			1357-58
		IDT7132L-120B	
		*** 2804**	
			1358-1
		IDT7132L-35	*** 2804**
			1355-64

(Continued)

Base Number	Source	Device	Page-Line
7132	**IDT**		**(Cont'd)**
		IDT7132L-45	*** 2804**
			1356-3
		IDT7132L-55	*** 2804**
			1356-45
		IDT7132L-70	*** 2804**
			1357-6
		IDT7132L-70B	
		*** 2804**	
			1357-7
		IDT7132L-90	*** 2804**
			1357-44
		IDT7132L-90B	
		*** 2804**	
			1357-46
		IDT7132S-100B	
		*** 2804**	
			1357-59
		IDT7132S-120B	
		*** 2804**	
			1358-2
		IDT7132S-35	*** 2804**
			1355-65
		IDT7132S-45	*** 2804**
			1356-4
		IDT7132S-55	*** 2804**
			1356-46
		IDT7132S-70	*** 2804**
			1357-8
		IDT7132S-70B	
		*** 2804**	
			1357-9
		IDT7132S-90	*** 2804**
			1357-45
		IDT7132S-90B	
		*** 2804**	
			1357-47
	VLSI Tech	**VT7132-55**	*** 3359**
			1356-57
		VT7132-70	*** 3359**
			1357-1
		VT7132-90	*** 3359**
			1357-39
		VT7132A-30	*** 3359**
			1355-44
		VT7132A-35	*** 3359**
			1355-71
		VT7132A-45	*** 3359**
			1356-12
71321	**IDT**	**IDT71321LA-35**	
		*** 2804**	
			1355-68
		IDT71321LA-45	
		*** 2804**	
			1356-9
		IDT71321LA-55	
		*** 2804**	
			1356-49
		IDT71321LA-70	
		*** 2804**	
			1356-86
		IDT71321SA-35	
		*** 2804**	
			1355-69
		IDT71321SA-45	
		*** 2804**	
			1356-10
		IDT71321SA-55	
		*** 2804**	
			1356-50
		IDT71321SA-70	
		*** 2804**	
			1356-87
71322	**IDT**	**IDT71322L-45**	
		*** 2804**	
		*** 2820**	
			1356-5
		IDT71322L-55	
		*** 2804**	
		*** 2820**	
			1356-64
		IDT71322L-55B	
		*** 2804**	
		*** 2820**	
			1356-65

(Continued)

Base Number	Source	Device	Page-Line
71322	**IDT**		**(Cont'd)**
		IDT71322L-70	
		*** 2804**	
		*** 2820**	
			1357-10
		IDT71322L-70B	
		*** 2804**	
		*** 2820**	
			1357-11
		IDT71322S-45	
		*** 2804**	
		*** 2820**	
			1356-6
		IDT71322S-55	
		*** 2804**	
		*** 2820**	
			1356-66
		IDT71322S-55B	
		*** 2804**	
		*** 2820**	
			1356-67
		IDT71322S-70	
		*** 2804**	
		*** 2820**	
			1357-12
		IDT71322S-70B	
		*** 2804**	
		*** 2820**	
			1357-13
7133	Fujitsu	MB7133E	1323-20
		MB7133H	1323-7
	IDT	**IDT7133L-55**	*** 2804**
			*** 2821**
			1358-95
		IDT7133L-70	*** 2804**
			*** 2821**
			1358-99
		IDT7133L-90	*** 2804**
			*** 2821**
			1359-3
		IDT7133L-90B	
		*** 2804**	
		*** 2821**	
			1359-4
		IDT7133S-55	*** 2804**
			*** 2821**
			1358-96
		IDT7133S-70	*** 2804**
			*** 2821**
			1358-100
	Toshiba	TA7133	1191-41
7134	**Datel**	**DAC7134**	*** 2576**
			972-33
		DAC7134BJ	*** 2576**
			963-14
		DAC7134BK	*** 2576**
			971-33
		DAC7134BL	*** 2576**
			972-9
		DAC7134UJ	*** 2576**
			963-15
		DAC7134UK	*** 2576**
			971-34
		DAC7134UL	*** 2576**
			972-10
	Fujitsu	MB7134E	1323-22
			1389-51
		MB7134E-W	1323-23
		MB7134H	1323-9
			1389-50
	GE/Intersil	**ICL7134**	*** 2668**
			972-6
	IDT	**IDT7134L-100B**	
		*** 2804**	
		*** 2821**	
			1365-72
		IDT7134L-45	*** 2804**
			*** 2821**
			1365-57
		IDT7134L-55	*** 2804**
			*** 2821**
			1365-62
		IDT7134L-55B	
		*** 2804**	
		*** 2821**	
			1365-63

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7134	**IDT**		**(Cont'd)**
		IDT7134L-90	⋆ **2804**
			⋆ **2821**
			1365-68
		IDT7134L-90B	
			⋆ **2804**
			⋆ **2821**
			1365-69
		IDT7134S-100B	
			⋆ **2804**
			⋆ **2821**
			1365-73
		IDT7134S-45	⋆ **2804**
			⋆ **2821**
			1365-58
		IDT7134S-55	⋆ **2804**
			⋆ **2821**
			1365-64
		IDT7134S-55B	
			⋆ **2804**
			⋆ **2821**
			1365-65
		IDT7134S-90	⋆ **2804**
			⋆ **2821**
			1365-70
		IDT7134S-90B	
			⋆ **2804**
			⋆ **2821**
			1365-71
71342	**IDT**	**IDT71342L-45**	
			⋆ **2804**
			⋆ **2822**
			1365-54
		IDT71342L-55	
			⋆ **2804**
			⋆ **2822**
			1365-60
		IDT71342L-70	
			⋆ **2804**
			⋆ **2822**
			1365-66
		IDT71342S-45	
			⋆ **2804**
			⋆ **2822**
			1365-55
		IDT71342S-55	
			⋆ **2804**
			⋆ **2822**
			1365-61
		IDT71342S-70	
			⋆ **2804**
			⋆ **2822**
			1365-67
7135	**GE/Intersil**	**ICL7135**	⋆ **2667**
			939-57
	Maxim	ICL7135	939-62
	Sanyo	LC7135	1119-23
	Siliconix	SI7135	939-58
			¶ 419-9
			¶ 426-26
	TeledyneS	TSC7135	939-59
			¶ 422-26
			¶ 422-7
7136	**GE/Intersil**	**ICL7136**	⋆ **2666**
			939-19
	GoldStar	**GL7136**	⋆ **2700**
			939-9
	Maxim	ICL7136	939-26
	National	DM7136	656-81
	TI	TLC7136C	979-140
	Toshiba	TA7136A	1118-19
7137	Fujitsu	MB7137E	1322-25
		MB7137H	1321-54
	GE/Intersil	**ICL7137**	⋆ **2666**
			939-20
	Maxim	ICL7137	939-46
	Toshiba	TA7137	1123-23
		TA7137-ST	1123-24
		TDA7137	1116-40
		TDA7137-ST	1116-41
7138	Fujitsu	MB7138E	1322-27
		MB7138E-W	1322-28
		MB7138H	1321-57
		MB7138Y	1321-26
	MicroPwr	MP7138	939-27
		MP7138A	939-28

Base Number	Source	Device	Page-Line
714	DataTrans	DT714	4859-6
	Fairchild	μA714C	1170-37
		μA714EC	1140-40
		μA714M	1132-60
			1140-27
	Raytheon	**RC714**	⋆ **2979**
			1140-32
		RC714C	⋆ **2979**
			1140-33
		RC714E	⋆ **2979**
			1140-34
	TI	μA714E	1140-22
		μA714L	1143-29
	Xylogics	714	4881-31
7140	**GoldStar**	**GCL7140**	⋆ **4242**
			4048-5
		LL7140	4048-6
	IDT	**IDT7140L-100B**	
			⋆ **2804**
			1354-45
		IDT7140L-120B	
			⋆ **2804**
			1354-54
		IDT7140L-45	⋆ **2804**
			1354-4
		IDT7140L-55	⋆ **2804**
			1354-16
		IDT7140L-70	⋆ **2804**
			1354-24
		IDT7140L-70B	
			⋆ **2804**
			1354-25
		IDT7140L-90	⋆ **2804**
			1354-34
		IDT7140L-90B	
			⋆ **2804**
			1354-35
		IDT7140S-100	
			⋆ **2804**
			1354-46
		IDT7140S-100B	
			⋆ **2804**
			1354-47
		IDT7140S-120B	
			⋆ **2804**
			1354-55
		IDT7140S-35	⋆ **2804**
			1353-95
		IDT7140S-55	⋆ **2804**
			1354-17
		IDT7140S-70	⋆ **2804**
			1354-26
		IDT7140S-70B	
			⋆ **2804**
			1354-27
		IDT7140S-90	⋆ **2804**
			1354-36
		IDT7140S-90B	
			⋆ **2804**
			1354-37
	Laserpath	LP7140C	4052-8
		LP7140P	4052-9
	LSI Logic	LL7140	4052-42
	MicroNet	MN7140	1220-79
		MN7140H	1220-80
	Raytheon	**RL7140**	⋆ **4297**
			4058-38
	Toshiba	TA7140	1117-73
7141	Fujitsu	MB7141E	1323-54
		MB7141H	1323-50
	Toshiba	TA7141A	1124-98
714100025			
	Inventive	714100025	4850-30
7142	Fujitsu	MB7142E	1323-55
		MB7142E-W	1323-56
		MB7142H	1323-51
	IDT	**IDT7142L-100B**	
			⋆ **2804**
			1357-60
		IDT7142L-120B	
			⋆ **2804**
			1358-3
		IDT7142L-35	⋆ **2804**
			1355-66
		IDT7142L-45	⋆ **2804**
			1356-7

(Continued)

Base Number	Source	Device	Page-Line
7142	**IDT**		**(Cont'd)**
		IDT7142L-55	⋆ **2804**
			1356-47
		IDT7142L-70	⋆ **2804**
			1357-16
		IDT7142L-70B	
			⋆ **2804**
			1357-17
		IDT7142L-90	⋆ **2804**
			1357-48
		IDT7142L-90B	
			⋆ **2804**
			1357-49
		IDT7142S-100	
			⋆ **2804**
			1357-61
		IDT7142S-100B	
			⋆ **2804**
			1357-62
		IDT7142S-120B	
			⋆ **2804**
			1358-4
		IDT7142S-35	⋆ **2804**
			1355-67
		IDT7142S-45	⋆ **2804**
			1356-8
		IDT7142S-55	⋆ **2804**
			1356-48
		IDT7142S-70	⋆ **2804**
			1357-18
		IDT7142S-70B	
			⋆ **2804**
			1357-19
		IDT7142S-90	⋆ **2804**
			1357-50
		IDT7142S-90B	
			⋆ **2804**
			1357-51
	VLSI Tech	**VT7142-55**	⋆ **3359**
			1356-58
		VT7142-70	⋆ **3359**
			1357-2
		VT7142-90	⋆ **3359**
			1357-40
		VT7142A-30	⋆ **3359**
			1355-45
		VT7142A-35	⋆ **3359**
			1355-72
		VT7142A-45	⋆ **3359**
			1356-13
7143	Fujitsu	MB7143E	1325-71
		MB7143H	1325-52
	IDT	**IDT7143L-100**	
			⋆ **2804**
			1359-7
		IDT7143L-100B	
			⋆ **2804**
			1359-8
		IDT7143L-120B	
			⋆ **2804**
			1359-9
		IDT7143L-55	⋆ **2804**
			1358-97
		IDT7143L-70	⋆ **2804**
			1359-1
		IDT7143L-90	⋆ **2804**
			1359-5
		IDT7143L-90B	
			⋆ **2804**
			1359-6
		IDT7143S-55	⋆ **2804**
			1358-98
		IDT7143S-70	⋆ **2804**
			1359-2
7144	Fujitsu	MB7144E	1325-72
		MB7144E-W	1325-74
		MB7144H	1325-56
		MB7144Y	1325-6
71440	IMI	G71440	4051-51
715	DataTrans	DT715	4859-8
	Fairchild	μA715C	1135-87
			1164-21
		μA715M	1135-88
			1161-23

Base Number	Source	Device	Page-Line
7150	MicroNet	MN7150	1220-106
	SMS	OMTI7150	4869-38
	SGS	L7150	1006-85
71501	**IDT**	**IDT71501S-25**	
			⋆ **2802**
			⋆ **2823**
			1381-50
		IDT71501S-35	
			⋆ **2802**
			⋆ **2823**
			1382-1
		IDT71501S-45	
			⋆ **2802**
			⋆ **2823**
			1382-31
71502	**IDT**	**IDT71502L-30**	
			⋆ **2802**
			⋆ **2824**
			1365-76
		IDT71502L-35	
			⋆ **2802**
			⋆ **2824**
			1365-78
		IDT71502L-45	
			⋆ **2802**
			⋆ **2824**
			1366-1
		IDT71502L-55	
			⋆ **2802**
			⋆ **2824**
			1366-5
		IDT71502L-70	
			⋆ **2802**
			⋆ **2824**
			1366-9
		IDT71502S-30	
			⋆ **2802**
			⋆ **2824**
			1365-77
		IDT71502S-35	
			⋆ **2802**
			⋆ **2824**
			1365-79
		IDT71502S-45	
			⋆ **2802**
			⋆ **2824**
			1366-2
		IDT71502S-55	
			⋆ **2802**
			⋆ **2824**
			1366-6
		IDT71502S-70	
			⋆ **2802**
			⋆ **2824**
			1366-10
7151	Fujitsu	MB7151E	1323-21
		MB7151H	1323-8
7152	Fujitsu	MB7152-Y	1323-3
		MB7152E	1323-24
		MB7152H	1323-12
7157	Toshiba	TA7157A	1121-158
7158	Toshiba	TA7158	1223-30
7160	National	DM7160	656-73
7163	ITT	ITT7163	1004-112
7164	**IDT**	**IDT7164L-100B**	
			⋆ **2802**
			1368-38
		IDT7164L-120B	
			⋆ **2802**
			1368-77
		IDT7164L-150B	
			⋆ **2802**
			1369-42
		IDT7164L-200B	
			⋆ **2802**
			1369-84
		IDT7164L-30	⋆ **2802**
			1366-30
		IDT7164L-35	⋆ **2802**
			1366-47
		IDT7164L-35B	
			⋆ **2802**
			1366-48
		IDT7164L-45	⋆ **2802**
			1366-89

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7164	IDT		(Cont'd)
		IDT7164L-45B	
		★ 2802	
			1366-90
		IDT7164L-55	★ 2802
			1367-36
		IDT7164L-55B	
		★ 2802	
			1367-37
		IDT7164L-70	★ 2802
			1367-75
		IDT7164L-70B	
		★ 2802	
			1367-76
		IDT7164L-85	★ 2802
			1368-10
		IDT7164L-85B	
		★ 2802	
			1368-11
		IDT7164S-100B	
		★ 2802	
			1368-39
		IDT7164S-120B	
		★ 2802	
			1368-78
		IDT7164S-150B	
		★ 2802	
			1369-43
		IDT7164S-200B	
		★ 2802	
			1369-85
		IDT7164S-30	★ 2802
			1366-31
		IDT7164S-35	★ 2802
			1366-68
		IDT7164S-35B	
		★ 2802	
			1366-49
		IDT7164S-45	★ 2802
			1366-91
		IDT7164S-45B	
		★ 2802	
			1366-92
		IDT7164S-55	★ 2802
			1367-38
		IDT7164S-55B	
		★ 2802	
			1367-39
		IDT7164S-70	★ 2802
			1367-77
		IDT7164S-70B	
		★ 2802	
			1367-78
		IDT7164S-85	★ 2802
			1368-12
		IDT7164S-85B	
		★ 2802	
			1368-13
	ITT	ITT7164	1004-113
7165	IDT	IDT7165L-30	★ 2802
		★ 2825	
			1366-32
		IDT7165L-35	★ 2802
		★ 2825	
			1366-50
		IDT7165L-35B	
		★ 2802	
		★ 2825	
			1366-51
		IDT7165L-45	★ 2802
		★ 2825	
			1366-93
		IDT7165L-45B	
		★ 2802	
		★ 2825	
			1366-94
		IDT7165L-55	★ 2802
		★ 2825	
			1367-40
		IDT7165L-55B	
		★ 2802	
		★ 2825	
			1367-41
		IDT7165S-30	★ 2802
		★ 2825	
			1366-33
			(Continued)

Base Number	Source	Device	Page-Line
7165	IDT		(Cont'd)
		IDT7165S-35	★ 2802
		★ 2825	
			1366-52
		IDT7165S-35B	
		★ 2802	
		★ 2825	
			1366-53
		IDT7165S-45	★ 2802
		★ 2825	
			1366-95
		IDT7165S-45B	
		★ 2802	
		★ 2825	
			1366-96
		IDT7165S-55	★ 2802
		★ 2825	
			1367-42
		IDT7165S-55B	
		★ 2802	
		★ 2825	
			1367-43
7168	IDT	IDT7168LA-12	1361-3
71681	IDT	IDT71681LA-10	
		★ 2802	
			1360-79
		IDT71681LA-100B	
		★ 2802	
			1365-39
		IDT71681LA-25	
		★ 2802	
			1362-26
		IDT71681LA-35	
		★ 2802	
			1363-38
		IDT71681LA-35B	
		★ 2802	
			1363-39
		IDT71681LA-45	
		★ 2802	
			1364-28
		IDT71681LA-45B	
		★ 2802	
			1364-29
		IDT71681LA-55	
		★ 2802	
			1364-74
		IDT71681LA-55B	
		★ 2802	
			1364-75
		IDT71681LA-70B	
		★ 2802	
			1365-16
		IDT71681LA-85B	
		★ 2802	
			1365-32
		IDT71681S-45	
		★ 2802	
			1364-30
		IDT71681S-55	
		★ 2802	
			1364-76
		IDT71681S-55B	
		★ 2802	
			1364-77
		IDT71681S-70B	
		★ 2802	
			1365-17
		IDT71681SA-10	
		★ 2802	
			1360-80
		IDT71681SA-100B	
		★ 2802	
			1365-40
		IDT71681SA-12	
		★ 2802	
			1361-4
		IDT71681SA-15	
		★ 2802	
			1361-20
		IDT71681SA-20	
		★ 2802	
			1361-55
		IDT71681SA-25	
		★ 2802	
			1362-27
			(Continued)

Base Number	Source	Device	Page-Line
71681	IDT		(Cont'd)
		IDT71681SA-35	
		★ 2802	
			1363-40
		IDT71681SA-35B	
		★ 2802	
			1363-41
		IDT71681SA-45	
		★ 2802	
			1364-31
		IDT71681SA-45B	
		★ 2802	
			1364-32
		IDT71681SA-55	
		★ 2802	
			1364-78
		IDT71681SA-55B	
		★ 2802	
			1364-79
		IDT71681SA-70B	
		★ 2802	
			1365-18
		IDT71681SA-85B	
		★ 2802	
			1365-33
71682	IDT	IDT71682LA-10	
		★ 2802	
			1360-81
			¶ 447-32
		IDT71682LA-100B	
		★ 2802	
			1365-41
			¶ 447-32
		IDT71682LA-12	
		★ 2802	
			1361-5
			¶ 447-32
		IDT71682LA-15	
		★ 2802	
			1361-21
			¶ 447-32
		IDT71682LA-20	
		★ 2802	
			1361-56
			¶ 447-32
		IDT71682LA-25	
		★ 2802	
			1362-28
			¶ 447-32
		IDT71682LA-35	
		★ 2802	
			1363-42
			¶ 447-32
		IDT71682LA-35B	
		★ 2802	
			1363-43
			¶ 447-32
		IDT71682LA-45	
		★ 2802	
			1364-33
			¶ 447-32
		IDT71682LA-45B	
		★ 2802	
			1364-34
			¶ 447-32
		IDT71682LA-55	
		★ 2802	
			1364-80
			¶ 447-32
		IDT71682LA-55B	
		★ 2802	
			1364-81
			¶ 447-32
		IDT71682LA-70B	
		★ 2802	
			1365-19
			¶ 447-32
		IDT71682LA-85B	
		★ 2802	
			1365-34
			¶ 447-32
		IDT71682SA-100B	
		★ 2802	
			1365-42
			¶ 447-32
			(Continued)

Base Number	Source	Device	Page-Line
71682	IDT		(Cont'd)
		IDT71682SA-12	
		★ 2802	
			1361-6
			¶ 447-32
		IDT71682SA-15	
		★ 2802	
			1361-22
			¶ 447-32
		IDT71682SA-20	
		★ 2802	
			1361-57
			¶ 447-32
		IDT71682SA-25	
		★ 2802	
			1362-29
			¶ 447-32
		IDT71682SA-35	
		★ 2802	
			1363-44
			¶ 447-32
		IDT71682SA-35B	
		★ 2802	
			1363-45
			¶ 447-32
		IDT71682SA-45	
		★ 2802	
			1364-35
			¶ 447-32
		IDT71682SA-45B	
		★ 2802	
			1364-36
			¶ 447-32
		IDT71682SA-55	
		★ 2802	
			1364-82
			¶ 447-32
		IDT71682SA-55B	
		★ 2802	
			1364-83
			¶ 447-32
		IDT71682SA-70B	
		★ 2802	
			1365-20
			¶ 447-32
		IDT71682SA-85B	
		★ 2802	
			1365-35
			¶ 447-32
71690	IMI	G71690	4051-52
7170	GE/Intersil	ICM7170	888-93
	Marconi	MA7170	★ 2874
			644-18
7174	IDT	IDT7174L-35	★ 2802
			1366-54
			¶ 446-28
		IDT7174L-35B	
		★ 2802	
			1366-55
			¶ 446-28
		IDT7174L-45	★ 2802
			1366-97
			¶ 446-28
		IDT7174L-45B	
		★ 2802	
			1367-1
			¶ 446-28
		IDT7174L-55B	
		★ 2802	
			1367-44
			¶ 446-28
		IDT7174S-35	★ 2802
			1366-56
			¶ 446-28
		IDT7174S-35B	
		★ 2802	
			1366-57
			¶ 446-28
		IDT7174S-45	★ 2802
			1367-2
			¶ 446-28
		IDT7174S-45B	
		★ 2802	
			1367-3
			¶ 446-28
			(Continued)

¶ Indicates page number in Application Note Directory.
★ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7174	**IDT**		**(Cont'd)**
		IDT7174S-55B	
			★ **2802**
			1367-45
			¶ 446-28
7176	Toshiba	TA7176A	1125-144
7178	IDT	IDT7178S-12	1361-1
		IDT7178S-15	1361-16
7180	**Marconi**	**MA7180**	★ **2875**
			646-82
	Sprague	UDN7180A	980-120
7181	Sanyo	LC7181	1119-17
7184	Sanyo	LC7184	1119-18
7186	**IDT**	**IDT7186L-45**	★ **2802**
			1365-82
		IDT7186L-55	★ **2802**
			1366-3
		IDT7186L-70	★ **2802**
			1366-7
		IDT7186L-85	★ **2802**
			1366-11
		IDT7186S-45	★ **2802**
			1365-83
		IDT7186S-55	★ **2802**
			1366-4
		IDT7186S-70	★ **2802**
			1366-8
		IDT7186S-85	★ **2802**
			1366-12
	Marconi	**MA7186**	★ **2876**
			646-105
7187	**IDT**	**IDT7187L-15**	★ **2802**
			1381-21
			¶ 447-32
		IDT7187L-20	★ **2802**
			1381-29
			¶ 447-32
		IDT7187L-25	★ **2802**
			1381-41
			¶ 447-32
		IDT7187L-30	★ **2802**
			1381-57
			¶ 447-32
		IDT7187L-30B	
			★ **2802**
			1381-58
			¶ 447-32
		IDT7187L-35	★ **2802**
			1381-71
			¶ 447-32
		IDT7187L-35B	
			★ **2802**
			1381-72
			¶ 447-32
		IDT7187L-45	★ **2802**
			1382-21
			¶ 447-32
		IDT7187L-45B	
			★ **2802**
			1382-22
			¶ 447-32
		IDT7187L-55	★ **2802**
			1382-43
			¶ 447-32
		IDT7187L-55B	
			★ **2802**
			1382-44
			¶ 447-32
		IDT7187L-70	★ **2802**
			1382-61
			¶ 447-32
		IDT7187L-70B	
			★ **2802**
			1382-62
			¶ 447-32
		IDT7187L-85	★ **2802**
			1382-68
			¶ 447-32
		IDT7187L-85B	
			★ **2802**
			1382-69
			¶ 447-32
		IDT7187S-15	★ **2802**
			1381-22
			¶ 447-32

(Continued)

Base Number	Source	Device	Page-Line
7187	**IDT**		**(Cont'd)**
		IDT7187S-20	★ **2802**
			1381-30
			¶ 447-32
		IDT7187S-25	★ **2802**
			1381-42
			¶ 447-32
		IDT7187S-30	★ **2802**
			1381-59
			¶ 447-32
		IDT7187S-30B	
			★ **2802**
			1381-60
			¶ 447-32
		IDT7187S-35	★ **2802**
			1381-73
			¶ 447-32
		IDT7187S-35B	
			★ **2802**
			1381-74
			¶ 447-32
		IDT7187S-45	★ **2802**
			1382-23
			¶ 447-32
		IDT7187S-45B	
			★ **2802**
			1382-24
			¶ 447-32
		IDT7187S-55	★ **2802**
			1382-45
			¶ 447-32
		IDT7187S-55B	
			★ **2802**
			1382-46
			¶ 447-32
		IDT7187S-70	★ **2802**
			1382-63
			¶ 447-32
		IDT7187S-70B	
			★ **2802**
			1382-64
			¶ 447-32
		IDT7187S-85	★ **2802**
			1382-25
			¶ 447-32
		IDT7187S-85B	
			★ **2802**
			1382-70
			¶ 447-32
7188	**IDT**	**IDT7188L-15**	★ **2802**
			1372-15
		IDT7188L-20	★ **2802**
			1372-29
		IDT7188L-25	★ **2802**
			1372-58
		IDT7188L-30	★ **2802**
			1373-22
		IDT7188L-30B	
			★ **2802**
			1373-23
		IDT7188L-35	★ **2802**
			1373-79
		IDT7188L-35B	
			★ **2802**
			1373-80
		IDT7188L-45	★ **2802**
			1374-82
		IDT7188L-45B	
			★ **2802**
			1374-83
		IDT7188L-55	★ **2802**
			1375-70
		IDT7188L-55B	
			★ **2802**
			1375-71
		IDT7188L-70	★ **2802**
			1376-26
		IDT7188L-70B	
			★ **2802**
			1376-27
		IDT7188L-85B	
			★ **2802**
			1376-53
		IDT7188S-15	★ **2802**
			1372-16
		IDT7188S-20	★ **2802**
			1372-30

(Continued)

Base Number	Source	Device	Page-Line
7188	**IDT**		**(Cont'd)**
		IDT7188S-25	★ **2802**
			1372-59
		IDT7188S-30	★ **2802**
			1373-24
		IDT7188S-30B	
			★ **2802**
			1373-25
		IDT7188S-35	★ **2802**
			1373-81
		IDT7188S-35B	
			★ **2802**
			1373-82
		IDT7188S-45	★ **2802**
			1374-84
		IDT7188S-45B	
			★ **2802**
			1374-85
		IDT7188S-55	★ **2802**
			1375-72
		IDT7188S-55B	
			★ **2802**
			1375-73
		IDT7188S-70	★ **2802**
			1376-28
		IDT7188S-70B	
			★ **2802**
			1376-29
		IDT7188S-85B	
			★ **2802**
			1376-54
	Marconi	**MA7188**	★ **2877**
			644-10
7189	Thomson	EFB7189	1200-23
7190	**Marconi**	**MA7190**	★ **2878**
			646-103
7191	Sanyo	LC7191	1119-19
7193	Toshiba	TA7193	1124-99
7198	**IDT**	**IDT7198L-15**	★ **2802**
			1372-19
		IDT7198L-20	★ **2802**
			1372-35
		IDT7198L-25	★ **2802**
			1372-75
		IDT7198L-30	★ **2802**
			1373-34
		IDT7198L-30B	
			★ **2802**
			1373-35
		IDT7198L-35	★ **2802**
			1374-17
		IDT7198L-35B	
			★ **2802**
			1374-18
		IDT7198L-45	★ **2802**
			1375-40
		IDT7198L-45B	
			★ **2802**
			1375-41
		IDT7198L-55	★ **2802**
			1376-5
		IDT7198L-55B	
			★ **2802**
			1376-6
		IDT7198L-70	★ **2802**
			1376-39
		IDT7198L-70B	
			★ **2802**
			1376-40
		IDT7198L-85B	
			★ **2802**
			1376-57
		IDT7198S-15	★ **2802**
			1372-20
		IDT7198S-20	★ **2802**
			1372-36
		IDT7198S-25	★ **2802**
			1372-76
		IDT7198S-30	★ **2802**
			1373-36
		IDT7198S-30B	
			★ **2802**
			1373-37
		IDT7198S-35	★ **2802**
			1374-19

(Continued)

Base Number	Source	Device	Page-Line
7198	**IDT**		**(Cont'd)**
		IDT7198S-35B	
			★ **2802**
			1374-20
		IDT7198S-45	★ **2802**
			1375-42
		IDT7198S-45B	
			★ **2802**
			1375-43
		IDT7198S-55	★ **2802**
			1376-7
		IDT7198S-55B	
			★ **2802**
			1376-8
		IDT7198S-70	★ **2802**
			1376-41
		IDT7198S-70B	
			★ **2802**
			1376-42
		IDT7198S-85B	
			★ **2802**
			1376-58
71981	**IDT**	**IDT71981L-15**	
			★ **2802**
			1372-21
		IDT71981L-20	
			★ **2802**
			1372-45
		IDT71981L-25	
			★ **2802**
			1373-4
		IDT71981L-30	
			★ **2802**
			1373-47
		IDT71981L-30B	
			★ **2802**
			1373-48
		IDT71981L-35	
			★ **2802**
			1374-43
		IDT71981L-35B	
			★ **2802**
			1374-44
		IDT71981L-45	
			★ **2802**
			1375-44
		IDT71981L-45B	
			★ **2802**
			1375-45
		IDT71981L-55	
			★ **2802**
			1376-9
		IDT71981L-55B	
			★ **2802**
			1376-10
		IDT71981L-70	
			★ **2802**
			1376-43
		IDT71981L-70B	
			★ **2802**
			1376-44
		IDT71981L-85B	
			★ **2802**
			1376-59
		IDT71981S-15	
			★ **2802**
			1372-22
		IDT71981S-20	
			★ **2802**
			1372-46
		IDT71981S-25	
			★ **2802**
			1373-5
		IDT71981S-30	
			★ **2802**
			1373-49
		IDT71981S-30B	
			★ **2802**
			1373-50
		IDT71981S-35	
			★ **2802**
			1374-45
		IDT71981S-35B	
			★ **2802**
			1374-46
		IDT71981S-45	
			★ **2802**
			1375-46

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
71981	IDT		(Cont'd)
		IDT71981S-45B	
		⋆ **2802**	
			1375-47
		IDT71981S-55	
		⋆ **2802**	
			1376-11
		IDT71981S-55B	
		⋆ **2802**	
			1376-12
		IDT71981S-70	
		⋆ **2802**	
			1376-45
		IDT71981S-70B	
		⋆ **2802**	
			1376-46
		IDT71981S-85B	
		⋆ **2802**	
			1376-60
71982	IDT	**IDT71982L-15**	
		⋆ **2803**	
			1372-23
		¶	447-32
		IDT71982L-20	
		⋆ **2803**	
			1372-47
		¶	447-32
		IDT71982L-25	
		⋆ **2803**	
			1373-6
		¶	447-32
		IDT71982L-30	
		⋆ **2803**	
			1373-51
		¶	447-32
		IDT71982L-30B	
		⋆ **2803**	
			1373-52
		¶	447-32
		IDT71982L-35	
		⋆ **2803**	
			1374-47
		¶	447-32
		IDT71982L-35B	
		⋆ **2803**	
			1374-48
		¶	447-32
		IDT71982L-45	
		⋆ **2803**	
			1375-48
		¶	447-32
		IDT71982L-45B	
		⋆ **2803**	
			1375-49
		¶	447-32
		IDT71982L-55	
		⋆ **2803**	
			1376-13
		¶	447-32
		IDT71982L-55B	
		⋆ **2803**	
			1376-14
		¶	447-32
		IDT71982L-70	
		⋆ **2803**	
			1376-47
		¶	447-32
		IDT71982L-70B	
		⋆ **2803**	
			1376-48
		¶	447-32
		IDT71982L-85B	
		⋆ **2803**	
			1376-61
		¶	447-32
		IDT71982S-15	
		⋆ **2803**	
			1372-24
		¶	447-32
		IDT71982S-20	
		⋆ **2803**	
			1372-48
		¶	447-32
		IDT71982S-25	
		⋆ **2803**	
			1373-7
		¶	447-32
			(Continued)

Base Number	Source	Device	Page-Line
71982	IDT		(Cont'd)
		IDT71982S-30	
		⋆ **2803**	
			1373-53
		¶	447-32
		IDT71982S-30B	
		⋆ **2803**	
			1373-54
		¶	447-32
		IDT71982S-35	
		⋆ **2803**	
			1374-49
		¶	447-32
		IDT71982S-35B	
		⋆ **2803**	
			1374-50
		¶	447-32
		IDT71982S-45	
		⋆ **2803**	
			1375-50
		¶	447-32
		IDT71982S-45B	
		⋆ **2803**	
			1375-51
		¶	447-32
		IDT71982S-55	
		⋆ **2803**	
			1376-15
		¶	447-32
		IDT71982S-55B	
		⋆ **2803**	
			1376-16
		¶	447-32
		IDT71982S-70	
		⋆ **2803**	
			1376-49
		¶	447-32
		IDT71982S-70B	
		⋆ **2803**	
			1376-50
		¶	447-32
		IDT71982S-85B	
		⋆ **2803**	
			1376-62
		¶	447-32
72	AD	ADADC72J	938-5
		ADADC72K	937-40
		ADDAC72-COB-I	974-27
		ADDAC72-COB-V	975-8
		ADDAC72-CSB-I	974-28
		ADDAC72-CSB-V	975-9
	Burr-Brown	**ADC72A** ⋆ **2541**	938-17
		ADC72B ⋆ **2541**	938-7
		ADC72J ⋆ **2541**	938-18
		ADC72K ⋆ **2541**	938-19
		DAC72BH-COB-I ⋆ **2541**	974-23
		DAC72BH-COB-V ⋆ **2541**	975-28
		DAC72BH-CSB-I ⋆ **2541**	974-24
		DAC72BH-CSB-V ⋆ **2541**	975-29
		PWR72	1220-139
	Lomas	LDP72	4868-23
	MCE	MCE72	1180-39
72C19	National	MM72C19	632-136
72C65	SMC	FDC72C65	884-12
72C66	SMC	FDC72C66	884-13
72HB000	OKI	72HB000	4057-45
72H000	OKI	72H000	4057-46
72V000	OKI	72V000	4057-44

Base Number	Source	Device	Page-Line
720	AMCC	Q720	4041-4
	EG&G-Reticon	RO720B	1222-19
	ITT	TCA720	1127-113
	Motorola	MHW720	1104-47
		NHW720A	1104-53
7200	CalDevices	DLM7200	4042-48
	IDT	**IDT7200LA-120** ⋆ **2805** ⋆ **2826**	1305-31
		IDT7200LA-25 ⋆ **2805** ⋆ **2826**	1305-32
		IDT7200LA-30 ⋆ **2805** ⋆ **2826**	1305-33
		IDT7200LA-35 ⋆ **2805** ⋆ **2826**	1305-34
		IDT7200LA-40 ⋆ **2805** ⋆ **2826**	1305-35
		IDT7200LA-50 ⋆ **2805** ⋆ **2826**	1305-36
		IDT7200LA-65 ⋆ **2805** ⋆ **2826**	1305-37
		IDT7200LA-80 ⋆ **2805** ⋆ **2826**	1305-38
		IDT7200SA-120 ⋆ **2805** ⋆ **2826**	1305-39
		IDT7200SA-25 ⋆ **2805** ⋆ **2826**	1305-40
		IDT7200SA-30 ⋆ **2805** ⋆ **2826**	1305-41
		IDT7200SA-35 ⋆ **2805** ⋆ **2826**	1305-42
		IDT7200SA-40 ⋆ **2805** ⋆ **2826**	1305-43
		IDT7200SA-50 ⋆ **2805** ⋆ **2826**	1305-44
		IDT7200SA-65 ⋆ **2805** ⋆ **2826**	1305-45
		IDT7200SA-80 ⋆ **2805** ⋆ **2826**	1305-46
	Sanyo	LC7200	1120-111
72000	OKI	MSM72000	4057-29
7201	GE/Intersil	ICM7201	1222-109
	IDT	**IDT7201LA-120** ⋆ **2805** ⋆ **2826**	1305-56
		¶	445-31
		IDT7201LA-120B ⋆ **2805** ⋆ **2826**	1305-57
		¶	445-31
			(Continued)

Base Number	Source	Device	Page-Line
7201	IDT		(Cont'd)
		IDT7201LA-30 ⋆ **2805** ⋆ **2826**	1305-47
		¶	445-31
		IDT7201LA-35 ⋆ **2805** ⋆ **2826**	1305-84
		¶	445-31
		IDT7201LA-40B ⋆ **2805** ⋆ **2826**	1305-82
		¶	445-31
		IDT7201LA-50 ⋆ **2805** ⋆ **2826**	1305-75
		¶	445-31
		IDT7201LA-50B ⋆ **2805** ⋆ **2826**	1305-76
		¶	445-31
		IDT7201LA-65 ⋆ **2805** ⋆ **2826**	1305-67
		¶	445-31
		IDT7201LA-65B ⋆ **2805** ⋆ **2826**	1305-68
		¶	445-31
		IDT7201LA-80 ⋆ **2805** ⋆ **2826**	1305-63
		¶	445-31
		IDT7201LA-80B ⋆ **2805** ⋆ **2826**	1305-64
		¶	445-31
		IDT7201SA-120 ⋆ **2805** ⋆ **2826**	1305-58
		¶	445-31
		IDT7201SA-120B ⋆ **2805** ⋆ **2826**	1305-59
		¶	445-31
		IDT7201SA-30 ⋆ **2805** ⋆ **2826**	1305-48
		¶	445-31
		IDT7201SA-35 ⋆ **2805** ⋆ **2826**	1305-85
		¶	445-31
		IDT7201SA-40B ⋆ **2805** ⋆ **2826**	1305-83
		¶	445-31
		IDT7201SA-50 ⋆ **2805** ⋆ **2826**	1305-77
		¶	445-31
		IDT7201SA-50B ⋆ **2805** ⋆ **2826**	1305-78
		¶	445-31
		IDT7201SA-65 ⋆ **2805** ⋆ **2826**	1305-69
		¶	445-31
			(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7201	**IDT**		**(Cont'd)**
		IDT7201SA-65B	
			* **2805**
			* **2826**
			1305-70
			¶ 445-31
		IDT7201SA-80	
			* **2805**
			* **2826**
			1305-65
			¶ 445-31
		IDT7201SA-80B	
			* **2805**
			* **2826**
			1305-66
			¶ 445-31
	NEC	μPD7201A	870-19
			871-124
			871-126
			1010-53
	Sanyo	LC7201	1120-112
	Siemens	SAB7201A	873-65
			882-9
7202	**IDT**	**IDT7202LA-120**	
			* **2805**
			* **2827**
			1306-5
			¶ 445-31
		IDT7202LA-120B	
			* **2805**
			* **2827**
			1306-6
			¶ 445-31
		IDT7202LA-25	
			* **2805**
			* **2827**
			1305-103
			¶ 445-31
		IDT7202LA-30	
			* **2805**
			* **2827**
			1305-104
			¶ 445-31
		IDT7202LA-35	
			* **2805**
			* **2827**
			1306-25
			¶ 445-31
		IDT7202LA-40B	
			* **2805**
			* **2827**
			1306-23
			¶ 445-31
		IDT7202LA-50	
			* **2805**
			* **2827**
			1306-18
			¶ 445-31
		IDT7202LA-50B	
			* **2805**
			* **2827**
			1306-19
			¶ 445-31
		IDT7202LA-65	
			* **2805**
			* **2827**
			1306-13
			¶ 445-31
		IDT7202LA-65B	
			* **2805**
			* **2827**
			1306-14
			¶ 445-31
		IDT7202LA-80	
			* **2805**
			* **2827**
			1306-9
			¶ 445-31
		IDT7202LA-80B	
			* **2805**
			* **2827**
			1306-10
			¶ 445-31

(Continued)

Base Number	Source	Device	Page-Line
7202	**IDT**		**(Cont'd)**
		IDT7202SA-120	
			* **2805**
			* **2827**
			1306-7
			¶ 445-31
		IDT7202SA-120B	
			* **2805**
			* **2827**
			1306-8
			¶ 445-31
		IDT7202SA-25	
			* **2805**
			* **2827**
			1305-105
			¶ 445-31
		IDT7202SA-30	
			* **2805**
			* **2827**
			1306-1
			¶ 445-31
		IDT7202SA-35	
			* **2805**
			* **2827**
			1306-26
			¶ 445-31
		IDT7202SA-40B	
			* **2805**
			* **2827**
			1306-24
			¶ 445-31
		IDT7202SA-50	
			* **2805**
			* **2827**
			1306-20
			¶ 445-31
		IDT7202SA-50B	
			* **2805**
			* **2827**
			1306-21
			¶ 445-31
		IDT7202SA-65	
			* **2805**
			* **2827**
			1306-15
			¶ 445-31
		IDT7202SA-65B	
			* **2805**
			* **2827**
			1306-16
			¶ 445-31
		IDT7202SA-80	
			* **2805**
			* **2827**
			1306-11
			¶ 445-31
		IDT7202SA-80B	
			* **2805**
			* **2827**
			1306-12
			¶ 445-31
72021	IDT	IDT72021-25	1306-2
7203	**IDT**	**IDT7203L-120**	
			* **2805**
			* **2828**
			1306-60
		IDT7203L-120B	
			* **2805**
			* **2828**
			1306-61
		IDT7203L-35	* **2805**
			* **2828**
			1306-39
		IDT7203L-40	* **2805**
			* **2828**
			1306-40
		IDT7203L-50	* **2805**
			* **2828**
			1306-79
		IDT7203L-50B	
			* **2805**
			* **2828**
			1306-80
		IDT7203L-65	* **2805**
			* **2828**
			1306-72

(Continued)

Base Number	Source	Device	Page-Line
7203	**IDT**		**(Cont'd)**
		IDT7203L-65B	
			* **2805**
			* **2828**
			1306-73
		IDT7203L-80	* **2805**
			* **2828**
			1306-66
		IDT7203L-80B	
			* **2805**
			* **2828**
			1306-67
		IDT7203S-120	
			* **2805**
			* **2828**
			1306-62
		IDT7203S-120B	
			* **2805**
			* **2828**
			1306-63
		IDT7203S-35	* **2805**
			* **2828**
			1306-41
		IDT7203S-40	* **2805**
			* **2828**
			1306-42
		IDT7203S-50	* **2805**
			* **2828**
			1306-81
		IDT7203S-50B	
			* **2805**
			* **2828**
			1306-82
		IDT7203S-65	* **2805**
			* **2828**
			1306-74
		IDT7203S-65B	
			* **2805**
			* **2828**
			1306-75
		IDT7203S-80	* **2805**
			* **2828**
			1306-68
		IDT7203S-80B	
			* **2805**
			* **2828**
			1306-69
	Sanyo	LC7203	1120-113
72031	IDT	IDT72031-35	1306-43
7204	**IDT**	**IDT7204L-120**	
			* **2805**
			* **2829**
			1307-3
		IDT7204L-120B	
			* **2805**
			* **2829**
			1307-4
		IDT7204L-35	* **2805**
			* **2829**
			1306-99
		IDT7204L-40	* **2805**
			* **2829**
			1306-100
		IDT7204L-50	* **2805**
			* **2829**
			1307-21
		IDT7204L-50B	
			* **2805**
			* **2829**
			1307-22
		IDT7204L-65	* **2805**
			* **2829**
			1307-15
		IDT7204L-65B	
			* **2805**
			* **2829**
			1307-16
		IDT7204L-80	* **2805**
			* **2829**
			1307-9
		IDT7204L-80B	
			* **2805**
			* **2829**
			1307-10

(Continued)

Base Number	Source	Device	Page-Line
7204	**IDT**		**(Cont'd)**
		IDT7204S-120	
			* **2805**
			* **2829**
			1307-5
		IDT7204S-120B	
			* **2805**
			* **2829**
			1307-6
		IDT7204S-35	* **2805**
			* **2829**
			1306-101
		IDT7204S-40	* **2805**
			* **2829**
			1306-102
		IDT7204S-50	* **2805**
			* **2829**
			1307-23
		IDT7204S-50B	
			* **2805**
			* **2829**
			1307-24
		IDT7204S-65	* **2805**
			* **2829**
			1307-17
		IDT7204S-65B	
			* **2805**
			* **2829**
			1307-18
		IDT7204S-80	* **2805**
			* **2829**
			1307-11
		IDT7204S-80B	
			* **2805**
			* **2829**
			1307-12
72041	IDT	IDT72041-35	1306-103
7205	Toshiba	TA7205A	1117-124
7206	**GE/Intersil**	**ICM7206A**	* **2677**
			1198-134
		ICM7206B	* **2677**
			1198-135
		ICM7206C	* **2677**
			1198-136
		ICM7206D	* **2677**
			1199-1
72065	NEC	μPD72065	884-71
7207	GE/Intersil	ICM7207	633-88
		ICM7207A	633-89
	Sanyo	LC7207	1120-114
	Toshiba	TA7207	1117-74
7208	**GE/Intersil**	**ICM7208**	* **2669**
			611-141
7209	**GE/Intersil**	**ICM7209**	* **2670**
			633-87
			1001-12
	IDT	**IDT7209L**	* **2806**
			603-134
		IDT7209LB	* **2806**
			603-135
721	Stantel-STC	TEL721	645-92
			1192-5
	TI	TL721	1102-87
			1219-109
	VTC	**VA721J**	* **3374**
			1147-12
		VA721K	* **3374**
			1141-11
		VA721L	* **3374**
			1139-10
		VA721S	* **3374**
			1141-12
7210	**IDT**	**IDT7210L**	* **2806**
			604-96
		IDT7210LB	* **2806**
			604-97
	LSIComp	**LS7210**	* **2867**
			637-67
			1201-21
	NEC	μPD7210	871-37
			873-34
			876-69
			884-125
			886-62
	Sanyo	LC7210	1120-45
			1191-3

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7210			(Cont'd)
	SMC	COM7210	871-34
			872-60
			876-63
			884-121
			¶ 415-11
72103	**IDT**	**IDT72103**	⋆ **2805**
			⋆ **2830**
			1306-93
		IDT72103-120	
			⋆ **2805**
			⋆ **2830**
			1306-44
		IDT72103-35	⋆ **2805**
			⋆ **2830**
			1306-45
		IDT72103-40	⋆ **2805**
			⋆ **2830**
			1306-46
		IDT72103-50	⋆ **2805**
			⋆ **2830**
			1306-47
		IDT72103-65	⋆ **2805**
			⋆ **2830**
			1306-48
		IDT72103-80	⋆ **2805**
			⋆ **2830**
			1306-49
		IDT72103B	⋆ **2805**
			⋆ **2830**
			1306-94
72104	**IDT**	**IDT72104**	⋆ **2805**
			⋆ **2830**
			1307-29
		IDT72104-120	
			⋆ **2805**
			⋆ **2830**
			1306-104
		IDT72104-35	⋆ **2805**
			⋆ **2830**
			1306-105
		IDT72104-40	⋆ **2805**
			⋆ **2830**
			1306-106
		IDT72104-50	⋆ **2805**
			⋆ **2830**
			1306-107
		IDT72104-65	⋆ **2805**
			⋆ **2830**
			1307-1
		IDT72104-80	⋆ **2805**
			⋆ **2830**
			1307-2
		IDT72104B	⋆ **2805**
			⋆ **2830**
			1307-30
7211	**GE/Intersil**	**ICM7211**	⋆ **2671**
			616-151
			980-18
		ICM7211A	⋆ **2671**
			616-152
			980-19
		ICM7211AM	⋆ **2671**
			616-146
			980-1
		ICM7211M	⋆ **2671**
			616-147
			980-2
	GE/RCA	**CD7211**	⋆ **2635**
			⋆ **2653**
			978-1
	Hughes	HLCD7211-1	979-144
		HLCD7211-2	979-145
		HLCD7211-3	980-23
		HLCD7211-4	980-24
	Maxim	ICM7211	614-38
			980-20
		ICM7211A	614-39
			980-21
		ICM7211AM	614-36
			980-3
		ICM7211M	614-37
			980-4
	SGS	TDA7211	1121-1
	TeledyneS	TSC7211A	980-35
		TSC7211AM	980-5

Base Number	Source	Device	Page-Line
7212	**GE/Intersil**	**ICM7212**	⋆ **2671**
			616-161
			980-6
		ICM7212A	⋆ **2671**
			616-162
			980-7
		ICM7212AM	⋆ **2671**
			617-3
			980-10
		ICM7212M	⋆ **2671**
			617-4
			980-11
	IDT	**IDT7212L**	⋆ **2806**
			604-25
		IDT7212LB	⋆ **2806**
			604-26
	Maxim	ICM7212	617-1
			980-8
		ICM7212A	617-2
			980-9
		ICM7212AM	614-40
			980-12
		ICM7212M	614-41
			980-13
	SGS	TDA7212	1121-2
	TeledyneS	TSC7212A	980-16
		TSC7212AM	980-17
721264	**IDT**	**IDT721264**	⋆ **2806**
			⋆ **2831**
			645-78
721265	**IDT**	**IDT721265**	⋆ **2806**
			⋆ **2831**
			888-36
7213	**GE/Intersil**	**ICM7213**	⋆ **2670**
			633-90
	IDT	**IDT7213L**	⋆ **2806**
			604-27
		IDT7213LB	⋆ **2806**
			604-28
7214	National	DM7214	679-109
7215	**GE/Intersil**	**ICM7215**	⋆ **2669**
			980-64
	SGS	TDA7215	1121-3
	Toshiba	TA7215	1117-147
7216	**GE/Intersil**	**ICM7216**	⋆ **2669**
			613-138
		ICM7216A	⋆ **2669**
			691-52
		ICM7216B	⋆ **2669**
			691-53
		ICM7216C	⋆ **2669**
			691-63
		ICM7216D	⋆ **2669**
			691-64
	IDT	**IDT7216L**	⋆ **2806**
			⋆ **2832**
			604-56
		IDT7216LB	⋆ **2806**
			⋆ **2832**
			604-57
7217	**GE/Intersil**	**ICM7217**	⋆ **2669**
			613-74
		ICM7217A	⋆ **2669**
			613-75
		ICM7217B	⋆ **2669**
			613-76
			691-46
		ICM7217C	⋆ **2669**
			613-77
			691-47
	IDT	**IDT7217L**	⋆ **2806**
			⋆ **2832**
			604-58
		IDT7217LB	⋆ **2806**
			⋆ **2832**
			604-59
	Maxim	ICM7217	613-82
		ICM7217A	613-83
		ICM7217B	613-84
			691-49
		ICM7217C	613-85
			691-50
	Toshiba	TA7217A	1117-125

Base Number	Source	Device	Page-Line
7218	**GE/Intersil**	**ICM7218A**	⋆ **2671**
			692-91
			978-40
		ICM7218B	⋆ **2671**
			692-92
			978-41
		ICM7218C	⋆ **2671**
			692-93
			978-42
		ICM7218D	⋆ **2671**
			692-94
			978-43
		ICM7218E	⋆ **2671**
			692-95
			978-44
	Maxim	ICM7218A	692-96
			978-45
		ICM7218B	692-97
			978-46
		ICM7218C	692-98
			978-47
		ICM7218D	692-99
			978-48
722	Burr-Brown	722	1221-5
	Micro-Link	STD722	4873-58
7220	**GoldStar**	**GCL7220**	⋆ **4242**
			4048-11
		LL7220	4048-12
	Laserpath	LP7220C	4052-11
		LP7220P	4052-12
	LSIComp	**LS7220**	⋆ **2867**
			1127-35
	LSI Logic	LL7220	4052-48
	NEC	μPD7220A	882-69
			882-74
		μPD7220A-1	882-70
		μPD7220A-2	882-71
	Raytheon	**RL7220**	⋆ **4297**
			4058-41
	S-MOS	**SLA7220**	⋆ **4305**
			4069-6
	Sanyo	LC7220	1120-46
			1191-4
	SGS	TDA7220	1118-64
	SMC	CRT7220A	882-75
		CRT7220A-1	882-76
		CRT7220A-2	882-77
	Zilog	Z7220A	884-127
		Z7220A-GDC	884-128
7222	**LSIComp**	**LS7222**	⋆ **2867**
			984-1
	Toshiba	TA7222A	1117-126
7223	**LSIComp**	**LS7223**	⋆ **2867**
			984-2
	MicroPwr	MP7223	1196-4
7224	AD	AD7224B	948-28
			¶ 419-11
		AD7224C	948-10
			¶ 419-11
		AD7224K	948-29
			¶ 419-11
		AD7224L	948-11
			¶ 419-11
	GE/Intersil	**ICM7224**	⋆ **2669**
			613-59
		ICM7224A	⋆ **2669**
			613-60
	Maxim	AD7224	946-40
		ICM7224	613-63
	PMI	**PM7224A**	⋆ **2973**
			⋆ **2976**
			946-41
		PM7224B	⋆ **2973**
			⋆ **2976**
			948-14
		PM7224E	⋆ **2973**
			⋆ **2976**
			946-42
		PM7224F	⋆ **2973**
			⋆ **2976**
			948-15
		PM7224G	⋆ **2973**
			⋆ **2976**
			946-43

(Continued)

Base Number	Source	Device	Page-Line
7224	**PMI**		**(Cont'd)**
		PM7224H	⋆ **2973**
			⋆ **2976**
			948-16
7225	AD	AD7225K	948-12
		AD7225L	946-39
	GE/Intersil	**ICM7225**	⋆ **2669**
			613-61
		ICM7225A	⋆ **2669**
			613-62
	LSIComp	**LS7225**	⋆ **2867**
			1127-36
	Maxim	AD7225	949-8
		ICM7225	613-64
	NEC	μPD7225	885-34
			977-85
	Sanyo	LC7225	1120-47
			1191-5
7226	AD	AD7226B	950-26
			¶ 419-33
			¶ 422-23
		AD7226K	950-27
			¶ 419-33
			¶ 422-23
		AD7226T	950-28
			¶ 419-33
			¶ 422-23
	Fujitsu	MB7226RA-20	1317-47
		MB7226RA-25	1317-54
		MB7226RS-20	1317-48
		MB7226RS-25	1317-55
	GE/Intersil	**ICM7226**	⋆ **2669**
			613-139
		ICM7226A	⋆ **2669**
			691-54
		ICM7226B	⋆ **2669**
			691-55
	LSIComp	**LS7226**	⋆ **2867**
			1127-37
	Maxim	AD7226B	948-30
		AD7226K	948-31
		AD7226T	948-32
	PMI	**PM7226A**	⋆ **2973**
			⋆ **2976**
			949-5
		PM7226B	⋆ **2973**
			⋆ **2976**
			949-9
		PM7226E	⋆ **2973**
			⋆ **2976**
			949-6
		PM7226F	⋆ **2973**
			⋆ **2976**
			949-10
		PM7226G	⋆ **2973**
			⋆ **2976**
			949-7
		PM7226H	⋆ **2973**
			⋆ **2976**
			949-11
72264	IDT	IDT72264	888-37
			¶ 408-36
72265	IDT	IDT72265	645-79
7227	**GE/Intersil**	**ICM7227**	⋆ **2669**
			613-78
		ICM7227A	⋆ **2669**
			613-79
		ICM7227B	⋆ **2669**
			613-80
			691-48
		ICM7227C	⋆ **2669**
			613-81
			691-51
	NEC	μPD7227	883-81
			977-99
	Toshiba	TA7227	1117-173
7228	**AD**	**AD7228**	⋆ **2406**
			948-13
	LSIComp	**LS7228**	⋆ **2867**
			1127-38
	NEC	μPD7228	883-82
			977-100
7229	AT&T	T7229	1194-102
	LSIComp	**LS7229**	⋆ **2867**
			1127-39

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
723	Fairchild	μA723C	1214-42
		μA723M	1214-43
	GE/Intersil	μA723	1214-44
	GE/RCA	**CA723**	★ **2650**
			1214-45
		CA723C	★ **2650**
			1214-46
		LM723	★ **2650**
			1214-47
		LM723C	★ **2650**
			1214-48
	Lambda	LAS723	1214-72
		LAS723B	1214-88
	National	LM723	1214-52
		LM723C	1214-53
	Samsung	LM723	1214-54
	SGS	LM723	1214-55
		LM723C	1214-56
	Signetics	μA723	1214-57
		μA723C	1214-58
		SA723C	1214-59
	SiliconG	SG723	1214-60
		SG723C	1214-61
	TI	μA723	1214-62
		μA723C	1214-63
		μA723M	1214-64
7230	Toshiba	TA7230	1117-148
7231	**GE/Intersil**	**ICM7231**	★ **2671**
			980-104
	LSIComp	**LS7231**	★ **2867**
			1127-93
	Maxim	ICM7231	980-105
		MAX7231	978-21
		MAX7231A	980-106
		MAX7231B	980-107
		MAX7231C	980-108
7232	Fujitsu	MB7232RA-20	1318-98
		MB7232RA-25	1318-101
		MB7232RS-20	1318-99
		MB7232RS-25	1318-102
	GE/Intersil	**ICM7232**	★ **2671**
			981-8
	LSIComp	**LS7232**	★ **2867**
			1127-94
	Maxim	ICM7232	981-9
		MAX7232	977-135
		MAX7232A	981-10
		MAX7232B	981-11
		MAX7232C	981-12
	Toshiba	TA7232	1117-149
7233	**GE/Intersil**	**ICM7233**	★ **2671**
			979-149
	LSIComp	**LS7233**	★ **2867**
			1127-95
	Maxim	ICM7233	979-150
		MAX7233A	979-151
		MAX7233B	979-152
		MIC7233A	979-153
	Micrel	MIC7233	979-148
	SGS	TDA7233	1116-55
	Toshiba	TA7233	1117-150
7234	GE/Intersil	ICM7234	980-44
	LSIComp	**LS7234**	★ **2867**
			1127-96
	Maxim	ICM7234	980-45
		MAX7234	977-136
		MAX7234A	980-46
		MAX7234B	980-47
7235	GE/Intersil	ICM7235	980-26
		ICM7235A	980-27
		ICM7235AM	980-28
		ICM7235M	980-29
	LSIComp	**LS7235**	★ **2867**
			1127-97
7236	GE/Intersil	ICM7236	613-57
		ICM7236A	613-58
7237	**LSIComp**	**LS7237**	★ **2867**
			1127-98
	Toshiba	TA7237A	1117-25
7238	Fujitsu	MB7238RA-20	1320-51
		MB7238RA-25	1320-65
		MB7238RA-25W	1320-66
		MB7238RS-20	1320-52
		MB7238RS-25	1320-67

(Continued)

Base Number	Source	Device	Page-Line
7238	Fujitsu		(Cont'd)
		MB7238RS-25W	1320-68
	Toshiba	TA7238	1117-127
724	AD	RTI724	4860-4
	Burr-Brown	724	1221-4
	DataTrans	DT724	4859-43
7240	AD	AD7240J	968-35
		AD7240K	968-12
		AD7240S	968-36
		AD7240T	968-13
	GE/Intersil	**ICM7240**	★ **2670**
			1201-17
	LSIComp	LS7240	691-25
	Maxim	ICM7240	1201-22
	Toshiba	TA7240A	1117-174
72401	**IDT**	**IDT72401**	★ **2805**
			★ **2833**
			1304-71
72402	**IDT**	**IDT72402**	★ **2805**
			★ **2833**
			1304-107
72403	**IDT**	**IDT72403**	★ **2805**
			★ **2833**
			1304-72
72404	**IDT**	**IDT72404**	★ **2805**
			★ **2833**
			1304-108
7241	Toshiba	TA7241A	1117-175
72413	**IDT**	**IDT72413**	★ **2805**
			1305-1
7242	**GE/Intersil**	**ICM7242**	★ **2670**
			1201-18
	Maxim	ICM7242	1201-23
	Toshiba	TA7242	1126-72
7243	**GE/Intersil**	**ICM7243**	★ **2671**
			980-92
	IDT	**IDT7243**	★ **2806**
			644-103
		IDT7243L	★ **2806**
			604-98
		IDT7243LB	★ **2806**
			603-138
	Toshiba	TA7243	1125-145
7245	**AD**	**AD7245**	★ **2407**
			956-39
7248	**AD**	**AD7248**	★ **2407**
			968-7
7249	**GE/Intersil**	**ICM7249**	★ **2669**
			1201-4
		ICM7249M	★ **2669**
			1201-5
725	Burr-Brown	DAC725J	976-18
		DAC725K	975-25
		PWS725	1221-21
		725	★ **2539**
			1222-84
	Fairchild	μA725AM	1147-5
		μA725C	1154-16
		μA725EC	1132-106
		μA725M	1149-38
	National	LM725	1149-39
		LM725A	1132-103
			1150-10
		LM725C	1154-17
	PMI	PM725	1149-37
		PM725C	1154-18
	Robotrol	RMB725	4859-42
7250	**AT&T**	**T7250**	★ **2470**
			★ **2480**
			1197-101
		T7250A	★ **2470**
			★ **2480**
			1011-4
	GE/Intersil	**ICM7250**	★ **2670**
			1201-19
	Maxim	ICM7250	1201-24
	Sanyo	LC7250	1120-116
	Siliconix	SI7250	911-41
			999-5
			¶ 425-32
7252	**AT&T**	**T7252**	★ **2470**
			★ **2481**
			1011-72
			1200-5
	Toshiba	TA7252	1117-176

Base Number	Source	Device	Page-Line
7253	Sanyo	LC7253	1120-62
7254	Siliconix	VQ7254	1006-123
	Supertex	VQ7254	1006-129
7255	NEC	μPD7255	981-52
7257	Sanyo	LC7257	1120-63
7258	Sanyo	LC7258	1120-64
726	Burr-Brown	PWS726	1221-22
		726	★ **2539**
			1222-85
	Fairchild	μA726M	1229-27
7260	GE/Intersil	ICM7260	1201-20
	LSIComp	**LS7260**	★ **2867**
			1003-27
	Maxim	ICM7260	1201-25
	NEC	μPD7260	884-113
	SMC	HDC7260	885-19
	Zilog	Z7260-H/FDC	885-1
7261	**LSIComp**	**LS7261**	★ **2867**
			1003-25
	NEC	μPD7261A	883-60
		μPD7261AH	883-61
	SMC	HDC7261	887-11
7262	**LSIComp**	**LS7262**	★ **2867**
			1127-50
			1222-125
	SMC	MSD7262	883-89
7263	**LSIComp**	**LS7263**	★ **2867**
			1004-12
	Toshiba	TA7263	1117-177
7264	**LSIComp**	**LS7264**	★ **2867**
			1127-51
			1222-126
	Toshiba	TA7264	1117-178
7265	NEC	μPD7265	884-20
	SMC	FDC7265	885-75
7268	Toshiba	TA7268	1117-26
7269	Toshiba	TA7269	1117-151
727	Fairchild	μA727M	1104-14
7270	**LSIComp**	**LS7270**	★ **2867**
			888-95
	SGS	TDA7270	1123-44
			¶ 435-19
	Toshiba	TA7270	1117-179
7271	Toshiba	TA7271	1117-180
7272	SGS	TDA7272	1222-132
72720	**SEEQ**	**72720**	★ **2991**
			868-103
7280	GE/Intersil	ICM7280	978-24
	National	DM7280	662-93
7281	GE/Intersil	ICM7281	977-103
	National	DM7281	660-81
	NEC	μPD7281	645-120
			855-8
7283	GE/Intersil	ICM7283	978-25
	Toshiba	TA7283	1123-45
729	**Burr-Brown**	**DAC729J**	★ **2541**
			976-38
		DAC729K	★ **2541**
			976-37
	Micro-Link	STD729	4874-54
7291	National	DM7291	660-82
73	**Apex**	**PA73**	★ **2458**
			1130-52
			1131-96
			1166-19
		PA73M	★ **2458**
			1166-20
		PA73Q	★ **2458**
			1166-21
73C04	VersaLogic	VL73C04	4873-32
73HB000			
	OKI	73HB000	4057-48
73H000			
	OKI	73H000	4057-49
73K212	**SiliconSys**	**SSI73K212**	★ **3199**
			1195-112
		SSI73K212L	★ **3199**
			1196-61
73K221	**SiliconSys**	**SSI73K221**	★ **3199**
			1196-38
		SSI73K221L	★ **3199**
			1196-62
73K222	**SiliconSys**	**SSI73K222**	★ **3199**
			1196-39
		SSI73K222L	★ **3199**
			1196-63

(Continued)

Base Number	Source	Device	Page-Line
73K222	**SiliconSys**		(Cont'd)
		SSI73K222U	★ **3199**
			1196-77
73K224	**SiliconSys**	**SSI73K224**	★ **3199**
			1196-42
		SSI73K224L	★ **3199**
			1196-64
73K322	**SiliconSys**	**SSI73K322**	★ **3199**
			1196-59
		SSI73K322L	★ **3199**
			1196-66
73K324	**SiliconSys**	**SSI73K324**	★ **3199**
			1196-60
		SSI73K324L	★ **3199**
			1196-65
73M214			
	SiliconSys	**SSI73M214**	★ **3199**
			1192-8
73M223			
	SiliconSys	**SSI73M223**	★ **3199**
			1196-43
73M3522			
	SiliconSys	**SSI73M3522**	★ **3199**
			1197-4
73V000	OKI	73V000	4057-47
730	Atec	730	4876-4
	Unitrode	PIC730	1218-23
	VTC	**VA730J**	★ **3373**
			1102-24
		VA730S	★ **3373**
			1102-25
7300	NCR	NCR7300	882-30
73000	OKI	MSM73000	4057-30
7301	NCR	NCR7301	882-31
7302	Toshiba	TA7302	1121-20
7303	AMD	DP7303	996-23
	National	DP7303	996-31
	Toshiba	TA7303	1121-81
7304	AMD	DP7304B	996-11
	National	DP7304	870-119
		DP7304B	996-32
	VersaLogic	VL7304	4870-23
	WinSystems	LPM7304	4875-51
		MCM7304	4875-22
7307	AMD	DP7307	996-24
	National	DP7307	996-33
7308	AMD	DP7308	996-25
	National	DP7308	996-34
7310	**LSIComp**	**LS7310**	★ **2867**
			1003-10
	National	DP7310	1007-16
	Thomson	EFB7310	911-71
			1193-35
	Toshiba	TA7310	1190-73
7311	National	DP7311	1007-17
7313	Toshiba	TA7313A	1117-75
7314	Toshiba	TA7314	1126-1
	WinSystems	LPM7314	4876-3
		MCM7314	4876-2
7315	**LSIComp**	**LS7315**	★ **2867**
			1003-11
	Toshiba	TA7315B	1126-30
7316	IDT	IDT7316	605-10
	Toshiba	TA7316	1202-4
7317	IDT	IDT7317	605-11
	Toshiba	TA7317	1127-68
7318	Toshiba	TA7318	1127-66
732	AD	RTI732	4860-3
	DataTrans	DT732	4859-26
7320	**GoldStar**	**GCL7320**	★ **4242**
			4048-17
		LL7320	4048-18
	IDT	7320	605-9
	Laserpath	LP7320C	4052-14
		LP7320P	4052-15
	LSI Logic	LL7320	4053-3
	Raytheon	**RL7320**	★ **4297**
			4058-44
	Toshiba	TA7320	1219-92
7322	Toshiba	TA7322	1118-20
7324	Toshiba	TA7324	1116-93
7325	Toshiba	TA7325	1118-48
7326	Toshiba	TA7326	1201-59
7327	Toshiba	TA7327	1201-60

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
733	Fairchild	μA733C	1104-74
		μA733M	1104-75
	GE/Intersil	μA733	1104-76
		μA733C	1104-77
	National	LM733	1104-88
	Signetics	μA733	1104-102
			1150-5
		μA733C	1104-103
			1150-7
	TI	μA733C	1104-113
		μA733M	1104-114
	VTC	**VA733**	*** 3373**
			1126-148
7330	Toshiba	TA7330	1123-54
7331	**LSIComp**	**LS7331**	*** 2867**
			1003-9
	Thomson	EF7331	1198-99
	Toshiba	TA7331	1123-46
7332	Thomson	EF7332	1192-31
	Toshiba	TA7332	1127-67
7333	Thomson	EF7333	1193-12
	Toshiba	TA7333	1122-40
7335	Toshiba	TA7335	1121-5
7336	Toshiba	TA7336	1117-76
734	Micro-Link	STD734	4876-57
7340	**S-MOS**	**SLA7340**	*** 4305**
			4069-7
7341	Toshiba	TA7341	1120-77
7342	Toshiba	TA7342	1121-159
7344	Toshiba	TA7344	1122-16
735	Atec	735	4876-16
	Zendex	ZX735	4860-16
		ZX735i	4857-19
7358	Toshiba	TA7358	1120-125
7359	SGS	TDA7359	1116-75
	Toshiba	TA7359	1118-49
736	Burr-Brown	DAC736K	973-24
7361	SGS	TDA7361	1116-76
7362	Toshiba	TA7362	1116-94
7381	IDT	IDT7381	605-8
739	Fairchild	μA739C	1118-28
			1179-52
7392	Fairchild	μA7392C	1004-11
			¶ 437-38
74	Amperex	BGY74	1123-116
	Burr-Brown	PWR74	1220-138
	MCE	MCE74	1186-28
	TI	SN74AS-EVM-8	4719-4
74act11157			
	TI	74act11157	631-27
74ACT00			
	GE/RCA	**CD74ACT00**	*** 2629**
			623-55
74ACT02			
	GE/RCA	**CD74ACT02**	*** 2629**
			625-109
74ACT04			
	GE/RCA	**CD74ACT04**	*** 2629**
			607-148
74ACT05			
	GE/RCA	**CD74ACT05**	*** 2629**
			607-149
74ACT08			
	GE/RCA	**CD74ACT08**	*** 2629**
			622-51
74ACT10			
	GE/RCA	**CD74ACT10**	*** 2629**
			622-175
74ACT109			
	GE/RCA	**CD74ACT109**	*** 2629**
			620-145
74ACT11000			
	TI	**74ACT11000**	*** 3252**
			623-57
74ACT11002			
	TI	**74ACT11002**	*** 3252**
			625-111
74ACT11004			
	TI	**74ACT11004**	*** 3252**
			607-150
74ACT11008			
	TI	**74ACT11008**	*** 3252**
			622-52
74ACT11010			
	TI	**74ACT11010**	*** 3252**
			622-176
74ACT11011			
	TI	**74ACT11011**	*** 3252**
			622-1
74ACT11020			
	TI	**74ACT11020**	*** 3252**
			622-119
74ACT11021			
	TI	**74ACT11021**	*** 3252**
			621-148
74ACT11027			
	TI	**74ACT11027**	*** 3252**
			625-54
74ACT11030			
	TI	**74ACT11030**	*** 3252**
			623-140
74ACT11032			
	TI	**74ACT11032**	*** 3252**
			624-125
74ACT11034			
	TI	**74ACT11034**	*** 3252**
			605-159
74ACT11074			
	TI	**74ACT11074**	*** 3252**
			617-68
74ACT11109			
	TI	**74ACT11109**	*** 3252**
			620-147
74ACT11132			
	TI	**74ACT11132**	*** 3252**
			638-115
74ACT11138			
	TI	**74ACT11138**	*** 3252**
			616-104
74ACT11139			
	TI	**74ACT11139**	*** 3252**
			615-34
74ACT11151			
	TI	**74ACT11151**	*** 3252**
			632-14
74ACT11153			
	TI	**74ACT11153**	*** 3252**
			630-100
74ACT11157			
	TI	**74ACT11157**	*** 3252**
			631-162
74ACT11160			
	TI	**74ACT11160**	*** 3252**
			612-17
74ACT11161			
	TI	**74ACT11161**	*** 3252**
			608-172
74ACT11162			
	TI	**74ACT11162**	*** 3252**
			611-143
74ACT11163			
	TI	**74ACT11163**	*** 3252**
			608-117
74ACT11168			
	TI	**74ACT11168**	*** 3252**
			609-62
74ACT11169			
	TI	**74ACT11169**	*** 3252**
			610-58
74ACT11174			
	TI	**74ACT11174**	*** 3252**
			618-68
74ACT11175			
	TI	**74ACT11175**	*** 3252**
			617-141
74ACT11190			
	TI	**74ACT11190**	*** 3252**
			612-152
74ACT11191			
	TI	**74ACT11191**	*** 3252**
			609-63
74ACT11192			
	TI	**74ACT11192**	*** 3252**
			612-59
74ACT11193			
	TI	**74ACT11193**	*** 3252**
			609-64
74ACT11194			
	TI	**74ACT11194**	*** 3252**
			634-52
74ACT112			
	GE/RCA	**CD74ACT112**	*** 2629**
			621-68
74ACT11238			
	TI	**74ACT11238**	*** 3252**
			615-59
74ACT11239			
	TI	**74ACT11239**	*** 3252**
			615-35
74ACT11240			
	TI	**74ACT11240**	*** 3252**
			639-15
74ACT11241			
	TI	**74ACT11241**	*** 3252**
			640-24
74ACT11244			
	TI	**74ACT11244**	*** 3252**
			639-106
74ACT11245			
	TI	**74ACT11245**	*** 3252**
			641-108
74ACT11251			
	TI	**74ACT11251**	*** 3252**
			632-64
74ACT11253			
	TI	SN74ACT11253	
			630-119
		74ACT11253	*** 3252**
			630-120
74ACT11257			
	TI	**74ACT11257**	*** 3252**
			631-165
74ACT11258			
	TI	**74ACT11258**	*** 3252**
			631-166
74ACT11269			
	TI	**74ACT11269**	*** 3252**
			610-104
74ACT11280			
	TI	**74ACT11280**	*** 3252**
			604-139
74ACT11286			
	TI	**74ACT11286**	*** 3252**
			604-140
74ACT11299			
	TI	**74ACT11299**	*** 3253**
			635-146
74ACT11323			
	TI	**74ACT11323**	*** 3253**
			636-69
74ACT11353			
	TI	**74ACT11353**	*** 3253**
			630-144
74ACT11373			
	TI	**74ACT11373**	*** 3253**
			627-102
74ACT11374			
	TI	**74ACT11374**	*** 3253**
			619-156
74ACT11378			
	TI	**74ACT11378**	*** 3253**
			618-115
74ACT11379			
	TI	**74ACT11379**	*** 3253**
			618-14
74ACT11520			
	TI	**74ACT11520**	*** 3253**
			603-15
74ACT11521			
	TI	**74ACT11521**	*** 3253**
			603-16
74ACT11533			
	TI	**74ACT11533**	*** 3253**
			628-57
74ACT11534			
	TI	**74ACT11534**	*** 3253**
			619-40
74ACT11568			
	TI	**74ACT11568**	*** 3253**
			612-170
74ACT11569			
	TI	**74ACT11569**	*** 3253**
			609-65
74ACT11579			
	TI	**74ACT11579**	*** 3253**
			609-66
74ACT11620			
	TI	**74ACT11620**	*** 3253**
			641-9
74ACT11623			
	TI	**74ACT11623**	*** 3253**
			641-10
74ACT11640			
	TI	**74ACT11640**	*** 3253**
			641-46
74ACT11643			
	TI	**74ACT11643**	*** 3253**
			641-47
74ACT11646			
	TI	**74ACT11646**	*** 3253**
			640-108
74ACT11648			
	TI	S74ACT11648	640-59
		74ACT11648	*** 3253**
			640-60
74ACT11651			
	TI	**74ACT11651**	*** 3253**
			640-61
74ACT11652			
	TI	**74ACT11652**	*** 3253**
			640-109
74ACT11657			
	TI	**74ACT11657**	*** 3253**
			642-66
74ACT11818			
	TI	**74ACT11818**	*** 3253**
			637-63
74ACT11819			
	TI	**74ACT11819**	*** 3253**
			637-64
74ACT11821			
	TI	**74ACT11821**	*** 3253**
			620-126
74ACT11822			
	TI	**74ACT11822**	*** 3253**
			620-123
74ACT11823			
	TI	**74ACT11823**	*** 3253**
			620-118
74ACT11824			
	TI	**74ACT11824**	*** 3253**
			620-129
74ACT11825			
	TI	**74ACT11825**	*** 3253**
			620-100
74ACT11826			
	TI	**74ACT11826**	*** 3253**
			619-129
74ACT11827			
	TI	**74ACT11827**	*** 3253**
			607-112
74ACT11828			
	TI	**74ACT11828**	*** 3253**
			607-107
74ACT11833			
	TI	**74ACT11833**	*** 3253**
			637-102
74ACT11834			
	TI	**74ACT11834**	*** 3253**
			637-103
74ACT11841			
	TI	**74ACT11841**	*** 3253**
			629-117
74ACT11842			
	TI	**74ACT11842**	*** 3253**
			629-114
74ACT11843			
	TI	**74ACT11843**	*** 3253**
			629-130
74ACT11844			
	TI	**74ACT11844**	*** 3253**
			629-127
74ACT11845			
	TI	S74ACT11845	629-124
		74ACT11845	*** 3253**
			628-164
74ACT11846			
	TI	**74ACT11846**	*** 3253**
			629-121
74ACT11853			
	TI	**74ACT11853**	*** 3253**
			637-11
74ACT11854			
	TI	**74ACT11854**	*** 3253**
			637-12

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74ACT11861			
	TI	**74ACT11861**	*** 3253** 643-33
74ACT11862			
	TI	**74ACT11862**	*** 3253** 643-29
74ACT11863			
	TI	**74ACT11863**	*** 3253** 642-136
74ACT11864			
	TI	**74ACT11864**	*** 3253** 642-132
74ACT11873			
	TI	**74ACT11873**	*** 3253** 626-149
74ACT11874			
	TI	**74ACT11874**	*** 3253** 617-125
74ACT11881			
	TI	**74ACT11881**	*** 3253** 603-52
74ACT11882			
	TI	**74ACT11882**	*** 3253** 602-114
74ACT138			
	Fairchild	74ACT138	615-54
	GE/RCA	**CD74ACT138**	*** 2629** 615-57
74ACT139			
	Fairchild	74ACT139	614-139
	GE/RCA	**CD74ACT139**	*** 2629** 614-141
74ACT151			
	GE/RCA	**CD74ACT151**	*** 2629** 632-13
74ACT153			
	GE/RCA	**CD74ACT153**	*** 2629** 630-131
74ACT157			
	Fairchild	74ACT157	631-35
	GE/RCA	**CD74ACT157**	*** 2629** 631-37
74ACT158			
	Fairchild	74ACT158	631-74
	GE/RCA	**CD74ACT158**	*** 2629** 631-76
	TI	74ACT158	631-163
74ACT161			
	GE/RCA	**CD74ACT161**	*** 2629** 608-171
74ACT163			
	GE/RCA	**CD74ACT163**	*** 2629** 608-116
74ACT164			
	GE/RCA	**CD74ACT164**	*** 2629** 635-36
74ACT174			
	Fairchild	74ACT174	618-65
	GE/RCA	**CD74ACT174**	*** 2629** 618-67
74ACT175			
	GE/RCA	**CD74ACT175**	*** 2629** 617-140
74ACT191			
	GE/RCA	**CD74ACT191**	*** 2629** 609-60
74ACT193			
	GE/RCA	**CD74ACT193**	*** 2629** 609-61
74ACT20			
	GE/RCA	**CD74ACT20**	*** 2629** 622-118
74ACT238			
	GE/RCA	**CD74ACT238**	*** 2629** 615-58
74ACT240			
	Fairchild	74ACT240	639-11
	GE/RCA	**CD74ACT240**	*** 2629** 639-13
	VTC	**V74ACT240**	*** 3370** 639-18
74ACT241			
	Fairchild	74ACT241	639-99
	GE/RCA	**CD74ACT241**	*** 2629** 639-103
	VTC	**V74ACT241**	*** 3370** 640-26

Base Number	Source	Device	Page-Line
74ACT244			
	Fairchild	74ACT244	639-100
	GE/RCA	**CD74ACT244**	*** 2629** 639-104
	VTC	**V74ACT244**	*** 3370** 640-15
74ACT245			
	Fairchild	74ACT245	641-104
	GE/RCA	**CD74ACT245**	*** 2629** 641-106
	VTC	**V74ACT245**	*** 3370** 641-111
74ACT251			
	GE/RCA	**CD74ACT251**	*** 2629** 632-96
74ACT253			
	Fairchild	74ACT253	631-6
	GE/RCA	**CD74ACT253**	*** 2629** 631-8
74ACT257			
	Fairchild	74ACT257	631-108
	GE/RCA	**CD74ACT257**	*** 2629** 631-110
74ACT258			
	GE/RCA	**CD74ACT258**	*** 2629** 631-139
74ACT273			
	GE/RCA	**CD74ACT273**	*** 2629** 618-130
74ACT280			
	GE/RCA	**CD74ACT280**	*** 2629** 604-124
74ACT283			
	GE/RCA	**CD74ACT283**	*** 2629** 602-31
74ACT29116			
	TI	**SN74ACT29116**	*** 3226** 636-122
74ACT299			
	GE/RCA	CD74ACT299	635-143
74ACT32			
	GE/RCA	**CD74ACT32**	*** 2629** 624-123
74ACT323			
	GE/RCA	**CD74ACT323**	*** 2629** 635-136
74ACT373			
	Fairchild	74ACT373	627-95
	GE/RCA	**CD74ACT373**	*** 2629** 627-99
	VTC	**V74ACT373**	*** 3370** 627-105
74ACT374			
	Fairchild	74ACT374	619-152
	VTC	**V74ACT374**	*** 3370** 619-160
74ACT377			
	Fairchild	74ACT377	618-173
74ACT465			
	VTC	**V74ACT465**	*** 3370** 606-171
74ACT466			
	VTC	**V74ACT466**	*** 3370** 608-100 608-99
74ACT467			
	VTC	**V74ACT467**	*** 3370** 606-172
74ACT468			
	VTC	**V74ACT468**	*** 3370** 608-101 608-104
74ACT533			
	GE/RCA	**CD74ACT533**	*** 2629** 628-56
	VTC	**V74ACT533**	*** 3370** 628-61
74ACT534			
	GE/RCA	**CD74ACT534**	*** 2629** 619-39
	VTC	**V74ACT534**	*** 3370** 619-45

Base Number	Source	Device	Page-Line
74ACT540			
	GE/RCA	**CD74ACT540**	*** 2629** 606-166
	VTC	**V74ACT540**	*** 3370** 639-19
74ACT541			
	GE/RCA	**CD74ACT541**	*** 2629** 606-167
	VTC	**V74ACT541**	*** 3370** 606-173
74ACT547			
	MMI	74ACT547	627-64
74ACT563			
	GE/RCA	**CD74ACT563**	*** 2629** 627-70
	VTC	**V74ACT563**	*** 3370** 628-62
74ACT564			
	GE/RCA	**CD74ACT564**	*** 2629** 618-122
	VTC	**V74ACT564**	*** 3370** 619-46
74ACT567			
	MMI	74ACT567	627-65
74ACT573			
	Fairchild	74ACT573	627-96
	GE/RCA	**CD74ACT573**	*** 2629** 627-100
	VTC	**V74ACT573**	*** 3370** 627-106
74ACT574			
	Fairchild	74ACT574	619-153
	GE/RCA	**CD74ACT574**	*** 2629** 619-154
	VTC	**V74ACT574**	*** 3370** 619-161
74ACT575			
	VTC	**V74ACT575**	*** 3370** 620-105
74ACT576			
	VTC	**V74ACT576**	*** 3370** 619-47
74ACT577			
	VTC	**V74ACT577**	*** 3370** 619-134
74ACT580			
	VTC	**V74ACT580**	*** 3370** 628-63
74ACT620			
	VTC	**V74ACT620**	*** 3370** 641-13
74ACT623			
	VTC	**V74ACT623**	*** 3370** 641-14
74ACT640			
	VTC	**V74ACT640**	*** 3370** 641-50
74ACT643			
	VTC	**V74ACT643**	*** 3370** 641-51
74ACT645			
	VTC	**V74ACT645**	*** 3370** 641-112
74ACT646			
	GE/RCA	**CD74ACT646**	*** 2629** 640-103
	MMI	74ACT646	640-106
74ACT648			
	GE/RCA	**CD74ACT648**	*** 2629** 640-54
	MMI	74ACT648	640-57
74ACT651			
	MMI	74ACT651	640-58
74ACT652			
	MMI	74ACT652	640-107
74ACT7060			
	GE/RCA	**CD74ACT7060**	*** 2629** 611-54
74ACT7202			
	GE/RCA	**CD74ACT7202**	*** 2629** 630-94
74ACT74			
	GE/RCA	**CD74ACT74**	*** 2629** 617-66

Base Number	Source	Device	Page-Line
74ACT7402			
	GE/RCA	**CD74ACT7402**	*** 2629** 630-63
74ACT793			
	MMI	74ACT793	627-66
74ACT794			
	MMI	74ACT794	642-33
74ACT821			
	Calmos	CA74ACT821	643-49
	VTC	**V74ACT821**	*** 3370** 620-128
74ACT822			
	VTC	**V74ACT822**	*** 3370** 620-125
74ACT823			
	VTC	**V74ACT823**	*** 3370** 620-120
74ACT824			
	VTC	**V74ACT824**	*** 3370** 620-131
74ACT825			
	Calmos	CA74ACT825	619-149
	VTC	**V74ACT825**	*** 3370** 620-101
74ACT826			
	VTC	**V74ACT826**	*** 3370** 619-130
74ACT827			
	VTC	**V74ACT827**	*** 3370** 607-114
74ACT828			
	VTC	**V74ACT828**	*** 3370** 607-109
74ACT841			
	VTC	**V74ACT841**	*** 3370** 629-119
74ACT842			
	VTC	**V74ACT842**	*** 3370** 629-116
74ACT843			
	VTC	**V74ACT843**	*** 3370** 629-132
74ACT844			
	VTC	**V74ACT844**	*** 3370** 629-129
74ACT845			
	VTC	**V74ACT845**	*** 3370** 629-126
74ACT846			
	VTC	**V74ACT846**	*** 3370** 629-123
74ACT86			
	GE/RCA	**CD74ACT86**	*** 2629** 626-9
74ACT861			
	VTC	**V74ACT861**	*** 3370** 643-35
74ACT862			
	VTC	**V74ACT862**	*** 3370** 643-31
74ACT863			
	VTC	**V74ACT863**	*** 3370** 642-138
74ACT864			
	VTC	**V74ACT864**	*** 3370** 642-134
74ACT874			
	VTC	**V74ACT874**	*** 3370** 617-130
74ACT876			
	VTC	**V74ACT876**	*** 3370** 617-131
74ACT878			
	VTC	**V74ACT878**	*** 3370** 617-132
74ACT879			
	VTC	**V74ACT879**	*** 3370** 617-133
74ACT880			
	VTC	**V74ACT880**	*** 3370** 626-152
74ACT8816			
	TI	**SN74ACT8816**	*** 3226** 603-50

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74ACT8818			
	TI	SN74ACT8818	
			★ 3224
			637-14
74ACT8832			
	TI	SN74ACT8832	
			★ 3224
			603-25
74ACT8836			
	TI	SN74ACT8836	
			★ 3224
			603-125
74ACT8837			
	TI	SN74ACT8837	
			★ 3224
			602-131
74AC00	Fairchild	74AC00	623-49
	GE/RCA	CD74AC00	★ 2629
			623-46
	Toshiba	TC74AC00	★ 3307
			623-52
74AC02	Fairchild	74AC02	625-102
	GE/RCA	CD74AC02	★ 2629
			625-104
	Toshiba	TC74AC02	★ 3307
			625-107
74AC04	Fairchild	74AC04	607-137
	GE/RCA	CD74AC04	★ 2629
			607-140
	Toshiba	TC74AC04	★ 3307
			607-144
74AC05	GE/RCA	CD74AC05	★ 2629
			607-141
74AC08	Fairchild	74AC08	622-43
	GE/RCA	CD74AC08	★ 2629
			622-45
	Toshiba	TC74AC08	★ 3307
			622-48
74AC10	Fairchild	74AC10	622-168
	GE/RCA	CD74AC10	★ 2629
			622-170
	Toshiba	TC74AC10	★ 3307
			622-173
74AC109			
	Fairchild	74AC109	620-138
	GE/RCA	CD74AC109	★ 2629
			620-140
	Toshiba	TC74AC109	★ 3307
			620-143
74AC11	Fairchild	74AC11	621-182
	Toshiba	TC74AC11	★ 3307
			621-185
74AC11000			
	TI	74AC11000	★ 3252
			623-51
74AC11002			
	TI	74AC11002	★ 3252
			625-106
74AC11004			
	TI	74AC11004	★ 3252
			607-143
74AC11008			
	TI	74AC11008	★ 3252
			622-47
74AC11010			
	TI	74AC11010	★ 3252
			622-172
74AC11011			
	TI	74AC11011	★ 3252
			621-184
74AC11013			
	TI	74AC11013	★ 3252
			638-5
74AC11014			
	TI	74AC11014	★ 3252
			638-163
74AC11020			
	TI	74AC11020	★ 3252
			622-115
74AC11021			
	TI	74AC11021	★ 3252
			621-147
74AC11027			
	TI	74AC11027	★ 3252
			625-53
74AC11030			
	TI	74AC11030	★ 3252
			623-138
74AC11032			
	TI	74AC11032	★ 3252
			624-120
74AC11034			
	TI	74AC11034	★ 3252
			605-157
74AC11074			
	TI	74AC11074	★ 3252
			617-64
74AC11109			
	TI	74AC11109	★ 3252
			620-142
74AC11112			
	TI	74AC11112	★ 3252
			621-65
74AC11132			
	TI	74AC11132	★ 3252
			623-136
			638-114
74AC11138			
	TI	74AC11138	★ 3252
			615-49
			615-50
74AC11139			
	TI	74AC11139	★ 3252
			615-32
74AC11151			
	TI	74AC11151	★ 3252
			632-83
74AC11153			
	TI	74AC11153	★ 3252
			630-99
74AC11157			
	TI	74AC11157	★ 3252
			631-33
74AC11158			
	TI	74AC11158	★ 3252
			631-71
74AC11160			
	TI	74AC11160	★ 3252
			612-15
74AC11161			
	TI	74AC11161	★ 3252
			608-168
74AC11162			
	TI	74AC11162	★ 3252
			611-142
74AC11163			
	TI	74AC11163	★ 3252
			608-113
74AC11168			
	TI	74AC11168	★ 3252
			609-54
74AC11169			
	TI	74AC11169	★ 3252
			610-57
74AC11174			
	TI	74AC11174	★ 3252
			618-62
74AC11175			
	TI	74AC11175	★ 3252
			617-137
74AC11190			
	TI	74AC11190	★ 3252
			612-151
74AC11191			
	TI	74AC11191	★ 3252
			609-55
74AC11192			
	TI	74AC11192	★ 3252
			612-58
74AC11193			
	TI	74AC11193	★ 3252
			609-56
74AC11194			
	TI	74AC11194	★ 3252
			634-15
74AC112			
	GE/RCA	CD74AC112	★ 2629
			621-63
	Toshiba	TC74AC112	★ 3307
			621-66
74AC11238			
	TI	74AC11238	★ 3252
			615-118
			615-51
74AC11239			
	TI	74AC11239	★ 3252
			615-33
74AC11240			
	TI	74AC11240	★ 3252
			639-4
			986-16
74AC11241			
	TI	74AC11241	★ 3252
			639-89
74AC11244			
	TI	74AC11244	★ 3252
			639-90
74AC11245			
	TI	74AC11245	★ 3252
			641-98
74AC11251			
	TI	74AC11251	★ 3252
			632-92
74AC11253			
	TI	74AC11253	★ 3252
			631-25
74AC11257			
	TI	74AC11257	★ 3252
			631-164
74AC11258			
	TI	74AC11258	★ 3252
			631-136
74AC11269			
	TI	74AC11269	★ 3252
			613-67
74AC11280			
	TI	74AC11280	★ 3252
			604-122
			642-147
74AC11286			
	TI	74AC11286	★ 3252
			604-138
			643-6
74AC11299			
	TI	74AC11299	★ 3253
			635-139
74AC11323			
	TI	74AC11323	★ 3253
			635-140
74AC11352			
	TI	74AC11352	★ 3253
			630-143
74AC11353			
	TI	74AC11353	★ 3253
			630-147
74AC11373			
	TI	74AC11373	★ 3253
			627-90
74AC11374			
	TI	74AC11374	★ 3253
			619-140
74AC11378			
	TI	74AC11378	★ 3253
			618-114
74AC11379			
	TI	74AC11379	★ 3253
			618-13
74AC11520			
	TI	74AC11520	★ 3253
			603-17
74AC11521			
	TI	74AC11521	★ 3253
			603-14
74AC11533			
	TI	74AC11533	★ 3253
			629-46
74AC11534			
	TI	74AC11534	★ 3253
			618-124
74AC11568			
	TI	74AC11568	★ 3253
			612-169
74AC11569			
	TI	74AC11569	★ 3253
			609-57
74AC11579			
	TI	74AC11579	★ 3253
			610-113
74AC11620			
	TI	74AC11620	★ 3253
			641-1
74AC11623			
	TI	74AC11623	★ 3253
			641-2
74AC11640			
	TI	74AC11640	★ 3253
			641-3
74AC11643			
	TI	74AC11643	★ 3253
			640-149
74AC11646			
	TI	74AC11646	★ 3253
			640-100
74AC11648			
	TI	74AC11648	★ 3253
			640-51
74AC11651			
	TI	74AC11651	★ 3253
			640-150
74AC11652			
	TI	74AC11652	★ 3253
			640-151
74AC11657			
	TI	74AC11657	★ 3253
			640-42
74AC11818			
	TI	74AC11818	★ 3253
			637-61
74AC11819			
	TI	74AC11819	★ 3253
			637-62
74AC11821			
	TI	74AC11821	★ 3253
			620-122
74AC11822			
	TI	74AC11822	★ 3253
			620-121
74AC11823			
	TI	74AC11823	★ 3253
			620-109
74AC11824			
	TI	74AC11824	★ 3253
			620-108
74AC11825			
	TI	74AC11825	★ 3253
			620-107
74AC11826			
	TI	74AC11826	★ 3253
			620-106
74AC11827			
	TI	74AC11827	★ 3253
			617-57
74AC11833			
	TI	74AC11833	★ 3253
			637-100
74AC11834			
	TI	74AC11834	★ 3253
			637-101
74AC11841			
	TI	74AC11841	★ 3253
			629-104
74AC11842			
	TI	74AC11842	★ 3253
			629-93
74AC11843			
	TI	74AC11843	★ 3253
			629-77
74AC11844			
	TI	74AC11844	★ 3253
			629-64
74AC11845			
	TI	74AC11845	★ 3253
			629-54
74AC11846			
	TI	74AC11846	★ 3253
			629-47
74AC11853			
	TI	74AC11853	★ 3253
			637-13
74AC11854			
	TI	74AC11854	★ 3253
			637-10
74AC11861			
	TI	74AC11861	★ 3253
			643-38

¶ Indicates page number in Application Note Directory.
★ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
74AC11862			
	TI	74AC11862	★3253 643-37
74AC11863			
	TI	74AC11863	★3253 642-145
74AC11864			
	TI	74AC11864	★3253 642-144
74AC11873			
	TI	74AC11873	★3253 626-147
74AC11874			
	TI	74AC11874	★3253 617-124
74AC11881			
	TI	74AC11881	★3253 603-51
74AC11882			
	TI	74AC11882	★3253 605-36
74AC138			
	Fairchild	74AC138	615-43
	GE/RCA	CD74AC138	★2629 615-46
	Toshiba	TC74AC138	★3307 615-52
74AC139			
	Fairchild	74AC139	614-134
	GE/RCA	CD74AC139	★2629 614-136
	Toshiba	TC74AC139	★3307 614-137
74AC14	Fairchild	74AC14	638-122
74AC151			
	Fairchild	74AC151	632-7
	GE/RCA	CD74AC151	★2629 632-9
	Toshiba	TC74AC151	★3307 632-11
74AC153			
	Fairchild	74AC153	630-97
	GE/RCA	CD74AC153	★2629 630-129
74AC157			
	Fairchild	74AC157	631-29
	GE/RCA	CD74AC157	★2629 631-31
74AC158			
	Fairchild	74AC158	631-67
	GE/RCA	CD74AC158	★2629 631-69
	Toshiba	TC74AC158	★3307 631-72
74AC160			
	Toshiba	TC74AC160	★3307 612-16
74AC161			
	GE/RCA	CD74AC161	★2629 608-167
	Toshiba	TC74AC161	★3307 608-169
74AC162			
	Toshiba	TC74AC162	★3307 613-112
74AC163			
	GE/RCA	CD74AC163	★2629 608-112
	Toshiba	TC74AC163	★3307 608-114
74AC164			
	GE/RCA	CD74AC164	★2629 635-34
74AC169			
	Fairchild	74AC169	610-55
74AC174			
	Fairchild	74AC174	618-58
	GE/RCA	CD74AC174	★2629 618-60
	Toshiba	TC74AC174	★3307 618-63
74AC175			
	GE/RCA	CD74AC175	★2629 617-135
	Toshiba	TC74AC175	★3307 617-138
74AC191			
	GE/RCA	CD74AC191	★2629 609-51
74AC193			
	GE/RCA	CD74AC193	★2629 609-52
74AC20	Fairchild	74AC20	622-111
	GE/RCA	CD74AC20	★2629 622-113
	Toshiba	TC74AC20	★3307 622-116
74AC238			
	GE/RCA	CD74AC238	★2629 615-47
74AC240			
	Fairchild	74AC240	639-2
	GE/RCA	CD74AC240	★2629 607-70
	Toshiba	TC74AC240	★3307 639-5
	VTC	V74AC240	639-8
74AC241			
	Fairchild	74AC241	639-85
	GE/RCA	CD74AC241	★2629 607-74
	Toshiba	TC74AC241	★3307 639-91
	VTC	V74AC241	639-95
74AC244			
	Fairchild	74AC244	639-86
	GE/RCA	CD74AC244	★2629 607-72
	Toshiba	TC74AC244	★3307 639-92
	VTC	V74AC244	639-96
74AC245			
	Fairchild	74AC245	641-97
	GE/RCA	CD74AC245	★2629 636-91
	Toshiba	TC74AC245	★3307 641-99
	VTC	V74AC245	641-102
74AC251			
	Fairchild	74AC251	632-89
	GE/RCA	CD74AC251	★2629 632-91
	Toshiba	TC74AC251	★3307 632-93
		74AC251	632-94
74AC253			
	Fairchild	74AC253	630-149
	GE/RCA	CD74AC253	★2629 631-2
	Toshiba	TC74AC253	★3307 631-4
74AC257			
	GE/RCA	CD74AC257	★2629 631-104
	Toshiba	TC74AC257	★3307 631-106
74AC258			
	GE/RCA	CD74AC258	★2629 631-135
	Toshiba	TC74AC258	★3307 631-137
74AC273			
	Fairchild	74AC273	618-126
	GE/RCA	CD74AC273	★2629 618-127
	Toshiba	TC74AC273	★3307 618-128
74AC280			
	GE/RCA	CD74AC280	★2629 604-120
74AC283			
	GE/RCA	CD74AC283	★2629 602-29
74AC299			
	GE/RCA	CD74AC299	★2629 635-138
	Toshiba	TC74AC299	★3307 635-141
74AC32	Fairchild	74AC32	624-116
	GE/RCA	CD74AC32	★2629 624-118
	Toshiba	TC74AC32	★3307 624-121
74AC323			
	GE/RCA	CD74AC323	★2629 635-134
	Toshiba	TC74AC323	★3307 635-173
74AC367			
	Toshiba	TC74AC367	★3307 605-37
74AC368			
	Toshiba	TC74AC368	★3307 605-38
74AC373			
	Fairchild	74AC373	627-85
	GE/RCA	CD74AC373	★2629 627-88
	Toshiba	TC74AC373	★3307 627-91
	VTC	V74AC373	628-36
74AC374			
	Fairchild	74AC374	619-136
	GE/RCA	CD74AC374	★2629 619-21
	Toshiba	TC74AC374	★3307 619-141
	VTC	V74AC374	619-146
74AC377			
	Fairchild	74AC377	618-171
74AC390			
	Toshiba	TC74AC390	★3307 613-113
74AC393			
	Toshiba	TC74AC393	★3307 610-103
74AC465			
	VTC	V74AC465	607-59
74AC466			
	VTC	V74AC466	608-91
74AC467			
	VTC	V74AC467	607-60
74AC468			
	VTC	V74AC468	608-92
74AC533			
	GE/RCA	CD74AC533	★2629 628-45
	Toshiba	TC74AC533	★3307 628-46
	VTC	V74AC533	628-51
74AC534			
	GE/RCA	CD74AC534	★2629 619-27
	Toshiba	TC74AC534	★3307 619-28
	VTC	V74AC534	619-34
74AC540			
	Fairchild	74AC540	606-156
	GE/RCA	CD74AC540	★2629 606-160
	Toshiba	TC74AC540	★3307 606-162
	VTC	V74AC540	639-9
74AC541			
	Fairchild	74AC541	606-157
	GE/RCA	CD74AC541	★2629 606-161
	Toshiba	TC74AC541	★3307 606-163
	VTC	V74AC541	607-61
74AC563			
	GE/RCA	CD74AC563	★2629 627-68
	Toshiba	TC74AC563	★3307 628-47
	VTC	V74AC563	628-52
74AC564			
	GE/RCA	CD74AC564	★2629 618-120
	Toshiba	TC74AC564	★3307 619-29
	VTC	V74AC564	619-35
74AC573			
	GE/RCA	CD74AC573	★2629 627-89
	Toshiba	TC74AC573	★3307 627-92
	VTC	V74AC573	628-37
74AC574			
	GE/RCA	CD74AC574	★2629 619-138
	Toshiba	TC74AC574	★3307 619-142
	VTC	V74AC574	619-147
74AC575			
	VTC	V74AC575	620-103
74AC576			
	VTC	V74AC576	619-36
74AC577			
	VTC	V74AC577	619-132
74AC580			
	VTC	V74AC580	628-53
74AC620			
	Toshiba	TC74AC620	★3307 641-4
	VTC	V74AC620	641-7
74AC623			
	VTC	V74AC623	641-8
74AC640			
	Toshiba	TC74AC640	★3307 641-40
	VTC	V74AC640	641-44
74AC643			
	Toshiba	TC74AC643	★3307 641-41
	VTC	V74AC643	641-45
74AC645			
	VTC	V74AC645	641-103
74AC646			
	GE/RCA	CD74AC646	★2629 640-99
	Toshiba	TC74AC646	★3307 640-101
74AC648			
	GE/RCA	CD74AC648	★2629 640-50
	Toshiba	TC74AC648	★3307 640-52
74AC7060			
	GE/RCA	CD74AC7060	★2629 611-52
74AC7202			
	GE/RCA	CD74AC7202	★2629 630-92
74AC74	Fairchild	74AC74	617-60
	GE/RCA	CD74AC74	★2629 617-62
74AC7402			
	GE/RCA	CD74AC7402	★2629 630-61
74AC821			
	VTC	V74AC821	643-48
74AC822			
	VTC	V74AC822	643-40
74AC823			
	VTC	V74AC823	643-8
74AC824			
	VTC	V74AC824	620-111
74AC825			
	VTC	V74AC825	619-148
74AC826			
	VTC	V74AC826	619-37
74AC827			
	VTC	V74AC827	607-100
74AC828			
	VTC	V74AC828	607-91
74AC841			
	VTC	V74AC841	629-106
74AC842			
	VTC	V74AC842	629-95
74AC843			
	VTC	V74AC843	629-80
74AC844			
	VTC	V74AC844	629-67
74AC845			
	VTC	V74AC845	629-81
74AC846			
	VTC	V74AC846	629-68
74AC86	GE/RCA	CD74AC86	★2629 626-6
	Toshiba	TC74AC86	★3307 626-7
74AC861			
	VTC	V74AC861	643-16
74AC862			
	VTC	V74AC862	643-17

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74AC863			
	VTC	V74AC863	642-122
74AC874			
	VTC	V74AC874	617-120
74AC876			
	VTC	V74AC876	617-121
74AC878			
	VTC	V74AC878	617-122
74AC879			
	VTC	V74AC879	617-123
74AC880			
	VTC	V74AC880	626-145
74AHCT00			
	Samsung	KS74AHCT00	623-58
74AHCT02			
	Samsung	KS74AHCT02	625-112
74AHCT03			
	Samsung	KS74AHCT03	623-122
74AHCT04			
	Samsung	KS74AHCT04	607-151
74AHCT05			
	Samsung	KS74AHCT05	607-152
74AHCT08			
	Samsung	KS74AHCT08	622-53
74AHCT09			
	Samsung	KS74AHCT09	622-98
74AHCT10			
	Samsung	KS74AHCT10	622-177
74AHCT107			
	Samsung	KS74AHCT107	621-99
74AHCT109			
	Samsung	KS74AHCT109	620-148
74AHCT11			
	Samsung	KS74AHCT11	622-2
74AHCT112			
	Samsung	KS74AHCT112	621-69
74AHCT12			
	Samsung	KS74AHCT12	622-178
74AHCT121			
	Samsung	KS74AHCT121	632-156
74AHCT13			
	Samsung	KS74AHCT13	638-15
74AHCT139			
	Samsung	KS74AHCT139	614-142
74AHCT148			
	Samsung	KS74AHCT148	605-3
74AHCT154			
	Samsung	KS74AHCT154	616-65
74AHCT155			
	Samsung	KS74AHCT155	614-143
74AHCT157			
	Samsung	KS74AHCT157	631-38
74AHCT158			
	Samsung	KS74AHCT158	631-77
74AHCT160			
	Samsung	KS74AHCT160	612-18
74AHCT161			
	Samsung	KS74AHCT161	608-174
74AHCT162			
	Samsung	KS74AHCT162	611-144
74AHCT163			
	Samsung	KS74AHCT163	608-119
74AHCT164			
	Samsung	KS74AHCT164	635-37
74AHCT165			
	Samsung	KS74AHCT165	634-164
74AHCT166			
	Samsung	KS74AHCT166	635-66
74AHCT173			
	Samsung	KS74AHCT173	618-17
74AHCT174			
	Samsung	KS74AHCT174	618-69
74AHCT175			
	Samsung	KS74AHCT175	617-142
74AHCT191			
	Samsung	KS74AHCT191	610-46
74AHCT193			
	Samsung	KS74AHCT193	612-61
74AHCT210			
	Samsung	KS74AHCT210	639-20
74AHCT238			
	Samsung	KS74AHCT238	615-119
74AHCT239			
	Samsung	KS74AHCT239	614-144
74AHCT240			
	Samsung	KS74AHCT240	639-21
74AHCT241			
	Samsung	KS74AHCT241	640-27
74AHCT244			
	Samsung	KS74AHCT244	639-108
	TI	IDT74AHCT244	639-147
74AHCT245			
	Samsung	KS74AHCT245	641-114
74AHCT257			
	Samsung	KS74AHCT257	631-111
74AHCT258			
	Samsung	KS74AHCT258	631-140
74AHCT259			
	Samsung	KS74AHCT259	628-170
74AHCT266			
	Samsung	KS74AHCT266	626-75
74AHCT273			
	Samsung	KS74AHCT273	618-131
74AHCT280			
	Samsung	KS74AHCT280	642-149
74AHCT299			
	Samsung	KS74AHCT299	635-147
74AHCT32			
	Samsung	KS74AHCT32	624-126
74AHCT365			
	Samsung	KS74AHCT365	606-54
74AHCT366			
	Samsung	KS74AHCT366	606-106
74AHCT367			
	Samsung	KS74AHCT367	638-116
74AHCT368			
	Samsung	KS74AHCT368	606-107
74AHCT373			
	Samsung	KS74AHCT373	627-109
74AHCT374			
	Samsung	KS74AHCT374	619-164
74AHCT377			
	Samsung	KS74AHCT377	618-175
74AHCT393			
	Samsung	KS74AHCT393	609-166
74AHCT399			
	Samsung	KS74AHCT399	631-153
74AHCT42			
	Samsung	KS74AHCT42	614-54
74AHCT465			
	Samsung	KS74AHCT465	606-176
74AHCT466			
	Samsung	KS74AHCT466	608-87
74AHCT467			
	Samsung	KS74AHCT467	606-177
74AHCT468			
	Samsung	KS74AHCT468	608-88
74AHCT51			
	Samsung	KS74AHCT51	624-39
74AHCT533			
	Samsung	KS74AHCT533	628-64
74AHCT534			
	IDT	IDT74AHCT534	619-71
	Samsung	KS74AHCT534	619-48
74AHCT540			
	Samsung	KS74AHCT540	606-178
74AHCT541			
	Samsung	KS74AHCT541	641-115
74AHCT563			
	Samsung	KS74AHCT563	628-65
74AHCT564			
	Samsung	KS74AHCT564	619-49
74AHCT573			
	IDT	IDT74AHCT573	627-108
	Samsung	KS74AHCT573	627-110
74AHCT574			
	IDT	IDT74AHCT574	619-163
	Samsung	KS74AHCT574	619-165
74AHCT590			
	Samsung	KS74AHCT590	610-126
74AHCT591			
	Samsung	KS74AHCT591	610-142
74AHCT592			
	Samsung	KS74AHCT592	610-114
74AHCT593			
	Samsung	KS74AHCT593	610-115
74AHCT595			
	Samsung	KS74AHCT595	635-94
74AHCT596			
	Samsung	KS74AHCT596	635-95
74AHCT597			
	Samsung	KS74AHCT597	635-85
74AHCT640			
	IDT	IDT74AHCT640	641-23
	Samsung	KS74AHCT640	641-15
74AHCT643			
	Samsung	KS74AHCT643	641-52
74AHCT645			
	IDT	IDT74AHCT645	641-136
	Samsung	KS74AHCT645	640-44
74AHCT646			
	Samsung	KS74AHCT646	640-111
74AHCT648			
	Samsung	KS74AHCT648	640-63
74AHCT652			
	Samsung	KS74AHCT652	640-112
74AHCT658			
	Samsung	KS74AHCT658	636-88
74AHCT659			
	Samsung	KS74AHCT659	636-89
74AHCT664			
	Samsung	KS74AHCT664	640-159
74AHCT665			
	Samsung	KS74AHCT665	640-160
74AHCT670			
	Samsung	KS74AHCT670	630-20
74AHCT679			
	Samsung	KS74AHCT679	602-90
74AHCT680			
	Samsung	KS74AHCT680	602-91
74AHCT682			
	Samsung	KS74AHCT682	602-144
74AHCT684			
	Samsung	KS74AHCT684	602-145
74AHCT686			
	Samsung	KS74AHCT686	602-146
74AHCT688			
	Samsung	KS74AHCT688	602-147
74AHCT689			
	Samsung	KS74AHCT689	603-13
74AHCT73			
	Samsung	KS74AHCT73	621-100
74AHCT74			
	Samsung	KS74AHCT74	617-69
74AHCT793			
	Samsung	KS74AHCT793	627-72
74AHCT794			
	Samsung	KS74AHCT794	634-13
74AHCT821			
	Samsung	KS74AHCT821	636-9
74AHCT822			
	Samsung	KS74AHCT822	636-10
74AHCT823			
	Samsung	KS74AHCT823	636-4
74AHCT824			
	Samsung	KS74AHCT824	636-5
74AHCT825			
	Samsung	KS74AHCT825	634-141
74AHCT826			
	Samsung	KS74AHCT826	634-142
74AHCT841			
	Samsung	KS74AHCT841	629-89
74AHCT842			
	Samsung	KS74AHCT842	629-90
74AHCT843			
	Samsung	KS74AHCT843	629-60
74AHCT844			
	Samsung	KS74AHCT844	629-61
74AHCT86			
	Samsung	KS74AHCT86	626-10
74ALS00			
	National	DM74ALS00	672-109
	TI	SN74ALS00A	672-112
74ALS01			
	National	DM74ALS01	673-70
	TI	SN74ALS01	673-75
74ALS02			
	National	DM74ALS02	675-112
	TI	SN74ALS02	675-117
74ALS03			
	National	DM74ALS03	673-71
	TI	SN74ALS03B	673-76
74ALS04			
	National	DM74ALS04	659-82
	TI	SN74ALS04B	659-86
74ALS05			
	National	DM74ALS05	659-148
	TI	SN74ALS05A	659-151
74ALS08			
	National	DM74ALS08	671-1
	TI	SN74ALS08	671-5
74ALS09			
	National	DM74ALS09	671-59
	TI	SN74ALS09A	671-61
74ALS10			
	National	DM74ALS10	672-33
	TI	SN74ALS10A	672-37
74ALS1000			
	Mitsubishi	M74ALS1000A	672-106
	National	DM74ALS1000	672-110
	TI	SN74ALS1000A	672-113
74ALS1002			
	Mitsubishi	M74ALS1002A	675-96
	National	DM74ALS1002	675-113
	TI	SN74ALS1002A	675-118
74ALS1003			
	Mitsubishi	M74ALS1003A	673-66
	National	DM74ALS1003	673-72
	TI	SN74ALS1003A	673-77
74ALS1004			
	Mitsubishi	M74ALS1004	659-79
	National	DM74ALS1004	659-83
	TI	SN74ALS1004	659-87
74ALS1005			
	Mitsubishi	M74ALS1005	659-178
	National	DM74ALS1005	659-149
	TI	SN74ALS1005	659-152
74ALS1008			
	Mitsubishi	M74ALS1008A	670-175
	National	DM74ALS1008	671-2
	TI	SN74ALS1008A	671-6
74ALS1010			
	Mitsubishi	M74ALS1010A	672-30
	National	DM74ALS1010	672-34
	TI	SN74ALS1010A	672-38
74ALS1011			
	Mitsubishi	M74ALS1011A	670-102
	National	DM74ALS1011	670-105
	TI	SN74ALS1011A	670-108
74ALS1020			
	Mitsubishi	M74ALS1020A	671-96
	National	DM74ALS1020	671-99
	TI	SN74ALS1020A	671-102
74ALS1032			
	Mitsubishi	M74ALS1032A	674-118
	National	DM74ALS1032	674-121
	TI	SN74ALS1032A	674-124
74ALS1034			
	Mitsubishi	M74ALS1034	658-147
	National	DM74ALS1034	658-149
	TI	SN74ALS1034	658-151
74ALS1035			
	Mitsubishi	M74ALS1035	658-123
	National	DM74ALS1035	658-125
	TI	SN74ALS1035	658-127
74ALS109			
	National	DM74ALS109	669-58
	TI	SN74ALS109	669-60
74ALS11			
	National	DM74ALS11	670-106
	TI	SN74ALS11A	670-109
74ALS112			
	TI	SN74ALS112A	670-8
74ALS113			
	TI	SN74ALS113A	669-154
74ALS114			
	TI	SN74ALS114A	670-38
74ALS12			
	National	DM74ALS12	672-83
	TI	SN74ALS12A	672-85
74ALS1240			
	Mitsubishi	M74ALS1240	684-151
	National	DM74ALS1240	685-6
	TI	SN74ALS1240	684-156
		SN74ALS1240-1	684-157
74ALS1241			
	Mitsubishi	M74ALS1241	685-54
	National	DM74ALS1241	685-59
74ALS1242			
	National	DM74ALS1242	684-76
	TI	SN74ALS1242	684-138
74ALS1243			
	National	DM74ALS1243	684-77

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74ALS1244			
	National	DM74ALS1244	685-112
	TI	SN74ALS1244A	685-116
		SN74ALS1244A-1	685-117
74ALS1245			
	National	DM74ALS1245	686-129
	TI	SN74ALS1245A	686-135
		SN74ALS1245A-1	686-136
74ALS13			
	National	DM74ALS13	688-125
74ALS131			
	National	DM74ALS131	665-100
	TI	SN74ALS131	665-101
74ALS132			
	National	DM74ALS132	689-31
74ALS133			
	Mitsubishi	M74ALS133	673-167
	National	DM74ALS133	673-169
	TI	SN74ALS133	673-171
74ALS136			
	National	DM74ALS136	676-12
	TI	SN74ALS136	676-13
74ALS137			
	National	DM74ALS137	665-92
	TI	SN74ALS137	665-93
74ALS138			
	National	DM74ALS138	665-44
	TI	SN74ALS138	665-46
74ALS139			
	TI	SN74ALS139	664-116
74ALS14			
	National	DM74ALS14	689-63
74ALS15			
	National	DM74ALS15	670-148
	TI	SN74ALS15A	670-150
74ALS151			
	Mitsubishi	M74ALS151	681-50
	National	DM74ALS151	681-52
	TI	SN74ALS151	681-54
74ALS153			
	Mitsubishi	M74ALS153	679-19
	National	DM74ALS153	679-21
	TI	SN74ALS153	679-23
74ALS154			
	TI	SN74ALS154	665-114
74ALS156			
	TI	SN74ALS156	665-30
74ALS157			
	Mitsubishi	M74ALS157	680-83
	TI	SN74ALS157	680-85
74ALS158			
	Mitsubishi	M74ALS158	679-161
	TI	SN74ALS158	679-162
74ALS160			
	National	DM74ALS160	662-125
	TI	SN74ALS160B	662-126
74ALS161			
	National	DM74ALS161	660-127
	TI	SN74ALS161B	660-129
74ALS162			
	National	DM74ALS162	662-157
	TI	SN74ALS162B	662-159
74ALS1620			
	Mitsubishi	M74ALS1620	687-100
	National	DM74ALS1620	687-110
74ALS1621			
	National	DM74ALS1621	687-111
74ALS1623			
	Mitsubishi	M74ALS1623	687-101
	National	DM74ALS1623	687-112
74ALS163			
	Mitsubishi	M74ALS163A	660-169
	National	DM74ALS163	660-171
	TI	SN74ALS163B	660-173
74ALS1638			
	National	DM74ALS1638	685-169
74ALS1639			
	National	DM74ALS1639	685-170
74ALS1640			
	National	DM74ALS1640	686-35
	TI	SN74ALS1640A	686-40
		SN74ALS1640A-1	686-41
74ALS1641			
	Mitsubishi	M74ALS1641	687-9
74ALS1642			
	Mitsubishi	M74ALS1642	687-8
74ALS1643			
	Mitsubishi	M74ALS1643	687-142
74ALS1644			
	Mitsubishi	M74ALS1644	687-7
74ALS1645			
	TI	SN74ALS1645A-1	686-137
74ALS165			
	National	DM74ALS165	683-112
74ALS166			
	National	DM74ALS166	683-129
74ALS168			
	Mitsubishi	M74ALS168A	663-50
	National	DM74ALS168	663-52
	TI	SN74ALS168B	663-53
74ALS169			
	Mitsubishi	M74ALS169A	661-106
	National	DM74ALS169	661-108
	TI	SN74ALS169B	661-110
74ALS174			
	Mitsubishi	M74ALS174	667-154
	National	DM74ALS174	667-156
	TI	SN74ALS174	667-158
74ALS175			
	Mitsubishi	M74ALS175	667-39
	National	DM74ALS175	667-41
	TI	SN74ALS175	667-43
74ALS1804			
	TI	SN74ALS1804A	666-86
74ALS1805			
	TI	SN74ALS1805A	666-95
		S74ALS1805A	666-96
74ALS1808			
	TI	SN74ALS1808A	666-78
74ALS1832			
	TI	SN74ALS1832A	666-104
74ALS190			
	Mitsubishi	M74ALS190	663-123
	National	DM74ALS190	663-125
	TI	SN74ALS190	663-126
74ALS191			
	Mitsubishi	M74ALS191	661-150
	National	DM74ALS191	661-152
	TI	SN74ALS191	661-154
74ALS192			
	Mitsubishi	M74ALS192	663-92
	National	DM74ALS192	663-94
	TI	SN74ALS192	663-95
74ALS193			
	Mitsubishi	M74ALS193	662-16
	National	DM74ALS193	662-18
	TI	SN74ALS193	662-20
74ALS20			
	National	DM74ALS20	671-100
	TI	SN74ALS20A	671-103
74ALS21			
	National	DM74ALS21	670-65
	TI	SN74ALS21A	670-68
74ALS22			
	National	DM74ALS22	670-66
	TI	SN74ALS22B	672-5
74ALS2240			
	TI	**SN74ALS2240**	*** 3228** 684-142
74ALS2242			
	TI	**SN74ALS2242**	*** 3228** 684-139
74ALS229			
	TI	**SN74ALS229A**	*** 3229** 678-45
74ALS231			
	TI	SN74ALS231	684-143
74ALS232			
	TI	**SN74ALS232A**	*** 3229** 678-110
74ALS233			
	TI	**SN74ALS233A**	*** 3229** 678-131
74ALS234			
	TI	**SN74ALS234**	*** 3229** 679-1
74ALS235			
	TI	**SN74ALS235**	*** 3229** 679-2
74ALS236			
	TI	S74ALS236	678-134
74ALS240			
	Mitsubishi	M74ALS240A	684-152
		M74ALS240A-1	684-153
	National	DM74ALS240	684-155
	TI	SN74ALS240A	685-10 987-23
		SN74ALS240A-1	685-11
74ALS241			
	Mitsubishi	M74ALS241A	685-55
		M74ALS241A-1	685-56
	National	DM74ALS241	685-60
	TI	SN74ALS241A	685-63 986-53
		SN74ALS241A-1	685-64
74ALS242			
	National	DM74ALS242	684-78
	TI	SN74ALS242B	684-82 994-47
		SN74ALS242B-1	684-83
74ALS243			
	National	DM74ALS243	684-79
	TI	SN74ALS243A	684-84 994-48
		SN74ALS243A-1	684-85
74ALS244			
	Mitsubishi	M74ALS244A	685-108
		M74ALS244A-1	685-109
	National	DM74ALS244	685-113
	TI	SN74ALS244A	685-118 986-54
		SN74ALS244A-1	685-119
74ALS245			
	Mitsubishi	M74ALS245A	686-97
		M74ALS245A-1	686-123
	National	DM74ALS245	686-130
	TI	SN74ALS245A	686-138 997-21
		SN74ALS245A-1	686-139
74ALS251			
	Mitsubishi	M74ALS251	681-102 681-106
	National	DM74ALS251	681-108
	TI	SN74ALS251	681-110
74ALS253			
	Mitsubishi	M74ALS253	679-111
	National	DM74ALS253	679-112
	TI	SN74ALS253	679-114
74ALS2540			
	TI	**SN74ALS2540**	*** 3228** 685-1
74ALS2541			
	TI	**SN74ALS2541**	*** 3228** 685-65
74ALS257			
	Mitsubishi	M74ALS257	680-119
	National	DM74ALS257	680-122
	TI	SN74ALS257	680-125
74ALS258			
	Mitsubishi	M74ALS258	680-26
	National	DM74ALS258	680-28
	TI	SN74ALS258	680-30
74ALS259			
	TI	SN74ALS259	677-54
74ALS27			
	National	DM74ALS27	675-43
	TI	SN74ALS27	675-45
74ALS273			
	Mitsubishi	M74ALS273	668-92
	National	DM74ALS273	668-94
	TI	SN74ALS273	668-96
74ALS28			
	National	DM74ALS28	675-114
	TI	SN74ALS28A	675-119
74ALS280			
	TI	SN74ALS280	690-49
74ALS2967			
	TI	**SN74ALS2967**	*** 3227** *** 3234** 999-74 ¶ 444-8 ¶ 445-38
74ALS2968			
	TI	**SN74ALS2968**	*** 3227** *** 3234** 999-75 ¶ 445-38
74ALS29806			
	TI	SN74ALS29806	656-75
74ALS29809			
	TI	SN74ALS29809	656-143
74ALS29818			
	TI	SN74ALS29818	683-54
74ALS29827			
	TI	SN74ALS29827	666-111
74ALS29828			
	TI	SN74ALS29828	666-110
74ALS29833			
	TI	SN74ALS29833	687-149
74ALS29834			
	TI	SN74ALS29834	687-150
74ALS29853			
	TI	SN74ALS29853	687-151
74ALS29854			
	TI	SN74ALS29854	687-152
74ALS29861			
	TI	SN74ALS29861	687-159
74ALS29862			
	TI	SN74ALS29862	687-160
74ALS29863			
	TI	SN74ALS29863	687-154
74ALS29864			
	TI	SN74ALS29864	687-155
74ALS299			
	TI	SN74ALS299	684-7
74ALS30			
	National	DM74ALS30	673-127
	TI	SN74ALS30A	673-129
74ALS32			
	National	DM74ALS32	674-122
	TI	SN74ALS32	674-125
74ALS323			
	TI	SN74ALS323	684-8
74ALS33			
	National	DM74ALS33	675-81
	TI	SN74ALS33A	675-83
74ALS34			
	TI	SN74ALS34	658-118
74ALS35			
	TI	SN74ALS35A	658-130
74ALS352			
	Mitsubishi	M74ALS352	679-62
	National	DM74ALS352	679-64
	TI	SN74ALS352	679-66
74ALS353			
	Mitsubishi	M74ALS353	679-85
	National	DM74ALS353	679-87
	TI	SN74ALS353	679-89
74ALS37			
	National	DM74ALS37	672-170
	TI	SN74ALS37A	672-172

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74ALS373			
	Mitsubishi	M74ALS373	678-9
	National	DM74ALS373	677-82
	TI	SN74ALS373	677-86
74ALS374			
	Mitsubishi	M74ALS374	668-116
	National	DM74ALS374	668-121
	TI	SN74ALS374	668-125
74ALS38			
	National	DM74ALS38	673-17
	TI	SN74ALS38A	673-19
74ALS40			
	National	DM74ALS40	671-156
	TI	SN74ALS40A	671-157
74ALS465			
	Mitsubishi	M74ALS465A	659-38
	National	DM74ALS465	659-42
	TI	SN74ALS465A	659-44
74ALS466			
	Mitsubishi	M74ALS466A	660-61
	National	DM74ALS466	660-65
	TI	SN74ALS466A	660-67
74ALS467			
	Mitsubishi	M74ALS467A	659-39
	National	DM74ALS467	659-43
	TI	SN74ALS467A	659-45
74ALS468			
	Mitsubishi	M74ALS468A	660-62
	National	DM74ALS468	660-66
	TI	SN74ALS468A	660-68
74ALS518			
	National	DM74ALS518	656-108
	TI	SN74ALS518	656-111
74ALS519			
	National	DM74ALS519	656-109
	TI	SN74ALS519	656-112
74ALS520			
	National	DM74ALS520	656-86
	TI	SN74ALS520	656-90
74ALS521			
	National	DM74ALS521	656-87
	TI	SN74ALS521	656-91
74ALS522			
	National	DM74ALS522	656-88
	TI	SN74ALS522	656-92
74ALS526			
	TI	SN74ALS526	4078-34
74ALS527			
	TI	SN74ALS527	656-103
			4078-35
74ALS528			
	TI	SN74ALS528	4078-33
74ALS533			
	Mitsubishi	M74ALS533	677-146
	National	DM74ALS533	677-150
	TI	SN74ALS533	677-155
74ALS534			
	Mitsubishi	M74ALS534	668-55
	National	DM74ALS534	668-59
	TI	SN74ALS534	668-65
74ALS540			
	TI	SN74ALS540	685-2
			987-24
		SN74ALS540-1	685-3
			987-25
74ALS541			
	TI	SN74ALS541	685-66
			986-55
		SN74ALS541-1	685-67
			986-56
74ALS560			
	TI	SN74ALS560A	663-39
74ALS561			
	TI	SN74ALS561A	661-78
74ALS563			
	National	DM74ALS563	677-151
	TI	SN74ALS563A	677-144
74ALS564			
	National	DM74ALS564	668-60
	TI	SN74ALS564A	668-66
74ALS568			
	TI	SN74ALS568A	663-42
74ALS569			
	TI	SN74ALS569A	662-2
74ALS573			
	National	DM74ALS573	677-83
	TI	SN74ALS573B	678-8
74ALS574			
	National	DM74ALS574	668-122
	TI	SN74ALS574A	668-126
74ALS575			
	Mitsubishi	M74ALS575	668-117
	TI	SN74ALS575A	668-127
74ALS576			
	Mitsubishi	M74ALS576	670-176
	National	DM74ALS576	671-3
	TI	SN74ALS576A	668-67
74ALS577			
	Mitsubishi	M74ALS577	668-118
	TI	SN74ALS577A	668-128
74ALS580			
	National	DM74ALS580	677-152
	TI	SN74ALS580A	677-145
		S74ALS580A	677-156
74ALS614			
	TI	SN74ALS614	687-32
		SN74ALS614-1	687-33
74ALS615			
	TI	SN74ALS615	687-34
		SN74ALS615-1	687-35
74ALS616			
	TI	**SN74ALS616**	⋆ **3227**
			688-37
			982-49
74ALS620			
	Mitsubishi	M74ALS620A	687-102
		M74ALS620A-1	687-103
	National	DM74ALS620	687-113
	TI	SN74ALS620A	687-115
		SN74ALS620A-1	
			687-116
74ALS621			
	TI	SN74ALS621A	687-79
		SN74ALS621A-1	
			687-80
74ALS622			
	National	DM74ALS622	687-78
	TI	SN74ALS622A	687-81
		SN74ALS622A-1	
			687-82
74ALS623			
	Mitsubishi	M74ALS623A-1	687-104
	National	DM74ALS623	687-114
	TI	SN74ALS623A	687-117
		SN74ALS623A-1	
			687-118
74ALS6301			
	TI	**SN74ALS6301**	
			⋆ **3227**
			⋆ **3232**
			688-32
74ALS6302			
	TI	**SN74ALS6302**	
			⋆ **3227**
			⋆ **3232**
			688-33
74ALS632			
	National	MM74ALS632	982-39
	TI	**SN74ALS632B**	
			⋆ **3227**
			690-105
			¶ 426-20
74ALS633			
	National	MM74ALS633	982-40
74ALS634			
	National	MM74ALS634	982-41
	TI	**SN74ALS634A**	
			⋆ **3227**
			690-106
			982-50
			¶ 426-20
74ALS635			
	National	MM74ALS635	982-42
	TI	SN74ALS635	690-107
			982-51
			¶ 426-20
74ALS638			
	National	DM74ALS638	685-171
	TI	SN74ALS638A	686-1
		SN74ALS638A-1	
			686-2
74ALS639			
	National	DM74ALS639	685-172
	TI	SN74ALS639A	686-3
74ALS639			
	TI		(Cont'd)
		SN74ALS639A-1	
			686-4
74ALS640			
	Mitsubishi	M74ALS640A-1	686-31
	National	DM74ALS640	686-36
	TI	SN74ALS640A	686-42
		SN74ALS640A-1	
			686-43
74ALS641			
	National	DM74ALS641	686-104
	TI	SN74ALS641A	686-105
		SN74ALS641A-1	
			686-106
74ALS642			
	National	DM74ALS642	686-12
	TI	SN74ALS642A	686-13
		SN74ALS642A-1	
			686-14
74ALS643			
	National	DM74ALS643	686-37
	TI	SN74ALS643A	686-44
		SN74ALS643A-1	
			686-45
74ALS644			
	National	DM74ALS644	687-11
	TI	SN74ALS644A	687-12
		SN74ALS644A-1	
			687-13
74ALS645			
	Mitsubishi	M74ALS645	686-124
		M74ALS645A-1	686-125
	National	DM74ALS645	686-131
	TI	SN74ALS645A	686-140
			997-22
		SN74ALS645A-1	
			686-141
74ALS646			
	TI	SN74ALS646	687-40
		SN74ALS646-1	687-41
74ALS647			
	TI	SN74ALS647	687-36
		SN74ALS647-1	687-37
74ALS648			
	TI	SN74ALS648	687-42
		SN74ALS648-1	687-43
74ALS649			
	TI	SN74ALS649	687-38
		SN74ALS649-1	687-39
74ALS651			
	TI	SN74ALS651	686-46
			687-44
		SN74ALS651-1	687-45
74ALS652			
	TI	SN74ALS652	686-47
			687-46
		SN74ALS652-1	687-47
74ALS653			
	TI	SN74ALS653	687-22
		SN74ALS653-1	687-23
74ALS654			
	TI	SN74ALS654	687-24
		SN74ALS654-1	687-25
74ALS666			
	TI	SN74ALS666	678-64
74ALS667			
	TI	SN74ALS667	678-63
74ALS677			
	TI	SN74ALS677	656-31
74ALS678			
	TI	SN74ALS678	656-32
74ALS679			
	TI	SN74ALS679	656-33
74ALS680			
	TI	SN74ALS680	656-34
74ALS688			
	TI	SN74ALS688	656-127
74ALS689			
	National	DM74ALS689	656-110
	TI	SN74ALS689	656-113
74ALS74			
	National	DM74ALS74	666-150
	TI	SN74ALS74A	666-152
74ALS746			
	TI	SN74ALS746	659-32
		SN74ALS746-1	659-33
74ALS747			
	TI	SN74ALS747	659-34
		SN74ALS747-1	659-35
74ALS756			
	TI	SN74ALS756	684-146
		SN74ALS756-1	684-147
74ALS758			
	TI	SN74ALS758	684-135
74ALS763			
	TI	SN74ALS763	659-31
74ALS8003			
	TI	SN74ALS8003A	
			671-87
74ALS804			
	National	DM74ALS804	666-84
	TI	SN74ALS804A	666-87
74ALS805			
	National	DM74ALS805	666-93
	TI	SN74ALS805A	675-168
74ALS808			
	National	DM74ALS808	666-76
	TI	SN74ALS808A	671-84
74ALS810			
	National	DM74ALS810	676-80
	TI	SN74ALS810	676-82
74ALS811			
	National	DM74ALS811	676-93
	TI	SN74ALS811	676-95
74ALS812			
	TI	SN74ALS812	688-51
74ALS8161			
	TI	SN74ALS8161	661-79
74ALS8163			
	TI	SN74ALS8163	662-50
74ALS8169			
	TI	SN74ALS8169	662-51
74ALS819			
	TI	SN74ALS819	688-83
74ALS832			
	National	DM74ALS832	666-102
			675-4
	TI	SN74ALS832A	675-6
74ALS841			
	TI	SN74ALS841	678-41
		SN74ALS841-1	678-42
74ALS842			
	TI	SN74ALS842	678-35
		SN74ALS842-1	678-36
74ALS843			
	TI	SN74ALS843	678-23
		SN74ALS843-1	678-24
74ALS844			
	TI	SN74ALS844	678-21
		SN74ALS844-1	678-22
74ALS845			
	TI	SN74ALS845	678-12
		SN74ALS845-1	678-13
74ALS846			
	TI	SN74ALS846	678-14
		SN74ALS846-1	678-15
74ALS857			
	TI	SN74ALS857	681-29
74ALS86			
	National	DM74ALS86	676-40
	TI	SN74ALS86	676-42
74ALS873			
	National	DM74ALS873	676-113
	TI	SN74ALS873B	676-115
74ALS874			
	Mitsubishi	M74ALS874	666-134
	National	DM74ALS874	666-113
	TI	SN74ALS874A	666-115
74ALS876			
	Mitsubishi	M74ALS876	666-133
	National	DM74ALS876	666-114
	TI	SN74ALS876A	666-116
74ALS878			
	Mitsubishi	M74ALS878	666-135
	TI	SN74ALS878A	666-117
74ALS879			
	Mitsubishi	M74ALS879	666-136
	TI	SN74ALS879A	666-118
74ALS880			
	National	DM74ALS880	677-23
	TI	SN74ALS880A	677-24
74ALS990			
	TI	SN74ALS990	678-28

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74ALS991			
	TI	SN74ALS991	678-27
74ALS992			
	TI	SN74ALS992	678-29
74ALS993			
	TI	SN74ALS993	678-30
74ALS994			
	TI	SN74ALS994	678-34
74ALS995			
	TI	SN74ALS995	678-33
74ALS996			
	TI	SN74ALS996	677-71
		SN74ALS996-1	677-72
74AS00	National	DM74AS00	672-116
	TI	SN74AS00	672-119
74AS02	National	DM74AS02	675-122
	TI	SN74AS02	675-124
74AS04	National	DM74AS04	659-90
	TI	SN74AS04	659-93
74AS08	National	DM74AS08	671-9
	TI	SN74AS08	671-12
74AS10	National	DM74AS10	672-40
	TI	SN74AS10	672-42
74AS1000			
	National	DM74AS1000	672-117
	TI	SN74AS1000A	672-120
74AS1004			
	National	DM74AS1004	659-91
	TI	SN74AS1004A	659-94
74AS1008			
	National	DM74AS1008	671-10
	TI	SN74AS1008A	671-13
74AS1032			
	National	DM74AS1032	674-128
	TI	SN74AS1032A	674-132
74AS1034			
	National	DM74AS1034	658-115
			658-153
	TI	SN74AS1034A	658-117
			658-155
74AS1036			
	National	DM74AS1036	666-8
			675-123
	TI	SN74AS1036A	666-9
			675-125
74AS109			
	National	DM74AS109	669-62
	TI	SN74AS109	669-64
74AS11	National	DM74AS11	670-111
	TI	SN74AS11	670-113
74AS1181			
	TI	SN74AS1181	657-18
74AS131			
	TI	SN74AS131A	665-102
74AS137			
	TI	SN74AS137	665-94
74AS138			
	TI	SN74AS138	665-50
74AS151			
	TI	SN74AS151	681-56
74AS153			
	TI	SN74AS153	679-24
74AS157			
	TI	SN74AS157	680-86
74AS158			
	National	DM74AS158	679-164
	TI	SN74AS158	679-165
74AS160			
	National	DM74AS160	662-128
	TI	SN74AS160	662-129
74AS161			
	National	DM74AS161	660-132
	TI	SN74AS161	660-135
74AS162			
	National	DM74AS162	660-133
	TI	SN74AS162	662-160
74AS163			
	National	DM74AS163	660-175
	TI	SN74AS163	660-177
74AS168			
	National	DM74AS168	663-55
	TI	SN74AS168	663-56
74AS169			
	National	DM74AS169	661-112
	TI	SN74AS169	661-114
74AS174			
	National	DM74AS174	667-160
	TI	SN74AS174	667-162
74AS175			
	National	DM74AS175	667-45
	TI	SN74AS175A	667-47
74AS1804			
	National	DM74AS1804	673-116
	TI	SN74AS1804	666-90
74AS1805			
	National	DM74AS1805	675-167
	TI	SN74AS1805	666-99
74AS1808			
	National	DM74AS1808	671-83
	TI	SN74AS1808	666-81
74AS181			
	National	DM74AS181B	657-15
	TI	SN74AS181B	657-19
74AS182			
	National	DM74AS182	657-72
74AS1821			
	TI	SN74AS1821	690-84
74AS1823			
	TI	SN74AS1823	690-36
74AS1832			
	National	DM74AS1832	675-2
	TI	SN74AS1832	666-107
74AS1841			
	TI	SN74AS1841	690-83
74AS1843			
	TI	SN74AS1843	690-35
74AS194			
	TI	SN74AS194	683-14
74AS20	National	DM74AS20	671-105
	TI	SN74AS20	671-107
74AS21	National	DM74AS21	670-70
	TI	SN74AS21	670-72
74AS230			
	National	DM74AS230	685-123
	TI	SN74AS230	684-144
74AS231			
	National	DM74AS231	685-124
	TI	SN74AS231	684-145
74AS240			
	National	DM74AS240	685-7
	TI	SN74AS240	685-12
			987-26
74AS241			
	National	DM74AS241	685-69
	TI	SN74AS241	685-71
			986-57
74AS242			
	National	DM74AS242	684-88
	TI	SN74AS242	684-91
			995-4
74AS243			
	National	DM74AS243	684-89
	TI	SN74AS243	684-92
			995-5
74AS244			
	National	DM74AS244	685-125
	TI	SN74AS244	685-127
			986-58
74AS245			
	National	DM74AS245	686-144
	TI	SN74AS245	686-148
			997-23
74AS250			
	TI	SN74AS250	681-156
74AS257			
	National	DM74AS257	680-123
	TI	SN74AS257	680-126
74AS258			
	National	DM74AS258	680-32
	TI	SN74AS258	680-33
74AS2620			
	National	DM74AS2620	686-88
	TI	SN74AS2620	686-89
74AS2623			
	TI	SN74AS2623	686-91
74AS264			
	National	DM74AS264	657-73
74AS2640			
	TI	**SN74AS2640**	*** 3228**
			686-90
74AS2645			
	TI	**SN74AS2645**	*** 3228**
			686-92
74AS27	National	DM74AS27	675-47
	TI	SN74AS27	675-49
74AS280			
	National	DM74AS280	690-51
	TI	SN74AS280	690-53
74AS282			
	National	DM74AS282	657-74
	TI	SN74AS282	657-76
74AS286			
	National	DM74AS286	690-81
	TI	SN74AS286	690-82
74AS298			
	TI	SN74AS298	680-167
74AS299			
	TI	SN74AS299	684-9
74AS30	National	DM74AS30	673-131
	TI	SN74AS30	673-133
74AS32	National	DM74AS32	674-129
	TI	SN74AS32	674-133
74AS34	National	DM74AS34	658-120
	TI	SN74AS34	658-122
74AS352			
	TI	SN74AS352	679-67
74AS353			
	TI	SN74AS353	679-90
74AS373			
	National	DM74AS373	677-89
	TI	SN74AS373	677-93
74AS374			
	National	DM74AS374	668-133
	TI	SN74AS374	668-140
74AS533			
	National	DM74AS533	677-159
	TI	SN74AS533	677-161
74AS534			
	National	DM74AS534	668-61
	TI	SN74AS534	668-68
74AS573			
	National	DM74AS573	677-90
	TI	SN74AS573	677-94
74AS574			
	National	DM74AS574	668-134
	TI	SN74AS574	668-141
74AS575			
	National	DM74AS575	668-135
	TI	SN74AS575	668-142
74AS576			
	National	DM74AS576	668-70
	TI	SN74AS576	668-72
74AS577			
	National	DM74AS577	668-136
	TI	SN74AS577	668-143
74AS580			
	National	DM74AS580	677-160
	TI	SN74AS580	677-162
74AS620			
	National	DM74AS620	687-121
	TI	SN74AS620	687-123
74AS621			
	National	DM74AS621	687-85
	TI	SN74AS621	687-87
74AS622			
	National	DM74AS622	687-86
	TI	SN74AS622	687-88
74AS623			
	National	DM74AS623	687-122
	TI	SN74AS623	687-124
74AS632			
	TI	**SN74AS632**	*** 3230**
			690-104
74AS638			
	National	DM74AS638	686-7
	TI	SN74AS638	686-9
74AS639			
	National	DM74AS639	686-8
	TI	SN74AS639	686-10
74AS640			
	National	DM74AS640	686-53
	TI	SN74AS640	686-61
74AS641			
	National	DM74AS641	686-108
	TI	SN74AS641	686-109
74AS642			
	National	DM74AS642	686-16
	TI	SN74AS642	686-17
74AS643			
	National	DM74AS643	686-54
	TI	SN74AS643	686-62
74AS644			
	National	DM74AS644	686-55
	TI	SN74AS644	687-14
74AS645			
	National	DM74AS645	686-145
	TI	SN74AS645	686-149
74AS646			
	National	DM74AS646	687-50
	TI	SN74AS646	687-52
74AS648			
	TI	SN74AS648	687-53
74AS651			
	National	DM74AS651	686-56
	TI	SN74AS651	686-63
74AS652			
	National	DM74AS652	686-57
	TI	SN74AS652	686-64
74AS74	National	DM74AS74	666-154
	TI	SN74AS74	666-156
74AS756			
	TI	SN74AS756	684-148
74AS757			
	TI	SN74AS757	685-51
74AS758			
	TI	SN74AS758	684-133
74AS759			
	TI	SN74AS759	684-134
74AS760			
	TI	SN74AS760	685-152
74AS762			
	TI	SN74AS762	685-153
74AS763			
	TI	SN74AS763	685-151
74AS804			
	National	DM74AS804A	666-88
	TI	SN74AS804B	666-91
74AS805			
	National	DM74AS805A	666-97
	TI	SN74AS805B	666-100
74AS808			
	National	DM74AS808A	666-79
	TI	SN74AS808B	666-82
74AS810			
	National	DM74AS810	676-81
74AS811			
	National	DM74AS811	676-94
74AS821			
	TI	SN74AS821	669-35
74AS822			
	TI	SN74AS822	669-33
74AS823			
	TI	SN74AS823	669-28
74AS824			
	TI	SN74AS824	669-25
74AS825			
	TI	SN74AS825	669-22
74AS826			
	TI	SN74AS826	669-19
74AS832			
	National	DM74AS832A	666-105
	TI	SN74AS832B	666-108
74AS841			
	TI	SN74AS841	678-39
74AS842			
	TI	SN74AS842	678-37
74AS843			
	TI	SN74AS843	678-25
74AS844			
	TI	SN74AS844	678-19
74AS845			
	TI	SN74AS845	678-6
74AS846			
	TI	SN74AS846	677-142
74AS850			
	TI	SN74AS850	681-141
74AS851			
	TI	SN74AS851	681-142
74AS857			
	TI	SN74AS857	681-30
74AS86	National	DM74AS86	676-44
74AS866			
	TI	SN74AS866	658-43
74AS867			
	TI	SN74AS867	661-99
74AS869			
	TI	SN74AS869	661-100

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74AS870			
	TI	SN74AS870	⋆ 3226
			678-59
74AS871			
	TI	SN74AS871	⋆ 3226
			678-60
74AS873			
	National	DM74AS873	676-117
	TI	SN74AS873	676-119
74AS874			
	National	DM74AS874	666-124
	TI	SN74AS874	666-129
74AS876			
	National	DM74AS876	666-125
	TI	SN74AS876	666-130
74AS878			
	National	DM74AS878	666-126
	TI	SN74AS878	666-131
74AS879			
	National	DM74AS879	666-127
	TI	SN74AS879	666-132
74AS880			
	National	DM74AS880	677-26
	TI	SN74AS880	677-27
74AS881			
	National	DM74AS881B	657-16
	TI	SN74AS881A	657-20
74AS882			
	TI	SN74AS882A	657-77
74AS8832			
	TI	SN74AS8832	688-84
74AS8833			
	TI	SN74AS8833	⋆ 3224
			688-46
74AS8834			
	TI	SN74AS8834	⋆ 3224
			690-108
74AS8835			
	TI	SN74AS8835	688-85
74AS8836			
	TI	SN74AS8836	688-18
74AS8837			
	TI	SN74AS8837	658-56
74AS8838			
	TI	SN74AS8838	⋆ 3224
			⋆ 3226
			656-29
74AS8839			
	TI	SN74AS8839	⋆ 3224
			656-30
74AS885			
	TI	SN74AS885	656-129
74AS887			
	TI	SN74AS887	⋆ 3226
			688-86
			860-41
74AS888			
	TI	SN74AS888	⋆ 3226
			646-37
			861-128
			¶ 408-18
		SN74AS888-1	
			⋆ 3226
			646-38
			¶ 408-18
74AS890			
	TI	SN74AS890	⋆ 3226
			688-74
			861-131
			¶ 408-18
		SN74AS890-1	
			⋆ 3226
			657-94
			¶ 408-18
74AS895			
	TI	SN74AS895	⋆ 3226
			688-52
			860-40
74AS897			
	TI	SN74AS897A	⋆ 3226
			656-28
74AS95	National	DM74AS95	682-134
	TI	SN74AS95	682-135
74BCT1245			
	TI	SN74BCT1245	642-19

Base Number	Source	Device	Page-Line
74BCT2240			
	TI	SN74BCT2240	
			⋆ 3228
			⋆ 3249
			629-136
74BCT2241			
	TI	SN74BCT2241	
			⋆ 3228
			⋆ 3249
			629-137
74BCT2244			
	TI	SN74BCT2244	
			⋆ 3228
			⋆ 3249
			629-138
74BCT240			
	TI	SN74BCT240	⋆ 3249
			639-82
74BCT241			
	TI	SN74BCT241	⋆ 3249
			640-39
74BCT244			
	TI	SN74BCT244	⋆ 3249
			640-40
74BCT245			
	TI	SN74BCT245	⋆ 3249
			641-39
74BCT2827			
	TI	SN74BCT2827	
			⋆ 3228
			⋆ 3249
			630-5
74BCT2828			
	TI	SN74BCT2828	
			⋆ 3228
			⋆ 3249
			630-6
74BCT29818			
	TI	SN74BCT29818	
			⋆ 3249
			633-116
74BCT29827			
	TI	SN74BCT29827	
			⋆ 3249
			643-13
74BCT29828			
	TI	SN74BCT29828	
			⋆ 3249
			643-12
74BCT29833			
	TI	SN74BCT29833	
			⋆ 3249
			637-29
74BCT29834			
	TI	SN74BCT29834	
			⋆ 3249
			637-28
74BCT29853			
	TI	SN74BCT29853	
			⋆ 3249
			637-30
74BCT29854			
	TI	SN74BCT29854	
			⋆ 3249
			637-26
74BCT29861			
	TI	SN74BCT29861	
			⋆ 3249
			643-36
74BCT29862			
	TI	SN74BCT29862	
			⋆ 3249
			643-32
74BCT29863			
	TI	SN74BCT29863	
			⋆ 3249
			642-139
74BCT29864			
	TI	SN74BCT29864	
			⋆ 3249
			642-135
74BCT373			
	TI	SN74BCT373	⋆ 3249
			627-59
74BCT374			
	TI	SN74BCT374	⋆ 3249
			618-118

Base Number	Source	Device	Page-Line
74BCT533			
	TI	SN74BCT533	⋆ 3249
			627-58
74BCT534			
	TI	SN74BCT534	⋆ 3249
			634-11
74BCT543			
	TI	SN74BCT543	⋆ 3249
			642-22
74BCT544			
	TI	SN74BCT544	⋆ 3249
			642-23
74BCT620			
	TI	SN74BCT620	⋆ 3249
			641-17
74BCT623			
	TI	SN74BCT623	⋆ 3249
			641-116
74BCT646			
	TI	SN74BCT646	⋆ 3249
			640-115
74BCT648			
	TI	SN74BCT648	⋆ 3249
			640-66
74BCT651			
	TI	SN74BCT651	⋆ 3249
			640-67
74BCT652			
	TI	SN74BCT652	⋆ 3249
			642-21
74BCT819			
	TI	SN74BCT819	⋆ 3249
			633-117
74C00	National	MM74C00	623-60
74C02	National	MM74C02	625-114
74C04	National	MM74C04	607-155
74C08	National	MM74C08	622-55
74C10	National	MM74C10	622-180
74C107	National	MM74C107	621-103
74C14	National	MM74C14	638-127
			¶ 406-27
74C150	National	MM74C150	632-133
74C151	National	MM74C151	632-16
74C154	National	MM74C154	616-67
74C157	National	MM74C157	631-40
74C160	National	MM74C160	612-21
74C161	National	MM74C161	609-3
74C162	National	MM74C162	611-147
74C163	National	MM74C163	608-122
74C164	National	MM74C164	635-39
			1395-58
74C165	National	MM74C165	634-166
			1395-32
74C173	National	MM74C173	618-20
74C174	National	MM74C174	618-72
74C175	National	MM74C175	617-145
74C192	National	MM74C192	612-64
74C193	National	MM74C193	609-69
74C195	National	MM74C195	634-79
			1394-18
74C20	National	MM74C20	622-121
74C200	National	MM74C200	630-66
			1349-9
74C221	National	MM74C221	632-158
74C240	National	MM74C240	639-24
74C244	National	MM74C244	639-111
74C30	National	MM74C30	623-142
74C32	National	MM74C32	624-128
74C374	National	MM74C374	620-2
74C42	National	MM74C42	614-57
74C48	National	MM74C48	614-103
74C73	National	MM74C73	621-104
74C74	National	MM74C74	617-71
74C76	National	MM74C76	620-150
74C83	National	MM74C83	602-33
74C85	National	MM74C85	603-82
74C86	National	MM74C86	626-13
74C89	National	MM74C89	630-45
			1348-35
74C90	National	MM74C90	612-14
74C901	National	MM74C901	606-46
74C902	National	MM74C902	606-49
74C903	National	MM74C903	606-40
74C904	National	MM74C904	606-43
74C905	National	MM74C905	637-113
74C906	National	MM74C906	606-34

Base Number	Source	Device	Page-Line
74C907	National	MM74C907	606-37
74C908	National	MM74C908	617-46
74C909	National	MM74C909	636-118
			1114-30
74C910	National	MM74C910	630-86
74C911	National	MM74C911	617-52
			980-25
74C912	National	MM74C912	617-53
			980-72
74C914	National	MM74C914	638-128
74C915	National	MM74C915	617-56
			980-86
74C917	National	MM74C917	617-54
			980-73
74C918	National	MM74C918	617-47
74C922	National	MM74C922	984-5
74C923	National	MM74C923	984-9
74C925	National	MM74C925	613-104
74C926	National	MM74C926	613-105
74C927	National	MM74C927	613-69
74C928	National	MM74C928	613-68
74C93	National	MM74C93	608-109
74C932	National	MM74C932	636-119
74C941	National	MM74C941	606-154
			986-40
74C945	Maxim	MM74C945	613-70
	National	MM74C945	613-72
74C946	National	MM74C946	613-65
74C947	Maxim	MM74C947	613-71
	National	MM74C947	613-73
74C95	National	MM74C95	634-17
			1394-21
74C956	National	MM74C956	617-5
			883-65
			980-32
74FCT138			
	IDT	IDT74FCT138	
			⋆ 2808
			615-64
		IDT74FCT138A	
			⋆ 2808
			615-65
74FCT139			
	IDT	IDT74FCT139	
			⋆ 2808
			614-148
		IDT74FCT139A	
			⋆ 2808
			614-149
74FCT161			
	IDT	IDT74FCT161	
			⋆ 2808
			609-7
		IDT74FCT161A	
			⋆ 2808
			609-8
74FCT163			
	IDT	IDT74FCT163	
			⋆ 2808
			608-126
		IDT74FCT163A	
			⋆ 2808
			608-127
74FCT182			
	IDT	IDT74FCT182	
			⋆ 2808
			603-57
		IDT74FCT182A	
			⋆ 2808
			603-58
74FCT191			
	IDT	IDT74FCT191	
			⋆ 2808
			609-72
		IDT74FCT191A	
			⋆ 2808
			609-73
74FCT193			
	IDT	IDT74FCT193	
			⋆ 2808
			611-87
		IDT74FCT193A	
			⋆ 2808
			611-88

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74FCT240			
	IDT	IDT74FCT240	
		★ 2808	639-27
		IDT74FCT240A	
		★ 2808	639-28
	VTC	V74FCT240	★ 3370 639-30
74FCT241			
	VTC	V74FCT241	★ 3370 640-16
74FCT244			
	IDT	IDT74FCT244	
		★ 2808	639-114
		IDT74FCT244A	
		★ 2808	639-115
	VTC	V74FCT244	★ 3370 639-118
74FCT245			
	IDT	IDT74FCT245	
		★ 2808	641-121
		IDT74FCT245A	
		★ 2808	641-122
	VTC	V74FCT245	★ 3370 641-127
74FCT273			
	IDT	IDT74FCT273	
		★ 2808	618-135
		IDT74FCT273A	
		★ 2808	618-136
74FCT299			
	IDT	IDT74FCT299	
		★ 2808	635-150
		IDT74FCT299A	
		★ 2808	635-151
74FCT373			
	IDT	IDT74FCT373	
		★ 2808	627-115
		IDT74FCT373A	
		★ 2808	627-116
	VTC	V74FCT373	★ 3370 627-121
74FCT374			
	IDT	IDT74FCT374	
		★ 2808	620-9
		IDT74FCT374A	
		★ 2808	620-10
	VTC	V74FCT374	★ 3370 620-18
74FCT377			
	IDT	IDT74FCT377	
		★ 2808	
		★ 2810	619-2
		IDT74FCT377A	
		★ 2808	
		★ 2810	619-3
74FCT399			
	IDT	IDT74FCT399	
		★ 2808	
		★ 2810	634-4
		IDT74FCT399A	
		★ 2808	
		★ 2810	634-5

Base Number	Source	Device	Page-Line
74FCT521			
	IDT	IDT74FCT521	
		★ 2808	
		★ 2810	619-4
		IDT74FCT521A	
		★ 2808	
		★ 2810	602-138
74FCT533			
	IDT	IDT74FCT533	
		★ 2808	
		★ 2810	628-69
		IDT74FCT533A	
		★ 2808	
		★ 2810	628-70
	VTC	V74FCT533	★ 3370 628-72
74FCT534			
	IDT	IDT74FCT534	
		★ 2808	
		★ 2810	619-54
		IDT74FCT534A	
		★ 2808	
		★ 2810	619-55
	VTC	V74FCT534	★ 3370 619-60
74FCT540			
	IDT	IDT74FCT540	
		★ 2808	
		★ 2810	607-77
		IDT74FCT540A	
		★ 2808	
		★ 2810	607-78
74FCT541			
	IDT	IDT74FCT541	
		★ 2808	
		★ 2810	607-82
		IDT74FCT541A	
		★ 2808	
		★ 2810	607-79
74FCT543			
	IDT	IDT74FCT543	
		★ 2808	
		★ 2810	642-44
		IDT74FCT543A	
		★ 2808	
		★ 2810	642-45
74FCT573			
	IDT	IDT74FCT573	
		★ 2808	
		★ 2810	627-117
		IDT74FCT573A	
		★ 2808	
		★ 2810	627-118
	VTC	V74FCT573	★ 3370 627-122
74FCT574			
	IDT	IDT74FCT574	
		★ 2808	
		★ 2810	620-11
		IDT74FCT574A	
		★ 2808	
		★ 2810	620-12
	VTC	V74FCT574	★ 3370 620-19

Base Number	Source	Device	Page-Line
74FCT640			
	IDT	IDT74FCT640	
		★ 2809	641-55
		IDT74FCT640A	
		★ 2809	641-19
	VTC	V74FCT640	★ 3370 641-57
74FCT645			
	IDT	IDT74FCT645	
		★ 2809	641-123
		IDT74FCT645A	
		★ 2809	641-124
	VTC	V74FCT645	★ 3370 641-128
74FCT646			
	IDT	IDT74FCT646	
		★ 2809	642-50
		IDT74FCT646A	
		★ 2809	642-51
74FCT648			
	IDT	IDT74FCT648	
		★ 2809	642-38
		IDT74FCT648A	
		★ 2809	642-39
74FCT651			
	IDT	IDT74FCT651	
		★ 2809	642-52
		IDT74FCT651A	
		★ 2809	642-53
74FCT652			
	IDT	IDT74FCT652	
		★ 2809	642-40
		IDT74FCT652A	
		★ 2809	642-41
74FCT821			
	IDT	IDT74FCT821A	
		★ 2809	643-52
		IDT74FCT821B	
		★ 2809	643-53
	VTC	V74FCT821A	★ 3370 643-56
74FCT822			
	IDT	IDT74FCT822A	
		★ 2809	643-43
		IDT74FCT822B	
		★ 2809	643-44
	VTC	V74FCT822A	★ 3370 643-46
74FCT823			
	IDT	IDT74FCT823A	
		★ 2809	636-105
		IDT74FCT823B	
		★ 2809	643-54
	VTC	V74FCT823A	★ 3370 643-11
74FCT824			
	IDT	IDT74FCT824A	
		★ 2809	620-114
		IDT74FCT824B	
		★ 2809	620-115
	VTC	V74FCT824A	★ 3370 620-117

Base Number	Source	Device	Page-Line
74FCT825			
	IDT	IDT74FCT825A	
		★ 2809	620-13
		IDT74FCT825B	
		★ 2809	620-14
	VTC	V74FCT825A	★ 3370 620-20
74FCT826			
	IDT	IDT74FCT826A	
		★ 2809	619-56
		IDT74FCT826B	
		★ 2809	619-57
	VTC	V74FCT826A	★ 3370 619-61
74FCT827			
	IDT	IDT74FCT827A	
		★ 2809	607-104
		IDT74FCT827B	
		★ 2809	607-106
	VTC	V74FCT827A	★ 3370 607-101
74FCT828			
	IDT	IDR74FCT828B	607-111
		IDT74FCT828A	
		★ 2809	607-95
		IDT74FCT828B	
		★ 2809	607-96
	VTC	V74FCT828A	★ 3370 607-92
74FCT833			
	IDT	IDT74FCT833A	
		★ 2809	642-110
		IDT74FCT833B	
		★ 2809	642-111
74FCT834			
	IDT	IDT74FCT834A	
		★ 2809	642-112
		IDT74FCT834B	
		★ 2809	642-113
74FCT841			
	IDT	IDT74FCT841A	
		★ 2809	629-109
		IDT74FCT841B	
		★ 2809	629-110
	VTC	V74FCT841A	★ 3370 629-112
74FCT842			
	IDT	IDT74FCT842A	
		★ 2809	629-99
		IDT74FCT842B	
		★ 2809	629-100
	VTC	V74FCT842A	★ 3370 629-103
74FCT843			
	IDT	IDT74FCT843A	
		★ 2809	636-103
		IDT74FCT843B	
		★ 2809	629-84
	VTC	V74FCT843A	★ 3370 629-86
74FCT844			
	IDT	IDT74FCT844A	
		★ 2809	629-101
		IDT74FCT844B	
		★ 2809	629-72
	VTC	V74FCT844A	★ 3370 629-76

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74FCT845			
	IDT	IDT74FCT845A	
		* 2809	629-56
		IDT74FCT845B	
		* 2809	629-57
74FCT846			
	IDT	IDT74FCT846A	
		* 2809	629-50
		IDT74FCT846B	
		* 2809	629-51
	VTC	V74FCT846A	* 3370 629-53
74FCT853			
	IDT	IDT74FCT853A	
		* 2809	642-114
		IDT74FCT853B	
		* 2809	642-115
74FCT854			
	IDT	IDT74FCT854A	
		* 2809	642-116
		IDT74FCT854B	
		* 2809	642-117
74FCT861			
	IDT	IDT74FCT861A	
		* 2810	643-23
	VTC	V74FCT861A	* 3370 643-27
74FCT862			
	IDT	IDT74FCT862A	
		* 2810	643-24
	VTC	V74FCT862A	* 3370 643-28
74FCT863			
	IDT	IDT74FCT863A	
		* 2810	636-107
	VTC	V74FCT863A	* 3370 642-130
74FCT864			
	IDT	IDT74FCT864A	
		* 2810	642-127
	VTC	V74FCT864A	* 3370 642-131
74F00	Fairchild	74F00	672-122
	Motorola	MC74F00	672-124
	Signetics	74F00	* 3023 672-126
	TI	SN74F00	672-127
74F02	Fairchild	74F02	675-127
	Motorola	MC74F02	675-129
	Signetics	74F02	* 3023 675-130
	TI	SN74F02	675-131
74F04	Fairchild	74F04	659-96
	Motorola	MC74F04	659-99
	Signetics	74F04	* 3023 659-102
	TI	SN74F04	659-104
74F08	Fairchild	74F08	671-15
	Motorola	MC74F08	671-17
	Signetics	74F08	* 3023 671-18
	TI	SN74F08	671-81
74F10	Fairchild	74F10	672-44
	Motorola	MC74F10	672-45
	Signetics	74F10	* 3023 672-46
	TI	SN74F10	672-47
74F109	Fairchild	74F109	669-66
	Motorola	MC74F109	669-68
	Signetics	74F109	* 3023 669-69
	TI	SN74F109	669-70
74F11	Fairchild	74F11	670-115
	Motorola	MC74F11	670-117
	Signetics	74F11	* 3023 670-118
	TI	SN74F11	670-120
74F112	Fairchild	74F112	670-9
	Motorola	MC74F112	670-11
	Signetics	74F112	* 3023 670-12
	TI	SN74F112	670-14
74F113	Fairchild	74F113	669-155
	Motorola	MC74F113	669-157
	Signetics	74F113	* 3023 669-158
	TI	SN74F113	669-160
74F114	Fairchild	74F114	670-39
	Motorola	MC74F114	670-41
	Signetics	74F114	* 3023 670-42
	TI	SN74F114	670-44
74F1240			
	Signetics	74F1240	* 3023 * 3035 685-19
74F1241			
	Signetics	74F1241	* 3023 * 3035 685-77
74F1242			
	Signetics	74F1242	* 3023 684-99
74F1243			
	Signetics	74F1243	* 3023 684-100
74F1244			
	Signetics	74F1244	* 3023 685-132
74F1245			
	Signetics	74F1245	* 3023 686-157
74F125	Signetics	74F125	* 3023 658-68
74F126	Signetics	74F126	* 3023 658-91
74F13	Motorola	MC74F13	659-61
	Signetics	74F13	* 3023 688-126
74F132	Signetics	74F132	* 3023 689-32
74F138	Fairchild	74F138	665-52
	Motorola	MC74F138	665-54
	Signetics	74F138	* 3023 665-55
	TI	SN74F138	665-56
74F139	Fairchild	74F139	664-118
	Motorola	MC74F139	664-121
	Signetics	74F139	* 3023 664-123
74F14	Motorola	MC74F14	659-100
	Signetics	74F14	* 3023 689-64
74F148	Fairchild	74F148	690-14
	Motorola	MC74F148	690-3
	Signetics	74F148	* 3023 690-15
74F151	Fairchild	74F151	681-58
	Motorola	MC74F151	681-60
	Signetics	74F151	* 3023 681-61
	TI	SN74F151	681-63
74F153	Fairchild	74F153	679-26
	Motorola	MC74F153	679-28
	Signetics	74F153	* 3023 679-29
	TI	SN74F153	679-31
74F157	Fairchild	74F157	680-88
	Motorola	MC74F157	680-90
	Signetics	74F157	* 3023 680-92
	TI	SN74F157A	680-94
74F158	Fairchild	74F158	679-167
	Motorola	MC74F158	679-169
	Signetics	74F158	* 3023 679-171
	TI	SN74F158A	679-173
74F160	Fairchild	74F160A	662-131
	Motorola	MC74F160A	662-133
	Signetics	74F160A	* 3023 662-134
	TI	SN74F160A	662-136
74F161	Fairchild	74F161A	660-137
	Motorola	MC74F161A	660-139
	Signetics	74F161A	* 3023 660-140
	TI	SN74F161A	660-142
74F162	Fairchild	74F162A	662-162
	Motorola	MC74F162A	662-164
	Signetics	74F162A	* 3023 662-165
	TI	SN74F162A	662-167
74F163	Fairchild	74F163A	660-179
	Motorola	MC74F163A	661-1
	Signetics	74F163A	* 3023 661-2
	TI	SN74F163A	661-4
74F164	Fairchild	74F164	683-66
	Motorola	MC74F164	683-68
	Signetics	74F164	* 3023 683-69
74F166	Signetics	74F166	* 3023 * 3037 683-130
74F168	Fairchild	74F168	663-57
	Motorola	MC74F168	663-59
	Signetics	74F168	* 3023 663-60
	TI	SN74F168	663-62
74F169	Fairchild	74F169	661-115
	Motorola	MC74F169	661-117
	Signetics	74F169	* 3023 661-119
	TI	SN74F169	661-122
74F174	Fairchild	74F174	667-164
	Motorola	MC74F174	667-166
	Signetics	74F174	* 3023 667-167
	TI	SN74F174	667-169
74F175	Fairchild	74F175	667-49
	Motorola	MC74F175	667-51
	Signetics	74F175	* 3023 667-52
	TI	SN74F175	667-54
74F181	Fairchild	74F181	657-22
	Motorola	MC74F181	657-27
	Signetics	74F181	* 3023 657-31
74F182	Fairchild	74F182	657-78
	Motorola	MC74F182	657-80
	Signetics	74F182	* 3023 657-81
74F189	Fairchild	74F189	678-125
74F190	Fairchild	74F190	663-128
	Motorola	MC74F190	663-130
	Signetics	74F190	* 3023 663-131
74F191	Fairchild	74F191	661-156
	Motorola	MC74F191	661-158
	Signetics	74F191	* 3023 661-159
74F192	Fairchild	74F192	663-97
	Motorola	MC74F192	663-99
	Signetics	74F192	* 3023 663-100
74F193	Fairchild	74F193	662-22
	Motorola	MC74F193	662-24
	Signetics	74F193	* 3023 662-25
74F194	Fairchild	74F194	683-16
	Motorola	MC74F194	683-18
	Signetics	74F194	* 3023 683-19
74F195	Motorola	MC74F195	682-103
	Signetics	74F195	* 3023 682-104
74F198	Signetics	74F198	* 3023 683-95
74F199	Signetics	74F199	* 3023 683-100
74F20	Fairchild	74F20	671-109
	Motorola	MC74F20	671-111
	Signetics	74F20	* 3023 671-113
	TI	SN74F20	671-116
74F21	Motorola	MC74F21	670-74
		MV74F21	670-75
	TI	SN74F21	671-117
74F219	Fairchild	74F219	678-126
74F240	Fairchild	74F240	685-14 987-5
	Motorola	MC74F240	685-16
	Signetics	74F240	* 3023 685-20
	TI	SN74F240	685-24
74F241	Fairchild	74F241	685-73
	Motorola	MC74F241	685-75
	Signetics	74F241	* 3023 685-78
	TI	SN74F241	685-82
74F242	Motorola	MC74F242	684-95
	Signetics	74F242	* 3023 684-101
	TI	SN74F242	684-105
74F243	Fairchild	74F243	684-94
	Motorola	MC74F243	684-96
	Signetics	74F243	* 3023 684-102
	TI	SN74F243	684-106
74F244	Fairchild	74F244	685-129
	Motorola	MC74F244	685-130
	Signetics	74F244	* 3023 685-133
	TI	SN74F244	685-136
74F245	Fairchild	74F245	686-152
	Motorola	MC74F245	686-154 997-12
	Signetics	74F245	* 3023 686-158
	TI	SN74F245	686-161
74F251	Fairchild	74F251	681-112
	Motorola	MC74F251	681-114
	Signetics	74F251	* 3023 681-115
	TI	SN74F251	681-116
74F253	Fairchild	74F253	679-116
	Motorola	MC74F253	679-118
	Signetics	74F253	* 3023 679-119
	TI	SN74F253	679-121
74F256	Motorola	MC74F256	676-120
	Signetics	74F256	* 3023 676-121
74F257	Fairchild	74F257	680-128
	Motorola	MC74F257	680-130
	Signetics	74F257	* 3023 680-132
	TI	SN74F257	680-134
74F258	Fairchild	74F258	680-35
	Motorola	MC74F258	680-37
	Signetics	74F258	* 3023 680-39
	TI	SN74F258	680-41
74F259	Motorola	MC74F259	677-55
	Signetics	74F259	* 3023 677-56
74F260	Signetics	74F260	* 3023 675-19
74F269	Signetics	74F269	* 3023 * 3038 661-120
74F27	TI	SN74F27	675-51
74F273	Signetics	74F273	* 3023 668-98
	TI	SN74F273	668-100
74F280	Fairchild	74F280	690-55
	Motorola	MC74F280	690-57
	Signetics	74F280B	* 3023 690-59
	TI	SN74F280A	690-61
74F283	Fairchild	74F283	658-4
	Motorola	MC74F283	658-6
	Signetics	74F283	* 3023 658-7
	TI	SN74F283	658-9

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74F2960			
	Motorola	MC74F2960	860-123
			879-54
74F2961			
	Motorola	MC74F2961	860-132
		MC74F2961A	982-1
74F2962			
	Motorola	MC74F2962	860-133
		MC74F2962A	982-2
74F2968			
	Motorola	MC74F2968	860-114
74F2969			
	Motorola	MC74F2969	861-3
74F2970			
	Motorola	MC74F2970	861-6
74F298	Fairchild	74F298	680-170
	Signetics	**74F298**	⋆ **3023**
			680-173
74F299	Fairchild	74F299	684-10
	Signetics	**74F299**	⋆ **3023**
			684-13
	TI	SN74F299	684-16
74F30	**Signetics**	**74F30**	⋆ **3023**
			673-134
	TI	SN74F30	673-136
74F30240			
	Signetics	**74F30240**	⋆ **3023**
			685-21
74F30241			
	Signetics	**74F30241**	⋆ **3023**
			685-79
74F30244			
	Signetics	**74F30244**	⋆ **3023**
			685-134
74F30245			
	Signetics	**74F30245**	⋆ **3023**
			687-6
74F3037			
	Signetics	**74F3037**	⋆ **3023**
			⋆ **3043**
			689-51
74F3038			
	Signetics	**74F3038**	⋆ **3023**
			689-52
74F3040			
	Signetics	**74F3040**	⋆ **3023**
			689-12
74F32	Fairchild	74F32	674-135
	Motorola	MC74F32	674-137
	Signetics	**74F32**	⋆ **3023**
			674-138
	TI	SN74F32	674-140
74F322	Fairchild	74F322	683-146
	Signetics	**74F322**	⋆ **3023**
			683-147
74F323	Fairchild	74F323	684-11
	Motorola	MC74F323	684-12
	Signetics	**74F323**	⋆ **3023**
			684-14
	TI	SN74F323	684-17
74F350	Fairchild	74F350	644-122
	Motorola	MC74F350	644-126
	Signetics	**74F350**	⋆ **3023**
			644-129
	TI	SN74F350	644-131
74F352	Fairchild	74F352	679-69
	Motorola	MC74F352	679-71
	Signetics	**74F352**	⋆ **3023**
			679-72
	TI	SN74F352	679-73
74F353	Fairchild	74F353	679-92
	Motorola	MC74F353	679-94
	Signetics	**74F353**	⋆ **3023**
			679-95
	TI	SN74F353	679-97
74F36	TI	SN74F36	675-70
74F365	Fairchild	74F365	658-156
	Signetics	**74F365**	⋆ **3023**
			658-159
74F366	**Signetics**	**74F366**	⋆ **3023**
			660-21
			666-63
74F367	**Signetics**	**74F367**	⋆ **3023**
			658-160
74F368	**Signetics**	**74F368**	⋆ **3023**
			660-22
74F37	Fairchild	74F37	672-173
	Signetics	**74F37**	⋆ **3023**
			672-174
74F373	Fairchild	74F373	677-98
	Motorola	MC74F373	677-103
	Signetics	**74F373**	⋆ **3023**
			677-105
	TI	SN74F373	677-111
74F374	Fairchild	74F374	668-145
	Motorola	MC74F374	668-148
	Signetics	**74F374**	⋆ **3023**
			668-150
	TI	SN74F374	668-153
74F377	**Signetics**	**74F377**	⋆ **3023**
			669-4
	TI	SN74F377	669-5
74F378	Fairchild	74F378	668-16
	Motorola	MC74F378	668-17
	Signetics	**74F378**	⋆ **3023**
			668-18
	TI	SN74F378	668-19
74F379	Fairchild	74F379	667-96
	Motorola	MC74F379	667-97
	Signetics	**74F379**	⋆ **3023**
			667-98
	TI	SN74F379	667-99
74F38	Signetics	74F38	673-20
74F381	Fairchild	74F381	657-23
	Motorola	MC74F381	657-28
	Signetics	**74F381**	⋆ **3024**
			657-32
	TI	SN74F381	657-37
74F382	Fairchild	74F382	657-24
	Motorola	MC74F382	657-29
	Signetics	**74F382**	⋆ **3024**
			657-33
	TI	SN74F382	657-38
74F385	Fairchild	74F385	656-4
	Signetics	**74F385**	⋆ **3024**
			656-5
74F395	**Signetics**	**74F395**	⋆ **3024**
			682-154
74F398	Fairchild	74F398	680-171
	Motorola	MC74F398	681-20
	Signetics	**74F398**	⋆ **3024**
			680-174
74F399	Fairchild	74F399	680-172
	Motorola	MC74F399	681-21
	Signetics	**74F399**	⋆ **3024**
			680-175
74F40	Fairchild	74F40	671-158
	Signetics	74F40	671-159
74F401	Fairchild	74F401	656-154
			982-12
74F402	Fairchild	74F402	682-76
			982-15
74F403	Fairchild	74F403	1304-3
74F407	Fairchild	74F407	678-47
74F410	Fairchild	74F410	678-130
74F412	Fairchild	74F412	677-99
	Signetics	**74F412**	⋆ **3024**
			677-106
74F413	Fairchild	74F413	1304-50
74F432	Fairchild	74F432	677-100
	Signetics	**74F432**	⋆ **3024**
			677-107
74F445	**Signetics**	**74F445**	⋆ **3024**
			664-36
74F51	Signetics	74F51	674-11
74F518	TI	SN74F518	656-114
74F519	TI	SN74F519	656-115
74F520	TI	SN74F520	656-99
74F521	Fairchild	74F521	656-94
	Motorola	MC74F521	656-96
	Signetics	**74F521**	⋆ **3024**
			656-98
	TI	SN74F521	656-100
74F524	Fairchild	74F524	656-35
	Signetics	**74F524**	⋆ **3024**
			656-36
74F525	Fairchild	74F525	664-1
			690-103
74F533	Fairchild	74F533	677-165
	Motorola	MC74F533	677-168
	Signetics	**74F533**	⋆ **3024**
			677-170
			(Continued)
74F533			(Cont'd)
	TI	SN74F533	677-173
74F534	Fairchild	74F534	668-75
	Motorola	MC74F534	668-78
	Signetics	**74F534**	⋆ **3024**
			668-80
	TI	SN74F534	668-83
74F537	Fairchild	74F537	664-86
	Motorola	MC74F537	665-31
	Signetics	**74F537**	⋆ **3024**
			664-87
74F538	Fairchild	74F538	665-83
	Motorola	MC74F538	665-85
	Signetics	**74F538**	⋆ **3024**
			665-86
74F539	Fairchild	74F539	664-119
	Motorola	MC74F539	664-102
	Signetics	**74F539**	⋆ **3024**
			664-124
74F540	Fairchild	74F540	685-15
	Signetics	**74F540**	⋆ **3024**
			685-22
			987-16
74F541	Fairchild	74F541	685-74
	Signetics	**74F541**	⋆ **3024**
			685-80
			986-41
74F543	Fairchild	74F543	687-55
	Signetics	**74F543**	⋆ **3024**
			687-62
	TI	SN74F543	687-70
74F544	Fairchild	74F544	687-56
	Signetics	**74F544**	⋆ **3024**
			687-63
	TI	SN74F544	687-71
74F545	Fairchild	74F545	686-153
	Signetics	**74F545**	⋆ **3024**
			686-159
74F547	Fairchild	74F547	665-35
	Signetics	**74F547**	⋆ **3024**
			665-37
74F548	Fairchild	74F548	665-36
	Signetics	**74F548**	⋆ **3024**
			665-38
74F550	Fairchild	74F550	687-57
	Signetics	**74F550**	⋆ **3024**
			687-64
74F551	Fairchild	74F551	687-58
	Signetics	**74F551**	⋆ **3024**
			687-65
74F552	Fairchild	74F552	687-59
74F557	**Signetics**	**74F557**	⋆ **3024**
			644-51
74F558	**Signetics**	**74F558**	⋆ **3024**
			644-52
74F563	Fairchild	74F563	677-166
	Signetics	**74F563**	⋆ **3024**
			677-171
	TI	SN74F563	678-16
74F564	Fairchild	74F564	668-76
	Signetics	**74F564**	⋆ **3024**
			668-81
	TI	SN74F564	668-181
74F568	Fairchild	74F568	663-43
	Signetics	**74F568**	⋆ **3024**
			663-45
	TI	SN74F568	663-48
74F569	Fairchild	74F569	661-101
	Signetics	**74F569**	⋆ **3024**
			663-46
	TI	SN74F569	661-103
74F573	Fairchild	74F573	677-101
	Signetics	**74F573**	⋆ **3024**
			677-108
	TI	SN74F573	677-112
74F574	Fairchild	74F574	668-146
	TI	SN74F574	668-154
74F579	**Signetics**	**74F579**	⋆ **3024**
			⋆ **3039**
			663-47
74F583	Fairchild	74F583	657-2
	Signetics	**74F583**	⋆ **3024**
			657-3
74F588	Fairchild	74F588	688-49
	Signetics	**74F588**	⋆ **3024**
			685-160
74F595	**Signetics**	**74F595**	⋆ **3024**
			683-149
74F597	**Signetics**	**74F597**	⋆ **3024**
			683-138
74F598	**Signetics**	**74F598**	⋆ **3024**
			683-139
74F604	**Signetics**	**74F604**	⋆ **3024**
			677-34
74F605	**Signetics**	**74F605**	⋆ **3024**
			677-35
74F620	Motorola	MC74F620	687-125
	Signetics	**74F620**	⋆ **3024**
			687-128
	TI	SN74F620	687-132
74F621	**Signetics**	**74F621**	⋆ **3024**
			687-89
	TI	SN74F621	687-92
74F622	**Signetics**	**74F622**	⋆ **3024**
			687-90
	TI	SN74F622	687-93
74F623	Motorola	MC74F623	687-126
	Signetics	**74F623**	⋆ **3024**
			687-129
	TI	SN74F623	687-133
74F630	Signetics	74F630	982-46
74F631	Signetics	74F631	982-47
74F64	Fairchild	74F64	674-87
	Motorola	MC74F64	674-88
	Signetics	**74F64**	⋆ **3024**
			674-90
74F640	Motorola	MC74F640	686-65
	Signetics	**74F640**	⋆ **3024**
			686-67
74F641	**Signetics**	**74F641**	⋆ **3024**
			686-110
		74F641-1	⋆ **3024**
			686-111
74F642	**Signetics**	**74F642**	⋆ **3024**
			686-18
74F643	Motorola	MC74F643	686-66
74F645	**Signetics**	**74F645**	⋆ **3024**
			686-160
74F646	**Signetics**	**74F646**	⋆ **3024**
			⋆ **3030**
			687-66
74F647	**Signetics**	**74F647**	⋆ **3024**
			687-30
74F648	**Signetics**	**74F648**	⋆ **3024**
			⋆ **3030**
			687-67
74F649	**Signetics**	**74F649**	⋆ **3024**
			687-31
74F655	**Signetics**	**74F655A**	⋆ **3024**
			⋆ **3032**
			660-60
74F656	**Signetics**	**74F656A**	⋆ **3024**
			⋆ **3032**
			659-37
74F657	**Signetics**	**74F657**	⋆ **3024**
			⋆ **3034**
			687-21
74F673	Fairchild	74F673	684-65
			1395-85
	Signetics	**74F673**	⋆ **3024**
			1395-88
		74F673A	⋆ **3024**
			684-66
74F674	**Signetics**	**74F674**	⋆ **3024**
			684-56
			1395-89
74F675	Fairchild	74F675	684-63
			1395-86
	Signetics	74F675	684-64
			1395-90
74F676	Fairchild	74F676	684-61
			1395-87
	Signetics	**74F676**	⋆ **3024**
			684-62
			1395-91
74F74	Fairchild	74F74	666-158
	Motorola	MC74F74	666-159
	Signetics	74F74	666-160
	TI	SN74F74	667-2
74F764	**Signetics**	**74F764**	⋆ **3024**
			⋆ **3186**
			999-94

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74F779	**Signetics**	**74F779**	⋆ **3024** ⋆ **3041** 661-102
74F821	Fairchild	74F821	669-36
	Signetics	**74F821**	⋆ **3025** 669-37
74F822	**Signetics**	**74F822**	⋆ **3025** 669-31
74F823	Fairchild	74F823	669-29
	Signetics	**74F823**	⋆ **3025** 669-30
74F824	**Signetics**	**74F824**	⋆ **3025** 669-26
74F825	Fairchild	74F825	669-23
	Signetics	**74F825**	⋆ **3025** 669-24
74F826	**Signetics**	**74F826**	⋆ **3025** 669-20
74F827	**Signetics**	**74F827**	⋆ **3025** 659-57
74F828	**Signetics**	**74F828**	⋆ **3025** 660-77
74F841	**Signetics**	**74F841**	⋆ **3025** 678-40
74F842	**Signetics**	**74F842**	⋆ **3025** 678-38
74F843	**Signetics**	**74F843**	⋆ **3025** 678-26
74F844	**Signetics**	**74F844**	⋆ **3025** 678-20
74F845	**Signetics**	**74F845**	⋆ **3025** 678-7
74F846	**Signetics**	**74F846**	⋆ **3025** 677-143
74F85	Signetics	74F85	656-66
74F86	Fairchild	74F86	676-46
	Motorola	MC74F86	676-48
	Signetics	74F86	676-50
74F861	**Signetics**	**74F861**	⋆ **3025** 687-161
74F862	**Signetics**	**74F862**	⋆ **3025** 687-162
74F881	**Signetics**	**74F881**	⋆ **3025** 657-34
74F882	**Signetics**	**74F882**	⋆ **3025** 657-82
74HB000	OKI	74HB000	4057-51
74HCTLS00	Samsung	KS74HCTLS00	623-81
74HCTLS01	Samsung	KS74HCTLS01	623-133
74HCTLS02	Samsung	KS74HCTLS02	625-137
74HCTLS03	Samsung	KS74HCTLS03	623-134
74HCTLS04	Samsung	KS74HCTLS04	608-35
74HCTLS05	Samsung	KS74HCTLS05	608-36
74HCTLS08	Samsung	KS74HCTLS08	622-76
74HCTLS09	Samsung	KS74HCTLS09	622-102
74HCTLS10	Samsung	KS74HCTLS10	623-17
74HCTLS107	Samsung	KS74HCTLS107	621-140
74HCTLS109	Samsung	KS74HCTLS109	621-25
74HCTLS11	Samsung	KS74HCTLS11	622-21
74HCTLS112	Samsung	KS74HCTLS112	621-89
74HCTLS12	Samsung	KS74HCTLS12	623-18
74HCTLS132	Samsung	KS74HCTLS132	638-96
74HCTLS138	Samsung	KS74HCTLS138	615-103
74HCTLS139	Samsung	KS74HCTLS139	615-16
74HCTLS155	Samsung	KS74HCTLS155	615-17
74HCTLS157	Samsung	KS74HCTLS157	631-62
74HCTLS158	Samsung	KS74HCTLS158	631-98
74HCTLS160	Samsung	KS74HCTLS160	612-40
74HCTLS161	Samsung	KS74HCTLS161	609-30
74HCTLS162	Samsung	KS74HCTLS162	611-167
74HCTLS163	Samsung	KS74HCTLS163	608-148
74HCTLS164	Samsung	KS74HCTLS164	635-61
74HCTLS165	Samsung	KS74HCTLS165	635-20
74HCTLS166	Samsung	KS74HCTLS166	635-83
74HCTLS174	Samsung	KS74HCTLS174	618-95
74HCTLS175	Samsung	KS74HCTLS175	617-165
74HCTLS191	Samsung	KS74HCTLS191	610-54
74HCTLS193	Samsung	KS74HCTLS193	634-36
74HCTLS210	Samsung	KS74HCTLS210	639-64
74HCTLS238	Samsung	KS74HCTLS238	615-80
74HCTLS239	Samsung	KS74HCTLS239	615-18
74HCTLS240	Samsung	KS74HCTLS240	639-65
74HCTLS241	Samsung	KS74HCTLS241	639-178
74HCTLS244	Samsung	KS74HCTLS244	639-179
74HCTLS245	Samsung	74HCTLS245	641-171
74HCTLS257	Samsung	KS74HCTLS257	631-128
74HCTLS258	Samsung	KS74HCTLS258	631-151
74HCTLS259	Samsung	KS74HCTLS259	629-20
74HCTLS266	Samsung	KS74HCTLS266	626-89
74HCTLS273	Samsung	KS74HCTLS273	618-159
74HCTLS299	Samsung	KS74HCTLS299	635-171
74HCTLS365	Samsung	KS74HCTLS365	606-87
74HCTLS366	Samsung	KS74HCTLS366	606-142
74HCTLS367	Samsung	KS74HCTLS367	606-88
74HCTLS368	Samsung	KS74HCTLS368	606-143
74HCTLS373	Samsung	KS74HCTLS373	628-12
74HCTLS374	Samsung	KS74HCTLS374	620-79
74HCTLS393	Samsung	KS74HCTLS393	610-24
74HCTLS533	Samsung	KS74HCTLS533	628-124
74HCTLS534	Samsung	KS74HCTLS534	619-115
74HCTLS540	Samsung	KS74HCTLS540	607-42
74HCTLS541	Samsung	KS74HCTLS541	607-43
74HCTLS563	Samsung	KS74HCTLS563	628-125
74HCTLS564	Samsung	KS74HCTLS564	619-116
74HCTLS573	Samsung	KS74HCTLS573	628-13
74HCTLS574	Samsung	KS74HCTLS574	620-80
74HCTLS640	Samsung	KS74HCTLS640	641-87
74HCTLS643	Samsung	KS74HCTLS643	641-88
74HCTLS646	Samsung	KS74HCTLS646	640-140
74HCTLS648	Samsung	KS74HCTLS648	640-92
74HCTLS73	Samsung	KS74HCTLS73	621-141
74HCTLS74	Samsung	KS74HCTLS74	617-92
74HCTLS76	Samsung	KS74HCTLS76	621-26
74HCTLS78	Samsung	KS74HCTLS78	621-98
74HCTLS86	Samsung	KS74HCTLS86	626-40
74HCT00	**GE/RCA**	**CD74HCT00**	⋆ **2631** 623-77
	GoldStar	**GD74HCT00**	⋆ **2695** 623-78
	National	MM74HCT00	623-80
	Signetics	**74HCT00**	⋆ **3003** 623-82
74HCT02	**GE/RCA**	**CD74HCT02**	⋆ **2631** 625-135
	GoldStar	**GD74HCT02**	⋆ **2695** 625-136
	Signetics	**74HCT02**	⋆ **3003** 625-138
74HCT03	**GE/RCA**	**CD74HCT03**	⋆ **2631** 623-119
	GoldStar	**GD74HCT03**	⋆ **2695** 623-120
	Signetics	**74HCT03**	⋆ **3003** 623-121
74HCT04	**GE/RCA**	**CD74HCT04**	⋆ **2631** 608-23
	GoldStar	**GD74HCT04**	⋆ **2695** 608-24
	National	MM74HCT04	608-32
74HCT04 (Cont'd)	SGS	M74HCT04	608-37
	Signetics	**74HCT04**	⋆ **3003** 608-38
	Toshiba	TC74HCT04	608-40
74HCT05	**GoldStar**	**GD74HCT05**	⋆ **2695** 608-25
	National	MM74HCT05	608-33
74HCT08	**GE/RCA**	**CD74HCT08**	⋆ **2631** 622-74
	GoldStar	**GD74HCT08**	⋆ **2695** 622-75
	Signetics	**74HCT08**	⋆ **3003** 622-77
74HCT09	**GoldStar**	**GD74HCT09**	⋆ **2695** 622-104
74HCT10	**GE/RCA**	**CD74HCT10**	⋆ **2631** 623-15
	GoldStar	**GD74HCT10**	⋆ **2695** 623-16
	Signetics	**74HCT10**	⋆ **3003** 623-19
74HCT107	**GE/RCA**	**CD74HCT107**	⋆ **2631** 621-134
	GoldStar	**GD74HCT107**	⋆ **2695** 621-136
	National	MM74HCT107	621-139
	Signetics	**74HCT107**	⋆ **3003** 621-142
74HCT109	**GE/RCA**	**CD74HCT109**	⋆ **2631** 621-18
	GoldStar	**GD74HCT109**	⋆ **2695** 621-19
	National	MM74HCT109	621-23
	Signetics	**74HCT109**	⋆ **3003** 621-27
74HCT11	**GE/RCA**	**CD74HCT11**	⋆ **2631** 622-19
	GoldStar	**GD74HCT11**	⋆ **2695** 622-20
	Signetics	**74HCT11**	⋆ **3003** 622-22
74HCT112	**GE/RCA**	**CD74HCT112**	⋆ **2631** 621-85
	GoldStar	**GD74HCT112**	⋆ **2695** 621-86
	National	MM74HCT112	621-88
	Signetics	**74HCT112**	⋆ **3003** 621-90
74HCT113	**GoldStar**	**GD74HCT113**	⋆ **2695** 621-61
74HCT123	**GE/RCA**	**CD74HCT123**	⋆ **2632** 633-52
	GoldStar	**GD74HCT123**	⋆ **2695** 633-53
	Signetics	**74HCT123**	⋆ **3003** 633-54
74HCT125	**GE/RCA**	**CD74HCT125**	⋆ **2631** 605-66
	GoldStar	**GD74HCT125**	⋆ **2695** 605-74
	Hitachi	HD74HCT125	605-68
	Signetics	**74HCT125**	⋆ **3003** 605-70

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74HCT126			
	GE/RCA	**CD74HCT126**	* **2631** 605-67
	GoldStar	**GD74HCT126**	* **2695** 605-41
	Hitachi	HD74HCT126	605-69
	Signetics	**74HCT126**	* **3003** 605-71
74HCT132			
	GE/RCA	**CD74HCT132**	* **2631** 638-94
	GoldStar	**GD74HCT132**	* **2695** 638-95
	Signetics	**74HCT132**	* **3003** 638-97
74HCT133			
	GoldStar	**GD74HCT133**	* **2695** 623-186
74HCT137			
	GE/RCA	**CD74HCT137**	* **2632** 615-161
	GoldStar	**GD74HCT137**	* **2695** 615-163
	Hitachi	HD74HCT137	615-164
	Marconi	74HCT137	615-167
	Plessey	MV74HCT137	615-169
	SGS	M74HCT137	615-104
	Signetics	**74HCT137**	* **3003** 615-171
	Supertex	74HCT137	615-174
	TI	SN74HCT137	616-1
	Toshiba	TC74HCT137	616-2
74HCT138			
	GE/RCA	**CD74HCT138**	* **2632** 615-90
	GoldStar	**GD74HCT138**	* **2695** 615-91
	Hitachi	HD74HCT138	615-92
	Marconi	74HCT138	615-95
	Mitel	MD74HCT138R	615-98
	National	MM74HCT138	615-100
	Plessey	MV74HCT138	615-101
	Signetics	**74HCT138**	* **3003** 615-105
	Supertex	74HCT138	615-109
	TI	SN74HCT138	615-112
	Toshiba	TC74HCT138	615-113
74HCT139			
	GE/RCA	**CD74HCT139**	* **2632** 615-2
	GoldStar	**GD74HCT139**	* **2695** 615-3
	Marconi	74HCT139	615-7
	Mitel	MD74HCT139R	615-10
	National	MM74HCT139	615-13
	Plessey	MV74HCT139	615-15
	Signetics	**74HCT139**	* **3003** 615-19
	Supertex	74HCT139	615-22
74HCT14			
	GE/RCA	**CD74HCT14**	* **2631** 638-142
	GoldStar	**GD74HCT14**	* **2695** 638-143
	Signetics	**74HCT14**	* **3003** 638-144
74HCT147			
	GE/RCA	**CD74HCT147**	* **2632** 616-101
	GoldStar	**GD74HCT147**	* **2695** 616-103
	Signetics	**74HCT147**	* **3003** 616-102
74HCT148			
	GoldStar	**GD74HCT148**	* **2695** 605-7
74HCT149			
	National	MM74HCT149	616-90
74HCT151			
	GE/RCA	**CD74HCT151**	* **2632** 632-35
	GoldStar	**GD74HCT151**	* **2695** 632-36
	Signetics	**74HCT151**	* **3003** 632-37
74HCT153			
	GE/RCA	**CD74HCT153**	* **2632** 630-139
	GoldStar	**GD74HCT153**	* **2695** 632-80
	National	MM74HCT153	630-141
	Signetics	**74HCT153**	* **3003** 632-81
74HCT154			
	GE/RCA	**CD74HCT154**	* **2632** 616-83
	GoldStar	**GD74HCT154**	* **2695** 616-105
	Signetics	**74HCT154**	* **3003** 616-84
74HCT155			
	GoldStar	**GD74HCT155**	* **2695** 615-4
	National	MM74HCT155	615-14
74HCT157			
	GE/RCA	**CD74HCT157**	* **2632** 631-60
	GoldStar	**GD74HCT157**	* **2695** 631-61
	Signetics	**74HCT157**	* **3003** 631-63
74HCT158			
	GE/RCA	**CD74HCT158**	* **2632** 631-95
	GoldStar	**GD74HCT158**	* **2695** 631-96
	Signetics	**74HCT158**	* **3003** 631-99
74HCT160			
	GE/RCA	**CD74HCT160**	* **2632** 612-37
	GoldStar	**GD74HCT160**	* **2695** 631-97
	National	MM74HCT160	612-39
	Signetics	**74HCT160**	* **3003** 631-100
74HCT161			
	GE/RCA	**CD74HCT161**	* **2632** 609-26
	GoldStar	**GD74HCT161A**	* **2695** 609-27
	National	MM74HCT161	609-29
	Signetics	**74HCT161**	* **3003** 609-31
74HCT162			
	GE/RCA	**CD74HCT162**	* **2632** 611-163
	GoldStar	**GD74HCT162**	* **2695** 611-164
	National	MM74HCT162	611-166
	Signetics	**74HCT162**	* **3003** 611-168
74HCT163			
	GE/RCA	**CD74HCT163**	* **2632** 608-144
	GoldStar	**GD74HCT163**	* **2695** 608-145
	National	MM74HCT163	608-147
	Signetics	**74HCT163**	* **3003** 608-149
74HCT164			
	GE/RCA	**CD74HCT164**	* **2631** 635-57
	GoldStar	**GD74HCT164**	* **2695** 635-58
	National	MM74HCT164	635-60
	Signetics	**74HCT164**	* **3003** 635-62
74HCT165			
	GE/RCA	**CD74HCT165**	* **2631** 635-17
	GoldStar	GD74HCT165	635-18
	Signetics	**74HCT165**	* **3003** 635-21
74HCT166			
	GE/RCA	**CD74HCT166**	* **2631** 635-79
	GoldStar	**GD74HCT166**	* **2695** 635-19
	National	MM74HCT166	635-82
	Signetics	**74HCT166**	* **3003** 635-22
74HCT169			
	National	MM74HCT169	610-63
74HCT173			
	GE/RCA	**CD74HCT173**	* **2631** 618-38
	GoldStar	**GD74HCT173**	* **2695** 618-39
	Signetics	**74HCT173**	* **3003** 618-40
74HCT174			
	GE/RCA	**CD74HCT174**	* **2631** 618-91
	GoldStar	**GD74HCT174**	* **2696** 618-92
	National	MM74HCT174	618-94
	Signetics	**74HCT174**	* **3003** 618-96
74HCT175			
	GE/RCA	**CD74HCT175**	* **2631** 617-163
	GoldStar	**GD74HCT175**	* **2696** 617-164
	Signetics	**74HCT175**	* **3003** 617-166
74HCT181			
	GE/RCA	**CD74HCT181**	* **2632** 603-37
	Signetics	**74HCT181**	* **3003** 603-38
74HCT182			
	GE/RCA	**CD74HCT182**	* **2632** 603-68
	Signetics	**74HCT182**	* **3003** 603-69
74HCT190			
	GE/RCA	**CD74HCT190**	* **2632** 612-166
	GoldStar	**GD74HCT190**	* **2696** 612-116
	Signetics	**74HCT190**	* **3003** 612-117
74HCT191			
	GE/RCA	**CD74HCT191**	* **2632** 609-103
	GoldStar	**GD74HCT191**	* **2696** 609-106
	National	MM74HCT191	609-110
	Signetics	**74HCT191**	* **3003** 609-112
74HCT192			
	GE/RCA	**CD74HCT192**	* **2632** 612-80
	GoldStar	**GD74HCT192**	* **2696** 612-81
	Signetics	**74HCT192**	* **3003** 612-82
74HCT193			
	GE/RCA	**CD74HCT193**	* **2632** 609-104
	GoldStar	**GD74HCT193**	* **2696** 609-107
	National	MM74HCT193	609-111
	Signetics	**74HCT193**	* **3003** 609-113
74HCT194			
	GE/RCA	**CD74HCT194**	* **2631** 634-35
	GoldStar	**GD74HCT194**	* **2696** 636-67
	Signetics	**74HCT194**	* **3003** 634-37
74HCT195			
	GE/RCA	**CD74HCT195**	* **2631** 634-98
	GoldStar	**GD74HCT195**	* **2696** 636-68
	Signetics	**74HCT195**	* **3003** 634-99
74HCT20			
	GE/RCA	**CD74HCT20**	* **2631** 622-138
	GoldStar	**GD74HCT20**	* **2695** 622-139
	Signetics	**74HCT20**	* **3003** 622-140
74HCT21			
	GE/RCA	**CD74HCT21**	* **2631** 621-160
	GoldStar	**GD74HCT21**	* **2695** 621-161
	Signetics	**74HCT21**	* **3003** 621-162
74HCT221			
	GE/RCA	**CD74HCT221**	* **2632** 633-20
	GoldStar	**GD74HCT221**	* **2696** 633-23
	Signetics	**74HCT221**	* **3003** 633-25
74HCT22106			
	GE/RCA	**CD74HCT22106E**	* **2638** 911-58
74HCT227			
	Signetics	**74HCT227**	* **3003** 615-40
74HCT237			
	GE/RCA	**CD74HCT237**	* **2632** 615-162
	Hitachi	HD74HCT237	615-126
	Marconi	74HCT237	615-168
	Plessey	MV74HCT237	615-170
	Supertex	74HCT237	615-175
	TI	SN74HCT237	615-132
74HCT238			
	GE/RCA	**CD74HCT238**	* **2632** 615-69
	Hitachi	HD74HCT238	615-127
	Marconi	74HCT238	615-96
	Plessey	MV74HCT238	615-102
	Signetics	**74HCT238**	* **3003** 615-106
	Supertex	74HCT238	615-110
	TI	SN74HCT238	615-133
74HCT239			
	Marconi	74HCT239	615-8
	Supertex	74HCT239	615-23
74HCT240			
	GE/RCA	**CD74HCT240**	* **2631** 639-50
	GoldStar	**GD74HCT240**	* **2696** 639-51
	Hitachi	HD74HCT240	639-52
	Marconi	74HCT240	639-54
	Micrel	MIC74HCT240	639-55
	Mitel	MD74HCT240R	639-57
	Motorola	MC74HCT240	639-59

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74HCT240			(Cont'd)
	National	MM74HCT240	639-61
	Plessey	MV74HCT240	639-63
	Samsung	74HCT240	639-66
	SGS	M74HCT240	639-67
	Signetics	**74HCT240**	*** 3003** 639-69
	Supertex	74HCT240	639-71
	TI	SN74HCT240	639-74
	Toshiba	TC74HCT240	639-76
74HCT241			
	GE/RCA	**CD74HCT241**	*** 2631** 639-153
	GoldStar	**GD74HCT241**	*** 2696** 639-155
	Hitachi	HD74HCT241	639-157
	Marconi	74HCT241	639-161
	Micrel	MIC74HCT241	639-163
	Mitel	MD74HCT241R	639-167
	Motorola	MC74HCT241	639-171
	National	MM74HCT241	640-32
	Plessey	MV74HCT241	639-176
	Samsung	74HCT241	639-180
	SGS	M74HCT241	640-2
	Signetics	**74HCT241**	*** 3003** 640-6
	Supertex	74HCT241	640-10
	TI	SN74HCT241	640-35
	Toshiba	TC74HCT241	640-36
74HCT242			
	GE/RCA	**CD74HCT242**	*** 2631** 638-39
	GoldStar	**GD74HCT242**	*** 2696** 638-40
	Hitachi	HD74HCT242	638-41
	Micrel	MIC74HCT242	638-42
	Signetics	**74HCT242**	*** 3003** 638-44
	Supertex	74HCT242	638-46
	TI	SN74HCT242	638-47
74HCT243			
	GE/RCA	**CD74HCT243**	*** 2631** 638-65
	GoldStar	**GD74HCT243**	*** 2696** 638-66
	Hitachi	HD74HCT243	638-67
	Micrel	MIC74HCT243	638-43
	Signetics	**74HCT243**	*** 3003** 638-68
	Supertex	74HCT243	638-70
	TI	SN74HCT243	638-71
74HCT244			
	GE/RCA	**CD74HCT244**	*** 2631** 639-154
	GoldStar	**GD74HCT244**	*** 2696** 639-156
	Hitachi	HD74HCT244	639-158
	Marconi	74HCT244	639-162
	Micrel	MIC74HCT244	639-164
	Mitel	MD74HCT244R	639-168
	Motorola	MC74HCT244	639-172
	National	MM74HCT244	639-174
	Plessey	MV74HCT244	639-177
	Samsung	74HCT244	640-1
	SGS	M74HCT244	640-3
	Signetics	**74HCT244**	*** 3003** 640-7
	Supertex	74HCT244	640-11
	TI	SN74HCT244	640-13
	Toshiba	TC74HCT244	640-14
74HCT245			
	GE/RCA	**CD74HCT245**	*** 2631** 641-157
	GoldStar	**GD74HCT245**	*** 2696** 641-158
	Hitachi	HD74HCT245	641-159
	Marconi	74HCT245	641-161
	Micrel	MIC74HCT245	641-162
	Mitel	MD74HCT245R	641-164

(Continued)

Base Number	Source	Device	Page-Line
74HCT245			(Cont'd)
	Motorola	MC74HCT245	641-166
	National	MM74HCT245	641-168
	Plessey	MV74HCT245	641-170
	SGS	M74HCT245	641-172
	Signetics	**74HCT245**	*** 3003** 641-173
	Supertex	74HCT245	641-175
	TI	SN74HCT245	641-177
	Toshiba	TC74HCT245	641-179
74HCT251			
	GE/RCA	**CD74HCT251**	*** 2632** 632-122
	GoldStar	**GD74HCT251**	*** 2696** 632-138
	Signetics	**74HCT251**	*** 3003** 632-82
74HCT253			
	GE/RCA	**CD74HCT253**	*** 2632** 631-19
	GoldStar	**GD74HCT253**	*** 2696** 631-24
	National	MM74HCT253	631-21
	Signetics	**74HCT253B**	*** 3003** 630-127
74HCT257			
	GE/RCA	**CD74HCT257**	*** 2632** 631-126
	GoldStar	**GD74HCT257**	*** 2696** 631-127
	Signetics	**74HCT257**	*** 3003** 631-129
74HCT258			
	GE/RCA	**CD74HCT258**	*** 2632** 631-150
	GoldStar	**GD74HCT258**	*** 2696** 631-167
	Signetics	**74HCT258**	*** 3003** 631-152
74HCT259			
	GE/RCA	**CD74HCT259**	*** 2632** 629-18
	GoldStar	**GD74HCT259**	*** 2696** 629-19
	Signetics	**74HCT259**	*** 3003** 629-21
74HCT266			
	GoldStar	**GD74HCT266**	*** 2696** 626-107
74HCT27			
	GE/RCA	**CD74HCT27**	*** 2631** 625-71
	GoldStar	**GD74HCT27**	*** 2695** 625-72
	Signetics	**74HCT27**	*** 3003** 625-73
74HCT273			
	GE/RCA	**CD74HCT273**	*** 2631** 618-154
	GoldStar	**GD74HCT273**	*** 2696** 618-155
	National	MM74HCT273	618-157
	Signetics	**74HCT273**	*** 3003** 618-160
	Supertex	74HCT273	618-162
74HCT280			
	GE/RCA	**CD74HCT280**	*** 2632** 604-136
	Signetics	**74HCT280**	*** 3003** 604-137
74HCT283			
	GE/RCA	**CD74HCT283**	*** 2632** 602-48
	GoldStar	**GD74HCT283**	*** 2696** 602-49
	Signetics	**74HCT283**	*** 3003** 602-50

Base Number	Source	Device	Page-Line
74HCT297			
	GE/RCA	**CD74HCT297**	*** 2632** 637-41 1190-14
	Signetics	**74HCT297**	*** 3003** 1190-18
74HCT298			
	GoldStar	**GD74HCT298**	*** 2696** 631-168
74HCT299			
	GE/RCA	**CD74HCT299**	*** 2631** 635-167
	GoldStar	**GD74HCT299**	*** 2696** 635-168
	National	MM74HCT299	635-170
	Signetics	**74HCT299**	*** 3003** 635-172
74HCT30			
	GE/RCA	**CD74HCT30**	*** 2631** 623-159
	GoldStar	**GD74HCT30**	*** 2695** 623-160
	Signetics	**74HCT30**	*** 3003** 623-161
74HCT32			
	GE/RCA	**CD74HCT32**	*** 2631** 624-147
	GoldStar	**GD74HCT32**	*** 2695** 624-148
	Signetics	**74HCT32**	*** 3003** 624-149
74HCT322			
	GoldStar	**GD74HCT322**	*** 2696** 635-80
74HCT34			
	GoldStar	**GD74HCT34**	*** 2695** 605-95
	Motorola	MC74HCT34	605-96
	National	MM74HCT34	608-34
74HCT354			
	GE/RCA	**CD74HCT354**	*** 2632** 632-123
	GoldStar	**GD74HCT354**	*** 2696** 632-139
	Signetics	**74HCT354**	*** 3003** 632-125
74HCT356			
	GE/RCA	**CD74HCT356**	*** 2632** 632-124
	GoldStar	**GD74HCT356**	*** 2696** 632-140
	Signetics	**74HCT356**	*** 3003** 632-126
74HCT365			
	GE/RCA	**CD74HCT365**	*** 2631** 606-83
	GoldStar	**GD74HCT365**	*** 2696** 606-85
	Signetics	**74HCT365**	*** 3003** 606-89
74HCT366			
	GE/RCA	**CD74HCT366**	*** 2631** 606-138
	GoldStar	**GD74HCT366**	*** 2696** 606-140
	Signetics	**74HCT366**	*** 3003** 606-144
74HCT367			
	GE/RCA	**CD74HCT367**	*** 2631** 606-84
	GoldStar	**GD74HCT367**	*** 2696** 606-86
	Signetics	**74HCT367**	*** 3003** 606-90

Base Number	Source	Device	Page-Line
74HCT368			
	GE/RCA	**CD74HCT368**	*** 2631** 606-139
	GoldStar	**GD74HCT368**	*** 2696** 606-141
	Signetics	**74HCT368**	*** 3003** 606-145
74HCT373			
	GE/RCA	**CD74HCT373**	*** 2632** 627-156
	GoldStar	**GD74HCT373**	*** 2696** 627-158
	Hitachi	HD74HCT373	627-160
	Marconi	74HCT373	627-164
	Micrel	MIC74HCT373	627-166
	Mitel	MD74HCT373R	628-3
	Motorola	MC74HCT373	628-6
	National	MM74HCT373	628-8
	Plessey	MV74HCT373	628-10
	SGS	M74HCT373	628-14
	Signetics	**74HCT373**	*** 3003** 628-15
	Supertex	74HCT373	628-19
	TI	SN74HCT373	628-22
	Toshiba	TC74HCT373	628-24
74HCT374			
	GE/RCA	**CD74HCT374**	*** 2631** 620-54
	GoldStar	**GD74HCT374**	*** 2696** 620-56
	Hitachi	HD74HCT374	620-58
	Marconi	74HCT374	620-62
	Micrel	MIC74HCT374	620-64
	Mitel	MD74HCT374R	620-68
	Motorola	MC74HCT374	620-71
	National	MM74HCT374	620-74
	Plessey	MV74HCT374	620-77
	SGS	M74HCT374	620-81
	Signetics	**74HCT374**	*** 3003** 620-82
	Supertex	74HCT374	620-86
	TI	SN74HCT374	620-89
74HCT377			
	GE/RCA	**CD74HCT377**	*** 2631** 619-15
	GoldStar	**GD74HCT377**	*** 2696** 619-16
	Signetics	**74HCT377**	*** 3003** 619-17
74HCT384			
	NCR	NCR74HCT384	644-33 ¶ 406-17
74HCT386			
	GoldStar	**GD74HCT386**	*** 2696** 626-38
74HCT390			
	GE/RCA	**CD74HCT390**	*** 2632** 613-15
	GoldStar	**GD74HCT390**	*** 2696** 613-16
	Signetics	**74HCT390**	*** 3003** 613-17
74HCT393			
	GE/RCA	**CD74HCT393**	*** 2632** 610-22
	GoldStar	**GD74HCT393**	*** 2696** 610-23
	Signetics	**74HCT393**	*** 3003** 610-25
	Supertex	74HCT393	609-178
74HCT4002			
	GE/RCA	**CD74HCT4002**	*** 2631** 625-25
	Signetics	**74HCT4002**	*** 3003** 625-27

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
74HCT40102			
	GE/RCA	**CD74HCT40102**	
		*** 2632**	612-122
	Signetics	**74HCT40102 * 3003**	612-123
74HCT40103			
	GE/RCA	**CD74HCT40103**	
		*** 2632**	610-111
	Signetics	**74HCT40103 * 3003**	610-112
74HCT40104			
	GE/RCA	**CD74HCT40104**	
		*** 2631**	634-50
	Signetics	**74HCT40104 * 3003**	634-51
74HCT40105			
	GE/RCA	**CD74HCT40105**	
		*** 2631**	630-2
	Signetics	**74HCT40105 * 3003**	630-3
74HCT4015			
	GE/RCA	**CD74HCT4015**	
		*** 2631**	633-123
	Signetics	**74HCT4015 * 3003**	633-124
74HCT4017			
	GE/RCA	**CD74HCT4017**	
		*** 2632**	611-120
	Signetics	**74HCT4017 * 3003**	611-121
74HCT4020			
	GE/RCA	**CD74HCT4020**	
		*** 2632**	611-30
	Signetics	**74HCT4020 * 3003**	611-31
74HCT4024			
	GE/RCA	**CD74HCT4024**	
		*** 2632**	610-78
	Signetics	**74HCT4024 * 3003**	610-79
74HCT4040			
	GE/RCA	**CD74HCT4040**	
		*** 2632**	610-158
	Signetics	**74HCT4040 * 3003**	610-159
74HCT4046			
	GE/RCA	**CD74HCT4046**	
		*** 2632**	637-42
	Signetics	**74HCT4046A * 3003**	637-43
74HCT4049			
	GE/RCA	CD74HCT4049	605-106
	Signetics	**74HCT4049 * 3003**	605-136
74HCT4050			
	Signetics	**74HCT4050 * 3003**	606-12
74HCT4051			
	GE/RCA	**CD74HCT4051**	
		*** 2632**	913-38
	Signetics	**74HCT4051 * 3003**	642-119
74HCT4052			
	GE/RCA	**CD74HCT4052**	
		*** 2632**	912-2
	Signetics	**74HCT4052 * 3003**	638-14
74HCT4053			
	GE/RCA	**CD74HCT4053**	
		*** 2632**	908-25
	Signetics	**74HCT4053 * 3003**	638-17
74HCT4059			
	GE/RCA	**CD74HCT4059**	
		*** 2632**	613-98
	Signetics	**74HCT4059 * 3003**	613-99
74HCT4060			
	GE/RCA	**CD74HCT4060**	
		*** 2632**	611-67
	Signetics	**74HCT4060 * 3003**	611-68
74HCT4066			
	GE/RCA	**CD74HCT4066**	
		*** 2631**	904-18
	Signetics	74HCT4066	902-6
74HCT4067			
	GE/RCA	**CD74HCT4067**	
		*** 2632**	915-30
	Signetics	74HCT4067	915-37
74HCT4075			
	GE/RCA	**CD74HCT4075**	
		*** 2631**	624-97
	Signetics	**74HCT4075 * 3003**	624-98
74HCT4094			
	GE/RCA	**CD74HCT4094**	
		*** 2631**	634-150
	Signetics	**74HCT4094 * 3003**	634-151
74HCT42			
	GE/RCA	**CD74HCT42 * 2632**	614-76
	GoldStar	**GD74HCT42 * 2695**	614-77
	Signetics	**74HCT42 * 3003**	614-78
74HCT423			
	GE/RCA	**CD74HCT423 * 2632**	633-21
	GoldStar	**GD74HCT423**	
		*** 2696**	633-24
	Signetics	**74HCT423 * 3003**	633-26
74HCT4316			
	Signetics	74HCT4316	902-10
74HCT4351			
	Signetics	74HCT4351	913-62
74HCT4352			
	Signetics	74HCT4352	912-25
74HCT4353			
	Signetics	74HCT4353	906-7
74HCT4510			
	GE/RCA	**CD74HCT4510**	
		*** 2632**	612-149
	Signetics	74HCT4510	612-83
74HCT4511			
	GE/RCA	**CD74HCT4511**	
		*** 2632**	617-21
	Signetics	**74HCT4511 * 3003**	617-22
74HCT4514			
	GE/RCA	**CD74HCT4514**	
		*** 2632**	616-25
	Signetics	**74HCT4514 * 3003**	616-27
74HCT4515			
	GE/RCA	**CD74HCT4515**	
		*** 2632**	616-26
	Signetics	**74HCT4515 * 3003**	616-28
74HCT4516			
	GE/RCA	**CD74HCT4516**	
		*** 2632**	609-105
	Signetics	**74HCT4516 * 3003**	609-114
74HCT4518			
	GE/RCA	**CD74HCT4518**	
		*** 2632**	613-28
	Signetics	**74HCT4518 * 3003**	613-29
74HCT4520			
	GE/RCA	**CD74HCT4520**	
		*** 2632**	609-165
	Signetics	**74HCT4520 * 3003**	609-176
74HCT4538			
	GE/RCA	**CD74HCT4538**	
		*** 2632**	633-22
	Signetics	**74HCT4538 * 3003**	633-27
74HCT4543			
	GE/RCA	**CD74HCT4543**	
		*** 2632**	616-136
	Signetics	**74HCT4543 * 3003**	616-137
74HCT521			
	National	MM74HCT521	603-101
74HCT533			
	GE/RCA	**CD74HCT533 * 2632**	628-105
	GoldStar	**GD74HCT533**	
		*** 2696**	628-107
	Hitachi	HD74HCT533	628-109
	Marconi	74HCT533	628-113
	Micrel	MIC74HCT533	628-115
	Motorola	MC74HCT533	628-118
	National	MM74HCT533	628-120
	Plessey	MV74HCT533	628-122
	Signetics	**74HCT533 * 3003**	628-127
	Supertex	74HCT533	628-131
	TI	SN74HCT533	628-133
74HCT534			
	GE/RCA	**CD74HCT534 * 2631**	619-96
	GoldStar	**GD74HCT534**	
		*** 2696**	619-98
	Hitachi	HD74HCT534	619-100
	Marconi	74HCT534	619-104
	Micrel	MIC74HCT534	619-106
	Motorola	MC74HCT534	619-109
	National	MM74HCT534	619-111
	Plessey	MV74HCT534	619-113
	Signetics	**74HCT534 * 3003**	619-117
	Supertex	74HCT534	619-121
	TI	SN74HCT534	619-123
74HCT540			
	GE/RCA	**CD74HCT540 * 2631**	607-16
	GoldStar	**GD74HCT540**	
		*** 2696**	607-18
	Hitachi	HD74HCT540	607-20
	Marconi	74HCT540	607-24
	Micrel	MIC74HCT540	607-26
	Mitel	MD74HCT540R	607-30
	Motorola	MC74HCT540	607-34
	National	MM74HCT540	607-38
	Plessey	MV74HCT540	607-40
	SGS	M74HCT540	607-44
	Signetics	**74HCT540 * 3003**	607-46
	Supertex	74HCT540	607-49
	TI	SN74HCT540	639-75
	Toshiba	TC74HCT540	607-53
74HCT541			
	GE/RCA	**CD74HCT541 * 2631**	607-17
	GoldStar	**GD74HCT541**	
		*** 2696**	607-19
	Hitachi	HD74HCT541	607-21
	Marconi	74HCT541	607-25
	Micrel	MIC74HCT541	607-27

(Continued)

Base Number	Source	Device	Page-Line
74HCT541			(Cont'd)
	Mitel	MD74HCT541R	607-31
	Motorola	MC74HCT541	607-35
	National	MM74HCT541	607-39
	Plessey	MV74HCT541	607-41
	SGS	M74HCT541	607-45
	Signetics	**74HCT541 * 3003**	607-47
	Supertex	74HCT541	607-50
	TI	SN74HCT541	607-52
	Toshiba	TC74HCT541	641-180
74HCT543			
	National	MM74HCT543	642-30
74HCT544			
	National	MM74HCT544	642-31
74HCT545			
	Plessey	MV74HCT545	641-86
74HCT550			
	National	MM74HCT550	642-60
74HCT551			
	National	MM74HCT551	642-61
74HCT56			
	Supertex	74HCT56	619-122
74HCT563			
	GE/RCA	**CD74HCT563 * 2632**	628-106
	GoldStar	**GD74HCT563**	
		*** 2696**	628-108
	Hitachi	HD74HCT563	628-110
	Marconi	74HCT563	628-114
	Micrel	MIC74HCT563	628-116
	Plessey	MV74HCT563	628-123
	SGS	M74HCT563	628-126
	Signetics	**74HCT563 * 3003**	628-128
	Supertex	74HCT563	628-132
	TI	SN74HCT563	628-134
	Toshiba	TC74HCT563	628-135
74HCT564			
	GE/RCA	**CD74HCT564 * 2631**	619-97
	GoldStar	**GD74HCT564**	
		*** 2696**	619-99
	Hitachi	HD74HCT564	619-101
	Marconi	74HCT564	619-105
	Micrel	MIC74HCT564	619-107
	Plessey	MV74HCT564	619-114
	Signetics	**74HCT564 * 3003**	619-118
	TI	SN74HCT564	619-124
	Toshiba	TC74HCT564	619-125
74HCT573			
	GE/RCA	**CD74HCT573 * 2632**	627-157
	GoldStar	**GD74HCT573**	
		*** 2696**	627-159
	Hitachi	HD74HCT573	627-161
	Marconi	74HCT573	627-165
	Micrel	MIC74HCT573	627-167
	Mitel	MD74HCT573R	628-4
	Plessey	MV74HCT573	628-11
	Signetics	**74HCT573 * 3003**	628-16
	Supertex	74HCT573	628-20
	TI	SN74HCT573	628-23
	Toshiba	TC74HCT573	628-25
74HCT574			
	GE/RCA	**CD74HCT574 * 2631**	620-55
	GoldStar	**GD74HCT574**	
		*** 2696**	620-57
	Hitachi	HD74HCT574	620-59
	Marconi	74HCT574	620-63
	Micrel	MIC74HCT574	620-65
	Mitel	MD74HCT574R	620-69
	National	MM74HCT574	620-75
	Plessey	MV74HCT574	620-78
	Signetics	**74HCT574 * 3003**	620-83
	Supertex	74HCT574	620-87

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74HCT574			(Cont'd)
	TI	SN74HCT574	620-90
	Toshiba	TC74HCT574	620-92
74HCT58			
	GoldStar	**GD74HCT58**	* 2695 624-62
74HCT583			
	GE/RCA	**CD74HCT583**	* 2632 602-5
	Signetics	**74HCT583**	* 3003 602-6
74HCT590			
	GoldStar	**GD74HCT590**	* 2696 610-135
	National	MM74HCT590	610-137
	Unicorn	UC74HCT590	889-75
	UMC	**UM74HCT590**	* 3316 610-143
74HCT597			
	GE/RCA	**CD74HCT597**	* 2631 635-31
	Signetics	**74HCT597**	* 3003 635-32
74HCT612			
	Unicorn	UC74HCT612	889-13
	UMC	**UM74HCT612**	* 3313 629-133 678-50
	ZyMOS	74HCT612	629-134
74HCT620			
	Hitachi	HD74HCT620	641-34
	Motorola	MC74HCT620	640-153
	TI	SN74HCT620	641-37
74HCT623			
	Hitachi	HD74HCT623	641-35
	Motorola	MC74HCT623	640-155
	TI	SN74HCT623	641-38
74HCT640			
	GE/RCA	**CD74HCT640**	* 2631 641-74
	GoldStar	**GD74HCT640**	* 2696 641-75
	Hitachi	HD74HCT640	641-76
	Motorola	MC74HCT640	641-78
	National	MM74HCT640	641-81
	SGS	M74HCT640	641-89
	Signetics	**74HCT640**	* 3003 641-90
	TI	SN74HCT640	641-91
	Toshiba	TC74HCT640	641-93
	Universal	US74HCT640	641-95
74HCT643			
	GE/RCA	**CD74HCT643**	* 2631 642-12
	GoldStar	**GD74HCT643**	* 2696 642-13
	Hitachi	HD74HCT643	642-14
	Motorola	MC74HCT643	642-16
	National	MM74HCT643	641-82
	SGS	M74HCT643	642-17
	Signetics	**74HCT643**	* 3003 642-18
	TI	SN74HCT643	641-92
	Toshiba	TC74HCT643	641-94
74HCT645			
	TI	SN74HCT645	641-178
74HCT646			
	GE/RCA	**CD74HCT646**	* 2631 640-136
	GoldStar	**GD74HCT646**	* 2696 640-137
	Hitachi	HD74HCT646	640-138
	Signetics	**74HCT646**	* 3003 640-141
	TI	SN74HCT646	640-142
	Toshiba	TC74HCT646	640-144
	UMC	**UM74HCT646**	* 3313 642-20
74HCT647			
	Signetics	**74HCT647**	* 3003 640-165
74HCT648			
	GE/RCA	**CD74HCT648**	* 2631 640-88
	GoldStar	**GD74HCT648**	* 2696 640-89
	Hitachi	HD74HCT648	640-90
	Signetics	**74HCT648**	* 3003 640-93
	TI	SN74HCT648	640-94
	Toshiba	TC74HCT648	640-96
74HCT651			
	Hitachi	HD74HCT651	640-91
	TI	SN74HCT651	640-95
	Toshiba	TC74HCT651	640-97
74HCT652			
	Hitachi	HD74HCT652	640-139
	TI	SN74HCT652	640-143
	Toshiba	TC74HCT652	640-145
74HCT658			
	TI	SN74HCT658	642-79
74HCT659			
	TI	SN74HCT659	642-80
74HCT664			
	TI	SN74HCT664	642-81
74HCT665			
	TI	SN74HCT665	642-82
74HCT670			
	GE/RCA	**CD74HCT670**	* 2631 630-26
	GoldStar	**GD74HCT670**	* 2696 630-27
	Signetics	**74HCT670**	* 3003 630-28
74HCT688			
	GE/RCA	**CD74HCT688**	* 2632 602-110
	GoldStar	**GD74HCT688**	* 2696 602-111
	Hitachi	HD74HCT688	602-112
	National	MM74HCT688	603-11
	Signetics	**74HCT688**	* 3003 602-113
74HCT7007			
	Toshiba	**TC74HCT7007**	* 3307 605-97
74HCT7030			
	GE/RCA	**CD74HCT7030**	* 2631 630-59
	Signetics	**74HCT7030**	* 3003 1304-14
74HCT7038			
	GE/RCA	**CD74HCT7038**	* 2631 642-143
74HCT7046			
	GE/RCA	**CD74HCT7046**	* 2632 633-115
	Signetics	**74HCT7046A**	* 3003 1190-59
74HCT73			
	GE/RCA	**CD74HCT73**	* 2631 621-135
	GoldStar	**GD74HCT73**	* 2695 621-137
	Signetics	**74HCT73**	* 3003 621-143
74HCT74			
	GE/RCA	**CD74HCT74**	* 2631 617-88
	GoldStar	**GD74HCT74**	* 2695 617-89
	National	MM74HCT74	617-91
	Signetics	**74HCT74**	* 3003 617-93
74HCT75			
	GE/RCA	**CD74HCT75**	* 2632 628-162
	GoldStar	**GD74HCT75**	* 2695 629-120
	Signetics	**74HCT75**	* 3003 628-163
74HCT7597			
	Signetics	74HCT7597	636-71
74HCT76			
	GoldStar	**GD74HCT76**	* 2695 621-20
	National	MM74HCT76	621-24
74HCT784			
	NCR	74HCT784	644-35
74HCT784X4			
	NCR	74HCT784X4	644-36
74HCT85			
	GE/RCA	**CD74HCT85**	* 2632 603-99
	GoldStar	**GD74HCT85**	* 2695 602-140
	Signetics	**74HCT85**	* 3003 603-104
74HCT86			
	GE/RCA	**CD74HCT86**	* 2631 626-37
	GoldStar	**GD74HCT86**	* 2695 626-39
	Signetics	**74HCT86**	* 3003 626-41
74HCT9034			
	Motorola	MC74HCT9034	608-105
74HCT9035			
	Motorola	MC74HCT9035	607-83
74HCT93			
	GE/RCA	**CD74HCT93**	* 2632 610-36
	GoldStar	**GD74HCT93**	* 2695 610-37
	Signetics	**74HCT93**	* 3003 610-38
74HCU04			
	GE/RCA	**CD74HCU04**	* 2631 * 2648 608-3 ¶ 437-10
	GoldStar	**GD74HCU04**	* 2695 608-65
	Motorola	MC74HCU04	608-67
	National	MM74HCU04	608-69
	SGS	M74HCU04	608-70
	Signetics	74HCU04	608-71
	TI	SN74HCU04	608-73
	Toshiba	TC74HCU04	608-74
		TC74HCU04A	608-20
74HC00			
	GE/RCA	**CD74HC00**	* 2631 623-62
	GoldStar	**GD74HC00**	* 2695 623-63
	Hitachi	HD74HC00	623-64
	Motorola	MC74HC00	623-66
	National	MM74HC00	623-68
	SGS	M74HC00	623-69
	Sharp	LR74HC00	623-70
	Signetics	**74HC00**	* 3003 623-71
	TI	SN74HC00	623-73
	Toshiba	**TC74HC00**	* 3307 623-74
		TC74HC00A	* 3307 623-75
74HC01			
	Hitachi	HD74HC01	622-125
	TI	SN74HC01	623-130
74HC02			
	GE/RCA	**CD74HC02**	* 2631 625-116
	GoldStar	**GD74HC02**	* 2695 625-117
	Hitachi	HD74HC02	625-118
	Motorola	MC74HC02	625-120
	National	MM74HC02	625-122
	Panasonic	MN74HC02	625-123
	SGS	M74HC02	625-124
	Sharp	LR74HC02	625-125
74HC02			(Cont'd)
	Signetics	**74HC02**	* 3003 625-126
	TI	SN74HC02	625-129
	Toshiba	**TC74HC02**	* 3307 625-132
		TC74HC02A	* 3307 625-133
74HC03			
	GE/RCA	**CD74HC03**	* 2631 623-115
	GoldStar	**GD74HC03**	* 2695 623-116
	Motorola	MC74HC03	623-124
	National	MM74HC03	623-126
	SGS	M74HC03	623-127
	Sharp	LR74HC03	623-128
	Signetics	**74HC03**	* 3003 623-117
	TI	SN74HC03	623-131
	Toshiba	**TC74HC03**	* 3307 623-132
74HC04			
	GE/RCA	**CD74HC04**	* 2631 608-4
	GoldStar	**GD74HC04**	* 2695 608-5
	Hitachi	HD74HC04	608-7
	Motorola	MC74HC04	608-10
	National	MM74HC04	608-12
	SGS	M74HC04	608-13
	Sharp	LR74HC04	608-14
	Signetics	**74HC04**	* 3003 608-15
	TI	SN74HC04	608-18
	Toshiba	**TC74HC04**	* 3307 608-21
74HC05			
	GoldStar	**GD74HC05**	* 2695 608-6
	TI	SN74HC05	608-19
74HC08			
	GE/RCA	**CD74HC08**	* 2631 622-57
	GoldStar	**GD74HC08**	* 2695 622-58
	Hitachi	HD74HC08	622-59
	Motorola	MC74HC08	622-61
	National	MM74HC08	622-63
	Panasonic	MN74HC08	622-64
	SGS	M74HC08	622-65
	Sharp	LR74HC08	622-66
	Signetics	**74HC08**	* 3003 622-67
	TI	SN74HC08	622-69
	Toshiba	**TC74HC08**	* 3307 622-71
		TC74HC08A	* 3307 622-72
74HC09			
	GoldStar	**GD74HC09**	* 2695 622-103
	Hitachi	HD74HC09	622-99
	TI	SN74HC09	622-101
74HC10			
	GE/RCA	**CD74HC10**	* 2631 622-182
	GoldStar	**GD74HC10**	* 2695 622-183
	Hitachi	HD74HC10	622-184
	Motorola	MC74HC10	623-1
	National	MM74HC10	623-4
	Panasonic	MN74HC10	623-6
	SGS	M74HC10	623-7
	Sharp	LR74HC10	623-8
	Signetics	**74HC10**	* 3003 623-9
	TI	SN74HC10	623-11
	Toshiba	**TC74HC10**	* 3307 623-12
		TC74HC10A	* 3307 623-13

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74HC107			
	GE/RCA	**CD74HC107**	*** 2631**
			621-107
	GoldStar	**GD74HC107**	*** 2695**
			621-109
	Hitachi	HD74HC107	621-111
	Motorola	MC74HC107	621-115
	National	MM74HC107	621-119
	Panasonic	MN74HC107	621-121
	SGS	M74HC107	621-122
	Sharp	LR74HC107	621-124
	Signetics	**74HC107**	*** 3003**
			621-125
	TI	SN74HC107	621-128
	Toshiba	**TC74HC107**	*** 3307**
			621-130
74HC108			
	Hitachi	HD74HC108	621-91
74HC109			
	GE/RCA	**CD74HC109**	*** 2631**
			620-152
	GoldStar	**GD74HC109**	*** 2695**
			620-153
	Hitachi	HD74HC109	620-155
	Motorola	MC74HC109	620-159
	National	MM74HC109	621-2
	Panasonic	MN74HC109	621-4
	SGS	M74HC109	621-6
	Sharp	LR74HC109	621-8
	Signetics	**74HC109**	*** 3003**
			621-10
	TI	SN74HC109	621-12
	Toshiba	**TC74HC109**	*** 3307**
			621-14
74HC11			
	GE/RCA	**CD74HC11**	*** 2631**
			622-4
	GoldStar	**GD74HC11**	*** 2695**
			622-5
	Hitachi	HD74HC11	622-6
	Motorola	MC74HC11	622-8
	National	MM74HC11	622-10
	Panasonic	MN74HC11	622-11
	SGS	M74HC11	622-12
	Sharp	LR74HC11	622-13
	Signetics	**74HC11**	*** 3003**
			622-14
	TI	SN74HC11	622-16
	Toshiba	**TC74HC11**	*** 3307**
			622-17
74HC112			
	GE/RCA	**CD74HC112**	*** 2631**
			621-71
	GoldStar	**GD74HC112**	*** 2695**
			621-72
	Hitachi	HD74HC112	621-73
	Motorola	MC74HC112	621-75
	National	MM74HC112	621-77
	Panasonic	MN74HC112	621-78
	SGS	M74HC112	621-79
	Sharp	LR74HC112	621-80
	Signetics	**74HC112**	*** 3003**
			621-81
	TI	SN74HC112	621-83
	Toshiba	**TC74HC112**	*** 3307**
			621-15
74HC113			
	GoldStar	**GD74HC113**	*** 2695**
			621-50
	Hitachi	HD74HC113	621-51
	Motorola	MC74HC113	621-53
	National	MM74HC113	621-55
	SGS	M74HC113	621-56
	Sharp	LR74HC113	621-57
	TI	SN74HC113	621-59
	Toshiba	**TC74HC113**	*** 3307**
			621-60
74HC114			
	Hitachi	HD74HC114	621-92
	Mitsubishi	M74HC114	621-94
	TI	SN74HC114	621-96

Base Number	Source	Device	Page-Line
74HC123			
	GE/RCA	**CD74HC123**	*** 2632**
			633-42
	GoldStar	**GD74HC123**	*** 2695**
			633-43
	Hitachi	HD74HC123	633-44
	National	MM74HC123	633-47
		MM74HC123A	633-48
	Panasonic	MN74HC123	633-49
	SGS	M74HC123	633-40
	Signetics	**74HC123**	*** 3003**
			633-50
	Toshiba	**TC74HC123**	*** 3307**
			633-12
74HC125			
	GE/RCA	**CD74HC125**	*** 2631**
			605-44
	GoldStar	**GD74HC125**	*** 2695**
			605-46
	Hitachi	HD74HC125	605-48
	Motorola	MC74HC125	605-52
	National	MM74HC125	605-55
	SGS	M74HC125	605-56
	Signetics	**74HC125**	*** 3003**
			605-58
	TI	SN74HC125	605-61
	Toshiba	**TC74HC125**	*** 3307**
			605-90
74HC126			
	GE/RCA	**CD74HC126**	*** 2631**
			605-45
	GoldStar	**GD74HC126**	*** 2695**
			605-47
	Hitachi	HD74HC126	605-49
	Motorola	MC74HC126	605-53
	National	MM74HC126	605-73
	SGS	M74HC126	605-57
	Signetics	**74HC126**	*** 3003**
			605-59
	TI	SN74HC126	605-62
	Toshiba	**TC74HC126**	*** 3307**
			605-63
74HC131			
	SGS	M74HC131	616-8
	Toshiba	**TC74HC131**	*** 3307**
			616-7
74HC132			
	GE/RCA	**CD74HC132**	*** 2631**
			638-80
	GoldStar	**GD74HC132**	*** 2695**
			638-81
	Hitachi	HD74HC132	638-82
	Motorola	MC74HC132	638-84
	National	MM74HC132	638-86
	SGS	M74HC132	638-87
	Sharp	LR74HC132	638-88
	Signetics	**74HC132**	*** 3003**
			638-89
	TI	SN74HC132	638-91
	Toshiba	**TC74HC132**	*** 3307**
			638-92
74HC133			
	GoldStar	**GD74HC133**	*** 2695**
			623-174
	Hitachi	HD74HC133	623-175
	Motorola	MC74HC133	623-177
	National	MM74HC133	623-179
	Panasonic	MN74HC133	623-180
	SGS	M74HC133	623-181
	TI	SN74HC133	623-184
	Toshiba	**TC74HC133**	*** 3307**
			623-185
74HC137			
	GE/RCA	**CD74HC137**	*** 2632**
			615-136
	GoldStar	**GD74HC137**	*** 2695**
			615-138
	Hitachi	HD74HC137	615-139
	Mitsubishi	M74HC137	615-141
	Motorola	MC74HC137	615-144
	National	MM74HC137	615-148
	Samsung	74HC137	615-150
	SGS	M74HC137	615-152
	Sharp	LR74HC137	615-154
	Signetics	**74HC137**	*** 3003**
			615-155

(Continued)

Base Number	Source	Device	Page-Line
74HC137			(Cont'd)
	TI	SN74HC137	615-157
	Toshiba	**TC74HC137**	*** 3307**
			615-158
74HC138			
	GE/RCA	**CD74HC138**	*** 2632**
			615-70
	GoldStar	**GD74HC138**	*** 2695**
			615-72
	Hitachi	HD74HC138	615-73
	Motorola	MC74HC138	615-76
	National	MM74HC138	615-78
	Panasonic	MN74HC138	615-79
	Samsung	74HC138	615-81
	SGS	M74HC138	615-82
	Sharp	LR74HC138	615-83
	Signetics	**74HC138**	*** 3003**
			615-84
	TI	SN74HC138	615-87
	Toshiba	**TC74HC138**	*** 3307**
			615-88
74HC139			
	GE/RCA	**CD74HC139**	*** 2632**
			614-151
	GoldStar	**GD74HC139**	*** 2695**
			614-152
	Hitachi	HD74HC139	614-153
	Motorola	MC74HC139	614-156
	National	MM74HC139	614-159
	Panasonic	MN74HC139	614-160
	Samsung	74HC139	614-161
	SGS	M74HC139	614-162
	Sharp	LR74HC139	614-163
	Signetics	**74HC139**	*** 3003**
			614-164
	TI	SN74HC139	614-166
	Toshiba	**TC74HC139**	*** 3307**
			614-168
74HC14			
	GE/RCA	**CD74HC14**	*** 2631**
			638-130
	GoldStar	**GD74HC14**	*** 2695**
			638-131
	Hitachi	HD74HC14	638-132
	Motorola	MC74HC14	638-134
	National	MM74HC14	638-165
	Panasonic	MN74HC14	638-135
	SGS	M74HC14	638-136
	Sharp	LR74HC14	638-137
	Signetics	**74HC14**	*** 3003**
			638-138
	TI	SN74HC14	638-140
	Toshiba	**TC74HC14**	*** 3307**
			608-63
74HC145			
	GoldStar	GD74HC145	614-60
74HC147			
	GE/RCA	**CD74HC147**	*** 2632**
			616-93
	GoldStar	**GD74HC147**	*** 2695**
			616-94
	Hitachi	HD74HC147	616-95
	Motorola	MC74HC147	616-97
	National	MM74HC147	632-128
			632-130
	SGS	M74HC147	616-98
	Sharp	LR74HC147	604-141
	Signetics	**74HC147**	*** 3003**
			616-99
	TI	SN74HC147	604-142
	Toshiba	**TC74HC147**	*** 3307**
			643-57
74HC148			
	GoldStar	**GD74HC148**	*** 2695**
			605-4
	Hitachi	HD74HC148	605-5
	SGS	M74HC148	616-91
	TI	SN74HC148	605-6
	Toshiba	**TC74HC148**	*** 3307**
			616-86
74HC149			
	National	MM74HC149	616-88

Base Number	Source	Device	Page-Line
74HC151			
	GE/RCA	**CD74HC151**	*** 2632**
			632-19
	GoldStar	**GD74HC151**	*** 2695**
			632-20
	Hitachi	HD74HC151	632-21
	Motorola	MC74HC151	632-23
	National	MM74HC151	632-25
	Panasonic	MN74HC151	632-26
	SGS	M74HC151	632-27
	Sharp	LR74HC151	632-28
	Signetics	**74HC151**	*** 3003**
			632-29
	TI	SN74HC151	632-31
	Toshiba	**TC74HC151**	*** 3307**
			632-32
	Universal	US74HC151	632-33
74HC152			
	Hitachi	HD74HC152	632-39
	TI	SN74HC152	632-41
74HC153			
	GE/RCA	**CD74HC153**	*** 2632**
			630-133
	GoldStar	**GD74HC153**	*** 2695**
			632-66
	Hitachi	HD74HC153	630-134
	Motorola	MC74HC153	630-103
	National	MM74HC153	630-136
	SGS	M74HC153	630-104
	Sharp	LR74HC153	630-105
	Signetics	**74HC153**	*** 3003**
			632-73
	TI	SN74HC153	630-107
	Toshiba	**TC74HC153**	*** 3307**
			632-78
	Universal	US74HC153	630-137
74HC154			
	GE/RCA	**CD74HC154**	*** 2632**
			616-69
	GoldStar	**GD74HC154**	*** 2695**
			616-70
	Hitachi	HD74HC154	616-71
	Motorola	MC74HC154	616-73
	National	MM74HC154	616-75
	Panasonic	MN74HC154	616-76
	SGS	M74HC154	616-77
	Signetics	**74HC154**	*** 3003**
			616-78
	TI	SN74HC154	616-79
	Toshiba	**TC74HC154**	*** 3307**
			616-80
	Universal	US74HC154	616-81
74HC155			
	GoldStar	**GD74HC155**	*** 2695**
			614-129
	Hitachi	HD74HC155	614-130
	Motorola	MC74HC155	614-131
	SGS	M74HC155	615-31
	Toshiba	**TC74HC155**	*** 3307**
			614-132
74HC157			
	GE/RCA	**CD74HC157**	*** 2632**
			631-42
	GoldStar	**GD74HC157**	*** 2695**
			631-43
	Hitachi	HD74HC157	631-44
	Motorola	MC74HC157	631-46
	National	MM74HC157	631-49
	Panasonic	MN74HC157	631-51
	SGS	M74HC157	631-52
	Sharp	LR74HC157	631-53
	Signetics	**74HC157**	*** 3003**
			631-54
	TI	SN74HC157	631-56
	Toshiba	**TC74HC157**	*** 3307**
			631-57
	Universal	US74HC157	631-58
74HC158			
	GE/RCA	**CD74HC158**	*** 2632**
			631-79
	GoldStar	**GD74HC158**	*** 2695**
			631-80
	Hitachi	HD74HC158	631-82
	Motorola	MC74HC158	631-84
	National	MM74HC158	631-50
	Panasonic	MN74HC158	631-85

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74HC158			(Cont'd)
	SGS	M74HC158	631-86
	Sharp	LR74HC158	631-87
	Signetics	**74HC158**	*** 3003**
			631-88
	TI	SN74HC158	631-91
	Toshiba	**TC74HC158**	*** 3307**
			631-92
	Universal	US74HC158	631-93
74HC160			
	GE/RCA	**CD74HC160**	*** 2632**
			612-23
	GoldStar	**GD74HC160**	*** 2695**
			631-81
	Hitachi	HD74HC160	612-24
	Motorola	MC74HC160	612-26
	National	MM74HC160	612-28
	Panasonic	MN74HC160	612-29
	SGS	M74HC160	612-30
	Sharp	LR74HC160	612-31
	Signetics	**74HC160**	*** 3003**
			631-89
	TI	SN74HC160	612-33
	Toshiba	**TC74HC160**	*** 3307**
			612-34
	Universal	US74HC160	612-35
74HC161			
	GE/RCA	**CD74HC161**	*** 2632**
			609-10
	GoldStar	**GD74HC161A**	
			*** 2695**
			609-11
	Hitachi	HD74HC161	609-12
	Motorola	MC74HC161	609-14
	National	MM74HC161	609-16
	Panasonic	MN74HC161	609-17
	SGS	M74HC161	609-18
	Sharp	LR74HC161	609-19
	Signetics	**74HC161**	*** 3003**
			609-20
	TI	SN74HC161	609-22
	Toshiba	**TC74HC161**	*** 3307**
			609-23
	Universal	US74HC161	609-24
74HC162			
	GE/RCA	**CD74HC162**	*** 2632**
			611-149
	GoldStar	**GD74HC162**	*** 2695**
			611-150
	Hitachi	HD74HC162	611-151
	Motorola	MC74HC162	611-153
	National	MM74HC162	611-155
	SGS	M74HC162	611-156
	Sharp	LR74HC162	611-157
	Signetics	**74HC162**	*** 3003**
			611-158
	TI	SN74HC162	611-159
	Toshiba	**TC74HC162**	*** 3307**
			611-160
	Universal	US74HC162	611-161
74HC163			
	GE/RCA	**CD74HC163**	*** 2632**
			608-129
	GoldStar	**GD74HC163**	*** 2695**
			608-130
	Hitachi	HD74HC163	608-131
	Motorola	MC74HC163	608-133
	National	MM74HC163	608-135
	Panasonic	MN74HC163	608-136
	SGS	M74HC163	608-137
	Sharp	LR74HC163	608-138
	Signetics	**74HC163**	*** 3003**
			608-139
	TI	SN74HC163	608-140
	Toshiba	**TC74HC163**	*** 3307**
			608-141
	Universal	US74HC163	608-142
74HC164			
	GE/RCA	**CD74HC164**	*** 2631**
			635-42
	GoldStar	**GD74HC164**	*** 2695**
			635-43
	Hitachi	HD74HC164	635-44
	Motorola	MC74HC164	635-46
			1394-59
	National	MM74HC164	635-48

(Continued)

Base Number	Source	Device	Page-Line
74HC164			(Cont'd)
	SGS	M74HC164	635-49
	Sharp	LR74HC164	635-50
	Signetics	**74HC164**	*** 3003**
			635-51
	TI	SN74HC164	635-53
	Toshiba	**TC74HC164**	*** 3307**
			635-54
	Universal	US74HC164	635-55
74HC165			
	GE/RCA	**CD74HC165**	*** 2631**
			634-169
	GoldStar	**GD74HC165**	*** 2695**
			635-1
	Hitachi	HD74HC165	635-3
	Motorola	MC74HC165	635-5
			1394-62
	National	MM74HC165	635-7
	SGS	M74HC165	635-8
	Sharp	LR74HC165	635-9
	Signetics	**74HC165**	*** 3003**
			635-10
	TI	SN74HC165	635-13
	Toshiba	**TC74HC165**	*** 3307**
			635-14
	Universal	US74HC165	635-15
74HC166			
	GE/RCA	**CD74HC166**	*** 2631**
			635-69
	GoldStar	**GD74HC166**	*** 2695**
			635-2
	Hitachi	HD74HC166	635-71
	National	MM74HC166	635-73
	SGS	M74HC166	635-74
	Signetics	**74HC166**	*** 3003**
			635-11
	TI	SN74HC166	635-76
	Toshiba	**TC74HC166**	*** 3307**
			635-77
74HC168			
	Motorola	MC74HC168	609-84
74HC169			
	Motorola	MC74HC169	610-59
	National	MM74HC169	610-61
74HC173			
	GE/RCA	**CD74HC173**	*** 2631**
			618-23
	GoldStar	**GD74HC173**	*** 2695**
			618-24
	Hitachi	HD74HC173	618-25
	Motorola	MC74HC173	618-27
	National	MM74HC173	618-29
	SGS	M74HC173	618-30
	Sharp	LR74HC173	618-31
	Signetics	**74HC173**	*** 3003**
			618-32
	TI	SN74HC173	618-34
	Toshiba	**TC74HC173**	*** 3307**
			618-35
	Universal	US74HC173	618-36
74HC174			
	GE/RCA	**CD74HC174**	*** 2631**
			618-75
	GoldStar	**GD74HC174**	*** 2696**
			618-76
	Hitachi	HD74HC174	618-77
	Motorola	MC74HC174	618-79
	National	MM74HC174	618-81
	Panasonic	MN74HC174	618-82
	SGS	M74HC174	618-83
	Sharp	LR74HC174	618-84
	Signetics	**74HC174**	*** 3003**
			618-85
	TI	SN74HC174	618-87
	Toshiba	**TC74HC174**	*** 3307**
			618-88
	Universal	US74HC174	618-89
74HC175			
	GE/RCA	**CD74HC175**	*** 2631**
			617-148
	GoldStar	**GD74HC175**	*** 2696**
			617-149
	Hitachi	HD74HC175	617-150
	Motorola	MC74HC175	617-152
	National	MM74HC175	617-154
	SGS	M74HC175	617-155

(Continued)

Base Number	Source	Device	Page-Line
74HC175			(Cont'd)
	Sharp	LR74HC175	617-156
	Signetics	**74HC175**	*** 3003**
			617-157
	TI	SN74HC175	617-159
	Toshiba	**TC74HC175**	*** 3307**
			617-160
	Universal	US74HC175	617-161
74HC180			
	Hitachi	HD74HC180	642-151
	TI	SN74HC180	643-3
74HC181			
	GE/RCA	**CD74HC181**	*** 2632**
			603-27
	Hitachi	HD74HC181	603-28
	Motorola	MC74HC181	603-30
	National	MM74HC181	603-32
	SGS	M74HC181	603-33
	Signetics	**74HC181**	*** 3003**
			603-34
	Toshiba	**TC74HC181**	*** 3307**
			603-35
74HC182			
	GE/RCA	**CD74HC182**	*** 2632**
			603-60
	Hitachi	HD74HC182	603-61
	Motorola	MC74HC182	603-53
	National	MM74HC182	603-63
	SGS	M74HC182	603-64
	Signetics	**74HC182**	*** 3003**
			603-65
	Toshiba	**TC74HC182**	*** 3307**
			603-66
74HC189			
	Hitachi	HD74HC189	630-39
74HC190			
	GE/RCA	**CD74HC190**	*** 2632**
			612-154
	GoldStar	**GD74HC190**	*** 2696**
			612-114
	Hitachi	HD74HC190	612-155
	Motorola	MC74HC190	612-157
	National	MM74HC190	612-159
	SGS	M74HC190	612-160
	Signetics	**74HC190**	*** 3003**
			612-115
	TI	SN74HC190	612-162
	Toshiba	**TC74HC190**	*** 3307**
			612-163
	Universal	US74HC190	612-164
74HC191			
	GE/RCA	**CD74HC191**	*** 2632**
			609-77
	GoldStar	**GD74HC191**	*** 2696**
			609-80
	Hitachi	HD74HC191	609-82
	Motorola	MC74HC191	609-85
	National	MM74HC191	609-89
	SGS	M74HC191	609-92
	Signetics	**74HC191**	*** 3003**
			609-94
	TI	SN74HC191	610-51
	Toshiba	**TC74HC191**	*** 3307**
			610-53
	Universal	US74HC191	609-98
74HC192			
	GE/RCA	**CD74HC192**	*** 2632**
			612-66
	GoldStar	**GD74HC192**	*** 2696**
			612-67
	Hitachi	HD74HC192	612-68
	Motorola	MC74HC192	612-69
	National	MM74HC192	612-71
	Panasonic	MN74HC192	612-72
	SGS	M74HC192	612-73
	Signetics	**74HC192**	*** 3003**
			612-74
	TI	SN74HC192	612-76
	Toshiba	**TC74HC192**	*** 3307**
			612-77
	Universal	US74HC192	612-78

Base Number	Source	Device	Page-Line
74HC193			
	GE/RCA	**CD74HC193**	*** 2632**
			609-78
	GoldStar	**GD74HC193**	*** 2696**
			609-81
	Hitachi	HD74HC193	609-83
	Motorola	MC74HC193	609-86
	National	MM74HC193	609-90
	Panasonic	MN74HC193	609-91
	SGS	M74HC193	609-93
	Signetics	**74HC193**	*** 3003**
			609-95
	TI	SN74HC193	610-52
	Toshiba	**TC74HC193**	*** 3307**
			609-97
	Universal	US74HC193	609-99
74HC194			
	GE/RCA	**CD74HC194**	*** 2631**
			634-20
	GoldStar	**GD74HC194**	*** 2696**
			634-21
	Hitachi	HD74HC194	634-22
	Motorola	MC74HC194	634-24
			1393-26
	National	MM74HC194	634-26
	SGS	M74HC194	634-27
	Sharp	LR74HC194	634-28
	Signetics	**74HC194**	*** 3003**
			634-29
	TI	SN74HC194	634-31
	Toshiba	**TC74HC194**	*** 3307**
			634-32
	Universal	US74HC194	634-33
74HC195			
	GE/RCA	**CD74HC195**	*** 2631**
			634-82
	GoldStar	**GD74HC195**	*** 2696**
			634-83
	Hitachi	HD74HC195	634-84
	Motorola	MC74HC195	634-87
			1393-27
	National	MM74HC195	634-89
	SGS	M74HC195	634-90
	Sharp	LR74HC195	634-91
	Signetics	**74HC195**	*** 3003**
			634-92
	TI	SN74HC195	634-94
	Toshiba	**TC74HC195**	*** 3307**
			634-95
	Universal	US74HC195	634-96
74HC20			
	GE/RCA	**CD74HC20**	*** 2631**
			622-123
	GoldStar	**GD74HC20**	*** 2695**
			622-124
	Hitachi	HD74HC20	622-126
	Motorola	MC74HC20	622-128
	National	MM74HC20	623-5
	Panasonic	MN74HC20	622-129
	SGS	M74HC20	622-130
	Sharp	LR74HC20	622-131
	Signetics	**74HC20**	*** 3003**
			622-132
	TI	SN74HC20	622-134
	Toshiba	**TC74HC20**	*** 3307**
			622-135
	Universal	US74HC20	622-136
74HC21			
	GE/RCA	**CD74HC21**	*** 2631**
			621-150
	GoldStar	**GD74HC21**	*** 2695**
			621-151
	Hitachi	HD74HC21	621-152
	SGS	M74HC21	621-153
	Signetics	**74HC21**	*** 3003**
			621-154
	TI	SN74HC21	621-156
	Toshiba	**TC74HC21**	*** 3307**
			621-157
	Universal	US74HC21	621-158
74HC221			
	GE/RCA	**CD74HC221**	*** 2632**
			632-162
	GoldStar	**GD74HC221**	*** 2696**
			632-165
	Hitachi	HD74HC221	632-167

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
74HC221			(Cont'd)
	Motorola	MC74HC221A	632-171
	National	MM74HC221A	633-3
	Panasonic	MN74HC221	633-6
	SGS	M74HC221	633-39
	Signetics	**74HC221**	*** 3003** 633-9
	Toshiba	**TC74HC221**	*** 3307** 633-13
	Universal	US74HC221	633-16
74HC22106			
	GE/RCA	**CD74HC22106E**	*** 2638** 911-59
74HC237			
	GE/RCA	**CD74HC237**	*** 2632** 615-137
	Hitachi	HD74HC237	615-140
	Motorola	MC74HC237	615-145
	National	MM74HC237	615-149
	Samsung	74HC237	615-151
	SGS	M74HC237	615-153
	Signetics	74HC237	615-39
	TI	SN74HC237	615-122
	Toshiba	**TC74HC237**	*** 3307** 615-124
74HC238			
	GE/RCA	**CD74HC238**	*** 2632** 615-71
	Hitachi	HD74HC238	615-74
	SGS	M74HC238	616-9
	Signetics	**74HC238**	*** 3003** 615-85
	TI	SN74HC238	615-123
	Toshiba	**TC74HC238**	*** 3307** 615-125
74HC239			
	Motorola	MC74HC239	614-157
	TI	SN74HC239	614-167
74HC240			
	GE/RCA	**CD74HC240**	*** 2631** 639-32
	GoldStar	**GD74HC240**	*** 2696** 639-33
	Hitachi	HD74HC240	639-34
	Motorola	MC74HC240	639-37
	National	MM74HC240	639-39
	Panasonic	MN74HC240	639-40
	Samsung	74HC240	639-41
	SGS	M74HC240	639-42
	Sharp	LR74HC240	639-43
	Signetics	**74HC240**	*** 3003** 639-45
	TI	SN74HC240	639-47
	Toshiba	**TC74HC240**	*** 3307** 639-48
74HC241			
	GE/RCA	**CD74HC241**	*** 2631** 639-121
	GoldStar	**GD74HC241**	*** 2696** 639-123
	Hitachi	HD74HC241	639-125
	Motorola	MC74HC241	639-130
	National	MM74HC241	639-133
	Panasonic	MN74HC241	639-135
	Samsung	74HC241	639-137
	SGS	M74HC241	639-139
	Sharp	LR74HC241	640-28
	Signetics	**74HC241**	*** 3003** 639-144
	TI	SN74HC241	640-30
	Toshiba	**TC74HC241**	*** 3307** 639-150
74HC242			
	GE/RCA	**CD74HC242**	*** 2631** 638-23
	GoldStar	**GD74HC242**	*** 2696** 638-24
	Hitachi	HD74HC242	638-25
	Motorola	MC74HC242	638-27
	National	MM74HC242	638-29
	Panasonic	MN74HC242	638-30
	SGS	M74HC242	638-31
	Sharp	LR74HC242	638-33
	Signetics	**74HC242**	*** 3003** 638-34

(Continued)

Base Number	Source	Device	Page-Line
74HC242			(Cont'd)
	TI	SN74HC242	638-36
	Toshiba	**TC74HC242**	*** 3307** 638-37
74HC243			
	GE/RCA	**CD74HC243**	*** 2631** 638-51
	GoldStar	**GD74HC243**	*** 2696** 638-52
	Motorola	MC74HC243	638-54
	National	MM74HC243	638-56
	Panasonic	MN74HC243	638-57
	SGS	M74HC243	638-32
	Sharp	LR74HC243	638-58
	Signetics	**74HC243**	*** 3003** 638-59
	TI	SN74HC243	638-62
	Toshiba	**TC74HC243**	*** 3307** 638-63
74HC244			
	GE/RCA	**CD74HC244**	*** 2631** 639-122
	GoldStar	**GD74HC244**	*** 2696** 639-124
	Hitachi	HD74HC244	639-126
	Motorola	MC74HC244	639-131
	National	MM74HC244	639-134
	Panasonic	MN74HC244	639-136
	Samsung	74HC244	639-138
	SGS	M74HC244	639-140
	Sharp	LR74HC244	639-141
	Signetics	**74HC244**	*** 3003** 639-145
	TeledyneS	TC74HC244	639-146
	TI	SN74HC244	639-149
	Toshiba	**TC74HC244**	*** 3307** 640-38
74HC245			
	GE/RCA	**CD74HC245**	*** 2631** 641-130
	GoldStar	**GD74HC245**	*** 2696** 641-131
	Hitachi	HD74HC245	641-133
	Motorola	MC74HC245	641-138
	National	MM74HC245	635-176
	Panasonic	MN74HC245	641-139
	Samsung	74HC245	641-140
	SGS	M74HC245	641-141
	Sharp	LR74HC245	641-142
	Signetics	**74HC245**	*** 3003** 641-144
	TI	SN74HC245	641-149
	Toshiba	**TC74HC245**	*** 3307** 641-153
74HC251			
	GE/RCA	**CD74HC251**	*** 2632** 632-100
	GoldStar	**GD74HC251**	*** 2696** 632-67
	Hitachi	HD74HC251	632-103
	Motorola	MC74HC251	632-109
	National	MM74HC251	632-62
	SGS	M74HC251	632-112
	Sharp	LR74HC251	632-70
	Signetics	**74HC251**	*** 3003** 632-74
	TI	SN74HC251	632-76
	Toshiba	**TC74HC251**	*** 3307** 632-79
74HC253			
	GE/RCA	**CD74HC253**	*** 2632** 631-10
	GoldStar	**GD74HC253**	*** 2696** 630-121
	Hitachi	HD74HC253	631-11
	Motorola	MC74HC253	631-14
	National	MM74HC253	631-16
	SGS	M74HC253	631-17
	Sharp	LR74HC253	630-122
	Signetics	**74HC253B**	*** 3003** 630-123
	TI	SN74HC253	630-125
	Toshiba	**TC74HC253**	*** 3307** 630-126

Base Number	Source	Device	Page-Line
74HC257			
	GE/RCA	**CD74HC257**	*** 2632** 631-113
	GoldStar	**GD74HC257**	*** 2696** 631-114
	Hitachi	HD74HC257	631-12
	Motorola	MC74HC257	631-116
	National	MM74HC257	631-118
	SGS	M74HC257	631-119
	Sharp	LR74HC257	631-120
	Signetics	**74HC257**	*** 3003** 631-121
	TI	SN74HC257	631-123
	Toshiba	**TC74HC257**	*** 3307** 631-124
74HC258			
	GE/RCA	**CD74HC258**	*** 2632** 631-142
	GoldStar	**GD74HC258**	*** 2696** 631-143
	Hitachi	HD74HC258	631-144
	Signetics	**74HC258**	*** 3003** 631-145
	TI	SN74HC258	631-147
	Toshiba	**TC74HC258**	*** 3307** 631-148
74HC259			
	GE/RCA	**CD74HC259**	*** 2632** 629-1
	GoldStar	**GD74HC259**	*** 2696** 629-2
	Hitachi	HD74HC259	629-3
	Motorola	MC74HC259	629-5
	National	MM74HC259	629-8
	SGS	M74HC259	629-10
	Sharp	LR74HC259	629-11
	Signetics	**74HC259**	*** 3003** 629-12
	TI	SN74HC259	629-14
	Toshiba	**TC74HC259**	*** 3307** 629-16
74HC266			
	GoldStar	**GD74HC266**	*** 2696** 626-78
	Hitachi	HD74HC266	626-79
	Motorola	MC74HC266	626-104
	National	MM74HC266	624-87
	Panasonic	MN74HC266	626-80
	SGS	M74HC266	626-81
	Sharp	LR74HC266	626-83
	TI	SN74HC266	626-86
74HC27			
	GE/RCA	**CD74HC27**	*** 2631** 625-56
	GoldStar	**GD74HC27**	*** 2695** 625-57
	Hitachi	HD74HC27	625-58
	Motorola	MC74HC27	625-60
	National	MM74HC27	625-62
	Panasonic	MN74HC27	625-63
	SGS	M74HC27	625-64
	Sharp	LR74HC27	625-65
	Signetics	**74HC27**	*** 3003** 625-66
	TI	SN74HC27	625-68
	Toshiba	**TC74HC27**	*** 3307** 625-69
74HC273			
	GE/RCA	**CD74HC273**	*** 2631** 618-138
	GoldStar	**GD74HC273**	*** 2696** 618-139
	Hitachi	HD74HC273	618-140
	Motorola	MC74HC273	618-143
	National	MM74HC273	618-145
	Panasonic	MN74HC273	618-146
	SGS	M74HC273	618-147
	Sharp	LR74HC273	618-148
	Signetics	**74HC273**	*** 3003** 618-149
	TI	SN74HC273	618-151
	Toshiba	**TC74HC273**	*** 3307** 618-152
74HQ279			
	Toshiba	**TC74HC279**	*** 3307** 627-56

Base Number	Source	Device	Page-Line
74HC280			
	GE/RCA	**CD74HC280**	*** 2632** 604-126
	GoldStar	**GD74HC280**	*** 2696** 642-150
	Hitachi	HD74HC280	604-127
	Mitsubishi	M74HC280	604-128
	Motorola	MC74HC280	604-130
	National	MM74HC280	604-132
	SGS	M74HC280	604-133
	Sharp	LR74HC280	642-152
	Signetics	**74HC280**	*** 3003** 604-134
	TI	SN74HC280	643-4
	Toshiba	**TC74HC280**	*** 3307** 643-5
74HC283			
	GE/RCA	**CD74HC283**	*** 2632** 602-36
	GoldStar	**GD74HC283**	*** 2696** 602-37
	Hitachi	HD74HC283	602-38
	Motorola	MC74HC283	602-40
	National	MM74HC283	602-42
	SGS	M74HC283	602-43
	Signetics	**74HC283**	*** 3003** 602-44
	TI	SN74HC283	602-45
	Toshiba	**TC74HC283**	*** 3307** 602-46
74HC292			
	Hitachi	HD74HC292	637-76
	Motorola	MC74HC292	637-68
	National	MM74HC292	637-72
	SGS	M74HC292	637-74
74HC294			
	Hitachi	HD74HC294	637-77
	Motorola	MC74HC294	637-69
	National	MM74HC294	637-73
	SGS	M74HC294	637-75
74HC297			
	GE/RCA	**CD74HC297**	*** 2632** 637-34 1190-15
	Signetics	**74HC297**	*** 3003** 1190-19
74HC298			
	GoldStar	**GD74HC298**	*** 2696** 631-155
	Hitachi	HD74HC298	631-156
	National	MM74HC298	631-158
	SGS	M74HC298	631-159
	TI	SN74HC298	631-160
	Toshiba	**TC74HC298**	*** 3307** 631-161
74HC299			
	GE/RCA	**CD74HC299**	*** 2631** 635-153
	GoldStar	**GD74HC299**	*** 2696** 635-154
	Hitachi	HD74HC299	635-155
	Motorola	MC74HC299	635-158
	National	MM74HC299	635-160
	SGS	M74HC299	635-161
	Sharp	LR74HC299	635-162
	Signetics	**74HC299**	*** 3003** 635-163
	TI	SN74HC299	635-164
	Toshiba	**TC74HC299**	*** 3307** 635-165
74HC30			
	GE/RCA	**CD74HC30**	*** 2631** 623-144
	GoldStar	**GD74HC30**	*** 2695** 623-145
	Hitachi	HD74HC30	623-146
	Motorola	MC74HC30	623-148
	National	MM74HC30	623-150
	Panasonic	MN74HC30	623-151
	SGS	M74HC30	623-152
	Sharp	LR74HC30	623-153
	Signetics	**74HC30**	*** 3003** 623-154
	TI	SN74HC30	623-156
	Toshiba	**TC74HC30**	*** 3307** 623-157

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74HC32			
	GE/RCA	**CD74HC32**	* 2631
			624-130
	GoldStar	**GD74HC32**	* 2695
			624-131
	Hitachi	HD74HC32	624-132
	Motorola	MC74HC32	624-134
	National	MM74HC32	624-136
	Panasonic	MN74HC32	624-137
	SGS	M74HC32	624-138
	Sharp	LR74HC32	624-139
	Signetics	**74HC32**	* 3003
			624-140
	TI	SN74HC32	624-142
	Toshiba	**TC74HC32**	* 3307
			624-144
		TC74HC32A	* 3307
			624-145
74HC322			
	GoldStar	**GD74HC322**	* 2696
			635-70
74HC323			
	Hitachi	HD74HC323	635-96
	National	MM74HC323	635-177
	Toshiba	**TC74HC323**	* 3307
			635-107
74HC34			
	GoldStar	**GD74HC34**	* 2695
			605-93
74HC352			
	TI	SN74HC352	630-145
74HC353			
	Hitachi	HD74HC353	631-22
	TI	SN74HC353	631-23
74HC354			
	GE/RCA	**CD74HC354**	* 2632
			632-101
	GoldStar	**GD74HC354**	* 2696
			632-68
	Hitachi	HD74HC354	632-104
	Motorola	MC74HC354	632-110
	National	MM74HC354	632-86
	SGS	M74HC354	632-113
	Sharp	LR74HC354	632-71
	Signetics	**74HC354**	* 3003
			632-115
	Toshiba	**TC74HC354**	* 3307
			632-117
74HC356			
	GE/RCA	**CD74HC356**	* 2632
			632-102
	GoldStar	**GD74HC356**	* 2696
			632-69
	Hitachi	HD74HC356	632-105
	Motorola	MC74HC356	632-111
	National	MM74HC356	632-87
	SGS	M74HC356	632-114
	Sharp	LR74HC356	632-72
	Signetics	**74HC356**	* 3003
			632-116
	TI	SN74HC356	632-77
	Toshiba	**TC74HC356**	* 3307
			632-118
74HC36			
	TI	SN74HC36	625-130
74HC365			
	GE/RCA	**CD74HC365**	* 2631
			606-57
	GoldStar	**GD74HC365**	* 2696
			606-59
	Hitachi	HD74HC365	606-61
	Motorola	MC74HC365	606-65
	National	MM74HC365	606-69
	Panasonic	MN74HC365	606-71
	SGS	M74HC365	606-73
	Sharp	LR74HC365	606-75
	Signetics	**74HC365**	* 3003
			606-76
	Toshiba	**TC74HC365**	* 3307
			606-79
74HC366			
	GE/RCA	**CD74HC366**	* 2631
			606-110
	GoldStar	**GD74HC366**	* 2696
			606-112
	Hitachi	HD74HC366	606-114

(Continued)

Base Number	Source	Device	Page-Line
74HC366			(Cont'd)
	Motorola	MC74HC366	606-118
	National	MM74HC366	606-122
	Panasonic	MN74HC366	606-124
	SGS	M74HC366	606-126
	Sharp	LR74HC366	606-128
	Signetics	**74HC366**	* 3003
			606-130
	Toshiba	**TC74HC366**	* 3307
			606-134
74HC367			
	GE/RCA	**CD74HC367**	* 2631
			606-58
	GoldStar	**GD74HC367**	* 2696
			606-60
	Hitachi	HD74HC367	606-62
	Motorola	MC74HC367	606-66
	National	MM74HC367	606-70
	Panasonic	MN74HC367	606-72
	SGS	M74HC367	606-74
	Sharp	LR74HC367	638-117
	Signetics	**74HC367**	* 3003
			606-77
	Toshiba	**TC74HC367**	* 3307
			606-80
74HC368			
	GE/RCA	**CD74HC368**	* 2631
			606-111
	GoldStar	**GD74HC368**	* 2696
			606-113
	Hitachi	HD74HC368	606-115
	Motorola	MC74HC368	606-119
	National	MM74HC368	606-123
	Panasonic	MN74HC368	606-125
	SGS	M74HC368	606-127
	Sharp	LR74HC368	606-129
	Signetics	**74HC368**	* 3003
			606-131
	Toshiba	**TC74HC368**	* 3307
			606-135
74HC373			
	GE/RCA	**CD74HC373**	* 2632
			627-125
	GoldStar	**GD74HC373**	* 2696
			627-127
	Hitachi	HD74HC373	627-129
	Motorola	MC74HC373	627-134
	National	MM74HC373	627-138
	Panasonic	MN74HC373	627-140
	Samsung	74HC373	627-141
	SGS	M74HC373	627-143
	Sharp	LR74HC373	627-145
	Signetics	**74HC373**	* 3003
			627-146
	TI	SN74HC373	627-150
	Toshiba	**TC74HC373**	* 3307
			627-152
		TC74HC373A	* 3307
			627-60
74HC374			
	GE/RCA	**CD74HC374**	* 2631
			620-23
	GoldStar	**GD74HC374**	* 2696
			620-25
	Hitachi	HD74HC374	620-27
	Motorola	MC74HC374	620-32
	National	MM74HC374	620-36
	Panasonic	MN74HC374	620-38
	Samsung	74HC374	620-39
	SGS	M74HC374	620-41
	Sharp	LR74HC374	620-43
	Signetics	**74HC374**	* 3003
			620-45
	TI	SN74HC374	620-91
	Toshiba	**TC74HC374**	* 3307
			620-50
74HC375			
	Hitachi	HD74HC375	626-153
	TI	SN74HC375	626-155
	Toshiba	**TC74HC375**	* 3307
			626-156

Base Number	Source	Device	Page-Line
74HC377			
	GE/RCA	**CD74HC377**	* 2631
			619-6
	GoldStar	**GD74HC377**	* 2696
			619-7
	Hitachi	HD74HC377	619-8
	Signetics	**74HC377**	* 3003
			619-10
	TI	SN74HC377	619-12
	Toshiba	**TC74HC377**	* 3307
			619-13
74HC378			
	TI	SN74HC378	618-117
74HC379			
	TI	SN74HC379	618-16
74HC384			
	Signetics	**74HC384**	* 3003
			603-157
74HC386			
	GoldStar	**GD74HC386**	* 2696
			626-16
	Hitachi	HD74HC386	626-18
	Motorola	MC74HC386	626-21
			626-22
	TI	SN74HC386	626-32
	Toshiba	**TC74HC386**	* 3307
			626-34
74HC390			
	GE/RCA	**CD74HC390**	* 2632
			612-173
	GoldStar	**GD74HC390**	* 2696
			613-1
	Hitachi	HD74HC390	613-2
	Motorola	MC74HC390	613-22
	National	MM74HC390	613-6
	Panasonic	MN74HC390	613-7
	SGS	M74HC390	613-23
	Sharp	LR74HC390	613-8
	Signetics	**74HC390**	* 3003
			613-9
	TI	SN74HC390	613-11
	Toshiba	**TC74HC390**	* 3307
			613-13
74HC393			
	GE/RCA	**CD74HC393**	* 2632
			610-12
	GoldStar	**GD74HC393**	* 2696
			610-13
	Hitachi	HD74HC393	610-14
	Motorola	MC74HC393	609-170
	National	MM74HC393	610-16
	Panasonic	MN74HC393	610-17
	SGS	M74HC393	609-171
	Sharp	LR74HC393	609-172
	Signetics	**74HC393**	* 3003
			610-19
	TI	SN74HC393	609-175
	Toshiba	**TC74HC393**	* 3307
			610-20
74HC4002			
	GE/RCA	**CD74HC4002**	
			* 2631
			625-9
	Mitsubishi	M74HC4002	625-11
	Motorola	MC74HC4002	625-13
	National	MM74HC4002	625-15
	Panasonic	MN74HC4002	625-16
	SGS	M74HC4002	625-17
	Sharp	LR74HC4002	625-18
	Signetics	**74HC4002**	* 3003
			625-19
	TI	SN74HC4002	625-22
	Toshiba	**TC74HC4002**	* 3307
			625-23
74HC40102			
	GE/RCA	**CD74HC40102**	
			* 2632
			612-119
	Signetics	**74HC40102**	* 3003
			612-120
	Toshiba	**TC74HC40102**	
			* 3307
			613-46

Base Number	Source	Device	Page-Line
74HC40103			
	GE/RCA	**CD74HC40103**	
			* 2632
			610-108
	Signetics	**74HC40103**	* 3003
			610-109
	Toshiba	**TC74HC40103**	
			* 3307
			609-144
74HC40104			
	GE/RCA	**CD74HC40104**	
			* 2631
			634-47
	Signetics	**74HC40104**	* 3003
			634-48
74HC40105			
	GE/RCA	**CD74HC40105**	
			* 2631
			629-140
	Signetics	**74HC40105**	* 3003
			629-141
74HC4015			
	GE/RCA	**CD74HC4015**	
			* 2631
			633-120
	Signetics	**74HC4015**	* 3003
			633-121
74HC4016			
	Motorola	MC74HC4016	905-29
	National	MM74HC4016	905-35
	Signetics	**74HC4016**	* 3003
			905-42
74HC4017			
	GE/RCA	**CD74HC4017**	
			* 2632
			611-109
	Hitachi	HD74HC4017	611-110
	Mitsubishi	M74HC4017	611-92
	Motorola	MC74HC4017	611-112
	National	MM74HC4017	611-114
	SGS	M74HC4017	611-115
	Signetics	**74HC4017**	* 3003
			611-116
	TI	SN74HC4017	611-117
	Toshiba	**TC74HC4017**	* 3307
			611-118
74HC4018			
	National	MM74HC4018	625-174
74HC4020			
	GE/RCA	**CD74HC4020**	
			* 2632
			611-19
	Hitachi	HD74HC4020	611-20
	Mitsubishi	M74HC4020	611-50
	Motorola	MC74HC4020	611-22
	National	MM74HC4020	611-24
	SGS	M74HC4020	611-25
	Signetics	**74HC4020**	* 3003
			611-26
	TI	SN74HC4020	611-27
	Toshiba	**TC74HC4020**	* 3307
			611-28
74HC4022			
	Hitachi	HD74HC4022	614-34
	Mitsubishi	M74HC4022	611-90
	Toshiba	**TC74HC4022**	* 3307
			613-114
74HC4024			
	GE/RCA	**CD74HC4024**	
			* 2632
			610-66
	Hitachi	HD74HC4024	610-67
	Mitsubishi	M74HC4024	610-102
	Motorola	MC74HC4024	610-69
	National	MM74HC4024	610-71
	SGS	M74HC4024	610-72
	Sharp	LR74HC4024	610-73
	Signetics	**74HC4024**	* 3003
			610-74
	TI	SN74HC4024	610-75
	Toshiba	**TC74HC4024**	* 3307
			610-76
74HC4028			
	Toshiba	**TC74HC4028**	* 3307
			614-73

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
74HC4040			
	GE/RCA	**CD74HC4040**	
			*** 2632**
			610-146
	Hitachi	HD74HC4040	610-147
	Mitsubishi	M74HC4040	611-16
	Motorola	MC74HC4040	610-149
	National	MM74HC4040	610-151
	Panasonic	MN74HC4040	610-152
	SGS	M74HC4040	610-153
	Signetics	**74HC4040**	*** 3003**
			610-154
	TI	SN74HC4040	610-155
	Toshiba	**TC74HC4040**	*** 3307**
			610-156
74HC4046			
	GE/RCA	**CD74HC4046**	
			*** 2632**
			637-35
	National	MM74HC4046	637-37
	Signetics	**74HC4046**	*** 3003**
			637-38
		74HC4046A	*** 3003**
			1190-60
74HC4049			
	GE/RCA	**CD74HC4049**	
			*** 2631**
			605-127
	Mitsubishi	M74HC4049B	605-104
	Motorola	MC74HC4049	605-129
	National	MM74HC4049	605-131
	Panasonic	MN74HC4049	605-132
	SGS	M74HC4049	605-133
	Signetics	**74HC4049**	*** 3003**
			605-134
	Toshiba	**TC74HC4049**	*** 3307**
			605-135
74HC4050			
	GE/RCA	**CD74HC4050**	
			*** 2631**
			606-3
	Mitsubishi	M74HC4050B	605-160
	Motorola	MC74HC4050	606-5
	National	MM74HC4050	606-7
	Panasonic	MN74HC4050	606-8
	SGS	M74HC4050	606-9
	Signetics	**74HC4050**	*** 3003**
			606-10
	Toshiba	**TC74HC4050**	*** 3307**
			606-11
74HC4051			
	GE/RCA	**CD74HC4051**	
			*** 2632**
			913-39
	Hitachi	HD74HC4051	912-5
	Mitsubishi	M74HC4051	632-60
	Motorola	MC74HC4051	913-47
	National	MM74HC4051	913-53
	Panasonic	MN74HC4051	913-55
	SGS	M74HC4051	915-15
	Signetics	**74HC4051**	*** 3003**
			642-118
74HC4052			
	GE/RCA	**CD74HC4052**	
			*** 2632**
			912-3
	Hitachi	HD74HC4052	912-6
	Mitsubishi	M74HC4052	630-118
	Motorola	MC74HC4052	912-13
	National	MM74HC4052	912-19
	Panasonic	MN74HC4052	912-22
	SGS	M74HC4052	911-72
	Signetics	**74HC4052**	*** 3003**
			638-13
74HC4053			
	GE/RCA	**CD74HC4053**	
			*** 2632**
			908-26
	Hitachi	HD74HC4053	911-74
	Mitsubishi	M74HC4053	631-26
	Motorola	MC74HC4053	908-34
	Panasonic	MN74HC4053	908-39
	SGS	M74HC4053	908-42
			911-73
	Signetics	**74HC4053**	*** 3003**
			638-16

Base Number	Source	Device	Page-Line
74HC4059			
	GE/RCA	**CD74HC4059**	
			*** 2632**
			613-95
	Signetics	**74HC4059**	*** 3003**
			613-96
74HC4060			
	GE/RCA	**CD74HC4060**	
			*** 2632**
			611-56
	Hitachi	HD74HC4060	611-57
	Motorola	MC74HC4060	611-59
	National	MM74HC4060	611-61
	SGS	M74HC4060	611-62
	Signetics	**74HC4060**	*** 3003**
			611-63
	TI	SN74HC4060	611-64
	Toshiba	**TC74HC4060**	*** 3307**
			611-65
74HC4061			
	TI	SN74HC4061	605-94
74HC4066			
	GE/RCA	**CD74HC4066**	
			*** 2631**
			904-19
			904-87
	Hitachi	HD74HC4066	904-89
	Mitsubishi	M74HC4066	905-13
	Motorola	MC74HC4066	904-95
	National	MM74HC4066	904-99
	Panasonic	MN74HC4066	905-1
	SGS	M74HC4066	905-4
	Signetics	**74HC4066**	*** 3003**
			905-8
	Toshiba	**TC74HC4066**	*** 3307**
			905-12
74HC4067			
	GE/RCA	**CD74HC4067**	
			*** 2632**
			915-31
	Signetics	74HC4067	915-38
74HC4072			
	Toshiba	**TC74HC4072**	*** 3307**
			624-63
74HC4075			
	GE/RCA	**CD74HC4075**	
			*** 2631**
			624-81
	Mitsubishi	M74HC4075	624-82
	Motorola	MC74HC4075	624-84
	National	MM74HC4075	624-88
	Panasonic	MN74HC4075	624-89
	SGS	M74HC4075	624-90
	Sharp	LR74HC4075	624-91
	Signetics	74HC4075	624-92
	TI	SN74HC4075	624-94
	Toshiba	**TC74HC4075**	*** 3307**
			624-95
74HC4078			
	Mitsubishi	M74HC4078	625-169
	Motorola	MC74HC4078	625-171
	National	MM74HC4078	625-175
	Panasonic	MN74HC4078	625-176
	SGS	M74HC4078	625-177
	Sharp	LR74HC4078	625-178
	TI	SN74HC4078A	625-180
	Toshiba	**TC74HC4078**	*** 3307**
			625-181
74HC4094			
	GE/RCA	**CD74HC4094**	
			*** 2631**
			634-146
	Signetics	**74HC4094**	*** 3003**
			634-147
	Toshiba	**TC74HC4094**	*** 3307**
			634-148
74HC42			
	GE/RCA	**CD74HC42**	*** 2632**
			614-59
	GoldStar	**GD74HC42**	*** 2695**
			614-61
	Hitachi	HD74HC42	614-62
	Motorola	MC74HC42	614-64
	National	MM74HC42	614-66
	Panasonic	MN74HC42	614-67
	SGS	M74HC42	614-68
	Sharp	LR74HC42	614-69

(Continued)

Base Number	Source	Device	Page-Line
74HC42			(Cont'd)
	Signetics	**74HC42**	*** 3003**
			614-70
	TI	SN74HC42	614-72
	Toshiba	**TC74HC42**	*** 3307**
			614-74
74HC423			
	GE/RCA	**CD74HC423**	*** 2632**
			632-163
	GoldStar	**GD74HC423**	*** 2696**
			632-166
	Hitachi	HD74HC423	632-168
	Motorola	MC74HC423A	632-172
	National	MM74HC423A	633-4
	SGS	M74HC423	633-7
	Signetics	**74HC423**	*** 3003**
			633-10
	Toshiba	**TC74HC423**	*** 3307**
			633-14
74HC4301			
	National	MM74HC4301	628-144
74HC4302			
	National	MM74HC4302	628-142
74HC4303			
	National	MM74HC4303	618-169
74HC4304			
	National	MM74HC4304	618-167
74HC4305			
	National	MM74HC4305	606-151
74HC4316			
	Motorola	MC74HC4316	905-30
	National	MM74HC4316	905-36
	Signetics	74HC4316	902-11
74HC4351			
	Motorola	MC74HC4351	913-48
	National	MM74HC4351	913-54
	Signetics	74HC4351	913-63
74HC4352			
	Motorola	MC74HC4352	912-14
	National	MM74HC4352	912-20
	Signetics	74HC4352	912-26
74HC4353			
	Motorola	MC74HC4353	908-35
	Signetics	74HC4353	906-8
74HC442			
	Hitachi	HD74HC442	638-19
74HC443			
	Hitachi	HD74HC443	638-20
74HC444			
	Hitachi	HD74HC444	638-21
74HC4510			
	GE/RCA	**CD74HC4510**	
			*** 2632**
			612-146
	Signetics	**74HC4510**	*** 3003**
			612-147
74HC4511			
	GE/RCA	**CD74HC4511**	
			*** 2632**
			617-8
	Hitachi	HD74HC4511	617-9
	Motorola	MC74HC4511	617-11
	National	MM74HC4511	617-14
	SGS	M74HC4511	617-16
	Sharp	LR74HC4511	617-17
	Signetics	**74HC4511**	*** 3003**
			617-18
	Toshiba	**TC74HC4511**	*** 3307**
			617-19
74HC4514			
	GE/RCA	**CD74HC4514**	
			*** 2632**
			616-12
	Hitachi	HD74HC4514	616-14
	Motorola	MC74HC4514	616-16
	National	MM74HC4514	616-19
	SGS	M74HC4514	616-20
	Sharp	LR74HC4514	616-62
	Signetics	**74HC4514**	*** 3003**
			616-21
	TI	SN74HC4514	616-63
	Toshiba	**TC74HC4514**	*** 3307**
			616-64

Base Number	Source	Device	Page-Line
74HC4515			
	GE/RCA	**CD74HC4515**	
			*** 2632**
			616-13
	Hitachi	HD74HC4515	616-59
	Mitsubishi	M74HC4515	615-36
	Motorola	MC74HC4515	616-17
	Signetics	**74HC4515**	*** 3003**
			616-22
	TI	SN74HC4515	616-60
	Toshiba	**TC74HC4515**	*** 3307**
			616-61
74HC4516			
	GE/RCA	**CD74HC4516**	
			*** 2632**
			609-79
	Signetics	**74HC4516**	*** 3003**
			609-96
74HC4518			
	GE/RCA	**CD74HC4518**	
			*** 2632**
			613-20
	Hitachi	HD74HC4518	613-21
	SGS	M74HC4518	613-24
	Signetics	74HC4518	613-25
	Toshiba	**TC74HC4518**	*** 3307**
			613-26
74HC4520			
	GE/RCA	**CD74HC4520**	
			*** 2632**
			609-162
	Hitachi	HD74HC4520	609-168
	SGS	M74HC4520	610-18
	Signetics	**74HC4520**	*** 3003**
			609-173
	Toshiba	**TC74HC4520**	*** 3307**
			609-163
74HC4538			
	GE/RCA	**CD74HC4538**	
			*** 2632**
			632-164
	Hitachi	HD74HC4538	632-169
	Mitsubishi	M74HC4538	638-4
	Motorola	MC74HC4538	632-173
	National	MM74HC4538	633-5
	SGS	M74HC4538	633-8
	Signetics	**74HC4538**	*** 3003**
			633-11
	Toshiba	**TC74HC4538**	*** 3307**
			633-15
74HC4543			
	GE/RCA	**CD74HC4543**	
			*** 2632**
			616-127
	Hitachi	HD74HC4543	616-128
	Mitsubishi	M74HC4543	614-52
	Motorola	MC74HC4543	616-130
			979-100
	National	MM74HC4543	617-15
	SGS	M74HC4543	616-131
	Sharp	LR74HC4543	616-132
	Signetics	**74HC4543**	*** 3003**
			616-133
	Toshiba	**TC74HC4543**	*** 3307**
			616-134
74HC4724			
	TI	SN74HC4724	629-15
74HC490			
	Hitachi	HD74HC490	613-3
	TI	SN74HC490	613-12
74HC51			
	GoldStar	**GD74HC51**	*** 2695**
			624-40
	Hitachi	HD74HC51	624-41
	Motorola	MC74HC51	624-43
	National	MM74HC51	624-45
	Panasonic	MN74HC51	624-46
	SGS	M74HC51	624-47
	Sharp	LR74HC51	624-48
	TI	SN74HC51	624-50
	Toshiba	**TC74HC51**	*** 3307**
			624-51
74HC521			
	National	MM74HC521	603-90

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74HC533			
	GE/RCA	**CD74HC533**	* **2632**
			628-75
	GoldStar	**GD74HC533**	* **2696**
			628-77
	Hitachi	HD74HC533	628-79
	Motorola	MC74HC533	628-84
	National	MM74HC533	628-88
	Samsung	74HC533	628-90
	SGS	M74HC533	628-92
	Sharp	LR74HC533	628-93
	Signetics	**74HC533**	* **3003**
			628-95
	TI	SN74HC533	628-99
	Toshiba	**TC74HC533**	* **3307**
			628-101
		TC74HC533A	* **3307**
			627-57
74HC534			
	GE/RCA	**CD74HC534**	* **2631**
			619-64
	GoldStar	**GD74HC534**	* **2696**
			619-66
	Hitachi	HD74HC534	619-68
	Motorola	MC74HC534	619-74
	National	MM74HC534	619-78
	Samsung	74HC534	619-80
	SGS	M74HC534	619-82
	Sharp	LR74HC534	619-84
	Signetics	**74HC534**	* **3003**
			619-86
	TI	SN74HC534	619-90
	Toshiba	**TC74HC534**	* **3307**
			619-92
74HC540			
	GE/RCA	**CD74HC540**	* **2631**
			606-181
	GoldStar	**GD74HC540**	* **2696**
			606-183
	Hitachi	HD74HC540	606-184
	Motorola	MC74HC540	607-3
	Samsung	74HC540	607-5
	SGS	M74HC540	607-7
	Signetics	**74HC540**	* **3003**
			607-9
	TI	SN74HC540	607-12
	Toshiba	**TC74HC540**	* **3307**
			607-13
74HC541			
	GE/RCA	**CD74HC541**	* **2631**
			606-182
	GoldStar	**GD74HC541**	* **2696**
			641-132
	Hitachi	HD74HC541	606-185
	Motorola	MC74HC541	607-4
	Samsung	74HC541	607-6
	SGS	M74HC541	607-8
	Sharp	LR74HC541	641-143
	Signetics	**74HC541**	* **3003**
			607-10
	TI	SN74HC541	641-150
	Toshiba	**TC74HC541**	* **3307**
			641-154
74HC543			
	National	MM74HC543	642-26
74HC544			
	National	MM74HC544	642-27
74HC550			
	Motorola	MC74HC550	640-167
	National	MM74HC550	642-56
74HC551			
	Motorola	MC74HC551	640-166
	National	MM74HC551	642-57
74HC563			
	GE/RCA	**CD74HC563**	* **2632**
			628-76
	GoldStar	**GD74HC563**	* **2696**
			628-78
	Hitachi	HD74HC563	628-80
	Motorola	MC74HC563	628-85
	National	MM74HC563	628-89
	Samsung	74HC563	628-91
	Sharp	LR74HC563	628-94
	Signetics	**74HC563**	* **3003**
			628-96
	TI	SN74HC563	628-100

(Continued)

Base Number	Source	Device	Page-Line
74HC563			(Cont'd)
	Toshiba	**TC74HC563**	* **3307**
			628-102
74HC564			
	GE/RCA	**CD74HC564**	* **2631**
			619-65
	GoldStar	**GD74HC564**	* **2696**
			619-67
	Hitachi	HD74HC564	619-69
	Motorola	MC74HC564	619-75
	National	MM74HC564	619-79
	Samsung	74HC564	619-81
	SGS	M74HC564	619-83
	Sharp	LR74HC564	619-85
	Signetics	**74HC564**	* **3003**
			619-87
	TI	SN74HC564	619-91
	Toshiba	**TC74HC564**	* **3307**
			619-93
74HC573			
	GE/RCA	**CD74HC573**	* **2632**
			627-126
	GoldStar	**GD74HC573**	* **2696**
			627-128
	Hitachi	HD74HC573	627-130
	Motorola	MC74HC573	627-135
	National	MM74HC573	627-139
	Samsung	74HC573	627-142
	SGS	M74HC573	627-144
	Signetics	**74HC573**	* **3003**
			627-147
	TI	SN74HC573	627-151
	Toshiba	**TC74HC573**	* **3307**
			627-153
74HC574			
	GE/RCA	**CD74HC574**	* **2631**
			620-24
	GoldStar	**GD74HC574**	* **2696**
			620-26
	Hitachi	HD74HC574	620-28
	Motorola	MC74HC574	620-33
	National	MM74HC574	620-37
	Samsung	74HC574	620-40
	SGS	M74HC574	620-42
	Sharp	LR74HC574	620-44
	Signetics	**74HC574**	* **3003**
			620-46
	TI	SN74HC574	620-49
	Toshiba	**TC74HC574**	* **3307**
			620-51
74HC58			
	GoldStar	**GD74HC58**	* **2695**
			625-10
	Motorola	MC74HC58	624-20
	National	MM74HC58	624-22
	Sharp	LR74HC58	624-23
	Signetics	**74HC58**	* **3003**
			625-20
74HC583			
	GE/RCA	**CD74HC583**	* **2632**
			602-2
	Signetics	**74HC583**	* **3003**
			602-3
74HC589			
	Hitachi	HD74HC589	635-109
	Motorola	MC74HC589	635-111
			1394-55
	National	MM74HC589	635-113
74HC590			
	GoldStar	**GD74HC590**	* **2696**
			610-127
	Hitachi	HD74HC590	610-128
	Motorola	MC74HC590	610-129
	National	MM74HC590	610-131
	TI	SN74HC590	610-133
	Toshiba	**TC74HC590**	* **3307**
			610-134
74HC592			
	Hitachi	HD74HC592	610-116
	Motorola	MC74HC592	610-118
	National	MM74HC592	610-122
	SGS	M74HC592	610-105
	Toshiba	**TC74HC592**	* **3307**
			610-124

Base Number	Source	Device	Page-Line
74HC593			
	Hitachi	HD74HC593	610-117
	Motorola	MC74HC593	610-119
	National	MM74HC593	610-123
	SGS	M74HC593	610-106
	Toshiba	**TC74HC593**	* **3307**
			610-125
74HC594			
	TI	SN74HC594	635-105
74HC595			
	Hitachi	HD74HC595	635-97
	Motorola	MC74HC595	635-99
			1394-60
	National	MM74HC595	635-101
	SGS	M74HC595	635-102
	Sharp	LR74HC595	635-103
	TI	SN74HC595	635-106
	Toshiba	**TC74HC595**	* **3307**
			635-108
74HC597			
	GE/RCA	**CD74HC597**	* **2631**
			635-26
	Hitachi	HD74HC597	635-86
	Motorola	MC74HC597	635-88
			1394-56
	National	MM74HC597	635-28
	SGS	M74HC597	635-89
	Sharp	LR74HC597	635-90
	Signetics	**74HC597**	* **3003**
			635-29
	Toshiba	**TC74HC597**	* **3307**
			635-91
74HC604			
	TI	SN74HC604	631-169
74HC620			
	Hitachi	HD74HC620	640-168
	Motorola	MC74HC620	640-152
			641-27
	TI	SN74HC620	641-32
	Toshiba	**TC74HC620**	* **3307**
			640-169
74HC623			
	Hitachi	HD74HC623	641-134
	Motorola	MC74HC623	640-154
			641-28
	TI	SN74HC623	641-151
	Toshiba	**TC74HC623**	* **3307**
			641-155
74HC640			
	GE/RCA	**CD74HC640**	* **2631**
			641-59
	GoldStar	**GD74HC640**	* **2696**
			641-20
	Hitachi	HD74HC640	641-61
	Mitsubishi	M74HC640	641-62
	Motorola	MC74HC640	641-64
	Samsung	74HC640	641-65
	SGS	M74HC640	640-45
	Sharp	LR74HC640	641-66
	Signetics	**74HC640**	* **3003**
			641-68
	TI	SN74HC640	641-71
	Toshiba	**TC74HC640**	* **3307**
			640-146
74HC643			
	GE/RCA	**CD74HC643**	* **2631**
			642-8
	GoldStar	**GD74HC643**	* **2696**
			641-60
	Hitachi	HD74HC643	642-9
	Motorola	MC74HC643	641-29
	Samsung	74HC643	641-30
	SGS	M74HC643	641-31
	Sharp	LR74HC643	641-67
	Signetics	**74HC643**	* **3003**
			642-10
	TI	SN74HC643	641-72
	Toshiba	**TC74HC643**	* **3307**
			640-147
74HC645			
	TI	SN74HC645	641-152

Base Number	Source	Device	Page-Line
74HC646			
	GE/RCA	**CD74HC646**	* **2631**
			640-117
	GoldStar	**GD74HC646**	* **2696**
			640-118
	Hitachi	HD74HC646	640-119
	Motorola	MC74HC646	640-123
	National	MM74HC646	640-127
	Samsung	74HC646	640-128
	SGS	M74HC646	640-129
	Signetics	**74HC646**	* **3003**
			640-130
	TI	SN74HC646	640-131
	Toshiba	**TC74HC646**	* **3307**
			640-133
74HC648			
	GE/RCA	**CD74HC648**	* **2631**
			640-69
	GoldStar	**GD74HC648**	* **2696**
			640-70
	Hitachi	HD74HC648	640-71
	Motorola	MC74HC648	640-75
	National	MM74HC648	640-79
	Samsung	74HC648	640-80
	SGS	M74HC648	640-81
	Signetics	**74HC648**	* **3003**
			640-82
	TI	SN74HC648	640-83
	Toshiba	**TC74HC648**	* **3307**
			640-85
74HC651			
	Hitachi	HD74HC651	640-72
	Motorola	MC74HC651	640-76
			640-77
	SGS	M74HC651	640-46
	TI	SN74HC651	640-84
	Toshiba	**TC74HC651**	* **3307**
			640-86
74HC652			
	Hitachi	HD74HC652	640-120
	Motorola	MC74HC652	640-124
			640-125
	SGS	M74HC652	640-47
	TI	SN74HC652	640-132
	Toshiba	**TC74HC652**	* **3307**
			640-134
74HC658			
	Motorola	MC74HC658	640-161
	TI	SN74HC658	642-75
74HC659			
	Motorola	MC74HC659	640-162
	TI	SN74HC659	642-76
74HC664			
	Motorola	MC74HC664	640-163
	TI	SN74HC664	642-77
74HC665			
	Motorola	MC74HC665	640-164
	TI	SN74HC665	642-78
74HC668			
	Hitachi	HD74HC668	612-156
74HC669			
	Hitachi	HD74HC669	609-160
	Mitsubishi	M74HC669	611-91
74HC670			
	GE/RCA	**CD74HC670**	* **2631**
			630-22
	GoldStar	**GD74HC670**	* **2696**
			637-98
	Hitachi	HD74HC670	637-99
	Mitsubishi	M74HC670	630-4
	Signetics	**74HC670**	* **3003**
			630-23
	Toshiba	**TC74HC670**	* **3307**
			630-24
74HC673			
	Hitachi	HD74HC673	636-14
74HC674			
	Hitachi	HD74HC674	636-13
74HC677			
	Hitachi	HD74HC677	602-94
	TI	SN74HC677	602-96
74HC678			
	Hitachi	HD74HC678	602-95
	TI	SN74HC678	602-97
74HC679			
	Hitachi	HD74HC679	602-86
	TI	SN74HC679	602-92

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74HC680			
	Hitachi	HD74HC680	602-87
	TI	SN74HC680	602-93
74HC682			
	Hitachi	HD74HC682	602-149
	TI	SN74HC682	603-7
74HC684			
	Hitachi	HD74HC684	602-150
	TI	SN74HC684	603-8
74HC686			
	Hitachi	HD74HC686	602-151
74HC688			
	GE/RCA	**CD74HC688**	⋆ **2632** 602-105
	GoldStar	**GD74HC688**	⋆ **2696** 602-148
	Hitachi	HD74HC688	602-106
	Motorola	MC74HC688	603-1
	National	MM74HC688	603-3
	SGS	M74HC688	603-4
	Sharp	LR74HC688	603-5
	Signetics	**74HC688**	⋆ **3003** 602-107
	TI	SN74HC688	603-9
	Toshiba	**TC74HC688**	⋆ **3307** 602-108
74HC690			
	SGS	M74HC690	613-47
	Toshiba	**TC74HC690**	⋆ **3307** 612-141
74HC691			
	SGS	M74HC691	610-27
	Toshiba	**TC74HC691**	⋆ **3307** 610-41
74HC692			
	SGS	M74HC692	613-48
	Toshiba	**TC74HC692**	⋆ **3307** 612-142
74HC693			
	SGS	M74HC693	610-28
	Toshiba	**TC74HC693**	⋆ **3307** 610-42
74HC696			
	SGS	M74HC696	612-167
	Toshiba	**TC74HC696**	⋆ **3307** 612-139
74HC697			
	SGS	M74HC697	611-89
	Toshiba	**TC74HC697**	⋆ **3307** 610-43
74HC698			
	SGS	M74HC698	612-168
	Toshiba	**TC74HC698**	⋆ **3307** 612-140
74HC699			
	SGS	M74HC699	610-29
	Toshiba	**TC74HC699**	⋆ **3307** 610-44
74HC7001			
	TI	SN74HC7001	622-70
74HC7002			
	TI	SN74HC7002	625-131
74HC7006			
	TI	SN74HC7006	642-69
74HC7008			
	TI	SN74HC7008	637-15
74HC7022			
	TI	SN74HC7022	614-35
74HC7030			
	GE/RCA	**CD74HC7030**	⋆ **2631** 630-57
	Signetics	**74HC7030**	⋆ **3003** 1304-15
74HC7032			
	TI	SN74HC7032	624-143
74HC7038			
	GE/RCA	**CD74HC7038**	⋆ **2631** 642-141
74HC7046			
	GE/RCA	**CD74HC7046**	⋆ **2632** 633-113
	Signetics	**74HC7046A**	⋆ **3003** 1190-61

Base Number	Source	Device	Page-Line
74HC7074			
	TI	SN74HC7074	637-140
74HC7075			
	TI	SN74HC7075	642-74
74HC7076			
	TI	SN74HC7076	642-73
74HC7266			
	GE/RCA	**CD74HC7266**	⋆ **2631** 626-77
	Motorola	MC74HC7266	626-106
	SGS	M74HC7266	626-82
	Signetics	74HC7266	626-84
	TI	SN74HC7266	626-87
	Toshiba	**TC74HC7266**	⋆ **3307** 626-88
74HC7292			
	SGS	M74HC7292	611-81
	Toshiba	**TC74HC7292**	⋆ **3307** 637-126 637-78
74HC7294			
	SGS	M74HC7294	611-82
	Toshiba	**TC74HC7294**	⋆ **3307** 637-127 637-79
74HC73			
	GE/RCA	**CD74HC73**	⋆ **2631** 621-108
	GoldStar	**GD74HC73**	⋆ **2695** 621-110
	Hitachi	HD74HC73	621-112
	Motorola	MC74HC73	621-116
	National	MM74HC73	621-120
	SGS	M74HC73	621-123
	Signetics	**74HC73**	⋆ **3003** 621-126
	TI	SN74HC73	621-129
	Toshiba	**TC74HC73**	⋆ **3307** 621-131
74HC7373			
	Motorola	MC74HC7373	627-73
74HC74			
	GE/RCA	**CD74HC74**	⋆ **2631** 617-73
	GoldStar	**GD74HC74**	⋆ **2695** 617-74
	Hitachi	HD74HC74	617-75
	Motorola	MC74HC74	617-77
	National	MM74HC74	617-79
	Panasonic	MN74HC74	617-80
	SGS	M74HC74	617-81
	Sharp	LR74HC74	617-82
	Signetics	**74HC74**	⋆ **3003** 617-83
	TI	SN74HC74	617-85
	Toshiba	**TC74HC74**	⋆ **3307** 617-86
74HC75			
	GE/RCA	**CD74HC75**	⋆ **2632** 628-147
	GoldStar	**GD74HC75**	⋆ **2695** 628-148
	Hitachi	HD74HC75	628-149
	Motorola	MC74HC75	628-151
	National	MM74HC75	628-153
	Panasonic	MN74HC75	628-154
	SGS	M74HC75	628-155
	Sharp	LR74HC75	628-156
	Signetics	**74HC75**	⋆ **3003** 628-157
	TI	SN74HC75	628-159
	Toshiba	**TC74HC75**	⋆ **3307** 628-160
74HC7533			
	Motorola	MC74HC7533	627-74
74HC7563			
	Motorola	MC74HC7563	627-75
74HC7573			
	Motorola	MC74HC7573	627-76
74HC7597			
	Signetics	74HC7597	636-70
74HC76			
	GoldStar	**GD74HC76**	⋆ **2695** 620-154
	Hitachi	HD74HC76	620-156
	Motorola	MC74HC76	620-160

(Continued)

Base Number	Source	Device	Page-Line
74HC76			(Cont'd)
	National	MM74HC76	621-3
	Panasonic	MN74HC76	621-5
	SGS	M74HC76	621-7
	Sharp	LR74HC76	621-9
	TI	SN74HC76	621-13
	Toshiba	**TC74HC76**	⋆ **3307** 621-16
74HC77			
	Hitachi	HD74HC77	626-128
	National	MM74HC77	629-9
	SGS	M74HC77	626-154
	TI	SN74HC77	626-129
	Toshiba	**TC74HC77**	⋆ **3307** 626-130
74HC7793			
	Motorola	MC74HC7793	627-81 627-83
74HC78			
	Hitachi	HD74HC78	621-93
	TI	SN74HC78	621-97
74HC7873			
	Motorola	MC74HC7873	626-146
74HC793			
	Motorola	MC74HC793	627-82 628-165
74HC804			
	TI	SN74HC804	617-49
74HC805			
	TI	SN74HC805	617-50
74HC808			
	TI	SN74HC808	617-48
74HC83			
	Hitachi	HD74HC83	602-39
74HC832			
	TI	SN74HC832	617-51
74HC85			
	GE/RCA	**CD74HC85**	⋆ **2632** 603-84
	GoldStar	**GD74HC85**	⋆ **2695** 602-139
	Hitachi	HD74HC85	603-85
	Motorola	MC74HC85	603-87
	National	MM74HC85	603-91
	Panasonic	MN74HC85	603-92
	SGS	M74HC85	603-93
	Sharp	LR74HC85	603-94
	Signetics	**74HC85**	⋆ **3003** 603-95
	TI	SN74HC85	603-96
	Toshiba	**TC74HC85**	⋆ **3307** 603-97
74HC86			
	GE/RCA	**CD74HC86**	⋆ **2631** 626-15
	GoldStar	**GD74HC86**	⋆ **2695** 626-17
	Hitachi	HD74HC86	626-19
	Motorola	MC74HC86	626-23
	National	MM74HC86	626-25
	Panasonic	MN74HC86	626-26
	SGS	M74HC86	626-27
	Sharp	LR74HC86	626-28
	Signetics	**74HC86**	⋆ **3003** 626-29
	TI	SN74HC86	626-33
	Toshiba	**TC74HC86**	⋆ **3307** 626-35
74HC873			
	Motorola	MC74HC873	626-150
74HC881			
	Hitachi	HD74HC881	603-29
74HC9000			
	Motorola	MC74HC9000	637-129 637-130
74HC91			
	Hitachi	HD74HC91	635-65
74HC9114			
	Motorola	HC74HC9114	607-86
74HC93			
	GE/RCA	**CD74HC93**	⋆ **2632** 610-31
	GoldStar	**GD74HC93**	⋆ **2695** 610-32
	Hitachi	HD74HC93	610-33
	Signetics	**74HC93**	⋆ **3003** 610-34

Base Number	Source	Device	Page-Line
74HC9373			
	Motorola	MC74HC9373	628-32
74HC942			
	National	MM74HC942	1195-108 ¶ 432-7 ¶ 433-27
74HC95			
	Hitachi	HD74HC95	634-85
74HC9533			
	Motorola	MC74HC9533	627-77
74HC9563			
	Motorola	MC74HC9563	627-78
74HC9573			
	Motorola	MC74HC9573	627-79
74H00	National	DM74H00	672-129
74H000			
	OKI	74H000	4057-52
74H01	National	DM74H01	673-79
74H04	National	DM74H04	659-106
74H08	National	DM74H08	671-23
74H10	National	DM74H10	672-49
74H106			
	National	DM74H106	670-16
74H11	National	DM74H11	670-122
74H20	National	DM74H20	671-119
74H21	National	DM74H21	670-77
74H30	National	DM74H30	673-138
74H40	National	DM74H40	671-161
74H50	National	DM74H50	674-47
74H51	National	DM74H51	674-13
74H74	National	DM74H74	667-5
74LS00	Fairchild	74LS00	672-131
	GoldStar	**GD74LS00**	⋆ **2693** 672-132
	Hitachi	HD74LS00	672-133
	Mitsubishi	M74LS00	672-134
	Motorola	SN74LS00	672-137
	National	DM74LS00	672-139
	Panasonic	DN74LS00	672-140
	SGS	T74LS00	672-142
		74LS00	672-146
	Signetics	**74LS00**	⋆ **3003** 672-150
	TI	SN74LS00	672-152
74LS01	Hitachi	HD74LS01	673-82
	Motorola	SN74LS01	673-86
	National	DM74LS01	673-90
	Panasonic	DN74LS01	673-92
	SGS	T74LS01	672-143
		74LS01	672-147
	Signetics	**74LS01**	⋆ **3003** 673-98
	TI	SN74LS01	673-101
74LS02	Fairchild	74LS02	675-134
	GoldStar	**GD74LS02**	⋆ **2693** 675-136
	Hitachi	HD74LS02	675-137
	Mitsubishi	M74LS02	675-73
	Motorola	SN74LS02	675-140
	National	DM74LS02	675-143
	Panasonic	DN74LS02	675-144
	SGS	T74LS02	675-75
		74LS02	675-149
	Signetics	**74LS02**	⋆ **3003** 675-152
	TI	SN74LS02	675-155
74LS03	Fairchild	74LS03	673-81
	Hitachi	HD74LS03	673-83
	Mitsubishi	M74LS03	672-135
	Motorola	SN74LS03	673-87
	National	DM74LS03	673-91
	Panasonic	DN74LS03	673-93
	SGS	T74LS03A	672-144
		74LS03	673-95
	TI	SN74LS03	673-102
74LS04	Fairchild	74LS04	659-108
	GoldStar	**GD74LS04**	⋆ **2693** 659-109
	Hitachi	HD74LS04	659-110
	Mitsubishi	M74LS04	659-111
	Motorola	SN74LS04	659-114
	National	DM74LS04	659-116
	Panasonic	DN74LS04	659-117
	SGS	T74LS04	659-122
		74LS04	659-125

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74LS04			(Cont'd)
	Signetics	**74LS04**	⋆ **3003**
			659-127
	TI	SN74LS04	659-129
74LS05	Fairchild	74LS05	659-154
	GoldStar	**GD74LS05**	⋆ **2693**
			659-155
	Hitachi	HD74LS05	659-158
	Mitsubishi	M74LS05	659-112
	Motorola	SN74LS05	659-160
	National	DM74LS05	659-162
	Panasonic	DN74LS05	659-163
	SGS	T74LS05A	659-123
		74LS05	659-165
	Signetics	**74LS05**	⋆ **3003**
			659-167
	TI	SN74LS05	659-169
74LS06	**GoldStar**	**GD74LS06**	⋆ **2693**
			659-156
	Mitsubishi	M74LS06	666-55
74LS07	**GoldStar**	**GD74LS07**	⋆ **2693**
			658-128
	Mitsubishi	M74LS07	666-38
74LS08	Fairchild	74LS08	671-25
	GoldStar	**GD74LS08**	⋆ **2693**
			671-26
	Hitachi	HD74LS08	671-27
	Mitsubishi	M74LS08	671-28
	Motorola	SN74LS08	671-31
	National	DM74LS08	671-33
	Panasonic	DN74LS08	671-34
	SGS	T74LS08	671-36
		74LS08	671-38
	Signetics	**74LS08**	⋆ **3003**
			671-40
	TI	SN74LS08	671-42
74LS09	Fairchild	74LS09	671-63
	GoldStar	**GD74LS09**	⋆ **2693**
			671-64
	Hitachi	HD74LS09	671-65
	Mitsubishi	M74LS09	671-29
	Motorola	SN74LS09	671-67
	National	DM74LS09	671-69
	Panasonic	DN74LS09	671-71
	SGS	T74LS09	671-37
		74LS09	671-73
	Signetics	**74LS09**	⋆ **3003**
			671-75
	TI	SN74LS09	671-77
74LS10	Fairchild	74LS10	672-51
	GoldStar	**GD74LS10**	⋆ **2693**
			672-52
	Hitachi	HD74LS10	672-53
	Mitsubishi	M74LS10	672-54
	Motorola	SN74LS10	672-56
	National	DM74LS10	672-58
	Panasonic	DN74LS10	672-59
	SGS	T74LS10	672-61
		74LS10	672-64
	Signetics	**74LS10**	⋆ **3003**
			672-67
	TI	SN74LS10	672-69
74LS107			
	GoldStar	**GD74LS107**	⋆ **2693**
			669-112
	Hitachi	HD74LS107A	669-114
	Motorola	SN74LS107A	669-117
	National	DM74LS107A	669-121
	Panasonic	DN74LS107	669-123
	Signetics	**74LS107**	⋆ **3003**
			669-127
	TI	SN74LS107A	669-131
74LS109			
	Fairchild	74LS109	669-72
	GoldStar	**GD74LS109**	⋆ **2693**
			669-73
	Hitachi	HD74LS109A	669-74
	Motorola	SN74LS109A	669-76
	National	DM74LS109	669-78
	Panasonic	DN74LS109	669-79
	Signetics	**74LS109**	⋆ **3003**
			669-81
	TI	SN74LS109A	669-83
74LS11	Fairchild	74LS11	670-124
	GoldStar	**GD74LS11**	⋆ **2693**
			670-125
	Hitachi	HD74LS11	670-98
	Motorola	SN74LS11	670-127
	National	DM74LS11	670-129
	Panasonic	DN74LS11	670-130
	SGS	T74LS11	670-132
		74LS11	670-135
	Signetics	**74LS11**	⋆ **3003**
			670-137
	TI	SN74LS11	670-139
74LS112			
	Fairchild	74LS112	670-18
	GoldStar	**GD74LS112**	⋆ **2693**
			670-19
	Hitachi	HD74LS112	670-20
	Motorola	SN74LS112A	670-22
	National	DM74LS112	670-24
	Panasonic	DN74LS112	670-25
	Signetics	**74LS112**	⋆ **3003**
			670-27
	TI	SN74LS112A	670-28
74LS113			
	Hitachi	HD74LS113	669-162
	Motorola	SN74LS113A	669-164
	National	DM74LS113A	669-166
	Panasonic	DN74LS113	669-167
	Signetics	**74LS113**	⋆ **3003**
			669-169
	TI	SN74LS113A	669-170
74LS114			
	Hitachi	HD74LS114	670-46
	Motorola	SN74LS114A	670-48
	National	DM74LS114A	670-50
	Panasonic	DN74LS114	670-51
	SGS	T74LS114	670-53
	TI	SN74LS114A	670-54
74LS12	Fairchild	74LS12	672-86
	Hitachi	HD74LS12	672-87
	Motorola	SN74LS12	672-89
	National	DM74LS12	672-91
	Panasonic	DN74LS12	672-92
	SGS	T74LS12	672-62
		74LS12	672-65
	TI	SN74LS12	672-94
74LS122			
	Hitachi	HD74LS122	682-12
	Mitsubishi	M74LS122	682-13
	Motorola	SN74LS122	682-15
	National	DM74LS122	682-16
	TI	SN74LS122	682-18
74LS123			
	GoldStar	**GD74LS123**	⋆ **2693**
			682-42
	Hitachi	HD74LS123	682-43
	Mitsubishi	M74LS123	682-44
	Motorola	SN74LS123	682-47
	National	DM74LS123	682-48
	Panasonic	DN74LS123	682-49
	TI	SN74LS123	682-51
			¶ 406-30
74LS125			
	Fairchild	74LS125	658-70
	GoldStar	**GD74LS125A**	⋆ **2693**
			658-71
	Hitachi	HD74LS125A	658-72
	Mitsubishi	M74LS125	658-73
	Motorola	SN74LS125A	658-75
	National	DM74LS125A	658-77
	Panasonic	DN74LS125A	658-78
	SGS	T74LS125	658-107
		74LS125A	658-80
	Signetics	**74LS125A**	⋆ **3003**
			658-82
	TI	SN74LS125A	658-84
74LS126			
	Fairchild	74LS126	658-93
	Hitachi	HD74LS126A	658-94
	Mitsubishi	M74LS126	658-95
	Motorola	SN74LS126A	658-97
	National	DM74LS126	658-99
	SGS	T74LS126	658-106
		74LS126	658-101
	Signetics	**74LS126A**	⋆ **3003**
			658-103
74LS126			(Cont'd)
	TI	SN74LS126A	658-105
74LS13	Fairchild	74LS13	688-128
	Hitachi	HD74LS13	688-129
	Motorola	SN74LS13	688-132
	National	DM74LS13	688-134
	Panasonic	DN74LS13	689-1
	SGS	T74LS13	689-3
		74LS13	659-62
	Signetics	**74LS13**	⋆ **3003**
			689-7
	TI	SN74LS13	689-9
74LS132			
	Fairchild	74LS132	689-33
	GoldStar	**GD74LS132**	⋆ **2693**
			689-34
	Hitachi	HD74LS132	689-35
	Motorola	SN74LS132	689-38
	National	DM74LS132	689-40
	Panasonic	DN74LS132	689-41
	SGS	T74LS132	659-64
		74LS132	689-5
	Signetics	**74LS132**	⋆ **3003**
			689-44
	TI	SN74LS132	689-46
74LS133			
	Fairchild	74LS133	673-173
	Motorola	SN74LS133	673-175
	SGS	T74LS133	673-176
		74LS133	673-177
74LS136			
	Fairchild	74LS136	676-15
	Hitachi	HD74LS136	676-16
	Motorola	SN74LS136	676-18
	National	DM74LS136	676-20
	Panasonic	DN74LS136	676-21
	SGS	T74LS136	676-8
		74LS136	676-23
	Signetics	**74LS136**	⋆ **3003**
			676-25
	TI	SN74LS136	676-27
74LS137			
	Mitsubishi	M74LS137	665-95
	Motorola	SN74LS137	665-96
	TI	SN74LS137	665-98
74LS138			
	Fairchild	74LS138	665-59
	GoldStar	**GD74LS138**	⋆ **2693**
			665-61
	Hitachi	HD74LS138	665-62
	Motorola	SN74LS138	665-64
	National	DM74LS138	665-66
			871-12
	Panasonic	DN74LS138	665-67
	SGS	T74LS138	665-40
		74LS138	665-69
	Signetics	**74LS138**	⋆ **3003**
			665-71
	TI	SN74LS138	665-73
			871-14
74LS139			
	Fairchild	74LS139	664-132
	GoldStar	**GD74LS139**	⋆ **2693**
			664-135
	Hitachi	HD74LS139	664-137
	Mitsubishi	M74LS139	664-140
	Motorola	SN74LS139	664-144
	National	DM74LS139	664-150
	Panasonic	DN74LS139	664-153
	SGS	T74LS139	664-94
		74LS139	665-6
	Signetics	**74LS139**	⋆ **3003**
			665-12
	TI	SN74LS139A	665-18
74LS14	Fairchild	74LS14	689-66
	GoldStar	**GD74LS14**	⋆ **2693**
			689-67
	Hitachi	HD74LS14	689-68
	Motorola	SN74LS14	689-71
	National	DM74LS14	689-73
	Panasonic	DN74LS14	689-74
	SGS	T74LS14	660-1
		74LS14	689-76
	Signetics	**74LS14**	⋆ **3003**
			689-78
	TI	SN74LS14	689-80
74LS145			
	GoldStar	**GD74LS145**	⋆ **2693**
			664-52
	Hitachi	HD74LS145	664-53
	Mitsubishi	M74LS145	664-34
	Motorola	SN74LS145	664-54
	Panasonic	DN74LS145	664-55
	TI	SN74LS145	664-57
74LS147			
	Mitsubishi	M74LS147	690-89
	Motorola	SN74LS147	690-90
	TI	SN74LS147	690-92
74LS148			
	GoldStar	**GD74LS148**	⋆ **2693**
			665-124
	Hitachi	HD74LS148	690-20
	Mitsubishi	M74LS148	690-21
	Motorola	SN74LS148	690-23
	TI	SN74LS148	690-26
			877-59
74LS15	Fairchild	74LS15	670-152
	Hitachi	HD74LS15	670-153
	Motorola	SN74LS15	670-155
	National	DM74LS15	670-157
	Panasonic	DN74LS15	670-158
	SGS	T74LS15	670-133
		74LS15	670-160
	TI	SN74LS15	670-162
74LS151			
	Fairchild	74LS151	681-65
	GoldStar	**GD74LS151**	⋆ **2693**
			681-66
	Hitachi	HD74LS151A	681-67
	Motorola	SN74LS151	681-69
	National	DM74LS151	681-71
	Panasonic	DN74LS151	681-72
	SGS	T74LS151	681-31
		74LS151	681-74
	Signetics	**74LS151**	⋆ **3003**
			681-76
	TI	SN74LS151	681-78
74LS152			
	Hitachi	HD74LS152	681-88
	SGS	T74LS152	681-89
		74LS152	681-97
74LS153			
	Fairchild	74LS153	679-33
	GoldStar	**GD74LS153**	⋆ **2693**
			679-34
	Hitachi	HD74LS153	679-35
	Motorola	SN74LS153	679-37
	National	DM74LS153	679-39
	Panasonic	DN74LS153	679-40
	SGS	T74LS153	679-8
		74LS153	679-42
	Signetics	**74LS153**	⋆ **3003**
			679-46
	TI	SN74LS153	679-48
74LS154			
	GoldStar	**GD74LS154**	⋆ **2693**
			665-115
	Hitachi	HD74LS154	665-116
	National	DM74LS154	665-118
	Signetics	**74LS154**	⋆ **3003**
			665-120
74LS155			
	Fairchild	74LS155	664-133
	GoldStar	**GD74LS155**	⋆ **2693**
			664-136
	Hitachi	HD74LS155	664-138
	Mitsubishi	M74LS155	679-6
	Motorola	SN74LS155	664-145
	National	DM74LS155	664-151
	Panasonic	DN74LS155	665-1
	SGS	T74LS155	664-97
		74LS155	665-7
	Signetics	**74LS155**	⋆ **3003**
			665-13
	TI	SN74LS155A	665-19
74LS156			
	Fairchild	74LS156	664-134
	Hitachi	HD74LS156	664-139
	Mitsubishi	M74LS156	679-7
	Motorola	SN74LS156	664-146
	National	DM74LS156	664-152
	Panasonic	DN74LS156	665-2

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74LS156			(Cont'd)
	SGS	T74LS156	664-98
		74LS156	665-8
	Signetics	**74LS156**	⋆ **3003**
			665-14
	TI	SN74LS156	665-20
74LS157			
	Fairchild	74LS157	680-96
	GoldStar	**GD74LS157**	⋆ **2693**
			680-97
	Hitachi	HD74LS157	680-98
	Motorola	SN74LS157	680-100
	National	DM74LS157	680-102
	Panasonic	DN74LS157	680-103
	SGS	T74LS157	679-152
		74LS157	680-105
	Signetics	**74LS157**	⋆ **3003**
			680-107
	TI	SN74LS157	680-109
74LS158			
	Fairchild	74LS158	680-2
	GoldStar	**GD74LS158**	⋆ **2693**
			680-3
	Hitachi	HD74LS158	680-4
	Motorola	SN74LS158	680-6
	National	DM74LS158	680-8
	Panasonic	DN74LS158	680-9
	SGS	T74LS158	679-153
		74LS158	680-11
	Signetics	**74LS158**	⋆ **3003**
			680-13
	TI	SN74LS158	680-15
74LS16	**GoldStar**	**GD74LS16**	⋆ **2693**
			659-157
74LS160			
	Fairchild	74LS160	662-138
	Hitachi	HD74LS160A	662-139
	Mitsubishi	M74LS160A	662-140
	Motorola	SN74LS160A	662-142
	National	DM74LS160A	662-144
	Panasonic	DN74LS160A	662-145
	Signetics	**74LS160A**	⋆ **3003**
			662-147
	TI	SN74LS160A	662-149
74LS161			
	Fairchild	74LS161	660-144
	GoldStar	**GD74LS161A**	⋆ **2693**
			660-145
	Hitachi	HD74LS161A	660-146
	Mitsubishi	M74LS161A	660-147
	Motorola	SN74LS161A	660-149
	National	DM74LS161A	660-151
	Panasonic	DN74LS161A	660-152
	Signetics	**74LS161A**	⋆ **3003**
			660-154
	TI	SN74LS161A	660-156
74LS162			
	Fairchild	74LS162	662-169
	Hitachi	HD74LS162A	662-170
	Mitsubishi	M74LS162A	662-171
	Motorola	SN74LS162A	662-173
	National	DM74LS162	663-2
	Panasonic	DN74LS162	663-3
	Signetics	**74LS162A**	⋆ **3003**
			663-5
	TI	SN74LS162A	663-7
74LS163			
	Fairchild	74LS163	661-6
	GoldStar	**GD74LS163A**	⋆ **2693**
			661-7
	Hitachi	HD74LS163A	661-8
	Motorola	SN74LS163A	661-10
			¶ 415-27
	National	DM74LS163A	661-12
	Panasonic	DN74LS163A	661-13
	Signetics	**74LS163A**	⋆ **3003**
			661-15
	TI	SN74LS163A	661-17
74LS164			
	Fairchild	74LS164	683-71
			1395-36
	GoldStar	**GD74LS164**	⋆ **2693**
			683-72
	Hitachi	HD74LS164	683-73
			1395-38

(Continued)

Base Number	Source	Device	Page-Line
74LS164			(Cont'd)
	Motorola	SN74LS164	683-75
			1395-40
	National	DM74LS164	683-77
			1395-43
	Panasonic	DN74LS164	683-78
			1395-47
	SGS	T74LS164	678-55
		74LS164	683-79
	Signetics	**74LS164**	⋆ **3003**
			683-82
			1395-50
	TI	SN74LS164	683-84
74LS165			
	Fairchild	74LS165	683-114
			1394-105
	GoldStar	**GD74LS165**	⋆ **2693**
			683-115
	Hitachi	HD74LS165A	683-116
			1394-107
	Motorola	SN74LS165	683-118
			1395-2
			¶ 415-27
	TI	SN74LS165A	683-120
			1395-12
74LS166			
	GoldStar	**GD74LS166**	⋆ **2693**
			683-131
	Motorola	SN74LS166	683-133
			1395-3
	National	DM74LS166	683-135
			1395-5
	SGS	T74LS166	683-51
		74LS166	683-53
	TI	SN74LS166A	683-137
			1395-13
74LS168			
	Motorola	SN74LS168	663-68
	National	DM74LS168A	663-71
	SGS	T74LS168	663-73
		74LS168	662-52
	Signetics	**74LS168A**	⋆ **3003**
			663-76
74LS169			
	Fairchild	74LS169	661-124
	Motorola	SN74LS169	661-127
	National	DM74LS169A	661-129
	SGS	T74LS169	661-131
		74LS169	660-110
	Signetics	**74LS169A**	⋆ **3003**
			661-133
	TI	SN74LS169B	661-136
74LS17	**GoldStar**	**GD74LS17**	⋆ **2693**
			658-129
74LS170			
	Fairchild	74LS170	678-81
			1347-4
	Hitachi	HD74LS170	678-84
	Mitsubishi	M74LS170	678-86
	Motorola	SN74LS170	678-89
			1347-6
	National	DM74LS170	678-93
			1347-9
	Panasonic	DN74LS170	678-95
	SGS	T74LS170	678-62
		74LS170	678-98
			1347-11
	Signetics	**74LS170**	⋆ **3003**
			678-101
			1347-13
	TI	SN74LS170	678-105
			1347-16
74LS173			
	Fairchild	74LS173A	667-133
	Mitsubishi	M74LS173A	667-134
	Motorola	SN74LS173A	667-136
	National	DM74LS173	667-138
	Panasonic	DN74LS173	667-139
	Signetics	**74LS173**	⋆ **3003**
			667-141
	TI	SN74LS173A	667-143
74LS174			
	Fairchild	74LS174	667-173
	GoldStar	**GD74LS174**	⋆ **2693**
			667-174
	Hitachi	HD74LS174	667-175

(Continued)

Base Number	Source	Device	Page-Line
74LS174			(Cont'd)
	Motorola	SN74LS174	667-177
	National	DM74LS174	667-179
	Panasonic	DN74LS174	667-180
	SGS	T74LS174	667-145
		74LS174	668-1
	Signetics	**74LS174**	⋆ **3003**
			668-3
	TI	SN74LS174	668-5
74LS175			
	Fairchild	74LS175	667-56
	GoldStar	**GD74LS175**	⋆ **2693**
			667-57
	Hitachi	HD74LS175	667-58
	Motorola	SN74LS175	667-60
			¶ 415-27
	National	DM74LS175	667-62
			864-50
	Panasonic	DN74LS175	667-63
	SGS	T74LS175	667-29
		74LS175	667-65
	Signetics	**74LS175**	⋆ **3003**
			667-67
	TI	SN74LS175	667-69
74LS18	Mitsubishi	M74LS18	688-130
74LS181			
	Fairchild	74LS181	657-42
	Hitachi	HD74LS181	657-43
	Motorola	SN74LS181	657-45
	SGS	T74LS181	657-150
		74LS181	657-46
	Signetics	**74LS181**	⋆ **3003**
			657-48
	TI	SN74LS181	657-52
74LS182			
	Motorola	SN74LS182	657-84
74LS183			
	Motorola	SN74LS183	657-4
74LS189			
	TI	SN74LS189A	1348-20
74LS19	Mitsubishi	M74LS19	689-69
	TI	SN74LS19	689-81
74LS190			
	Fairchild	74LS190	663-134
	Hitachi	HD74LS190	663-135
	Mitsubishi	M74LS190	663-136
	Motorola	SN74LS190	663-138
	National	DM74LS190	663-140
	Panasonic	DN74LS190	663-141
	SGS	T74LS190	663-146
		74LS190	663-142
	TI	SN74LS190	663-145
74LS191			
	Fairchild	74LS191	661-160
	GoldStar	**GD74LS191**	⋆ **2693**
			661-161
	Hitachi	HD74LS191	661-162
	Mitsubishi	M74LS191	661-163
	Motorola	SN74LS191	661-165
	National	DM74LS191	661-167
	Panasonic	DN74LS191	661-168
	SGS	T74LS191	662-48
		74LS191	661-169
	Signetics	**74LS191**	⋆ **3003**
			661-171
	TI	SN74LS191	661-173
74LS192			
	Fairchild	74LS192	663-104
	Hitachi	HD74LS192	663-105
	Mitsubishi	M74LS192	663-117
	Motorola	SN74LS192	663-107
	National	DM74LS192	663-109
	Panasonic	DN74LS192	663-110
	SGS	T74LS192	663-147
		74LS192	663-112
	Signetics	**74LS192**	⋆ **3003**
			663-114
	TI	SN74LS192	663-116
74LS193			
	Fairchild	74LS193	662-27
	GoldStar	**GD74LS193**	⋆ **2693**
			662-28
	Hitachi	HD74LS193	662-29
	Mitsubishi	M74LS193	662-41
	Motorola	SN74LS193	662-31
	National	DM74LS193	662-33

(Continued)

Base Number	Source	Device	Page-Line
74LS193			(Cont'd)
	Panasonic	DN74LS193	662-34
	SGS	T74LS193	662-49
		74LS193	662-36
	Signetics	**74LS193**	⋆ **3003**
			662-38
	TI	SN74LS193	662-40
74LS194			
	Fairchild	74LS194A	1393-62
	GoldStar	**GD74LS194A**	⋆ **2693**
			683-21
	Hitachi	HD74LS194A	683-22
			1393-38
	Motorola	SN74LS194A	683-24
			1393-75
	National	DM74LS194A	683-26
	Panasonic	DN74LS194A	683-27
	SGS	T74LS194A	683-28
		74LS194	682-85
	Signetics	**74LS194A**	⋆ **3003**
			683-30
	TI	SN74LS194A	683-32
			1393-53
74LS195			
	Fairchild	74LS195A	1393-63
	GoldStar	**GD74LS195**	⋆ **2693**
			682-105
	Hitachi	HD74LS195A	682-106
			1393-69
	Motorola	SN74LS195A	682-108
			1393-76
	National	DM74LS195A	682-110
	Panasonic	DN74LS195A	682-111
	SGS	T74LS195A	682-112
			1393-85
		74LS195	682-83
	Signetics	**74LS195A**	⋆ **3003**
			682-113
			1393-88
	TI	SN74LS195A	682-115
			1393-94
74LS196			
	Fairchild	74LS196	662-102
	Mitsubishi	M74LS196	662-103
	Motorola	SN74LS196	662-105
	National	DM74LS196	662-107
	Panasonic	DN74LS196	662-108
	SGS	74LS196	662-109
	TI	SN74LS196	662-111
74LS197			
	Fairchild	74LS197	660-93
	Mitsubishi	M74LS197	660-94
	Motorola	SN74LS197	660-96
	National	DM74LS197	660-98
	Panasonic	DN74LS197	660-99
	SGS	74LS197	660-100
	Signetics	**74LS197**	⋆ **3003**
			660-102
	TI	SN74LS197	660-104
74LS20	Fairchild	74LS20	671-121
	GoldStar	**GD74LS20**	⋆ **2693**
			671-122
	Hitachi	HD74LS20	671-123
	Motorola	SN74LS20	671-125
	National	DM74LS20	671-127
	Panasonic	DN74LS20	671-128
	SGS	T74LS20	671-131
		74LS20	671-134
	Signetics	**74LS20**	⋆ **3003**
			671-136
	TI	SN74LS20	671-138
74LS21	Fairchild	74LS21	670-79
	GoldStar	**GD74LS21**	⋆ **2693**
			670-80
	Hitachi	HD74LS21	670-81
	Motorola	SN74LS21	670-83
	National	DM74LS21	670-85
	Panasonic	DN74LS21	670-86
	SGS	T74LS21	670-87
		74LS21	670-88
	Signetics	**74LS21**	⋆ **3003**
			670-90
	TI	SN74LS21	670-92
74LS219			
	TI	SN74LS219A	1348-21

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74LS22	Hitachi	HD74LS22	672-7
	Motorola	SN74LS22	672-9
	National	DM74LS22	672-11
	Panasonic	DN74LS22	672-12
	SGS	T74LS22	671-132
		74LS22	672-14
74LS221			
	GoldStar	**GD74LS221**	⋆ **2693**
			682-24
	Hitachi	HD74LS221	682-25
	Mitsubishi	M74LS221	682-19
	Motorola	SN74LS221	682-27
	National	DM74LS221	682-29
	TI	SN74LS221	682-32
74LS222			
	TI	SN74LS222	1304-7
74LS224			
	TI	SN74LS224	1304-8
74LS227			
	TI	SN74LS227	1304-9
74LS228			
	TI	SN74LS228	1304-10
74LS24	Mitsubishi	M74LS24	689-36
74LS240			
	Fairchild	74LS240	685-26
			987-6
	GoldStar	**GD74LS240**	⋆ **2693**
			685-28
	Hitachi	HD74LS240	685-29
	Motorola	SN74LS240	685-35
			987-11
	National	DM74LS240	685-38
	Panasonic	DN74LS240	685-155
	SGS	T74LS240	659-23
		74LS240	659-27
	Signetics	**74LS240**	⋆ **3003**
			685-39
			987-17
	TI	SN74LS240	685-43
			987-27
74LS241			
	Fairchild	74LS241	685-84
			986-19
	GoldStar	**GD74LS241**	⋆ **2693**
			685-85
	Hitachi	HD74LS241	685-86
			986-21
	Motorola	SN74LS241	685-92
			986-32
	National	DM74LS241	685-95
			986-36
	Panasonic	DN74LS241	685-156
	SGS	T74LS241	659-24
		74LS241	659-28
	Signetics	**74LS241**	⋆ **3003**
			685-98
			986-42
	TI	SN74LS241	685-102
			986-59
74LS242			
	GoldStar	GD74LS242	684-107
	Hitachi	HD74LS242	684-109
			994-40
	Motorola	SN74LS242	684-113
			994-41
	National	DM74LS242	684-117
			994-43
	Signetics	**74LS242**	⋆ **3003**
			684-123
			994-45
	TI	SN74LS242	684-129
			994-49
74LS243			
	GoldStar	**GD74LS243**	⋆ **2693**
			684-108
	Hitachi	HD74LS243	684-110
			997-8
	Motorola	SN74LS243	684-114
			994-42
	National	DM74LS243	684-118
			994-44
	Signetics	**74LS243**	⋆ **3003**
			684-124
			994-46
	TI	SN74LS243	684-130
			994-50

Base Number	Source	Device	Page-Line
74LS244			
	Fairchild	74LS244	685-138
			986-20
	GoldStar	**GD74LS244**	⋆ **2693**
			685-139
	Hitachi	HD74LS244	685-140
			986-22
	Motorola	SN74LS244	685-144
			986-33
	National	DM74LS244	986-37
	Panasonic	DN74LS244	685-157
	SGS	T74LS244	659-25
		74LS244	659-29
	Signetics	**74LS244**	⋆ **3003**
			986-43
	TI	SN74LS244	685-147
			986-60
74LS245			
	Fairchild	74LS245	686-164
			997-7
	GoldStar	**GD74LS245**	⋆ **2693**
			686-165
	Hitachi	HD74LS245	686-166
	Motorola	SN74LS245	686-172
			997-13
	National	DM74LS245	686-175
			997-16
	Panasonic	DN74LS245	686-176
	SGS	T74LS245	685-158
		74LS245	685-159
	Signetics	**74LS245**	⋆ **3003**
			686-181
			997-20
	TI	SN74LS245	687-3
			996-52
74LS247			
	Fairchild	74LS247	979-36
	Hitachi	HD74LS247	979-41
	Mitsubishi	M74LS247	979-43
	Motorola	SN74LS247	979-45
	National	DM74LS247	979-51
	TI	SN74LS247	979-65
74LS248			
	Fairchild	74LS248	979-1
	Hitachi	HD74LS248	979-5
	Mitsubishi	M74LS248	979-9
	Motorola	SN74LS248	979-10
	National	DM74LS248	979-19
74LS249			
	Fairchild	74LS249	979-2
	Hitachi	HD74LS249	979-6
	Motorola	SN74LS249	979-11
	National	DM74LS249	979-20
74LS251			
	Fairchild	74LS251	681-118
	GoldStar	**GD74LS251**	⋆ **2693**
			681-119
	Hitachi	HD74LS251	681-120
	Motorola	SN74LS251	681-122
	National	DM74LS251	681-124
	Panasonic	DN74LS251	681-125
	SGS	T74LS251	681-32
		74LS251	681-126
	Signetics	**74LS251**	⋆ **3003**
			681-127
	TI	SN74LS251	681-129
			877-51
74LS253			
	Fairchild	74LS253	679-123
	Hitachi	HD74LS253	679-124
	Motorola	SN74LS253	679-126
	National	DM74LS253	679-128
	Panasonic	DN74LS253	679-129
	SGS	T74LS253	679-41
		74LS253	679-130
	Signetics	**74LS253**	⋆ **3003**
			679-132
	TI	SN74LS253	679-134
74LS256			
	Fairchild	74LS256	676-123
	Motorola	SN74LS256	676-125
	SGS	T74LS256	676-127
		74LS256	676-129
	Signetics	**74LS256**	⋆ **3003**
			676-128

Base Number	Source	Device	Page-Line
74LS257			
	Fairchild	74LS257	680-136
	GoldStar	**GD74LS257A**	⋆ **2693**
			680-137
	Hitachi	HD74LS257	680-138
	Mitsubishi	M74LS257A	680-139
	Motorola	SN74LS257A	680-141
	National	DM74LS257B	680-143
	Panasonic	DN74LS257A	680-144
	SGS	T74LS257	679-154
		74LS257	680-145
	Signetics	**74LS257A**	⋆ **3003**
			680-147
	TI	SN74LS257B	680-149
74LS258			
	Fairchild	74LS258	680-43
	GoldStar	**GD74LS258**	⋆ **2693**
			680-44
	Hitachi	HD74LS258	680-45
	Mitsubishi	M74LS258A	680-46
	Motorola	SN74LS258A	680-48
	National	DM74LS258B	680-50
	Panasonic	DN74LS258A	680-51
	SGS	T74LS258	679-155
		74LS258	680-53
	Signetics	**74LS258A**	⋆ **3003**
			680-56
	TI	SN74LS258B	680-58
74LS259			
	Fairchild	74LS259	677-58
	GoldStar	**GD74LS259**	⋆ **2693**
			677-59
	Hitachi	HD74LS259	677-60
	Motorola	SN74LS259	677-62
	National	DM74LS259	677-64
	SGS	T74LS259	677-42
		74LS259	677-66
	Signetics	**74LS259**	⋆ **3003**
			677-68
	TI	SN74LS259B	677-70
			877-46
74LS26	Fairchild	74LS26	673-39
	GoldStar	**GD74LS26**	⋆ **2693**
			673-114
	Hitachi	HD74LS26	673-40
	Motorola	SN74LS26	673-42
	National	DM74LS26	673-44
	Panasonic	DN74LS26	673-45
	SGS	T74LS26	673-46
		74LS26	672-148
	Signetics	**74LS26**	⋆ **3003**
			673-48
	TI	SN74LS26	673-50
74LS260			
	Fairchild	74LS260	675-21
	Motorola	SN74LS260	675-23
	Panasonic	DN74LS260	675-24
	SGS	T74LS260	675-26
		74LS260	675-27
	Signetics	**74LS260**	⋆ **3003**
			675-29
74LS266			
	Fairchild	74LS266	676-97
	Hitachi	HD74LS266	676-98
	Motorola	SN74LS266	676-100
	National	DM74LS266	676-102
	Panasonic	DN74LS266	676-103
	SGS	T74LS266	676-85
		74LS266	676-105
	Signetics	**74LS266**	⋆ **3003**
			675-95
	TI	SN74LS266	676-110
74LS27	Fairchild	74LS27	675-53
	GoldStar	**GD74LS27**	⋆ **2693**
			675-54
	Hitachi	HD74LS27	675-55
	Motorola	SN74LS27	675-57
	National	DM74LS27	675-59
	Panasonic	DN74LS27	675-60
	SGS	74LS27	675-63
	Signetics	**74LS27**	⋆ **3003**
			675-65
	TI	SN74LS27	675-67

Base Number	Source	Device	Page-Line
74LS273			
	Fairchild	74LS273	668-103
	GoldStar	**GD74LS273**	⋆ **2693**
			668-52
	Hitachi	HD74LS273	668-104
	Motorola	SN74LS273	668-107
	SGS	T74LS273	668-108
		74LS273	683-144
	Signetics	**74LS273**	⋆ **3003**
			668-110
	TI	SN74LS273	668-112
74LS279			
	Fairchild	74LS279	677-8
	Hitachi	HD74LS279	677-9
	Motorola	SN74LS279	677-11
	National	DM74LS279	677-13
	Panasonic	DN74LS279	677-14
	SGS	74LS279	677-16
	TI	SN74LS279A	677-19
74LS28	Fairchild	74LS28	675-135
	Motorola	SN74LS28	675-141
	Panasonic	DN74LS28	675-145
	SGS	T74LS28	675-147
		74LS28	658-110
	TI	SN74LS28	675-156
74LS280			
	GoldStar	**GD74LS280**	⋆ **2693**
			690-62
	Hitachi	HD74LS280	690-63
	Mitsubishi	M74LS280	690-64
	Motorola	SN74LS280	690-65
	SGS	74LS280	658-54
	TI	SN74LS280	690-67
74LS283			
	Fairchild	74LS283	658-12
	GoldStar	**GD74LS283**	⋆ **2693**
			658-14
	Hitachi	HD74LS283A	658-15
	Motorola	SN74LS283	658-20
	National	DM74LS283	658-24
	Panasonic	DN74LS283	658-26
	SGS	74LS283	658-30
	Signetics	**74LS283**	⋆ **3003**
			658-34
	TI	SN74LS283	658-38
74LS290			
	Fairchild	74LS290	662-67
	Hitachi	HD74LS290	662-69
	Mitsubishi	M74LS290	662-71
	Motorola	SN74LS290	662-74
	National	DM74LS290	662-78
	Panasonic	DN74LS290	662-80
	Signetics	**74LS290**	⋆ **3003**
			662-86
	TI	SN74LS290	662-90
74LS292			
	TI	SN74LS292	664-24
74LS293			
	Fairchild	74LS293	661-50
	Hitachi	HD74LS293	661-52
	Mitsubishi	M74LS293	661-54
	Motorola	SN74LS293	661-58
	National	DM74LS293	661-62
	Panasonic	DN74LS293	661-64
	SGS	74LS293	661-68
	Signetics	**74LS293**	⋆ **3003**
			661-72
	TI	SN74LS293	661-76
74LS294			
	TI	SN74LS294	664-23
74LS295			
	Fairchild	74LS295A	1393-64
	Motorola	SN74LS295A	682-87
			1393-77
	SGS	74LS295A	682-88
	Signetics	**74LS295B**	⋆ **3003**
			682-90
	TI	SN74LS295B	682-92
			1393-95
74LS297			
	TI	SN74LS297	688-80
			1190-48
			¶ 406-37

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74LS298			
	Fairchild	74LS298	680-183
	GoldStar	**GD74LS298**	*** 2693**
			680-67
	Hitachi	HD74LS298	680-184
	Motorola	SN74LS298	680-188
	National	DM74LS298	681-4
	SGS	74LS298	681-6
	Signetics	**74LS298**	*** 3003**
			681-8
	TI	SN74LS298	681-12
74LS299			
	Fairchild	74LS299	684-24
			1394-79
	GoldStar	**GD74LS299**	*** 2693**
			684-26
	Hitachi	HD74LS299	684-27
	Motorola	SN74LS299	684-28
	TI	SN74LS299	684-32
74LS30	Fairchild	74LS30	673-140
	GoldStar	**GD74LS30**	*** 2693**
			673-141
	Hitachi	HD74LS30	673-142
	Motorola	SN74LS30	673-144
	National	DM74LS30	673-146
	Panasonic	DN74LS30	673-147
	SGS	74LS30	673-150
	Signetics	**74LS30**	*** 3003**
			673-152
	TI	SN74LS30	673-154
74LS301			
	Signetics	**74LS301**	*** 3003**
			1348-78
74LS31	TI	SN74LS31	688-28
74LS32	Fairchild	74LS32	674-143
	GoldStar	**GD74LS32**	*** 2693**
			674-144
	Hitachi	HD74LS32	674-145
	Motorola	SN74LS32	674-147
	National	DM74LS32	674-149
	Panasonic	DN74LS32	674-150
	SGS	74LS32	674-153
	Signetics	**74LS32**	*** 3003**
			674-155
	TI	SN74LS32	674-157
74LS321			
	TI	SN74LS321	688-79
74LS322			
	AMD	SN74LS322	658-47
	Fairchild	74LS322	683-148
	GoldStar	**GD74LS322**	*** 2693**
			658-49
	Motorola	SN74LS322A	658-50
	TI	SN74LS322A	658-52
74LS323			
	AMD	SN74LS323	684-21
			1394-76
	Fairchild	74LS323	684-25
			1394-80
	Motorola	SN74LS323	684-29
	TI	SN74LS323	684-33
			1394-83
74LS33	Fairchild	74LS33	675-85
	Motorola	SN74LS33	675-87
	Panasonic	DN74LS33	675-88
	SGS	T74LS33	675-90
		74LS33	658-111
	Signetics	**74LS33**	*** 3003**
			675-92
	TI	SN74LS33	675-94
74LS347			
	Fairchild	74LS347	979-37
74LS348			
	Motorola	SN74LS348	690-29
	TI	SN74LS348	690-32
			877-60
74LS352			
	Fairchild	74LS352	679-75
	Motorola	SN74LS352	679-76
	National	DM74LS352	679-78
	SGS	T74LS352	679-80
		74LS352	679-43
	Signetics	**74LS352**	*** 3003**
			679-82
	TI	SN74LS352	679-84

Base Number	Source	Device	Page-Line
74LS353			
	Fairchild	74LS353	679-99
	Motorola	SN74LS353	679-100
	National	DM74LS353	679-102
	SGS	T74LS353	679-104
		74LS353	679-44
	Signetics	**74LS353**	*** 3003**
			679-106
	TI	SN74LS353	679-108
74LS354			
	TI	SN74LS354	681-99
74LS356			
	TI	SN74LS356	681-100
74LS363			
	Signetics	**74LS363**	*** 3003**
			677-129
74LS364			
	Signetics	**74LS364**	*** 3003**
			668-54
74LS365			
	Fairchild	74LS365	658-163
	GoldStar	**GD74LS365A**	*** 2693**
			658-165
	Hitachi	HD74LS365A	658-167
	Motorola	SN74LS365A	658-171
	National	DM74LS365A	658-175
	Panasonic	DN74LS365A	659-2
	SGS	T74LS365A	659-4
			987-30
		74LS365A	659-8
	Signetics	**74LS365A**	*** 3003**
			659-12
	TI	SN74LS365A	659-16
			987-34
74LS366			
	Fairchild	74LS366	660-25
	GoldStar	**GD74LS366**	*** 2693**
			660-27
	Hitachi	HD74LS366A	666-64
	Motorola	SN74LS366A	660-32
	National	DM74LS366A	660-36
	Panasonic	DN74LS366A	660-38
	SGS	T74LS366A	660-40
			987-36
		74LS366A	660-44
	Signetics	**74LS366A**	*** 3003**
			660-48
	TI	SN74LS366A	660-52
			987-40
74LS367			
	Fairchild	74LS367	658-164
	GoldStar	**GD74LS367A**	*** 2693**
			658-166
	Hitachi	HD74LS367A	658-168
			666-65
	Motorola	SN74LS367A	658-172
	National	DM74LS367A	659-1
	Panasonic	DN74LS367A	659-3
	SGS	T74LS367A	659-5
			987-31
		74LS367A	659-9
	Signetics	**74LS367A**	*** 3003**
			659-13
	TI	SN74LS367A	659-17
			987-35
74LS368			
	Fairchild	74LS368	660-26
	GoldStar	**GD74LS368**	*** 2693**
			660-28
	Hitachi	HD74LS368A	660-29
	Motorola	SN74LS368A	660-33
	National	DM74LS368A	660-37
	Panasonic	DN74LS368A	660-39
	SGS	T74LS368A	660-41
			987-37
		74LS368A	660-45
	Signetics	**74LS368A**	*** 3003**
			660-49
	TI	SN74LS368A	660-53
			987-41
74LS37	Fairchild	74LS37	672-176
	Hitachi	HD74LS37	672-177
	Motorola	SN74LS37	672-179
	National	DM74LS37	672-181
	Panasonic	DN74LS37	672-182
	SGS	74LS37	672-184

(Continued)

Base Number	Source	Device	Page-Line
74LS37			(Cont'd)
	Signetics	74LS37	672-186
	TI	SN74LS37	672-188
74LS373			
	Fairchild	74LS373	677-113
	GoldStar	**GD74LS373**	*** 2693**
			677-115
	Hitachi	HD74LS373	677-116
	Motorola	SN74LS373	677-119
	National	DM74LS373	677-121
	Panasonic	DN74LS373	677-122
	SGS	T74LS373	677-123
		74LS373	677-21
	Signetics	**74LS373**	*** 3003**
			677-130
	TI	SN74LS373	677-132
74LS374			
	Fairchild	74LS374	668-156
	GoldStar	**GD74LS374**	*** 2693**
			668-158
	Hitachi	HD74LS374	668-159
	Motorola	SN74LS374	668-162
			¶ 415-27
	National	DM74LS374	668-164
	SGS	T74LS374	668-165
		74LS374	668-44
	Signetics	**74LS374**	*** 3003**
			668-167
	TI	SN74LS374	668-169
74LS375			
	Fairchild	74LS375	676-145
	Hitachi	HD74LS375	676-147
	Motorola	SN74LS375	676-151
	Signetics	**74LS375**	*** 3003**
			676-158
	TI	SN74LS375	676-162
74LS377			
	Fairchild	74LS377	669-7
	GoldStar	**GD74LS377**	*** 2693**
			669-8
	Motorola	SN74LS377	669-11
			¶ 415-27
	SGS	T74LS377	669-12
		74LS377	668-45
	Signetics	**74LS377**	*** 3003**
			669-14
	TI	SN74LS377	669-16
74LS378			
	AMD	SN74LS378	668-25
	Fairchild	74LS378	668-27
	Motorola	SN74LS378	668-29
	SGS	T74LS378	668-31
		74LS378	682-79
	Signetics	**74LS378**	*** 3003**
			668-33
	TI	SN74LS378	668-35
74LS379			
	AMD	SN74LS379	667-105
	Fairchild	74LS379	667-107
	Motorola	SN74LS379	667-109
	SGS	T74LS379	667-111
		74LS379	682-77
	TI	SN74LS379	667-113
74LS38	Fairchild	74LS38	673-22
	GoldStar	**GD74LS38**	*** 2693**
			673-23
	Hitachi	HD74LS38	673-24
	Motorola	SN74LS38	673-26
	National	DM74LS38	673-28
	Panasonic	DN74LS38	673-29
	SGS	74LS38	673-107
	Signetics	**74LS38**	*** 3003**
			673-31
	TI	SN74LS38	673-33
74LS380			
	MMI	SN74LS380	684-2
	National	DM74LS380	684-4
74LS381			
	TI	SN74LS381A	657-53
74LS382			
	TI	SN74LS382A	657-54
74LS384			
	AMD	SN74LS384	657-115
74LS385			
	AMD	SN74LS385	656-9
	Motorola	SN74LS385	656-11

Base Number	Source	Device	Page-Line
74LS386			
	Fairchild	74LS386	676-51
	Hitachi	HD74LS386	676-54
	Motorola	SN74LS386	676-58
	National	DM74LS386	676-32
	Panasonic	DN74LS386	676-63
74LS388			
	AMD	SN74LS388	667-90
74LS390			
	Fairchild	74LS390	663-14
	GoldStar	**GD74LS390**	*** 2693**
			663-16
	Hitachi	HD74LS390	663-17
	Mitsubishi	M74LS390	663-38
	Motorola	SN74LS390	663-21
	National	DM74LS390	663-24
	Panasonic	DN74LS390	663-25
	SGS	T74LS390	663-29
		74LS390	662-55
	Signetics	**74LS390**	*** 3003**
			663-33
	TI	SN74LS390	663-37
74LS393			
	Fairchild	74LS393	661-25
	GoldStar	**GD74LS393**	*** 2693**
			661-26
	Hitachi	HD74LS393	661-27
	Motorola	SN74LS393	661-29
	National	DM74LS393	661-31
	Panasonic	DN74LS393	661-32
	SGS	T74LS393	661-34
		74LS393	661-39
	Signetics	**74LS393**	*** 3003**
			661-36
	TI	SN74LS393	661-38
74LS395			
	Fairchild	74LS395	682-155
			1393-65
	GoldStar	**GD74LS395A**	*** 2693**
			682-156
	Motorola	SN74LS395	1393-78
	Panasonic	DN74LS395A	682-157
	SGS	T74LS395	682-159
			1393-86
		74LS395	682-84
	Signetics	**74LS395A**	*** 3003**
			683-1
	TI	SN74LS395A	683-3
			1393-96
74LS398			
	Motorola	SN74LS398	681-1
74LS399			
	AMD	SN74LS399	680-181
	Motorola	SN74LS399	681-2
	SGS	74LS399	682-78
	TI	SN74LS399	681-13
74LS40	Fairchild	74LS40	671-163
	Hitachi	HD74LS40	671-164
	Motorola	SN74LS40	671-166
	National	DM74LS40	671-168
	Panasonic	DN74LS40	671-169
	SGS	74LS40	671-171
	Signetics	**74LS40**	*** 3003**
			671-173
	TI	SN74LS40	671-175
74LS42	Fairchild	74LS42	664-71
	GoldStar	**GD74LS42**	*** 2693**
			664-72
	Hitachi	HD74LS42	664-73
	Mitsubishi	M74LS42	664-90
	Motorola	SN74LS42	664-75
	National	DM74LS42	664-77
	Panasonic	DN74LS42	664-78
	SGS	74LS42	664-80
	Signetics	**74LS42**	*** 3003**
			664-82
	TI	SN74LS42	664-84
74LS423			
	Mitsubishi	M74LS423	682-45
	TI	SN74LS423	682-33
74LS442			
	TI	SN74LS442	684-141
			994-15
74LS445			
	Signetics	**74LS445**	*** 3003**
			664-38

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74LS447			
	Fairchild	74LS447	979-38
74LS450			
	MMI	SN74LS450	681-152
	National	DM74LS450	681-154
74LS451			
	MMI	SN74LS451	679-146
	National	DM74LS451	679-145
74LS453			
	MMI	SN74LS453	681-25
	National	DM74LS453	681-27
74LS461			
	MMI	SN74LS461	661-81
	National	DM74LS461	661-83
74LS465			
	TI	SN74LS465	659-56
74LS466			
	TI	SN74LS466	660-73
74LS469			
	MMI	SN74LS469	661-105
	National	DM74LS469	611-84
74LS47	Fairchild	74LS47	979-39
	Hitachi	HD74LS47	979-42
	Mitsubishi	M74LS47	979-69
	Motorola	SN74LS47	979-46
	National	DM74LS47	979-52
	TI	SN74LS47	979-66
74LS471			
	National	DM74LS471	1317-4
74LS48	Fairchild	74LS48	979-3
	Hitachi	HD74LS48	979-7
	Mitsubishi	M74LS48	979-31
	Motorola	SN74LS48	979-12
	National	DM74LS48	979-21
74LS4891			
	National	DM74LS4891	664-22
74LS49	Hitachi	HD74LS49	979-8
	Motorola	SN74LS49	979-13
	National	DM74LS49	979-22
74LS490			
	Fairchild	74LS490	663-15
	Hitachi	HD74LS490	663-18
	Mitsubishi	M74LS490	663-10
	Motorola	SN74LS490	663-22
	Panasonic	DN74LS490	663-26
	SGS	T74LS490	663-30
		74LS490	662-56
	Signetics	**74LS490**	⋆ **3003**
			663-34
74LS491			
	MMI	SN74LS491	664-20
74LS498			
	MMI	SN74LS498	683-163
		S74LS498	683-164
74LS502			
	Fairchild	74LS502	689-154
74LS503			
	Fairchild	74LS503	689-155
74LS51	Fairchild	74LS51	674-15
	GoldStar	**GD74LS51**	⋆ **2693**
			674-16
	Hitachi	HD74LS51	674-17
	Mitsubishi	M74LS51	674-18
	Motorola	SN74LS51	674-20
	National	DM74LS51	674-22
	Panasonic	DN74LS51	674-23
	SGS	T74LS51	674-26
		74LS51	674-48
	Signetics	**74LS51**	⋆ **3003**
			674-28
	TI	SN74LS51	674-30
74LS533			
	Fairchild	74LS533	677-175
74LS534			
	Fairchild	74LS534	668-84
74LS54	Fairchild	74LS54	674-72
	Hitachi	HD74LS54	674-73
	Motorola	SN74LS54	674-75
	National	DM74LS54	674-77
	Panasonic	DN74LS54	674-78
	SGS	74LS54	674-80
	Signetics	**74LS54**	⋆ **3003**
			674-82
	TI	SN74LS54	674-84

Base Number	Source	Device	Page-Line
74LS540			
	Fairchild	74LS540	685-27
			987-7
	Mitsubishi	M74LS540	685-30
	Motorola	SN74LS540	685-36
			987-12
	Signetics	**74LS540**	⋆ **3003**
			685-40
			987-18
	TI	SN74LS540	685-44
			987-28
74LS541			
	Mitsubishi	M74LS541	685-87
	Motorola	SN74LS541	685-93
			986-34
	Signetics	**74LS541**	⋆ **3003**
			685-99
			986-44
	TI	SN74LS541	685-103
			986-61
74LS546			
	MMI	SN74LS546	683-88
74LS547			
	MMI	SN74LS547	677-77
74LS548			
	MMI	SN74LS548	646-64
74LS549			
	MMI	SN74LS549	678-18
74LS55	Fairchild	74LS55	674-52
	GoldStar	**GD74LS55**	⋆ **2693**
			674-104
	Hitachi	HD74LS55	674-53
	Motorola	SN74LS55	674-55
	National	DM74LS55	674-57
	Panasonic	DN74LS55	674-58
	SGS	74LS55	674-61
	TI	SN74LS55	674-62
74LS563			
	Fairchild	74LS563	677-176
74LS564			
	Fairchild	74LS564	677-177
74LS566			
	MMI	SN74LS566	683-86
74LS567			
	MMI	SN74LS567	677-74
74LS568			
	Motorola	SN74LS568	663-83
	Signetics	**74LS568A**	⋆ **3003**
			663-49
74LS569			
	Motorola	SN74LS569	662-6
	Signetics	**74LS569A**	⋆ **3003**
			662-7
74LS573			
	Fairchild	74LS573	677-114
74LS574			
	Fairchild	74LS574	668-157
74LS590			
	GoldStar	**GD74LS590**	⋆ **2693**
			661-87
	TI	SN74LS590	661-89
74LS591			
	TI	SN74LS591	661-90
74LS592			
	TI	SN74LS592	661-86
74LS593			
	TI	SN74LS593	664-18
74LS594			
	TI	SN74LS594	683-153
74LS595			
	Mitsubishi	M74LS595	683-150
	TI	SN74LS595	683-154
74LS596			
	Mitsubishi	M74LS596	683-151
74LS597			
	TI	SN74LS597	683-142
74LS598			
	TI	SN74LS598	683-143
74LS599			
	TI	SN74LS599	683-155
74LS604			
	Motorola	SN74LS604	677-36
74LS605			
	Motorola	SN74LS605	677-37
74LS606			
	Motorola	SN74LS606	677-38

Base Number	Source	Device	Page-Line
74LS607			
	Motorola	SN74LS607	677-39
	TI	SN74LS607	677-40
74LS610			
	TI	SN74LS610	678-51
			688-55
		¶	410-32
74LS611			
	TI	SN74LS611	678-52
			688-56
		¶	410-32
74LS612			
	GoldStar	**GD74LS612**	⋆ **2693**
			688-53
	TI	SN74LS612	678-53
			688-57
		¶	410-32
74LS613			
	TI	SN74LS613	678-54
			688-58
		¶	410-32
74LS62	National	DM74LS62	678-56
74LS620			
	Mitsubishi	M74LS620	687-134
	Motorola	SN74LS620	687-135
	Signetics	**74LS620**	⋆ **3003**
			687-139
74LS621			
	Motorola	SN74LS621	687-94
	Signetics	**74LS621**	⋆ **3003**
			687-98
74LS622			
	Motorola	SN74LS622	687-95
	Signetics	**74LS622**	⋆ **3003**
			687-99
74LS623			
	Motorola	SN74LS623	687-136
	Signetics	**74LS623**	⋆ **3003**
			687-140
	TI	SN74LS623	687-141
			996-53
74LS624			
	TI	SN74LS624	688-97
			1191-33
74LS625			
	TI	SN74LS625	688-113
			1191-65
74LS628			
	TI	SN74LS628	688-98
			1191-34
74LS629			
	TI	SN74LS629	688-114
			1191-66
74LS630			
	TI	SN74LS630	688-39
			982-52
		¶	426-21
		¶	445-36
74LS640			
	GoldStar	**GD74LS640**	⋆ **2693**
			686-68
	Hitachi	HS74LS640	686-69
			997-10
	Motorola	SN74LS640	686-72
			997-14
	Signetics	**74LS640**	⋆ **3003**
			686-77
			996-49
		74LS640-1	⋆ **3003**
			996-50
	TI	SN74LS640	686-79
			996-54
		SN74LS640-1	686-80
			996-55
74LS641			
	Hitachi	HD74LS641	686-112
			997-3
	Mitsubishi	M74LS641-1	686-113
	Motorola	SN74LS641	686-115
			997-5
	Signetics	**74LS641**	⋆ **3003**
			686-117
			996-16
		74LS641-1	⋆ **3003**
			686-118
			996-17

(Continued)

Base Number	Source	Device	Page-Line
74LS641			(Cont'd)
	TI	SN74LS641	686-120
			996-43
		SN74LS641-1	686-121
			996-44
74LS642			
	Hitachi	HD74LS642	686-19
			997-4
	Motorola	SN74LS642	686-25
			997-6
	Signetics	**74LS642**	⋆ **3003**
			686-26
			996-18
		74LS642-1	⋆ **3003**
			686-27
			996-19
	TI	SN74LS642	686-29
			996-45
		SN74LS642-1	686-30
			996-46
74LS643			
	Motorola	SN74LS643	686-73
74LS644			
	Motorola	SN74LS644	687-16
	TI	SN74LS644	687-18
			996-47
		SN74LS644-1	687-19
			996-48
74LS645			
	Hitachi	HD74LS645	686-167
			997-9
	Motorola	SN74LS645	686-173
			997-15
	Signetics	**74LS645**	⋆ **3003**
			686-182
			996-51
		74LS645-1	⋆ **3003**
			686-183
	TI	SN74LS645	687-4
			996-56
		SN74LS645-1	687-5
			996-57
74LS646			
	GoldStar	**GD74LS646**	⋆ **2693**
			687-72
	MMI	SN74LS646	686-101
	TI	SN74LS646	687-73
			997-24
74LS647			
	MMI	SN74LS647	686-95
74LS648			
	MMI	SN74LS648	686-85
	TI	SN74LS648	687-74
			997-25
74LS649			
	MMI	SN74LS649	686-22
74LS651			
	MMI	SN74LS651	686-86
	TI	SN74LS651	686-81
			687-75
74LS652			
	MMI	SN74LS652	686-102
	TI	SN74LS652	686-82
			687-76
74LS653			
	MMI	SN74LS653	686-23
74LS654			
	MMI	SN74LS654	686-96
74LS668			
	Mitsubishi	M74LS668	663-66
	Motorola	SN74LS668	663-69
74LS669			
	Hitachi	HD74LS669	662-44
	Mitsubishi	M74LS669	661-125
	Motorola	SN74LS669	662-45
	TI	SN74LS669	661-137
74LS670			
	Fairchild	74LS670	678-82
			1347-19
	GoldStar	**GD74LS670**	⋆ **2693**
			678-83
	Hitachi	HD74LS670	678-85
			1347-20
	Motorola	SN74LS670	678-90
			1347-22
	National	DM74LS670	678-94
			1347-24

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74LS670			(Cont'd)
	SGS	74LS670	678-99
			1347-25
	Signetics	**74LS670**	*** 3003**
			678-102
			1347-27
	TI	SN74LS670	678-106
			1347-29
74LS673			
	Motorola	SN74LS673	684-67
74LS674			
	Motorola	SN74LS674	684-57
	TI	SN74LS674	684-59
74LS681			
	TI	SN74LS681	657-133
74LS682			
	Mitsubishi	M74LS682	656-125
	Motorola	SN74LS682	656-131
	TI	SN74LS682	656-138
74LS683			
	Mitsubishi	M74LS683	656-116
	Motorola	SN74LS683	656-118
74LS684			
	Mitsubishi	M74LS684	656-130
	Motorola	SN74LS684	656-132
	TI	SN74LS684	656-139
74LS685			
	Mitsubishi	M74LS685	656-117
	Motorola	SN74LS685	656-119
74LS686			
	Motorola	SN74LS686	656-133
74LS687			
	Motorola	SN74LS687	656-120
74LS688			
	GoldStar	**GD74LS688**	*** 2693**
			656-153
	Mitsubishi	M74LS688	656-105
	Motorola	SN74LS688	656-134
	TI	SN74LS688	656-140
74LS689			
	Mitsubishi	M74LS689	656-104
	Motorola	SN74LS689	656-121
74LS697			
	TI	SN74LS697	661-93
74LS699			
	TI	SN74LS699	661-94
74LS716			
	Motorola	SN74LS716	664-11
74LS718			
	Motorola	SN74LS718	664-6
74LS724			
	Motorola	SN74LS724	688-99
74LS73	**GoldStar**	**GD74LS73**	*** 2693**
			669-113
	Hitachi	HD74LS73A	669-115
	Motorola	SN74LS73A	669-118
	National	DM74LS73A	669-122
	Panasonic	DN74LS73	669-124
	Signetics	**74LS73**	*** 3003**
			669-128
	TI	SN74LS73A	669-132
74LS74	Fairchild	74LS74	667-7
	GoldStar	**GD74LS74A**	*** 2693**
			667-8
	Hitachi	HD74LS74A	667-9
	Motorola	SN74LS74A	667-11
	National	DM74LS74	667-13
	Panasonic	DN74LS74A	667-14
	SGS	74LS74	667-16
	Signetics	**74LS74A**	*** 3003**
			667-18
	TI	SN74LS74A	667-20
74LS748			
	Motorola	SN74LS748	690-24
74LS75	**GoldStar**	**GD74LS75**	*** 2693**
			676-146
	Hitachi	HD74LS75	676-148
	Motorola	SN74LS75	676-152
	National	DM74LS75	676-154
	Panasonic	DN74LS75	676-155
	Signetics	**74LS75**	*** 3003**
			676-159
	TI	SN74LS75	676-163
74LS76	Hitachi	HD74LS76A	669-142
	Motorola	SN74LS76A	669-144
	National	DM74LS76	669-146
	Panasonic	DN74LS76	669-147
			(Continued)

Base Number	Source	Device	Page-Line
74LS76			(Cont'd)
	Signetics	**74LS76**	*** 3003**
			669-149
	TI	SN74LS76A	669-151
74LS764			
	Signetics	**74LS764**	*** 3003**
			999-95
74LS77	Hitachi	HD74LS77	676-164
	Motorola	SN74LS77	676-166
	National	DM74LS77	676-168
74LS78	Hitachi	HD74LS78A	669-85
	Motorola	SN74LS78A	669-87
	National	DM74LS78	669-89
	Panasonic	DN74LS78	669-90
	TI	SN74LS78A	669-92
74LS783			
	Motorola	SN74LS783	679-5
			868-72
74LS793			
	MMI	SN74LS793	677-79
74LS794			
	MMI	SN74LS794	683-90
74LS795			
	Motorola	SN74LS795	659-48
74LS796			
	Motorola	SN74LS796	659-49
74LS797			
	Motorola	SN74LS797	659-50
74LS798			
	Motorola	SN74LS798	659-51
74LS83	Fairchild	74LS83	658-13
	Hitachi	HD74LS83A	658-16
	Mitsubishi	M74LS83A	658-17
	Motorola	SN74LS83A	658-21
	National	DM74LS83A	658-25
	Panasonic	DN74LS83A	658-27
	SGS	74LS83A	658-31
	Signetics	**74LS83A**	*** 3003**
			658-35
	TI	SN74LS83A	658-39
74LS848			
	Motorola	SN74LS848	690-30
74LS85	Fairchild	74LS85	656-44
	GoldStar	**GD74LS85**	*** 2693**
			656-48
	Hitachi	HD74LS85	656-49
	Mitsubishi	M74LS85	656-67
	Motorola	SN74LS85	656-51
	National	DM74LS85	656-54
	Panasonic	DN74LS85	656-56
	Signetics	**74LS85**	*** 3003**
			656-60
	TI	SN74LS85	656-64
74LS86	Fairchild	74LS86	676-52
	GoldStar	**GD74LS86**	*** 2693**
			676-53
	Hitachi	HD74LS86	676-55
	Motorola	SN74LS86	676-59
	National	DM74LS86	676-62
	Panasonic	DN74LS86	676-64
	SGS	74LS86	676-65
	Signetics	**74LS86**	*** 3003**
			676-67
	TI	SN74LS86A	676-70
74LS90	**GoldStar**	**GD74LS90**	*** 2693**
			662-68
	Hitachi	HD74LS90	662-70
	Mitsubishi	M74LS90	662-114
	Motorola	SN74LS90	662-75
	National	DM74LS90	662-79
	Panasonic	DN74LS90	662-81
	SGS	74LS90	662-83
	Signetics	**74LS90**	*** 3003**
			662-87
	TI	SN74LS90	662-91
74LS91	Hitachi	HD74LS91	683-158
	Motorola	SN74LS91	683-159
	TI	SN74LS91	683-161
			1395-67
74LS92	**GoldStar**	**GD74LS92**	*** 2693**
			663-156
	Hitachi	HD74LS92	663-157
	Mitsubishi	M74LS92	663-167
	Motorola	SN74LS92	663-159
	National	DM74LS92	663-161
	Panasonic	DN74LS92	663-162
			(Continued)

Base Number	Source	Device	Page-Line
74LS92			(Cont'd)
	Signetics	**74LS92**	*** 3003**
			663-164
	TI	SN74LS92	663-166
74LS93	**GoldStar**	**GD74LS93**	*** 2693**
			661-51
	Hitachi	HD74LS93	661-53
	Mitsubishi	M74LS93	661-55
	Motorola	SN74LS93	661-59
	National	DM74LS93	661-63
	Panasonic	DN74LS93	661-65
	SGS	74LS93	661-69
	Signetics	**74LS93**	*** 3003**
			661-73
	TI	SN74LS93	661-77
74LS95	Fairchild	74LS95B	682-137
			1393-66
	GoldStar	**GD74LS95**	*** 2693**
			682-138
	Hitachi	HD74LS95B	682-139
	Motorola	SN74LS95B	682-141
			1393-79
	Panasonic	DN74LS95B	682-142
	SGS	T74LS95	682-81
		74LS95B	682-143
	Signetics	**74LS95B**	*** 3003**
			682-145
			1393-45
	TI	SN74LS95B	682-147
			1393-54
74LS96	**Signetics**	**74LS96**	*** 3003**
			683-45
			1394-41
	TI	SN74LS96	683-46
			1394-46
74L5280			
	SGS	T74L5280	690-38
74L5490			
	SGS	T74L5490	662-54
74PCT240			
	Performance		
		P74PCT240	639-77
		P74PCT240A	607-65
74PCT241			
	Performance		
		P74PCT241	640-17
		P74PCT241A	607-66
74PCT244			
	Performance		
		P74PCT244	640-18
		P74PCT244A	607-67
74PCT245			
	Performance		
		P74PCT245	642-1
		P74PCT245A	638-171
74PCT273			
	Performance		
		P74PCT273	618-163
		P74PCT273A	619-19
74PCT373			
	Performance		
		P74PCT373	628-26
		P74PCT373A	628-42
74PCT374			
	Performance		
		P74PCT374	620-93
		P74PCT374A	619-24
74PCT521			
	Performance		
		P74PCT521	603-103
		P74PCT521A	602-84
		P74PCT521B	602-85
74PCT533			
	Performance		
		P74PCT533	628-136
		P74PCT533A	628-43
74PCT534			
	Performance		
		P74PCT534	619-126
		P74PCT534A	619-25
74PCT545			
	Performance		
		P74PCT545	642-2
		P74PCT545A	638-172

Base Number	Source	Device	Page-Line
74PCT632			
	Performance		
		P74PCT632	605-24
		P74PCT632A	605-25
		P74PCT632B	605-26
74PCT633			
	Performance		
		P74PCT633	605-27
		P74PCT633A	605-28
		P74PCT633B	605-29
74PCT634			
	Performance		
		P74PCT634	605-30
		P74PCT634A	605-31
		P74PCT634B	605-32
74PCT635			
	Performance		
		P74PCT635	605-33
		P74PCT635A	605-34
		P74PCT635B	605-35
74PCT640			
	Performance		
		P74PCT640	641-96
		P74PCT640A	638-173
74PCT643			
	Performance		
		P74PCT643	640-148
		P74PCT643A	638-174
74PCT645			
	Performance		
		P74PCT645	642-3
		P74PCT645A	638-175
74PC00	National	MM74PC00	623-47
74PC02	National	MM74PC02	625-100
74PC04	National	MM74PC04	607-135
74PC08	National	MM74PC08	622-41
74PC138			
	National	MM74PC138	615-41
74PC74	National	MM74PC74	617-58
74SC137			
	Plessey	MV74SC137	616-3
	Supertex	74SC137	616-5
74SC138			
	Supertex	74SC138	615-114
74SC139			
	Supertex	74SC139	615-25
74SC237			
	Plessey	MV74SC237	616-4
	Supertex	74SC237	616-6
74SC238			
	Supertex	74SC238	615-115
74SC239			
	Plessey	MV74SC239	615-24
	Supertex	74SC239	615-26
74SC240			
	Supertex	74SC240	639-78
74SC241			
	Supertex	74SC241	640-19
74SC242			
	Supertex	74SC242	638-48
74SC243			
	Supertex	74SC243	638-72
74SC244			
	Supertex	74SC244	640-20
74SC245			
	Supertex	74SC245	642-4
74SC273			
	Supertex	74SC273	618-164
74SC373			
	Supertex	74SC373	628-28
74SC374			
	Plessey	MV74SC374	620-94
	Supertex	74SC374	620-96
74SC393			
	Supertex	74SC393	609-179
74SC533			
	Plessey	MV74SC533	628-137
	Supertex	74SC533	628-139
74SC534			
	Supertex	74SC534	619-127
74SC540			
	Supertex	74SC540	607-54
74SC541			
	Supertex	74SC541	607-55
74SC563			
	Plessey	MV74SC563	628-138
	Supertex	74SC563	628-140

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74SC564			
	Supertex	74SC564	619-128
74SC573			
	Plessey	MV74SC573	628-27
	Supertex	74SC573	628-29
74SC574			
	Plessey	MV74SC574	620-95
	Supertex	74SC574	620-97
74S00	Fairchild	74S00	672-153
	GoldStar	**GD74S00**	⋆ **2694**
			672-154
	National	DM74S00	672-156
	Signetics	**74S00**	⋆ **3003**
			672-158
	TI	SN74S00	672-160
74S02	Fairchild	74S02	675-157
	GoldStar	**GD74S02**	⋆ **2694**
			675-158
	National	DM74S02	675-160
	Signetics	**74S02**	⋆ **3003**
			675-162
	TI	SN74S02	675-164
74S03	Fairchild	74S03	673-103
	National	DM74S03	673-105
	Signetics	**74S03**	⋆ **3003**
			673-109
	TI	SN74S03	673-111
74S04	Fairchild	74S04	659-130
	GoldStar	**GD74S04**	⋆ **2694**
			659-131
	National	DM74S04	659-133
	Signetics	**74S04**	⋆ **3003**
			659-135
	TI	SN74S04	659-137
74S05	Fairchild	74S05	659-170
	GoldStar	**GD74S05**	⋆ **2694**
			659-171
	National	DM74S05	659-173
	Signetics	**74S05**	⋆ **3003**
			659-175
	TI	SN74S05	659-177
74S08	Fairchild	74S08	671-43
	GoldStar	**GD74S08**	⋆ **2694**
			671-44
	National	DM74S08	671-46
	Signetics	**74S08**	⋆ **3003**
			671-48
	TI	SN74S08	671-50
74S09	National	DM74S09	671-70
	TI	SN74S09	671-80
74S10	Fairchild	74S10	672-70
	GoldStar	**GD74S10**	⋆ **2694**
			672-71
	National	DM74S10	672-73
	Signetics	**74S10**	⋆ **3003**
			672-75
	TI	SN74S10	672-77
74S109	Fairchild	74S109	669-84
74S11	Fairchild	74S11	670-140
	National	DM74S11	670-142
	Signetics	**74S11**	⋆ **3003**
			670-144
	TI	SN74S11	670-146
74S112	Fairchild	74S112	670-29
	GoldStar	**GD74S112**	⋆ **2694**
			670-30
	National	DM74S112	670-32
	Signetics	**74S112**	⋆ **3003**
			670-34
	TI	SN74S112	670-36
74S113	National	DM74S113	670-2
	Signetics	**74S113**	⋆ **3003**
			670-4
	TI	SN74S113	670-6
74S114	TI	SN74S114	670-56
74S124	TI	SN74S124	1191-67
74S132	Fairchild	74S132	689-47
	TI	SN74S132	689-49
74S133	Fairchild	74S133	673-178
	GoldStar	**GD74S133**	⋆ **2694**
			673-179
	National	DM74S133	673-181
	Signetics	**74S133**	⋆ **3003**
			673-183
	TI	SN74S133	674-2
74S134	National	DM74S134	673-162
	Signetics	**74S134**	⋆ **3003**
			673-164
	TI	SN74S134	673-166
74S135	National	DM74S135	675-171
	Signetics	**74S135**	⋆ **3003**
			676-1
	TI	SN74S135	676-3
74S138	AMD	SN74S138	665-74
	Fairchild	74S138	665-75
	GoldStar	**GD74S138**	⋆ **2694**
			665-76
	National	DM74S138	665-78
	Signetics	**74S138**	⋆ **3003**
			665-80
	TI	SN74S138	665-82
74S139	Fairchild	74S139	665-21
	GoldStar	**GD74S139**	⋆ **2694**
			665-22
	National	DM74S139	665-24
	Signetics	**74S139**	⋆ **3003**
			665-26
	TI	SN74S139	665-28
74S140	National	DM74S140	665-126
			987-53
	Signetics	**74S140**	⋆ **3003**
			665-128
			988-3
	TI	SN74S140	665-130
			988-6
74S148	MMI	SN74S148	690-28
74S15	National	DM74S15	670-164
	TI	SN74S15	670-166
74S151	Fairchild	74S151	681-79
	National	DM74S151	681-81
	Signetics	**74S151**	⋆ **3003**
			681-83
	TI	SN74S151	681-85
74S153	Fairchild	74S153	679-49
	GoldStar	**GD74S153**	⋆ **2694**
			679-142
	National	DM74S153	679-51
	Signetics	**74S153**	⋆ **3003**
			679-53
	TI	SN74S153	679-55
74S157	AMD	SN74S157	680-110
	Fairchild	74S157	680-111
	GoldStar	**GD74S157**	⋆ **2694**
			680-112
	National	DM74S157	680-114
	Signetics	**74S157**	⋆ **3003**
			680-116
	TI	SN74S157	680-118
74S158	Fairchild	74S158	680-16
	National	DM74S158	680-18
	Signetics	**74S158**	⋆ **3003**
			680-20
	TI	SN74S158	680-22
74S160	AMD	SN74S160	662-151
74S161	AMD	SN74S161	660-160
74S162	TI	SN74S162	663-9
74S163	AMD	SN74S163	661-18
	GoldStar	**GD74S163**	⋆ **2694**
			661-19
	TI	SN74S163	661-21
74S164	**GoldStar**	**GD74S164**	⋆ **2694**
			684-69
74S168	**Signetics**	**74S168A**	⋆ **3003**
			663-77
74S169	**GoldStar**	**GD74S169**	⋆ **2694**
			661-138
	Signetics	**74S169A**	⋆ **3003**
			661-140
	TI	SN74S169	661-142
74S172	**Signetics**	**74S172**	⋆ **3003**
			678-109
			1347-34
74S174	AMD	SN74S174	668-6
	Fairchild	74S174	668-7
	GoldStar	**GD74S174**	⋆ **2694**
			668-8
	National	DM74S174	668-10
	Signetics	**74S174**	⋆ **3003**
			668-12
	TI	SN74S174	668-14
74S175	AMD	SN74S175	667-70
	Fairchild	74S175	667-71
	GoldStar	**GD74S175**	⋆ **2694**
			667-72
	National	DM74S175	667-74
	Signetics	**74S175**	⋆ **3003**
			667-76
	TI	SN74S175	667-78
74S181	**Signetics**	**74S181**	⋆ **3003**
			657-60
	TI	SN74S181	657-63
74S182	AMD	SN74S182	657-85
	National	DM74S182	657-89
			¶ 415-8
	Signetics	**74S182**	⋆ **3003**
			657-91
	TI	SN74S182	657-93
74S188	National	DM74S188	1316-32
		DM74S188A	1316-20
74S189	AMD	SN74S189	1347-86
	Cypress	CY74S189	1347-77
	National	DM74S189	678-128
			1347-87
		DM74S189A	1347-65
	Signetics	**74S189**	⋆ **3003**
			1347-88
74S194	Fairchild	74S194	683-33
			1393-100
	National	DM74S194	683-35
	Signetics	**74S194**	⋆ **3003**
			1393-103
	TI	SN74S194	683-37
			1393-107
74S195	National	DM74S195	682-119
	Signetics	**74S195**	⋆ **3003**
			682-121
			1393-104
	TI	SN74S195	682-123
			1393-108
74S196	TI	SN74S196	662-113
74S197	TI	SN74S197	660-106
74S20	Fairchild	74S20	671-139
	GoldStar	**GD74S20**	⋆ **2694**
			671-140
	National	DM74S20	671-142
	Signetics	**74S20**	⋆ **3003**
			671-144
	TI	SN74S20	671-146
74S200	National	DM74S200	1348-88
74S206	National	DM74S206	1348-94
74S22	National	DM74S22	672-17
	TI	SN74S22	672-19
74S225	MMI	SN74S225	1304-11
		SN74S225A	1304-13
	Signetics	**74S225**	⋆ **3003**
			678-132
	TI	**SN74S225**	⋆ **3229**
			678-133
			1304-12
74S240	**GoldStar**	**GD74S240**	⋆ **2694**
			685-45
	National	DM74S240	987-14
	Signetics	**74S240**	⋆ **3003**
			685-48
	TI	SN74S240	685-50
			987-29
74S241	National	DM74S241	986-38
	Signetics	**74S241**	⋆ **3003**
			685-105
	TI	SN74S241	685-107
			987-1
74S242	**Signetics**	**74S242**	⋆ **3003**
			684-125
74S243	**Signetics**	**74S243**	⋆ **3003**
			684-126
74S244	**Signetics**	**74S244**	⋆ **3003**
			685-149
	TI	SN74S244	987-2
74S251	AMD	SN74S251	681-130
	GoldStar	**GD74S251**	⋆ **2694**
			681-131
	National	DM74S251	681-133
	Signetics	**74S251**	⋆ **3003**
			681-136
	TI	SN74S251	681-138
74S253	AMD	SN74S253	679-135
	Fairchild	74S253	679-136
	National	DM74S253	679-138
	Signetics	**74S253**	⋆ **3003**
			679-140
	TI	SN74S253	679-141
74S257	AMD	SN74S257	680-150
	Fairchild	74S257	680-151
	GoldStar	**GD74S257**	⋆ **2694**
			680-152
	National	DM74S257	680-154
	Signetics	**74S257**	⋆ **3003**
			680-156
	TI	SN74S257	680-158
74S258	AMD	SN74S258	680-59
	Fairchild	74S258	680-60
	National	DM74S258	680-62
	Signetics	**74S258**	⋆ **3003**
			680-64
	TI	SN74S258	680-66
74S260	National	DM74S260	675-30
	Signetics	**74S260**	⋆ **3003**
			675-32
	TI	SN74S260	675-34
74S273	**Signetics**	**74S273**	⋆ **3003**
			668-115
74S280	**GoldStar**	**GD74S280**	⋆ **2694**
			690-72
	National	DM74S280	690-74
	Signetics	**74S280**	⋆ **3003**
			690-77
	TI	SN74S280	690-79
74S281	National	DM74S281	657-134
	TI	SN74S281	657-135
74S283	TI	SN74S283	658-41
74S287	National	DM74S287	1316-84
74S288	National	DM74S288	1316-38
		DM74S288A	1316-25
74S289	AMD	SN74S289	1347-81
	National	DM74S289	678-114
			1347-83
74S299	**GoldStar**	**GD74S299**	⋆ **2694**
			684-34
	National	DM74S299	684-36
	TI	SN74S299	684-38
			1394-85
74S30	Fairchild	74S30	673-155
	GoldStar	**GD74S30**	⋆ **2694**
			673-156
	National	DM74S30	673-158
	TI	SN74S30	673-160
74S301	**Signetics**	**74S301**	⋆ **3003**
			1348-87
74S310	MMI	SN74S310	685-154
74S32	Fairchild	74S32	674-158
	GoldStar	**GD74S32**	⋆ **2694**
			674-159
	National	DM74S32	674-161
	Signetics	**74S32**	⋆ **3003**
			674-163
	TI	SN74S32	674-165
74S348	MMI	SN74S348	690-34
74S350	AMD	SN74S350	644-121
	Signetics	**74S350**	⋆ **3003**
			644-130
74S37	**Signetics**	**74S37**	⋆ **3003**
			673-2
	TI	SN74S37	673-4
74S373	AMD	SN74S373	677-134
	National	DM74S373	677-137
	Signetics	**74S373**	⋆ **3003**
			677-139
	TI	SN74S373	677-141
74S374	AMD	SN74S374	668-172
	GoldStar	GD74S374	668-173
	National	DM74S374	668-176
	Signetics	**74S374**	⋆ **3003**
			668-178
	TI	SN74S374	668-180
74S378	AMD	SN74S378	668-39
74S379	AMD	SN74S379	667-117
74S38	**Signetics**	**74S38**	⋆ **3003**
			673-35
	TI	SN74S38	673-37
74S381	MMI	SN74S381	657-58
	TI	SN74S381	657-64

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74S382	MMI	SN74S382	657-88
74S387	National	DM74S387	1316-81
74S388	AMD	SN74S388	667-94
74S399	AMD	SN74S399	681-17
74S40	Fairchild	74S40	671-176
	National	DM74S40	671-178
	Signetics	**74S40**	⋆ **3003**
			671-180
	TI	SN74S40	671-182
74S408	MMI	SN74S408	999-36
		SN74S408-2	999-37
74S409	MMI	SN74S409	999-47
		SN74S409-2	999-48
74S472	National	DM74S472	1318-12
		DM74S472A	1317-92
		DM74S472B	1317-73
			1317-93
74S473	National	DM74S473	1318-5
		DM74S473A	1317-87
74S474	National	DM74S474	1318-22
		DM74S474A	1317-97
74S475	National	DM74S475	1318-19
		DM74S475A	1317-88
74S508	MMI	SN74S508	657-96
74S51	Fairchild	74S51	674-31
	GoldStar	**GD74S51**	⋆ **2694**
			674-32
	National	DM74S51	674-34
	Signetics	**74S51**	⋆ **3003**
			674-36
	TI	SN74S51	674-38
74S516	MMI	SN74S516	657-97
74S533	AMD	SN74S533	678-4
74S534	AMD	SN74S534	668-87
	Signetics	**74S534**	⋆ **3003**
			668-90
74S556	MMI	SN74S556	644-81
74S557	MMI	SN74S557	644-48
74S558	MMI	SN74S558	644-49
74S570	National	DM74S570	1317-28
		DM74S570A	1317-29
74S571	National	DM74S571	1317-31
		DM74S571A	1317-32
		DM74S571B	1317-33
74S572	National	DM74S572	1318-74
		DM74S572A	1318-56
74S573	National	DM74S573	1318-75
		DM74S573A	1318-61
		DM74S573B	1318-50
74S64	Fairchild	74S64	674-91
	GoldStar	**GD74S64**	⋆ **2694**
			674-92
	National	DM74S64	674-94
	Signetics	**74S64**	⋆ **3003**
			674-96
	TI	SN74S64	674-98
74S65	National	DM74S65	674-100
	TI	SN74S65	674-103
74S700	MMI	SN74S700	1000-29
74S730	MMI	SN74S730	1000-30
74S731	MMI	SN74S731	1000-31
74S734	MMI	SN74S734	1000-32
74S74	Fairchild	74S74	667-21
	GoldStar	**GD74S74**	⋆ **2694**
			667-22
	National	DM74S74	667-23
	Signetics	**74S74**	⋆ **3003**
			667-25
	TI	SN74S74	667-27
74S818	MMI	SN74S818	678-49
			682-71
74S85	**GoldStar**	**GD74S85**	⋆ **2694**
			656-68
	Signetics	**74S85**	⋆ **3003**
			656-70
	TI	SN74S85	656-72
74S86	Fairchild	74S86	676-71
	GoldStar	**GD74S86**	⋆ **2694**
			676-72
	National	DM74S86	676-73
	Signetics	**74S86**	⋆ **3003**
			676-75
	TI	SN74S86	676-77
74V000	OKI	74V000	4057-50
740	Atec	740	4873-24
	GE/Intersil	μA740	1168-32
			(Continued)

Base Number	Source	Device	Page-Line
740	GE/Intersil		(Cont'd)
		μA740C	1169-12
	Micro-Link	STD740	4874-26
	SGS	M740	1119-113
	Unitrode	PIC740	1218-24
	Zendex	ZBX740	4854-11
7400	Fairchild	7400	672-97
	National	DM7400	672-99
	Signetics	**7400**	⋆ **3003**
			672-102
	TI	SN7400	672-104
	Toshiba	TC7400B	672-105
74000	OKI	MSM74000	4057-31
7401	Fairchild	7401	673-53
	GoldStar	**GL7401**	⋆ **2700**
			1003-69
	National	DM7401	673-57
	TI	SN7401	673-64
	Toshiba	TA7401A	1121-160
7402	Fairchild	7402	675-98
	National	DM7402	675-100
	Signetics	**7402**	⋆ **3003**
			675-103
	TI	SN7402	675-107
	Toshiba	TA7402	1120-38
7403	Fairchild	7403	673-54
	National	DM7403	673-58
	Signetics	**7403**	⋆ **3003**
			673-61
	TI	SN7403	673-65
7404	Fairchild	7404	659-66
	National	DM7404	659-68
	Sensoray	**7404**	⋆ **4901**
			4875-8
	Signetics	**7404**	⋆ **3003**
			659-75
	TI	SN7404	659-77
	Toshiba	TC7404B	659-78
7405	Fairchild	7405	659-138
	National	DM7405	659-140
	Signetics	**7405**	⋆ **3003**
			659-143
	TI	SN7405	659-145
	Toshiba	TA7405	1123-49
7406	Fairchild	7406	666-39
	National	DM7406	666-43
	Signetics	**7406**	⋆ **3003**
			666-49
	TI	SN7406	666-53
7407	Fairchild	7407	666-24
	National	DM7407	666-28
	Signetics	**7407**	⋆ **3003**
			666-32
	TI	SN7407	666-36
7408	Fairchild	7408	670-168
	National	DM7408	670-170
	Sensoray	**7408**	⋆ **4901**
			4872-6
			4879-7
	Signetics	**7408**	⋆ **3003**
			670-172
	TI	SN7408	670-174
7409	Fairchild	7409	671-53
	National	DM7409	671-55
	Sensoray	**7409**	⋆ **4901**
			4851-26
			4872-7
	TI	SN7409	671-57
741	AD	AD741	1130-20
			1161-3
		AD741C	1162-50
		AD741J	1156-16
		AD741K	1153-38
		AD741L	1147-3
		AD741S	1153-24
	Fairchild	μA741AM	1147-40
		μA741C	1162-51
		μA741EC	1147-39
		μA741M	1161-4
	GE/RCA	**CA741**	⋆ **2645**
			1130-21
		CA741C	⋆ **2645**
			1162-52
		LM741	⋆ **2645**
			1160-49
			(Continued)

Base Number	Source	Device	Page-Line
741	**GE/RCA**		(Cont'd)
		LM741C	⋆ **2645**
			1163-18
	National	LM741	1130-24
			1161-6
		LM741A	1156-10
		LM741C	1163-3
		LM741E	1156-11
	NEC	μPC741	1130-25
			1163-4
	PMI	PM741	1161-7
		PM741C	1163-5
	Raytheon	RM741	1161-8
	Robotrol	RMB741	4859-30
	Samsung	LM741C	1163-13
	SGS	LM741	1160-44
		LM741C	1162-48
		LM741E	1156-9
		M741	1119-114
	Signetics	μA741	1130-26
			1163-35
		μA741C	1164-19
		SA741C	1163-23
	SiliconG	SG741	1130-27
			1161-9
		SG741C	1163-6
	TI	μA741C	1163-7
	Thomson	μA741	1130-28
		μA741C	1163-14
		μA741M	1160-46
7410	Fairchild	7410	672-21
	National	DM7410	672-25
	Sensoray	**7410**	⋆ **4901**
			4821-1
			4878-17
	Signetics	**7410**	⋆ **3003**
			672-27
	TI	SN7410	672-29
74107	National	DM74107	669-98
	Signetics	**74107**	⋆ **3003**
			669-102
	TI	SN74107	669-106
74109	National	DM74109	669-52
	Signetics	**74109**	⋆ **3003**
			669-54
	TI	SN74109	669-56
7411	Fairchild	7411	670-97
	National	DM7411	670-100
	Sensoray	**7411**	⋆ **4901**
			4813-35
			4872-5
			4875-35
	Signetics	**7411**	⋆ **3003**
			670-101
74116	**Signetics**	**74116**	⋆ **3003**
			676-133
	TI	SN74116	676-135
7412	**Sensoray**	**7412**	⋆ **4901**
			4813-36
			4871-16
	TI	SN7412	672-81
74120	TI	SN74120	688-110
74121	Fairchild	74121	681-160
	National	DM74121	681-162
	Signetics	**74121**	⋆ **3003**
			682-1
	TI	SN74121	682-3
74122	TI	SN74122	682-11
74123	Fairchild	74123	682-35
	National	DM74123	682-37
	Signetics	**74123**	⋆ **3003**
			682-39
	TI	SN74123	682-41
74125	Fairchild	74125	658-59
	National	DM74125	658-62
	Signetics	**74125**	⋆ **3003**
			658-65
	TI	SN74125	658-67
74126	**Signetics**	**74126**	⋆ **3003**
			658-88
	TI	SN74126	658-90
74128	**Signetics**	**74128**	⋆ **3003**
			666-14
			988-35
	TI	SN74128	666-16
			988-36

Base Number	Source	Device	Page-Line
7413	National	DM7413	688-119
	Sensoray	**7413**	⋆ **4901**
			4813-37
			4870-17
			4879-9
	Signetics	**7413**	⋆ **3003**
			688-121
	TI	SN7413	688-123
74132	Fairchild	74132	689-23
	National	DM74132	689-25
	Signetics	**74132**	⋆ **3003**
			689-27
	TI	SN74132	689-29
74136	TI	SN74136	676-10
7414	Fairchild	7414	689-55
	National	DM7414	689-57
	Signetics	**7414**	⋆ **3003**
			689-59
	TI	SN7414	689-61
74141	National	DM74141	979-122
74143	TI	SN74143	664-12
74145	Fairchild	74145	664-46
	National	DM74145	664-48
	Signetics	**74145**	⋆ **3003**
			664-50
	TI	SN74145	664-51
74147	**Signetics**	**74147**	⋆ **3003**
			690-86
	TI	SN74147	690-88
74148	National	DM74148	690-7
	Signetics	**74148**	⋆ **3003**
			690-11
	TI	SN74148	690-13
7415	**Sensoray**	**7415**	⋆ **4901**
			4815-1
			4873-22
			4878-32
74150	Fairchild	74150	681-144
	National	DM74150	681-146
	Signetics	**74150**	⋆ **3003**
			681-148
	TI	SN74150	681-150
74151	Fairchild	74151	681-43
	National	DM74151A	681-45
	Signetics	**74151**	⋆ **3003**
			681-47
	TI	SN74151-Cell	632-17
		SN74151A	681-49
74153	Fairchild	74153	679-10
	National	DM74153	679-14
	Signetics	**74153**	⋆ **3003**
			679-16
	TI	SN74153	679-18
		SN74153-Cell	630-101
74154	National	DM74154	665-107
	Signetics	**74154**	⋆ **3003**
			665-111
	TI	SN74154	665-113
74155	Fairchild	74155	664-103
	National	DM74155	664-106
	Signetics	**74155**	⋆ **3003**
			664-110
	TI	SN74155	664-114
		SN74155-Cell	614-145
74156	National	DM74156	664-107
	Signetics	**74156**	⋆ **3003**
			664-111
	TI	SN74156	664-115
74157	Fairchild	74157	680-69
	National	DM74157	680-73
	Signetics	**74157**	⋆ **3003**
			680-80
	TI	SN74157	680-82
74158	**Signetics**	**74158**	⋆ **3003**
			679-160
74159	TI	SN74159	665-121
7416	Fairchild	7416	666-40
	National	DM7416	666-44
	Signetics	**7416**	⋆ **3003**
			666-50
	TI	SN7416	666-54
74160	National	DM74160A	662-116
	Signetics	**74160**	⋆ **3003**
			662-121
	TI	SN74160	662-123

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
74161	Fairchild	74161	660-114
	National	DM74161A	660-118
	Signetics	**74161**	⋆ **3003**
			660-123
	TI	SN74161	660-125
		SN74161A-Cell	609-4
74162	National	DM74162A	662-154
74163	Fairchild	74163	660-162
	National	DM74163	660-164
	Signetics	**74163**	⋆ **3003**
			660-166
	TI	SN74163	660-168
		SN74163A-Cell	608-123
74164	Fairchild	74164	683-56
			1395-37
	National	DM74164	683-58
			1395-44
	Signetics	**74164**	⋆ **3003**
			683-62
			1395-51
	TI	SN74164	683-64
			1395-54
		SN74164-Cell	635-40
74165	Fairchild	74165	683-104
			1394-97
	National	DM74165	683-106
			1394-99
	Signetics	**74165**	⋆ **3003**
			683-108
			1394-101
	TI	SN74165	683-110
			1394-103
		SN74165-Cell	634-167
74166	Fairchild	74166	683-121
			1394-106
	National	DM74166	683-123
			1395-6
	Signetics	**74166**	⋆ **3003**
			683-125
			1395-8
	TI	SN74166	683-127
			1395-14
		SN74166-Cell	635-67
74167	Fairchild	74167	688-90
	TI	SN74167	688-92
7417	Fairchild	7417	666-25
	National	DM7417	666-29
	Signetics	**7417**	⋆ **3003**
			666-33
	TI	SN7417	666-37
74170	Fairchild	74170	678-73
			1347-5
	National	DM74170	678-74
			1347-10
	Signetics	**74170**	⋆ **3003**
			678-76
	TI	SN74170	678-78
			1347-17
74172	TI	SN74172	678-107
			1347-35
74173	Fairchild	74173	667-121
	National	DM74173	667-123
	Signetics	**74173**	⋆ **3003**
			667-129
	TI	SN74173	667-131
		SN74173-Cell	618-21
74174	Fairchild	74174	667-147
	National	DM74174	667-149
	Signetics	**74174**	⋆ **3003**
			667-151
	TI	SN74174	667-153
		SN74174-Cell	618-73
74175	Fairchild	74175	667-32
	National	DM74175	667-34
	Signetics	**74175**	⋆ **3003**
			667-36
	TI	SN74175	667-38
		SN74175-Cell	617-146
74176	National	DM74176	662-94
	TI	SN74176	662-100
74177	National	DM74177	660-83
	TI	SN74177	660-91
74180	Fairchild	74180	690-39
	National	DM74180	690-41
	Signetics	**74180**	⋆ **3003**
			690-46

(Continued)

Base Number	Source	Device	Page-Line
74180			(Cont'd)
	TI	SN74180	690-48
74181	**Signetics**	**74181**	⋆ **3003**
			657-11
74182	Motorola	MC74182	657-67
74184	National	DM74184	688-105
74185	National	DM74185A	688-101
74190	**Signetics**	**74190**	⋆ **3003**
			663-120
	TI	SN74190	663-122
74191	National	DM74191	661-145
	Signetics	**74191**	⋆ **3003**
			661-147
	TI	SN74191	661-149
		SN74191-Cell	610-47
74192	National	DM74192	663-85
	Signetics	**74192**	⋆ **3003**
			663-89
	TI	SN74192	663-91
74193	National	DM74193	662-9
	Signetics	**74193**	⋆ **3003**
			662-13
	TI	SN74193	662-15
		SN74193-Cell	610-48
74194	National	DM74194	683-9
			1393-41
	Signetics	**74194**	⋆ **3003**
			683-11
			1393-46
	TI	SN74194	683-12
			1393-55
		SN74194A-Cell	634-18
74195	National	DM74195	682-96
			1393-81
	Signetics	**74195**	⋆ **3003**
			682-100
			1393-89
	TI	SN74195	682-102
			1393-97
		SN74195A-Cell	634-80
74196	TI	SN74196	662-101
74197	Fairchild	74197	660-78
	National	DM74197	660-84
	TI	SN74197	660-92
74198	National	DM74198	683-92
			1394-66
	TI	SN74198	683-94
			1394-71
74199	National	DM74199	1394-67
	Signetics	**74199**	⋆ **3003**
			683-97
			1394-68
	TI	SN74199	683-99
			1394-72
7420	Fairchild	7420	671-89
	GoldStar	**GCL7420**	⋆ **4242**
			4048-23
		LL7420	4048-24
	Laserpath	LP7420C	4052-17
		LP7420P	4052-18
	LSI Logic	LL7420	4053-10
	National	DM7420	671-91
	Raytheon	**RL7420**	⋆ **4297**
			4058-46
	Signetics	**7420**	⋆ **3003**
			671-93
	TI	SN7420	671-95
7421	**Signetics**	**7421**	⋆ **3003**
			670-62
7422	TI	SN7422	672-3
74221	**Signetics**	**74221**	⋆ **3003**
			682-21
	TI	SN74221	682-23
7423	TI	SN7423	675-18
7425	Fairchild	7425	675-10
	National	DM7425	675-12
	Signetics	**7425**	⋆ **3003**
			675-14
	TI	SN7425	675-16
74251	National	DM74251	681-103
	TI	SN74251	681-105
		SN74251-Cell	632-65
74259	National	DM74259	677-46
	TI	SN74259	677-52
		SN74259-Cell	628-171

Base Number	Source	Device	Page-Line
7426	National	DM7426	665-147
	Signetics	**7426**	⋆ **3003**
			665-154
	TI	SN7426	665-156
74265	TI	SN74265	689-18
7427	Fairchild	7427	675-35
	National	DM7427	675-37
	Signetics	**7427**	⋆ **3003**
			675-39
	TI	SN7427	675-41
74273	TI	SN74273	668-91
		SN74273-Cell	618-132
74276	TI	SN74276	670-59
74278	TI	SN74278	689-126
74279	Fairchild	74279	677-2
			¶ 452-5
	Signetics	**74279**	⋆ **3003**
			677-4
	TI	SN74279	677-6
7428	**Signetics**	**7428**	⋆ **3003**
			675-104
	TI	SN7428	675-108
74283	Fairchild	74283	657-153
	TI	SN74283	658-1
			¶ 448-20
		SN74283-Cell	602-34
			¶ 448-20
74293	TI	SN74293	661-47
74298	**Signetics**	**74298**	⋆ **3003**
			680-164
	TI	SN74298	680-166
		SN74298-Cell	631-154
7430	Fairchild	7430	673-119
	National	DM7430	673-121
	Signetics	**7430**	⋆ **3003**
			673-123
	TI	SN7430	673-125
7432	Burr-Brown	MP7432-AO	4856-27
	Fairchild	7432	674-111
	National	DM7432	674-113
	Signetics	**7432**	⋆ **3003**
			674-115
	TI	SN7432	674-117
7433	**Signetics**	**7433**	⋆ **3003**
			675-77
	TI	SN7433	675-79
74365	National	DM74365	660-7
	Signetics	**74365**	⋆ **3003**
			658-141
	TI	SN74365A	658-145
74366	National	DM74366	658-135
			666-68
	Signetics	**74366**	⋆ **3003**
			660-13
			666-60
	TI	SN74366A	660-17
74367	National	DM74367	658-136
			666-69
	Signetics	**74367**	⋆ **3003**
			658-142
			666-61
	TI	SN74367A	658-146
			666-74
74368	National	DM74368	660-8
	Signetics	**74368**	⋆ **3003**
			660-14
	TI	SN74368A	660-18
7437	Fairchild	7437	672-162
	National	DM7437	672-164
	Signetics	**7437**	⋆ **3003**
			672-166
	TI	SN7437	672-168
74376	TI	SN74376	670-58
7438	Fairchild	7438	673-5
	GoldStar	**GL7438**	⋆ **2700**
			1004-69
	National	DM7438	673-8
	Signetics	**7438**	⋆ **3003**
			673-11
	TI	SN7438	673-14
7439	Fairchild	7439	673-6
	Signetics	**7439**	⋆ **3003**
			673-12
	TI	SN7439	673-15
74390	TI	SN74390	663-12

Base Number	Source	Device	Page-Line
74393	TI	SN74393	661-23
		SN74393-Cell	609-167
744	**AD**	**AD744**	⋆ **2434**
			1144-7
7440	Fairchild	7440	671-148
	National	DM7440	671-150
	Signetics	**7440**	⋆ **3003**
			671-152
	TI	SN7440	671-154
7441	National	DM7441A	979-117
7442	Fairchild	7442	664-59
	National	DM7442	664-63
	Signetics	**7442**	⋆ **3003**
			664-67
	TI	SN7442A	664-69
7445	Fairchild	7445	664-39
	GoldStar	**GL7445**	⋆ **2700**
			1003-24
	National	DM7445	664-41
	Signetics	**7445**	⋆ **3003**
			664-43
	TI	SN7445	664-45
7446	National	DM7446A	979-53
	TI	SN7446A	979-67
74468	Motorola	MC74468	1008-12
7447	Fairchild	7447	979-40
	National	DM7447A	979-54
	TI	SN7447A	979-68
7448	National	DM7448	979-23
7450	Fairchild	7450	674-39
	National	DM7450	674-41
	Signetics	**7450**	⋆ **3003**
			674-43
	TI	SN7450	674-45
7451	Fairchild	7451	674-4
	National	DM7451	674-6
	SGS	LS7451	674-25
	Signetics	**7451**	⋆ **3003**
			674-8
	TI	SN7451	674-10
7453	National	DM7453	674-69
7454	National	DM7454	674-65
	TI	SN7454	674-67
747	Fairchild	μA747AM	1175-29
		μA747C	1179-5
		μA747EC	1175-30
		μA747M	1177-50
	GE/RCA	**CA747**	⋆ **2645**
			1177-52
		CA747C	⋆ **2645**
			1179-6
	National	LM747	1177-56
		LM747A	1175-31
		LM747C	1179-10
		LM747E	1175-32
	PMI	**PM747**	⋆ **2972**
			1177-57
	Raytheon	RC747	1179-15
		RM747	1177-58
	SGS	M747	1119-115
	Signetics	μA747	1179-51
		μA747C	1180-13
		SA747C	1179-42
	TI	μA747C	1179-17
		μA747M	1178-3
7470	National	DM7470	669-39
	TI	SN7470	669-41
7472	National	DM7472	669-43
7473	Fairchild	7473	669-95
	National	DM7473	669-99
	Signetics	**7473**	⋆ **3003**
			669-103
	TI	SN7473	669-107
7474	Fairchild	7474	666-142
	National	DM7474	666-144
	Signetics	**7474**	⋆ **3003**
			666-146
	TI	SN7474	666-148
7475	Fairchild	7475	676-137
	National	DM7475	676-139
	Signetics	**7475**	⋆ **3003**
			676-141
	TI	SN7475	676-143

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7476	Fairchild	7476	669-135
	National	DM7476	669-137
	Signetics	**7476**	*** 3003**
			669-139
	TI	SN7476	669-141
	Toshiba	TC7476B	669-93
748	Fairchild	µA748C	1163-8
	GE/Intersil	µA748C	1163-9
	GE/RCA	**CA748**	*** 2645**
			1161-13
		CA748C	*** 2645**
			1163-10
		LM748	*** 2645**
			1160-50
		LM748C	*** 2645**
			1163-19
	National	LM748	1161-15
		LM748C	1161-16
	SGS	LM748	1160-45
		LM748C	1162-49
	TI	µA748C	1163-12
	Thomson	LM748C	1163-15
		LM748M	1160-47
7483	National	DM7483	657-155
	Signetics	**7483**	*** 3003**
			657-157
	TI	SN7483A	658-2
7485	Fairchild	7485	656-45
	National	DM7485	656-55
	Signetics	**7485**	*** 3003**
			656-61
	TI	SN7485	656-65
7486	Fairchild	7486	676-30
	National	DM7486	676-33
	Signetics	**7486**	*** 3003**
			676-36
	TI	SN7486	676-38
7488	Ziatech	ZT 7488/08	4873-51
		ZT 7488/28	4871-4
7489	AMD	SN7489	1347-96
		SN7489-1	1347-82
	National	DM7489B	678-111
749	Fairchild	µA749C	1175-40
7490	Fairchild	7490	662-59
	National	DM7490	662-61
	S-MOS	**SLA7490**	*** 4305**
			4069-8
	Signetics	**7490**	*** 3003**
			662-63
7491	National	SN7491A	1395-62
	Signetics	**7491**	*** 3003**
			1395-64
7492	National	DM7492A	663-151
	Signetics	**7492**	*** 3003**
			663-153
	TI	SN7492A	663-155
7493	Fairchild	7493	661-40
	National	DM7493A	661-42
	Signetics	**7493**	*** 3003**
			661-44
	TI	SN7493A	661-48
7494	**Signetics**	**7494**	*** 3003**
			683-4
			1394-24
7495	Fairchild	7495	682-125
			1393-37
	National	DM7495	682-129
			1393-42
	Signetics	**7495A**	*** 3003**
			1393-47
	TI	SN7495A	682-132
			1393-56
7496	National	DM7496	683-39
			1394-38
	Signetics	**7496**	*** 3003**
			683-41
			1394-42
	TI	SN7496	683-43
			1394-44
7497	Fairchild	7497	689-131
	TI	SN7497	689-133
75	Amperex	BGY75	1123-117
	Burr-Brown	**PCM75**	*** 2541**
			1122-111
			¶ 420-14

(Continued)

Base Number	Source	Device	Page-Line
75	**Burr-Brown**		**(Cont'd)**
		PCM75J	*** 2541**
			937-47
			¶ 420-14
		PCM75K	*** 2541**
			937-35
			¶ 420-14
75ALS056			
	TI	SN75ALS056	996-6
75ALS057			
	TI	SN75ALS057	994-8
75ALS121			
	TI	SN75ALS121	985-23
75ALS123			
	TI	SN75ALS123	990-1
75ALS125			
	TI	SN75ALS125	990-58
75ALS126			
	TI	SN75ALS126	986-5
75ALS127			
	TI	SN75ALS127	990-59
75ALS130			
	TI	SN75ALS130	985-49
75ALS160			
	TI	SN75ALS160	997-33
75ALS161			
	TI	SN75ALS161	997-34
75ALS162			
	TI	SN75ALS162	997-35
75ALS163			
	TI	SN75ALS163	997-27
75ALS164			
	TI	SN75ALS164	997-36
75ALS165			
	TI	SN75ALS165	997-37
75ALS192			
	TI	SN75ALS192	989-10
75ALS193			
	TI	SN75ALS193	993-16
75ALS194			
	TI	SN75ALS194	988-43
75ALS195			
	TI	SN75ALS195	992-49
			992-50
75CG08			
	NEC	µPD75CG08	809-6
		µPD75CG08H	809-7
75CG16			
	NEC	µPD75CG16H	809-8
75CG19			
	NEC	µPD75CG19	809-9
		µPD75CG19H	809-10
75CG208			
	NEC	µPD75CG208	809-11
75CG28			
	NEC	µPD75CG28A	809-12
75CG33			
	NEC	µPD75CG33	809-13
75CG38			
	NEC	µPD75CG38	809-14
75C00	TI	TMS75C00	841-13
			868-117
75C07	VersaLogic	VL75C07	4873-33
75C08	VersaLogic	VL75C08	4873-34
75C18	**IDT**	**IDT75C18**	*** 2807**
			*** 2834**
			944-9
75C19	**IDT**	**IDT75C19**	*** 2807**
			950-38
75C28	IDT	IDT75C28	944-4
75C48	**IDT**	**IDT75C48**	*** 2807**
			*** 2836**
			917-40
75C58	**IDT**	**IDT75C58**	*** 2807**
			*** 2837**
			917-41
75HC133			
	Sharp	LR75HC133	623-182
75H000			
	OKI	MSM75H000	4057-33
		75H000	4058-2
75LS192			
	TI	SN75LS192	989-11
75P108	NEC	µPD75P108	809-15
75P308	NEC	µPD75P308	809-16
75S06	National	DM75S06	1316-6
75S07	National	DM75S07	1316-7
		DM75S07A	1316-3

Base Number	Source	Device	Page-Line
75S110	**Motorola**	**MC75S110**	*** 2952**
			988-25
75S28	National	DM75S28	1389-15
75S29	National	DM75S29	1389-14
75S50	National	DM75S50	664-17
75T201	**SiliconSys**	**SSI75T201**	*** 3199**
			1199-73
75T202	**SiliconSys**	**SSI75T202**	*** 3199**
			1199-74
75T203	**SiliconSys**	**SSI75T203**	*** 3199**
			1199-75
75T204	**SiliconSys**	**SSI75T204**	*** 3199**
			1199-76
75T2089			
	SiliconSys	**SSI75T2089**	*** 3199**
			1199-139
75T2090			
	SiliconSys	**SSI75T2090**	*** 3199**
			1199-43
75T957	**SiliconSys**	**SSI75T957**	*** 3199**
			1199-77
75T980	**SiliconSys**	**SSI75T980**	*** 3199**
			1192-18
75T981	**SiliconSys**	**SSI75T981**	*** 3199**
			1192-19
75T982	**SiliconSys**	**SSI75T982**	*** 3199**
			1192-20
75V000	OKI	75V000	4058-1
75X431	National	DM75X431	1305-8
750	Atec	750	4872-15
	Atmel	ATV750-30	4078-22
		ATV750-35	4078-23
		ATV750-40	4078-24
	Clearpoint	VXR750	4881-7
	Cybernetic	CY750	882-19
	Fujitsu	**ET750**	*** 4230**
			4046-8
	Plessey	TBA750	1121-45
			1125-126
	Zendex	ZBX750	4854-10
7500	**AT&T**	**T7500**	*** 2470**
			*** 2482**
			1192-124
	Gould	**GC7500**	*** 4244**
			4048-47
	Matra-Harris		
		MB7500	4054-23
	Motorola	**MCA7500RAM**	
			*** 4287**
			4056-15
	NEC	µPD7500	809-17
		µPD7500H	809-18
	OKI	MSM7500	4057-34
	Sanyo	LC7500	1116-53
	TI	TMS7500	841-14
			868-118
75000	Fujitsu	C75000AU	4047-16
7501	AD	AD7501J	913-66
		AD7501K	913-67
		AD7501S	913-68
	MicroPwr	MP7501J	913-78
		MP7501K	913-79
		MP7501S	913-28
	NEC	µPD7501	809-19
			864-26
7502	AD	AD7502J	912-29
		AD7502K	912-30
		AD7502S	912-31
	MicroPwr	MP7502J	912-37
		MP7502K	912-38
		MP7502S	911-81
	NEC	µPD7502	809-20
			864-27
	Toshiba	TA7502	1160-40
		TA7502A	1160-41
		TA7502B	1149-42
	Ziatech	ZT 7502/10/40/or 60	4875-1
7503	AD	AD7503J	913-69
		AD7503K	913-70
		AD7503S	913-71
	MicroPwr	MP7503J	913-80
		MP7503K	913-81
		MP7503S	913-29

(Continued)

Base Number	Source	Device	Page-Line
7503			(Cont'd)
	NEC	µPD7503	809-21
			864-28
7504	Toshiba	TA7504	1130-29
7505	**VTC**	**VA7505J**	*** 3373**
			1102-13
		VA7505K	*** 3373**
			1102-14
		VA7505L	*** 3373**
			1102-15
7506	AD	AD7506J	915-49
		AD7506K	915-50
		AD7506S	915-41
		AD7506T	915-42
	HybridSys	HS7506J	915-51
		HS7506K	915-52
		HS7506S	915-46
		HS7506T	915-47
	MicroPwr	MP7506J	915-39
		MP7506K	915-40
		MP7506S	915-20
	NEC	µPD7506	809-22
			864-12
	Toshiba	TA7506	1130-19
75060	Toshiba	TA75060	1154-33
75061	TI	SN75061	997-49
	Toshiba	TA75061	1154-34
75062	TI	SN75062	997-50
	Toshiba	TA75062	1175-3
75064	TI	SN75064	1006-13
	Toshiba	TA75064	1184-20
75065	TI	SN75065	1006-73
75066	TI	SN75066	1006-14
75067	TI	SN75067	1006-74
75068	TI	SN75068	1006-15
75069	TI	SN75069	1006-75
7507	AD	AD7507J	914-58
		AD7507K	914-59
		AD7507S	914-48
		AD7507T	914-49
	Gordos	G7507	4875-32
	HybridSys	HS7507J	914-60
		HS7507K	914-61
		HS7507S	914-53
		HS7507T	914-54
	MicroPwr	MP7507J	914-46
		MP7507K	914-47
		MP7507S	914-38
	NEC	µPD7507	809-23
			864-13
		µPD7507H	809-24
		µPD7507S	809-25
			864-14
	VersaLogic	VL7507	4876-26
	WinSystems	MCM-7507	4874-48
			4874-5
75070	Toshiba	TA75070	1154-35
75071	Toshiba	TA75071	1154-36
75072	Toshiba	TA75072	1175-4
75074	Toshiba	TA75074	1184-21
7508	HybridSys	HS7508DIK	913-85
		HS7508DIS	913-86
	MicroPwr	MP7508K	913-82
		MP7508S	913-30
	NEC	µPD7508	809-26
			864-15
		µPD7508A	809-27
			864-16
			864-31
		µPD7508H	864-17
	VersaLogic	VL7508	4876-40
	WinSystems	LPM7508	4876-36
		MCM7508	4876-37
7509	HybridSys	HS7509DIK	912-42
		HS7509DIS	912-43
	MicroPwr	MP7509K	912-39
		MP7509S	911-82
	Signetics	**PNA7509**	*** 3121**
			917-4
751	NEC	µPC751	999-30
	SGS	M751	1199-23
7510	AD	AD7510DIJ	904-50
		AD7510DIK	904-51
		AD7510DIS	904-52
	Cubit	7510	4817-27
	MicroPwr	MP7510DIJ	904-58

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7510	MicroPwr		(Cont'd)
		MP7510DIK	904-59
		MP7510DIS	904-60
	PMI	**SW7510A**	⋆ **2975**
			905-67
		SW7510B	⋆ **2975**
			905-68
		SW7510E	⋆ **2975**
			905-69
		SW7510F	⋆ **2975**
			905-70
	Raytheon	RG7510	673-51
	Sanyo	LC7510	1123-29
	Siemens	PSB7510	977-89
	Thomson	EFB7510	1196-30
75104	NEC	μPD75104	809-28
75106	NEC	μPD75106	809-29
			864-18
75107	**Motorola**	**MC75107**	⋆ **2952**
			991-20
			¶ 423-19
			¶ 425-22
	National	DS75107	991-22
			991-33
	TI	SN75107A	991-24
			1008-1
		SN75107B	991-35
			1008-2
75108	**Motorola**	**MC75108**	⋆ **2952**
			991-25
	National	DS75108	991-27
			991-37
	NEC	μPD75108	809-30
	TI	SN75108A	991-29
			1008-3
		SN75108B	991-39
			1008-4
75109	TI	SN75109A	988-23
7511	AD	AD7511DIJ	904-53
		AD7511DIK	904-54
		AD7511DIS	904-55
		AD7511DIT	904-56
	MicroPwr	MP7511DIJ	904-61
		MP7511DIK	904-62
		MP7511DIS	904-63
		MP7511DIT	904-64
	PMI	**SW7511A**	⋆ **2975**
			905-71
		SW7511B	⋆ **2975**
			905-72
		SW7511E	⋆ **2975**
			905-73
		SW7511F	⋆ **2975**
			905-74
	Thomson	EFB7511	1196-31
75110	TI	SN75110A	988-27
75111	TI	SN75111	988-24
75112	TI	SN75112	988-28
75113	National	DS75113	988-12
	TI	SN75113	988-14
75114	National	DS75114	987-49
	TI	SN75114	987-51
75115	National	DS75115	991-53
	TI	SN75115	991-55
75116	TI	SN75116	997-53
75117	TI	SN75117	997-59
75118	TI	SN75118	997-55
75119	TI	SN75119	997-57
7512	AD	AD7512DIJ	907-72
		AD7512DIK	907-73
		AD7512DIS	907-74
		AD7512DIT	907-75
	AT&T	**T7512**	⋆ **2483**
			1192-142
	MicroPwr	MP7512DIJ	907-76
		MP7512DIK	907-77
		MP7512DIS	907-78
		MP7512DIT	907-79
	Sanyo	LC7512	1123-30
	Thomson	EFB7512	1196-32
75121	National	DS75121	985-16
	TI	SN75121	985-20
75122	National	DS75122	990-12
	TI	SN75122	990-14
75123	National	DS75123	985-12
	TI	SN75123	985-14
75124	National	DS75124	990-8
	TI	SN75124	990-10
75125	**Motorola**	**MC75125**	⋆ **2952**
			990-60
	National	DS75125	991-1
	TI	SN75125	991-3
75127	**Motorola**	**MC75127**	⋆ **2952**
			990-61
	National	DS75127	991-2
	TI	SN75127	991-4
75128	**Motorola**	**MC75128**	⋆ **2952**
			991-7
	National	DS75128	991-9
	TI	SN75128	991-11
75129	**Motorola**	**MC75129**	⋆ **2952**
			991-8
	National	DS75129	991-10
	TI	SN75129	991-12
7513	**AT&T**	**T7513**	⋆ **2484**
			1192-125
	Thomson	EFG7513	1195-95
75136	TI	SN75136	689-97
			995-6
75138	TI	SN75138	995-60
7514	NEC	μPD7514	864-29
75140	TI	SN75140A	990-2
75141	TI	SN75141	990-3
75146	TI	SN75146	992-7
7515	Thomson	EFG7515	1196-19
		TSG7515	⋆ **3289**
			1196-14
75150	Mitsubishi	M75150	985-11
	National	DS75150	985-7
	TI	SN75150	985-9
751506	TI	SN751506	977-35
751508	TI	SN751508	977-33
75151	TI	SN75151	989-13
751516	TI	SN751516	977-36
751518	TI	SN751518	977-34
75152	TI	SN75152	992-6
75153	TI	SN75153	989-14
75154	Mitsubishi	M75154	990-23
	National	DS75154	990-21
	TI	SN75154	990-22
75155	TI	SN75155	994-1
75157	TI	SN75157	991-49
75158	TI	SN75158	987-52
75159	TI	SN75159	988-16
7516	NEC	μPD7516H	809-31
75160	National	DS75160A	996-8
	TI	SN75160B	997-28
75161	National	DS75161A	996-9
	TI	SN75161B	997-29
75162	National	DS75162A	996-10
	TI	SN75162B	997-30
75163	TI	SN75163B	997-31
75164	TI	SN75164B	997-32
7517	NEC	μPD7517	864-19
			864-32
75172	**Motorola**	**SN75172**	⋆ **2952**
			989-15
			¶ 424-21
	TI	SN75172	989-17
75173	**Motorola**	**SN75173**	⋆ **2952**
			992-43
			¶ 424-21
	TI	SN75173	992-46
75174	**Motorola**	**SN75174**	⋆ **2952**
			989-16
			¶ 424-21
	TI	SN75174	989-18
75175	**Motorola**	**SN75175**	⋆ **2952**
			992-44
			¶ 424-21
	TI	SN75175	992-47
75176	**Motorola**	**SN75176**	⋆ **2953**
			998-4
	TI	SN75176B	998-7
75177	**Motorola**	**SN75177**	⋆ **2953**
			998-5
	TI	SN75177B	998-8
75178	**Motorola**	**SN75178**	⋆ **2953**
			998-6
	TI	SN75178B	998-9
75179	TI	SN75179B	997-51
7518	**Signetics**	**PNA7518**	⋆ **3118**
			925-27
75182	TI	SN75182	991-59
75183	TI	SN75183	988-7
75188	TI	SN75188	985-45
75189	Mitsubishi	M75189	990-25
		M75189A	990-41
	TI	SN75189	990-32
		SN75189A	990-46
7519	NEC	μPD7519	809-32
			864-33
		μPD7519H	809-33
752	NthGraphics		
		752	4848-10
	Xylogics	752	4881-32
7520	AD	AD7520J	954-23
		AD7520K	953-25
		AD7520L	951-38
		AD7520S	954-24
		AD7520T	953-26
		AD7520U	951-39
	CAN-TRON	STD7520	4878-35
	Cubit	7520	4817-28
	GE/Intersil	**AD7520J**	⋆ **2668**
			954-26
		AD7520K	⋆ **2668**
			953-28
		AD7520L	⋆ **2668**
			951-41
		AD7520S	⋆ **2668**
			954-27
		AD7520T	⋆ **2668**
			953-29
		AD7520U	⋆ **2668**
			951-42
	Maxim	AD7520J	954-29
		AD7520K	953-31
		AD7520S	954-30
		AD7520T	953-32
		AD7520U	951-44
	MicroPwr	MP7520J	954-32
		MP7520K	953-34
		MP7520L	951-47
		MP7520Q	953-35
		MP7520R	951-48
		MP7520S	954-33
		MP7520T	953-36
		MP7520U	952-1
		MP7520W	953-37
		MP7520Y	952-2
	National	AD7520J	955-7
		AD7520K	954-17
		AD7520L	953-14
		AD7520S	955-8
		AD7520T	954-18
		AD7520U	953-15
	NEC	μPD7520	809-34
			864-30
	Raytheon	RG7520	689-22
	Siemens	PSB7520	977-90
75206	Maxim	AD7520	951-45
	NEC	μPD75206	811-1
			864-20
75207	National	DS75207	991-13
			1008-15
	TI	SN75207	991-15
			1008-17
		SN75207B	991-18
75208	National	DS75208	991-14
			1008-16
	NEC	μPD75208	811-2
	TI	SN75208	991-16
			1008-18
		SN75208B	991-19
7521	AD	AD7521J	970-7
		AD7521K	969-40
		AD7521L	969-2
		AD7521S	970-8
		AD7521T	969-41
		AD7521U	969-3
	GE/Intersil	**AD7521J**	⋆ **2668**
			970-10
		AD7521K	⋆ **2668**
			969-43
		AD7521L	⋆ **2668**
			969-4
			(Continued)
7521	**GE/Intersil**		(Cont'd)
		AD7521S	⋆ **2668**
			970-11
		AD7521T	⋆ **2668**
			969-44
		AD7521U	⋆ **2668**
			969-5
	Maxim	AD7521J	970-13
		AD7521K	969-46
		AD7521L	969-7
		AD7521S	970-14
		AD7521T	969-47
		AD7521U	969-8
	MicroPwr	MP7521J	970-16
		MP7521K	969-49
		MP7521L	969-10
		MP7521S	970-17
		MP7521T	970-1
		MP7521U	969-11
	National	AD7521J	970-19
		AD7521K	970-3
		AD7521L	969-34
		AD7521S	970-20
		AD7521T	970-4
		AD7521U	969-35
7522	AD	AD7522J	954-41
		AD7522K	953-44
		AD7522L	952-13
		AD7522S	954-42
		AD7522T	953-45
		AD7522U	952-14
	AT&T	**T7522**	⋆ **2485**
			1192-80
	MicroPwr	MP7522J	954-34
		MP7522K	953-38
		MP7522L	952-3
		MP7522S	954-35
		MP7522T	953-46
		MP7522U	952-4
7523	AD	AD7523J	944-38
		AD7523K	943-7
		AD7523L	942-12
		AD7523S	944-39
	AT&T	**T7523**	⋆ **2486**
			1192-81
	Datel	**DAC7523**	⋆ **2576**
			945-12
	GE/Intersil	**AD7523J**	⋆ **2668**
			942-20
		AD7523K	⋆ **2668**
			943-8
		AD7523L	⋆ **2668**
			942-13
		AD7523S	⋆ **2668**
			942-21
		AD7523T	⋆ **2668**
			943-9
		AD7523U	⋆ **2668**
			942-14
	Maxim	AD7523J	944-40
		AD7523K	943-10
		AD7523L	942-15
		AD7523S	944-41
		AD7523T	943-11
		AD7523U	942-16
	MicroPwr	MP7523J	944-37
		MP7523K	943-6
		MP7523L	942-11
7524	AD	AD7524A	944-42
		AD7524B	943-15
		AD7524C	942-17
		AD7524J	944-43
		AD7524K	943-16
		AD7524L	942-18
		AD7524S	944-44
		AD7524T	943-17
		AD7524U	942-19
	Maxim	AD7524	942-8
	MicroPwr	MP7524A	944-23
		MP7524B	943-12
		MP7524C	942-28
		MP7524J	944-24
		MP7524K	943-13
		MP7524L	942-9
		MP7524S	944-25
		MP7524T	943-14
			(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7524	MicroPwr		(Cont'd)
		MP7524U	942-10
	PMI	**PM7524A**	⋆ **2973**
			⋆ **2976**
			942-22
		PM7524B	⋆ **2973**
			⋆ **2976**
			943-33
		PM7524E	⋆ **2973**
			⋆ **2976**
			942-23
		PM7524F	⋆ **2973**
			⋆ **2976**
			943-34
		PM7524G	⋆ **2973**
			⋆ **2976**
			942-24
		PM7524H	⋆ **2973**
			⋆ **2976**
			943-35
	TI	TLC7524	645-54
		TLC7524C	944-21
		TLC7524I	944-22
		TLC7524M	943-36
7525	AD	AD7525K	1219-72
			1224-61
		AD7525L	1224-62
		AD7525T	1219-73
		AD7525U	1224-63
75254	Toshiba	TA75254	1144-33
7527	NEC	μPD7527	864-11
		μPD7527A	811-3
75270	TI	SN75270	688-17
7528	AD	AD7528A	950-22
			¶ 419-12
			¶ 419-20
			¶ 419-35
		AD7528B	950-16
			¶ 419-12
			¶ 419-20
			¶ 419-35
		AD7528C	950-17
			¶ 419-12
			¶ 419-20
			¶ 419-35
		AD7528J	950-23
			¶ 419-12
			¶ 419-20
			¶ 419-35
		AD7528K	950-18
			¶ 419-12
			¶ 419-20
			¶ 419-35
		AD7528L	950-19
			¶ 419-12
			¶ 419-20
			¶ 419-35
		AD7528S	950-24
			¶ 419-12
			¶ 419-20
			¶ 419-35
		AD7528T	950-20
			¶ 419-12
			¶ 419-20
			¶ 419-35
		AD7528U	950-21
			¶ 419-12
			¶ 419-20
			¶ 419-35
	HybridSys	HS7528J	947-48
		HS7528K	945-26
		HS7528L	943-31
		HS7528S	947-49
		HS7528T	945-27
		HS7528U	943-32
	Maxim	AD7528	948-39
	MicroPwr	MP7528XA	947-30
		MP7528XB	944-18
		MP7528XC	942-34
		MP7528XJ	947-31
		MP7528XK	944-19
		MP7528XL	942-35
		MP7528XQ	942-7
		MP7528XS	947-32
		MP7528XT	944-20
		MP7528XU	942-36
			(Continued)

Base Number	Source	Device	Page-Line
7528			(Cont'd)
	NEC	μPD7528	864-21
			864-34
		μPD7528A	811-4
	PMI	**PM7528A**	⋆ **2973**
			⋆ **2976**
			948-40
		PM7528B	⋆ **2973**
			⋆ **2976**
			948-41
		PM7528E	⋆ **2973**
			⋆ **2976**
			948-42
		PM7528F	⋆ **2973**
			⋆ **2976**
			949-1
		PM7528G	⋆ **2973**
			⋆ **2976**
			949-2
		PM7528H	⋆ **2973**
			⋆ **2976**
			949-3
	TI	TLC7528C	947-12
		TLC7528I	947-13
		TLC7528M	950-25
7530	AD	AD7530J	954-25
		AD7530K	953-27
		AD7530L	951-40
	Cubit	7530	4817-29
	GE/Intersil	**AD7530J**	⋆ **2668**
			954-28
		AD7530K	⋆ **2668**
			953-30
		AD7530L	⋆ **2668**
			951-43
	Maxim	AD7530J	954-31
		AD7530K	953-33
		AD7530L	951-46
	MicroPwr	MP7530	952-5
		MP7530J	954-36
		MP7530K	953-39
75308	NEC	μPD75308	811-5
			864-22
7531	AD	AD7531J	970-9
		AD7531K	969-42
	GE/Intersil	**AD7531J**	⋆ **2668**
			970-12
		AD7531K	⋆ **2668**
			969-45
		AD7531L	⋆ **2668**
			969-6
	Maxim	AD7531J	970-15
		AD7531K	969-48
		AD7531L	969-9
	MicroPwr	MP7531J	970-18
		MP7531K	970-2
		MP7531L	969-12
7532	OEI	7532	1123-72
75325	National	DS75325	999-57
	SiliconG	SG75325	999-58
75326	SiliconG	SG75326	999-60
75327	SiliconG	SG75327	999-61
7533	AD	AD7533A	954-43
		AD7533B	954-2
		AD7533C	952-18
		AD7533J	954-44
		AD7533K	954-3
		AD7533L	952-19
		AD7533S	954-45
		AD7533T	954-4
		AD7533U	952-20
	Datel	**DAC7533**	⋆ **2576**
			952-28
	GE/Intersil	**AD7533J**	⋆ **2668**
			954-49
		AD7533K	⋆ **2668**
			954-9
		AD7533L	⋆ **2668**
			952-26
		AD7533S	⋆ **2668**
			955-1
		AD7533T	⋆ **2668**
			954-10
		AD7533U	⋆ **2668**
			952-27
	Maxim	AD7533A	954-46
			(Continued)

Base Number	Source	Device	Page-Line
7533	Maxim		(Cont'd)
		AD7533B	954-5
		AD7533C	952-21
		AD7533J	954-47
		AD7533K	954-6
		AD7533L	952-22
		AD7533S	954-48
		AD7533T	954-7
		AD7533U	952-23
	MicroPwr	MP7533K	954-8
		MP7533L	952-24
		MP7533Q	951-8
		MP7533R	951-1
		MP7533S	955-2
		MP7533T	955-3
			955-4
		MP7533U	952-25
		MP7533W	951-9
		MP7533Y	951-2
	NEC	μPD7533	811-6
	PMI	**PM7533A**	⋆ **2974**
			⋆ **2976**
			952-15
		PM7533B	⋆ **2974**
			⋆ **2976**
			953-47
		PM7533E	⋆ **2974**
			⋆ **2976**
			952-16
		PM7533F	⋆ **2974**
			⋆ **2976**
			953-48
		PM7533G	⋆ **2974**
			⋆ **2976**
			952-17
		PM7533H	⋆ **2974**
			⋆ **2976**
			954-1
7534	AD	AD7534A	972-34
			¶ 423-7
		AD7534B	972-18
			¶ 423-7
		AD7534J	972-35
			¶ 423-7
		AD7534K	972-19
			¶ 423-7
		AD7534S	972-36
			¶ 423-7
		AD7534T	972-20
			¶ 423-7
7535	AD	AD7535A	972-37
			¶ 423-7
		AD7535B	972-21
			¶ 423-7
		AD7535J	972-38
			¶ 423-7
		AD7535K	972-22
			¶ 423-7
		AD7535S	972-39
			¶ 423-7
		AD7535T	972-23
			¶ 423-7
75358	Toshiba	TA75358	1174-17
7536	AD	AD7536J	972-40
		AD7536K	972-24
		AD7536S	972-41
		AD7536T	972-25
75361	National	DS75361	999-109
75362	National	DS75362	999-110
75365	National	DS75365	999-123
7537	AD	AD7537	967-25
			¶ 419-20
		AD7537A	970-45
			¶ 419-20
		AD7537B	970-29
			¶ 419-20
		AD7537C	970-30
			¶ 419-20
		AD7537J	970-46
			¶ 419-20
		AD7537K	970-31
			¶ 419-20
		AD7537L	970-32
			¶ 419-20
		AD7537S	970-47
			¶ 419-20
			(Continued)

Base Number	Source	Device	Page-Line
7537	AD		(Cont'd)
		AD7537T	970-33
			¶ 419-20
		AD7537U	970-34
			¶ 419-20
	NEC	μPD7537	864-35
		μPD7537A	811-7
75372	TI	SN75372	1001-58
75374	TI	SN75374	1001-64
7538	**AD**	**AD7538**	⋆ **2408**
			972-26
	NEC	μPD7538	864-23
			864-36
		μPD7538A	811-8
754	AD	AD754L	970-35
	Harris	HI754ITD-2	956-26
7540	Cubit	7540	4817-30
	Raytheon	RG7540	688-117
	Toshiba	TA7540	1149-29
75407	TI	SN75407	1005-53
			1005-81
75408	TI	SN75408	1005-109
7541	AD	AD7541A	966-9
		AD7541B	960-22
		AD7541J	966-10
		AD7541K	960-23
		AD7541S	967-5
		AD7541T	960-24
	Burr-Brown	**DAC7541AA**	⋆ **2541**
			966-2
		DAC7541AB	⋆ **2541**
			960-6
		DAC7541AJ	⋆ **2541**
			966-3
		DAC7541AK	⋆ **2541**
			960-7
		DAC7541AS	⋆ **2541**
			966-4
		DAC7541AT	⋆ **2541**
			960-8
	Datel	**DAC7541**	⋆ **2576**
			961-17
	GE/Intersil	**AD7541A**	⋆ **2668**
			966-11
		AD7541B	⋆ **2668**
			960-25
		AD7541J	⋆ **2668**
			966-12
		AD7541K	⋆ **2668**
			960-26
		AD7541L	⋆ **2668**
			967-6
		AD7541S	⋆ **2668**
			967-7
		AD7541T	⋆ **2668**
			960-27
	HoneywellSPT		
		HDAC7541ZAC	
			⋆ **2997**
			⋆ **2999**
			959-11
		HDAC7541ZAI	
			⋆ **2997**
			⋆ **2999**
			959-12
		HDAC7541ZAM	
			⋆ **2997**
			⋆ **2999**
			959-13
		HDAC7541ZBC	
			⋆ **2997**
			⋆ **2999**
			965-23
		HDAC7541ZBI	
			⋆ **2997**
			⋆ **2999**
			965-24
		HDAC7541ZBM	
			⋆ **2997**
			⋆ **2999**
			965-25
	HybridSys	HS7541-4	960-41
		HS7541B-1	966-33
		HS7541B-2	960-42
		HS7541C-1	966-34
		HS7541C-2	960-43
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7541			(Cont'd)
	Maxim	AD7541A	966-13
		AD7541AA	966-14
		AD7541AB	960-28
		AD7541AJ	966-15
		AD7541AK	960-29
		AD7541AS	966-16
		AD7541AT	960-30
		AD7541B	960-31
		AD7541J	966-17
		AD7541K	960-32
		AD7541S	966-18
		AD7541T	960-33
	MicroPwr	MP7541A	966-19
		MP7541B	960-34
		MP7541J	966-20
		MP7541K	960-35
		MP7541S	966-21
		MP7541T	964-14
	PMI	**PM7541A**	⋆ **2974**
			⋆ **2976**
			961-1
		PM7541B	⋆ **2974**
			⋆ **2976**
			966-44
		PM7541E	⋆ **2974**
			⋆ **2976**
			961-2
		PM7541F	⋆ **2974**
			⋆ **2976**
			966-45
		PM7541G	⋆ **2974**
			⋆ **2976**
			961-3
		PM7541H	⋆ **2974**
			⋆ **2976**
			967-1
	Siliconix	Si7541AJ	966-5
		Si7541AK	960-9
		Si7541AS	966-7
		Si7541AT	960-11
		Si7541J	966-6
		Si7541K	960-10
		Si7541S	966-8
		Si7541T	960-12
	TeledyneP	TP7541A	967-8
		TP7541B	961-32
		TP7541J	967-9
		TP7541K	961-33
		TP7541S	967-10
		TP7541T	961-34
7542	AD	AD7542A	967-40
			¶ 421-1
			¶ 421-3
			¶ 422-6
		AD7542B	962-37
			¶ 421-1
			¶ 421-3
			¶ 422-6
		AD7542J	967-41
			¶ 421-1
			¶ 421-3
			¶ 422-6
		AD7542K	962-38
			¶ 421-1
			¶ 421-3
			¶ 422-6
		AD7542S	967-42
			¶ 421-1
			¶ 421-3
			¶ 422-6
		AD7542T	962-39
			¶ 421-1
			¶ 421-3
			¶ 422-6
	Harris	MP7542S	968-1
	HoneywellSPT		
		HDAC7542AAC	
			⋆ **2997**
			⋆ **2999**
			959-14
		HDAC7542AAI	
			⋆ **2997**
			⋆ **2999**
			959-15
			(Continued)

Base Number	Source	Device	Page-Line
7542	**HoneywellSPT**		**(Cont'd)**
		HDAC7542AAM	
			⋆ **2997**
			⋆ **2999**
			959-16
		HDAC7542ABC	
			⋆ **2997**
			⋆ **2999**
			965-26
		HDAC7542ABI	
			⋆ **2997**
			⋆ **2999**
			965-27
		HDAC7542ABM	
			⋆ **2997**
			⋆ **2999**
			965-28
	HybridSys	HS7542J	967-31
		HS7542K	962-25
		HS7542S	967-32
		HS7542T	962-26
	Maxim	AD7542A	967-45
		AD7542B	962-42
		AD7542GB	962-43
		AD7542GK	962-44
		AD7542GT	962-45
		AD7542J	967-46
		AD7542K	962-46
		AD7542S	967-47
		AD7542T	962-47
	MicroPwr	MP7542A	966-22
		MP7542B	968-26
		MP7542J	966-23
		MP7542K	968-27
		MP7542T	968-28
	National	DM7542	667-79
	PMI	**PM7542A**	⋆ **2974**
			⋆ **2976**
			961-21
		PM7542B	⋆ **2974**
			⋆ **2976**
			961-22
		PM7542E	⋆ **2974**
			⋆ **2976**
			961-23
		PM7542F	⋆ **2974**
			⋆ **2976**
			961-24
		PM7542G	⋆ **2974**
			⋆ **2976**
			961-25
		PM7542H	⋆ **2974**
			⋆ **2976**
			961-26
7543	AD	AD7543A	967-43
		AD7543B	962-40
		AD7543J	967-44
		AD7543K	962-41
	HoneywellSPT		
		HDAC7543AAC	
			⋆ **2997**
			⋆ **2999**
			959-17
		HDAC7543AAI	
			⋆ **2997**
			⋆ **2999**
			959-18
		HDAC7543AAM	
			⋆ **2997**
			⋆ **2999**
			959-19
		HDAC7543ABC	
			⋆ **2997**
			⋆ **2999**
			965-29
		HDAC7543ABI	
			⋆ **2997**
			⋆ **2999**
			965-30
		HDAC7543ABM	
			⋆ **2997**
			⋆ **2999**
			965-31
	HybridSys	HS7543J	967-33
		HS7543K	962-27
		HS7543S	967-34
			(Continued)

Base Number	Source	Device	Page-Line
7543	HybridSys		(Cont'd)
		HS7543T	962-28
	Maxim	AD7543A	967-48
		AD7543B	962-48
		AD7543GB	962-49
		AD7543GK	963-1
		AD7543GT	963-2
		AD7543J	967-49
		AD7543K	963-3
		AD7543S	967-50
		AD7543T	963-4
	MicroPwr	MP7543A	966-24
		MP7543B	968-29
		MP7543J	966-25
		MP7543K	968-30
		MP7543S	966-26
		MP7543T	968-31
	PMI	**PM7543A**	⋆ **2974**
			⋆ **2976**
			961-27
		PM7543B	⋆ **2974**
			⋆ **2976**
			961-28
		PM7543E	⋆ **2974**
			⋆ **2976**
			961-29
		PM7543F	⋆ **2974**
			⋆ **2976**
			965-13
		PM7543G	⋆ **2974**
			⋆ **2976**
			961-30
		PM7543H	⋆ **2974**
			⋆ **2976**
			961-31
75435	TI	SN75435	1006-111
75436	TI	SN75436	1006-97
75437	TI	SN75437A	1006-98
75438	TI	SN75438	1006-99
7544	National	DM7544	688-22
75440	TI	SN75440	1006-100
754410	TI	SN754410	1003-84
754411	TI	SN754411	1003-85
75446	TI	SN75446	1005-35
75447	TI	SN75447	1005-54
75448	TI	SN75448	1005-110
75449	TI	SN75449	1005-82
7545	**AD**	**AD7545A**	⋆ **2409**
			968-37
			¶ 419-35
		AD7545B	965-14
			¶ 419-35
		AD7545C	956-40
			¶ 419-35
		AD7545GC	956-41
			¶ 419-35
		AD7545GL	956-42
			¶ 419-35
		AD7545GU	956-43
			¶ 419-35
		AD7545J	968-38
			¶ 419-35
		AD7545K	965-15
			¶ 419-35
		AD7545L	957-1
			¶ 419-35
		AD7545S	968-39
			¶ 419-35
		AD7545T	965-16
			¶ 419-35
		AD7545U	957-2
			¶ 419-35
	Burr-Brown	**DAC7545**	⋆ **2541**
			962-23
	HoneywellSPT		
		HDAC7545AAC	
			⋆ **2997**
			⋆ **2999**
			959-20
		HDAC7545AAI	
			⋆ **2997**
			⋆ **2999**
			959-21
			(Continued)

Base Number	Source	Device	Page-Line
7545	**HoneywellSPT**		**(Cont'd)**
		HDAC7545AAM	
			⋆ **2997**
			⋆ **2999**
			959-22
		HDAC7545ABC	
			⋆ **2997**
			⋆ **2999**
			965-32
		HDAC7545ABI	
			⋆ **2997**
			⋆ **2999**
			965-33
		HDAC7545ABM	
			⋆ **2997**
			⋆ **2999**
			966-1
	HybridSys	HS7545J	967-35
		HS7545K	962-29
		HS7545S	967-36
		HS7545T	962-30
	Maxim	AD7545A	969-22
		AD7545B	967-37
		AD7545C	962-31
		AD7545GC	962-32
		AD7545GL	962-33
		AD7545GU	962-34
		AD7545J	969-23
		AD7545K	967-38
		AD7545L	962-35
		AD7545S	969-24
		AD7545T	967-39
		AD7545U	962-36
	MicroPwr	MP7545	960-36
	PMI	**PM7545A**	⋆ **2974**
			⋆ **2976**
			962-5
		PM7545E	⋆ **2974**
			⋆ **2976**
			962-6
		PM7545G	⋆ **2974**
			⋆ **2976**
			962-7
	Siliconix	Si7545J	969-20
		Si7545K	967-11
		Si7545L	961-35
		Si7545S	969-21
		Si7545T	967-23
		Si7545U	962-1
75450	National	DS75450	1005-5
	SiliconG	SG75450	1005-15
		SG75450B	1005-16
	TI	SN75450B	1005-25
75451	National	DS75451	1005-6
	SiliconG	SG75451	1005-17
	TI	SN75451B	1005-26
75452	National	DS75452	1005-44
	SiliconG	SG75452	1005-48
		SG75452B	1005-131
	TI	SN75452B	1005-55
75453	National	DS75453	1005-100
	SiliconG	SG75453	1005-104
		SG75453B	1005-139
	TI	SN75453B	1005-111
75454	National	DS75454	1005-72
	SiliconG	SG75454	1005-76
		SG75454B	1005-135
	TI	SN75454B	1005-83
75458	Toshiba	TA75458	1178-4
7546	AD	AD7546A	973-36
		AD7546B	973-20
		AD7546J	973-37
		AD7546K	973-21
	National	DM7546	1394-63
75460	SiliconG	SG75460	1005-18
		SG75460B	1005-19
75461	National	DS75461	1005-7
	SiliconG	SG75461	1005-20
	TI	SN75461	1005-27
75462	National	DS75462	1005-45
	SiliconG	SG75462	1005-49
	TI	SN75462	1005-56
75463	National	DS75463	1005-101
	SiliconG	SG75463	1005-105
	TI	SN75463	1005-112

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
75464	National	DS75464	1005-73
	SiliconG	SG75464	1005-77
75465	TI	SN75465	1004-116
			1006-11
75466	TI	SN75466	1002-27
			1004-117
75467	TI	SN75467	1004-118
75468	TI	SN75468	1004-114
75469	TI	SN75469	1004-115
7547	AD	AD7547A	970-48
			¶ 419-20
		AD7547B	970-36
			¶ 419-20
		AD7547C	970-37
			¶ 419-20
		AD7547J	967-26
			¶ 419-20
		AD7547K	967-27
			¶ 419-20
		AD7547S	967-28
			¶ 419-20
		AD7547T	970-38
			¶ 419-20
		AD7547U	970-39
			¶ 419-20
75471	SiliconG	SG75471	1005-128
	TI	SN75471	1005-28
75472	SiliconG	SG75472	1005-132
	TI	SN75472	1005-57
75473	SiliconG	SG75473	1005-140
	TI	SN75473	1005-113
75474	SiliconG	SG75474	1005-136
75476	TI	SN75476	1005-29
75477	TI	SN75477	1005-63
75478	TI	SN75478	1005-114
			1005-120
75479	TI	SN75479	1005-84
			1005-90
7548	AD	AD7548J	948-6
			¶ 419-35
		AD7548K	946-19
			¶ 419-35
		AD7548S	948-7
			¶ 419-35
		AD7548T	946-20
			¶ 419-35
	PMI	**PM7548A**	⋆ **2974**
			⋆ **2976**
			961-5
		PM7548B	⋆ **2974**
			⋆ **2976**
			961-6
		PM7548E	⋆ **2974**
			⋆ **2976**
			961-7
		PM7548F	⋆ **2974**
			⋆ **2976**
			961-8
		PM7548G	⋆ **2974**
			⋆ **2976**
			961-9
		PM7548H	⋆ **2974**
			⋆ **2976**
			961-10
7549	AD	AD7549J	967-29
			¶ 419-20
			¶ 421-14
			¶ 423-6
		AD7549K	962-11
			¶ 419-20
			¶ 421-14
			¶ 423-6
75491	National	DS75491	980-41
	TI	SN75491A	980-43
75492	National	DS75492	980-65
	TI	SN75492	980-70
75493	National	DS75493	980-42
75494	National	DS75494	980-66
755	SGS	M755	1125-88
7550	AD	AD7550B	936-37
	Cubit	7550	4817-31
	MicroPwr	MP7550B	936-36
75500	TI	SN75500E	977-2
75501	TI	SN75501E	981-43
75508	TI	SN75508	981-44

Base Number	Source	Device	Page-Line
75509	TI	SN75509	981-45
			1007-38
7551	National	DM7551	667-124
75512	TI	SN75512B	981-18
75514	TI	SN75514	981-16
75518	TI	SN75518	981-48
7552	AD	AD7552	936-6
7554	NEC	μPD7554	811-9
			864-24
7555	**GE/Intersil**	**ICM7555**	⋆ **2670**
			1201-63
		ICM7555M	⋆ **2670**
			1201-64
	Maxim	ICM7555	1201-66
	Sanyo	LC7555	1222-91
75551	TI	SN75551	977-66
75552	TI	SN75552	977-57
75553	TI	SN75553	977-62
75554	TI	SN75554	977-53
75555	TI	SN75555	977-48
75556	TI	SN75556	977-49
75557	TI	SN75557	977-68
	Toshiba	TA75557	1172-21
75558	TI	SN75558	977-69
	Toshiba	TA75558	1172-22
75559	Toshiba	TA75559	1172-23
7556	**GE/Intersil**	**ICM7556**	⋆ **2670**
			1201-83
		ICM7556M	⋆ **2670**
			1201-84
	Maxim	ICM7556	1201-86
	National	DM7556	660-111
	NEC	μPD7556	811-10
			864-25
	Sanyo	LC7556	1222-92
75563	TI	SN75563	977-71
75564	TI	SN75564	977-72
75567	TI	SN75567	981-46
75568	TI	SN75568	981-47
75581	TI	SN75581	980-77
756	SGS	M756	1125-89
7560	AD	AD7560	1221-8
	National	DM7560	663-86
75601	Thomson	MK75601	4886-35
75602	Thomson	MK75602	4825-24
			4888-47
75603	TI	SN75603	1003-64
75604	TI	SN75604	1003-65
75605	TI	SN75605	1003-66
75608	TI	SN75608	1002-143
7563	National	DM7563	662-10
7564	NEC	μPD7564	811-11
7566	NEC	μPD7566	811-12
7569	**AD**	**AD7569**	⋆ **2428**
			923-46
			948-5
757	AD	AD757J	967-30
7570	MicroPwr	MP7570J	921-1
		MP7570L	927-7
	National	DM7570	683-59
			1395-45
75701	Thomson	MK75701	4890-13
7571	AD	AD7571J	927-40
			¶ 422-17
			¶ 422-5
		AD7571K	927-38
			¶ 422-17
			¶ 422-5
		AD7571S	927-41
			¶ 422-17
			¶ 422-5
		AD7571T	927-39
			¶ 422-17
			¶ 422-5
7572	**AD**	**AD7572J**	⋆ **2413**
			933-45
			¶ 419-30
			¶ 421-15
			¶ 421-8
		AD7572K	⋆ **2413**
			929-28
			¶ 419-30
			¶ 421-15
			¶ 421-8

(Continued)

Base Number	Source	Device	Page-Line
7572	**AD**		**(Cont'd)**
		AD7572S	⋆ **2413**
			933-46
			¶ 419-30
			¶ 421-15
			¶ 421-8
		AD7572T	⋆ **2413**
			929-29
			¶ 419-30
			¶ 421-15
			¶ 421-8
	Maxim	AD7572	929-30
7573	AD	AD7573J	927-32
		AD7573K	927-5
		AD7573S	927-33
		AD7573T	927-6
7574	AD	AD7574A	922-15
			¶ 422-18
		AD7574B	920-22
			¶ 422-18
		AD7574J	922-16
			¶ 422-18
		AD7574K	920-23
			¶ 422-18
		AD7574S	922-17
			¶ 422-18
		AD7574T	920-24
			¶ 422-18
	Maxim	AD7574A	922-18
		AD7574B	920-25
		AD7574J	922-19
		AD7574K	920-26
		AD7574S	922-20
		AD7574T	920-27
	MicroPwr	MP7574A	922-21
		MP7574B	922-22
		MP7574J	922-23
		MP7574K	922-24
		MP7574S	922-37
		MP7574T	922-25
	PMI	**PM7574A**	⋆ **2973**
			920-30
		PM7574B	⋆ **2973**
			922-26
		PM7574E	⋆ **2973**
			920-31
		PM7574F	⋆ **2973**
			922-27
		PM7574G	⋆ **2973**
			920-32
		PM7574H	⋆ **2973**
			922-28
7575	AD	AD7575J	924-5
		AD7575K	919-38
	National	DM7575	4081-59
7576	**AD**	**AD7576A**	⋆ **2414**
			925-13
		AD7576B	⋆ **2414**
			924-18
		AD7576J	⋆ **2414**
			925-14
		AD7576K	⋆ **2414**
			924-19
		AD7576S	⋆ **2414**
			924-20
			925-15
	National	DM7576	4081-60
7578	AD	AD7578K	935-8
		AD7578T	935-9
7579	**AD**	**AD7579**	⋆ **2415**
			927-21
758	Signetics	μA758	1121-151
7580	**AD**	**AD7580**	⋆ **2415**
			927-22
75801	Thomson	MK75801	4887-39
75802	Thomson	MK75802	4882-15
			4887-27
75803	Thomson	MK75803	4882-6
7581	AD	AD7581A	871-1
			872-35
			874-110
			1220-81
		AD7581B	871-2
			872-36
			874-111
			1220-82

(Continued)

Base Number	Source	Device	Page-Line
7581	AD		(Cont'd)
		AD7581C	871-3
			872-37
			874-112
			1220-83
		AD7581J	871-4
			872-38
			874-113
			1220-84
		AD7581K	871-5
			872-39
			874-114
			922-30
			1220-85
		AD7581L	871-6
			872-40
			874-115
			1220-86
	Maxim	AD7581A	925-11
		AD7581B	922-31
		AD7581C	921-12
		AD7581J	925-12
		AD7581K	922-32
		AD7581L	921-13
	MicroPwr	MP7581A	1220-89
		MP7581B	1220-90
		MP7581C	1220-91
		MP7581J	1220-92
		MP7581K	1220-93
		MP7581L	1220-94
		MP7581S	1220-95
		MP7581T	1220-96
		MP7581U	1220-97
7582	AD	AD7582B	927-46
		AD7582K	927-47
		AD7582T	927-48
7589	National	DM7589	678-112
			1348-26
759	Fairchild	μA759C	1130-93
			1134-48
			1162-46
		μA759M	1130-94
			1134-49
			1156-8
7590	AD	AD7590DIB	904-40
		AD7590DIK	904-41
	National	DM7590	1394-94
75902	Toshiba	TA75902	1187-37
7591	AD	AD7591DIB	904-42
		AD7591DIK	904-43
7592	AD	AD7592DIB	903-36
		AD7592DIK	903-37
76	**Burr-Brown**	**ADC76A**	⋆ **2541**
			938-14
		ADC76J	⋆ **2541**
			938-15
		ADC76K	⋆ **2541**
			937-46
		SHC76BM	1227-138
		SHC76K	1227-139
76C04	VersaLogic	VL76C04A	4876-58
76C14	VersaLogic	VL76C14	4876-46
76C164	**GoldStar**	**GM76C164-25**	
			⋆ **2692**
			1372-56
		GM76C164-35	
			⋆ **2692**
			1373-75
		GM76C164-45	
			⋆ **2692**
			1374-79
76C28	**GoldStar**	**GM76C28-35**	⋆ **2692**
			1355-50
		GM76C28-45	⋆ **2692**
			1355-84
		GM76C28-55	⋆ **2692**
			1356-26
76C422	GoldStar	GM76C422-25	1349-54
76C64	**GoldStar**	**GM76C64-45**	⋆ **2692**
			1382-16
		GM76C64-55	⋆ **2692**
			1382-37
		GM76C64-70	⋆ **2692**
			1382-56

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
76C88	**GoldStar**	**GM76C88-60**	⋆ **2692**
			1367-62
		GM76C88-70	⋆ **2692**
			1367-87
		GM76C88-85	⋆ **2692**
			1368-8
76H000			
	OKI	MSM76H000	4057-35
		76H000	4058-4
76S128	National	DM76S128	1302-1
			1302-9
76S64	National	DM76S64	1302-10
			1302-2
76V000	OKI	76V000	4058-3
760	CompDyn	PIO-760x	4874-55
	Fairchild	μA760C	1110-43
		μA760M	1110-44
	SGS	M760A	1193-98
	Zendex	ZBX760	4855-20
7600	Cherry	CS7600	4065-19
	GE/Intersil	ICL7600C	1137-29
		ICL7600M	1137-30
	GoldStar	**GCL7600**	⋆ **4242**
			4048-27
		LL7600	4048-28
	Laserpath	LP7600C	4052-20
		LP7600P	4052-21
	LSI Logic	LL7600	4053-15
	Raytheon	**RL7600**	⋆ **4297**
			4059-2
7601	GE/Intersil	ICL7601C	1137-31
		ICL7601M	1137-32
	VersaLogic	VL7601A	4876-56
7602	VersaLogic	VL7602A	4877-4
7603	VersaLogic	VL7603A	4877-3
7604	VersaLogic	VL7604A	4877-2
7605	**GE/Intersil**	**ICL7605C**	⋆ **2672**
			1102-94
		ICL7605M	⋆ **2672**
			1102-95
	WinSystems	LPM7605	4876-27
		MCM7605	4876-28
7606	**GE/Intersil**	**ICL7606C**	⋆ **2672**
			1102-96
		ICL7606M	⋆ **2672**
			1102-97
	Toshiba	TA7606	1230-131
7607	Toshiba	TA7607A	1124-100
761	SGS	M761	1193-99
		M761A	1193-100
7611	**GE/Intersil**	**ICL7611AC**	⋆ **2673**
			1151-7
		ICL7611AM	⋆ **2673**
			1151-8
		ICL7611BC	⋆ **2673**
			1158-12
		ICL7611BM	⋆ **2673**
			1158-13
		ICL7611C	⋆ **2673**
			1133-104
			1133-72
			1167-30
		ICL7611M	⋆ **2673**
			1133-105
			1133-65
	Maxim	ICL7611AC	1151-18
		ICL7611AM	1151-19
		ICL7611BC	1158-24
		ICL7611BM	1158-25
		ICL7611C	1133-85
			1134-9
			1167-31
		ICL7611DC	1167-25
		ICL7611DM	1167-26
		ICL7611M	1133-69
			1134-10
	Toshiba	TA7611A	1124-101
76115	TI	SN76115	1121-157
7612	**GE/Intersil**	**ICL7612AC**	⋆ **2673**
			1151-9
		ICL7612AM	⋆ **2673**
			1151-10
		ICL7612BC	⋆ **2673**
			1158-14
		ICL7612BM	⋆ **2673**
			1158-15
			(Continued)

Base Number	Source	Device	Page-Line
7612	**GE/Intersil**		**(Cont'd)**
		ICL7612C	⋆ **2673**
			1133-106
			1133-73
			1134-54
			1167-32
		ICL7612M	⋆ **2673**
			1133-107
			1133-74
			1134-55
	Maxim	ICL7612AC	1151-20
		ICL7612AM	1151-21
		ICL7612BC	1158-28
		ICL7612BM	1158-29
		ICL7612C	1133-86
			1134-11
			1134-58
			1167-34
		ICL7612DC	1158-32
		ICL7612DM	1158-33
		ICL7612M	1133-87
			1134-12
			1134-59
	Toshiba	TA7612A	978-31
7613	GE/Intersil	ICL7613AC	1151-13
		ICL7613BC	1158-18
		ICL7613BM	1158-19
		ICL7613C	1133-108
			1133-109
			1133-75
		ICL7613DC	1167-22
		ICL7613M	1133-110
			1133-76
	National	DM7613	666-138
	Toshiba	TA7613A	1120-99
7614	GE/Intersil	ICL7614AC	1151-14
		ICL7614AM	1151-15
		ICL7614BC	1158-20
		ICL7614BM	1158-21
		ICL7614C	1133-77
		ICL7614DC	1167-23
	Maxim	ICL7614AC	1151-5
		ICL7614AM	1151-6
		ICL7614BC	1158-10
		ICL7614BM	1158-11
		ICL7614C	1133-88
		ICL7614DC	1167-20
		ICL7614DM	1167-21
	MicroPwr	MP7614J	973-3
		MP7614K	972-46
		MP7614S	973-4
		MP7614T	972-47
	VersaLogic	VL7614	4876-47
	WinSystems	LPM7614	4876-41
		MCM7614	4876-42
7615	GE/Intersil	ICL7615	1151-16
		ICL7615AC	1151-17
		ICL7615BC	1158-22
		ICL7615BM	1158-23
		ICL7615C	1133-78
		ICL7615DC	1167-24
7616	GE/Intersil	ICL7616AC	1151-11
		ICL7616AM	1151-12
		ICL7616BC	1158-16
		ICL7616BM	1158-17
		ICL7616C	1133-111
			1133-79
			1134-56
			1167-33
		ICL7616M	1133-112
			1133-80
			1134-57
	Harris	HS7616RH	1322-48
	HybridSys	HS7616JN	973-14
		HS7616KN	973-7
		HS7616SD	973-15
		HS7616TD	973-8
	Maxim	ICL7616AC	1151-22
		ICL7616AM	1151-23
		ICL7616BC	1158-26
		ICL7616BM	1158-27
		ICL7616C	1133-89
			1134-13
			1134-60
			1167-35
		ICL7616DC	1158-30
			(Continued)

Base Number	Source	Device	Page-Line
7616	Maxim		(Cont'd)
		ICL7616DM	1158-31
		ICL7616M	1133-90
			1134-14
			1134-61
	MicroPwr	MP7616J	976-10
		MP7616K	976-20
		MP7616L	976-11
		MP7616S	976-12
		MP7616T	974-29
	Toshiba	TA7616	1120-39
7619	Toshiba	TA7619A	1124-136
7620	**S-MOS**	**SLA7620**	⋆ **4305**
			4069-9
7621	**GE/Intersil**	**ICL7621AC**	⋆ **2673**
			1173-49
		ICL7621AM	⋆ **2673**
			1173-50
		ICL7621BC	⋆ **2673**
			1176-41
		ICL7621BM	⋆ **2673**
			1176-42
		ICL7621C	⋆ **2673**
			1133-81
		ICL7621DC	⋆ **2673**
			1181-14
	Maxim	ICL7621AC	1174-1
		ICL7621AM	1174-2
		ICL7621BC	1176-43
		ICL7621BM	1176-44
		ICL7621C	1133-91
		ICL7621DC	1181-15
		ICL7621DM	1181-13
	MicroPwr	MP7621A	966-27
		MP7621B	960-37
		MP7621J	966-28
		MP7621K	960-38
		MP7621S	966-29
		MP7621T	960-39
		MP7621Z	969-17
	Toshiba	TA7621	1124-102
7622	GE/Intersil	ICL7622AC	1173-45
		ICL7622AM	1173-46
		ICL7622BC	1176-45
		ICL7622BM	1176-46
		ICL7622C	1133-82
		ICL7622DC	1181-16
	Maxim	ICL7622AC	1173-47
		ICL7622AM	1173-48
		ICL7622BC	1176-47
		ICL7622BM	1176-48
		ICL7622C	1133-92
		ICL7622DC	1181-17
	MicroPwr	MP7622A	967-2
		MP7622B	961-4
		MP7622H	969-13
		MP7622J	967-3
		MP7622K	960-21
		MP7622R	969-14
		MP7622S	967-4
		MP7622T	962-4
		MP7622Z	969-15
	Toshiba	TA7622A	1124-103
7623	MicroPwr	MP7623A	966-30
		MP7623B	960-40
		MP7623J	966-31
		MP7623K	961-18
		MP7623S	966-32
		MP7623T	961-19
7628	AD	AD7628	947-16
	HybridSys	HS7628J	948-1
		HS7628K	945-42
		HS7628S/883	948-2
		HS7628T/883	945-43
	MicroPwr	MP7628J	945-39
		MP7628K	943-37
		MP7628L	942-25
		MP7628S	945-40
		MP7628T	943-38
		MP7628U	942-26
7630	Toshiba	TA7630	1118-98
7631	**GE/Intersil**	**ICL7631BC**	⋆ **2673**
			1181-46
		ICL7631BM	⋆ **2673**
			1181-47
			(Continued)

Base Number	Source	Device	Page-Line
7631	**GE/Intersil**		**(Cont'd)**
		ICL7631C	⋆ **2673**
			1133-83
		ICL7631CC	⋆ **2673**
			1182-7
		ICL7631CM	⋆ **2673**
			1182-8
		ICL7631EC	⋆ **2673**
			1182-15
		ICL7631M	⋆ **2673**
			1133-66
	Maxim	ICL7631BC	1181-48
		ICL7631BM	1181-49
		ICL7631C	1133-93
		ICL7631CC	1182-9
		ICL7631CM	1182-10
		ICL7631EC	1182-16
		ICL7631EM	1182-19
		ICL7631M	1133-70
7632	GE/Intersil	ICL7632BC	1182-1
		ICL7632BM	1182-2
		ICL7632C	1134-23
		ICL7632CC	1182-11
		ICL7632CM	1182-12
		ICL7632EC	1182-17
		ICL7632M	1133-67
			1134-24
	Maxim	ICL7632BC	1182-3
		ICL7632BM	1182-4
		ICL7632C	1134-30
		ICL7632CC	1182-13
		ICL7632CM	1182-14
		ICL7632EC	1182-18
		ICL7632EM	1182-20
		ICL7632M	1133-71
			1134-31
	Toshiba	TA7632	1126-2
7633	MicroPwr	MP7633	952-6
7639	Toshiba	TA7639	1123-59
764	SGS	M764	1199-131
		M764A	1199-132
7640	National	DS7640	990-44
	Toshiba	TA7640A	1120-74
7641	**GE/Intersil**	**ICL7641BC**	⋆ **2673**
			1185-20
		ICL7641BM	⋆ **2673**
			1185-21
		ICL7641CC	⋆ **2673**
			1188-21
		ICL7641CM	⋆ **2673**
			1188-22
		ICL7641EC	⋆ **2673**
			1189-37
	Maxim	ICL7641BC	1185-19
		ICL7641BM	1185-26
		ICL7641CC	1188-27
		ICL7641CM	1188-28
		ICL7641EC	1189-40
		ICL7641EM	1189-41
	National	DS7641	994-31
	Toshiba	TA7641B	1120-27
7642	**GE/Intersil**	**ICL7642BC**	⋆ **2673**
			1185-22
		ICL7642BM	⋆ **2673**
			1185-23
		ICL7642C	⋆ **2673**
			1133-84
		ICL7642CC	⋆ **2673**
			1188-23
		ICL7642CM	⋆ **2673**
			1188-24
		ICL7642EC	⋆ **2673**
			1189-38
		ICL7642M	⋆ **2673**
			1133-68
	Maxim	ICL7642BC	1185-24
		ICL7642BM	1185-25
		ICL7642C	1133-94
		ICL7642CC	1188-25
		ICL7642CM	1188-26
		ICL7642EC	1189-39
		ICL7642M	1189-36

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7645	**PMI**	**PM7645A**	⋆ **2974**
			⋆ **2976**
			962-8
		PM7645G	⋆ **2974**
			⋆ **2976**
			962-9
76494	TI	SN76494	1118-73
			1224-122
76496	TI	SN76496	1224-123
765	NEC	μPD765A	869-108
			871-26
			872-52
			884-57
			884-72
			884-78
	SMC	FDC765A	884-74
		FDC765A-2	884-14
	Zilog	Z765A	884-77
		Z765A-FDC	884-16
7650	**Datel**	**AM7650**	⋆ **2577**
			1132-43
	GE/Intersil	**ICL7650C**	⋆ **2674**
			1137-14
	Maxim	ICL7650	1137-16
		ICL7650B	1137-33
		ICL7650C	1137-15
	TeledyneS	TSC7650	1137-13
7652	**GE/Intersil**	**ICL7652**	⋆ **2674**
			1137-17
	LinearTech	LTC7652C	1137-21
		LTC7652M	1137-22
	Maxim	ICL7652	1137-18
		ICL7652B	1137-40
	Siliconix	SI7652B	1137-23
		SI7652C	1137-24
7654	Toshiba	TA7654	978-33
7655	Toshiba	TA7655	978-34
7657	Toshiba	TA7657	1122-37
7658	Toshiba	TA7658	1118-50
7659	Toshiba	TA7659	1124-104
7660	**Datel**	**VI7660C**	⋆ **2577**
			1229-121
		VI7660M	⋆ **2577**
			1229-122
	GE/Intersil	**ICL7660**	⋆ **2675**
			1229-123
			1230-27
			¶ 421-34
	Maxim	ICL7660	1230-28
		ICL7660C	1229-126
		ICL7660M	1229-127
	National	LMC7660	1228-149
	Siliconix	SI7660A	1230-29
			¶ 422-22
			¶ 441-4
		SI7660B	1229-128
			1230-30
			¶ 422-22
			¶ 441-4
		SI7660C	1229-129
			1230-31
			¶ 422-22
			¶ 441-4
	TeledyneS	TSC7660	1230-32
			¶ 422-27
	Toshiba	TA7660	1124-105
7661	Siliconix	SI7661A	1230-26
			¶ 422-22
			¶ 441-4
		SI7661B	1230-24
			¶ 422-22
			¶ 441-4
		SI7661C	1230-25
			¶ 422-22
			¶ 441-4
	Toshiba	TA7661	1124-106
7662	**GE/Intersil**	**ICL7662C**	⋆ **2675**
			1229-130
		ICL7662M	⋆ **2675**
			1229-131
7663	**GE/Intersil**	**ICL7663**	⋆ **2675**
			1213-11
	Maxim	ICL7663	1213-12
		ICL7663A	1213-13
	Toshiba	TA7663	1123-58
7664	GE/Intersil	ICL7664	1214-114
	Maxim	ICL7664	1214-115
7665	**GE/Intersil**	**ICL7665**	⋆ **2676**
			1223-85
	Maxim	ICL7665	1230-132
		ICL7665A	1230-133
		ICL7665B	1230-134
7666	Toshiba	TA7666	980-58
7667	**GE/Intersil**	**ICL7667C**	⋆ **2675**
			1005-147
		ICL7667M	⋆ **2675**
			1005-148
	Toshiba	TA7667	980-59
7668	Toshiba	TA7668B	1123-55
7669	National	LMC7669	1228-150
767	**AD**	**AD767**	⋆ **2405**
			968-3
	NEC	μPC767	1199-16
7672	**AD**	**AD7672**	⋆ **2416**
			930-9
7673	**GE/Intersil**	**ICL7673**	⋆ **2675**
			888-74
7675	Toshiba	TA7675A	1124-107
7676	Toshiba	TA7676	1124-108
7678	Toshiba	TA7678A	1124-109
76811	TI	SN76811	692-116
7682	MicroPwr	MP7682XA	916-49
		MP7682XB	916-35
		MP7682XC	916-18
		MP7682XJ	916-50
		MP7682XK	916-36
		MP7682XL	916-19
		MP7682XS	916-51
		MP7682XT	916-37
		MP7682XU	916-20
		MP7682YA	916-43
		MP7682YB	916-24
		MP7682YJ	916-44
		MP7682YK	916-25
		MP7682ZJ	916-45
7683	MicroPwr	MP7683XA	923-13
		MP7683XB	918-10
		MP7683XC	917-8
		MP7683XJ	923-14
		MP7683XK	918-11
		MP7683XL	917-9
		MP7683XS	923-15
		MP7683XT	918-12
		MP7683YJN	923-7
7684	MicroPwr	MP7684	918-4
		MP7684K	918-8
		MP7684L	923-5
		MP7684Q	917-36
		MP7684S	923-11
		MP7684T	918-9
		MP7684U	923-6
		MP7684V	917-37
7685	Toshiba	TA7685	1118-51
	VTC	VC7685C	1110-25
		VC7685M	1110-26
7687	Toshiba	TA7687A	1120-76
	VTC	VC7687C	1112-21
		VC7687M	1112-22
7688	Toshiba	TA7688	1116-8
7690	**VTC**	**VC7690J**	⋆ **3373**
			1110-31
		VC7690S	⋆ **3373**
			1110-32
7695	**VTC**	**VC7695C**	⋆ **3373**
			1110-23
		VC7695M	⋆ **3373**
			1110-24
7696	**VTC**	**VC7696J**	⋆ **3373**
			1110-17
		VC7696S	⋆ **3373**
			1110-18
7697	**VTC**	**VC7697C**	⋆ **3373**
			1112-19
		VC7697M	⋆ **3373**
			1112-20
7698	**VTC**	**VC7698J**	⋆ **3373**
			1110-19
		VC7698S	⋆ **3373**
			1110-20
77	**PMI**	**OP77**	⋆ **2970**
			1137-36
77C09	VersaLogic	VL77C09	4877-16
77C20	Gould	S77C20	646-2
			889-49
			1194-79
	NEC	μPD77C20	645-93
			849-11
77H000			
	OKI	MSM77H000	4057-36
		77H000	4058-7
77LS181			
	National	DM77LS181	1319-81
77P20	NEC	μPD77P20	646-4
			889-50
77SR181			
	National	DM77SR181	1319-17
77SR183			
	National	DM77SR183	1319-27
		DM77SR183B	1319-18
77SR191			
	National	DM77SR191	1321-19
77SR193			
	National	DM77SR193	1321-20
77SR25	National	DM77SR25	1317-81
		DM77SR25B	1317-78
77SR27	National	DM77SR27	1317-101
		DM77SR27B	1317-75
77SR474			
	National	DM77SR474	1317-79
77SR476			
	National	DM77SR476	1317-82
		DM77SR476B	1317-80
77S180	National	DM77S180	1319-67
77S181	National	DM77S181	1319-69
		DM77S181A	1318-80
77S184	National	DM77S184	1320-25
77S185	National	DM77S185	1320-26
		DM77S185A	1320-19
		DM77S185B	1320-7
77S188	National	DM77S188	1316-13
77S190	National	DM77S190	1322-49
77S191	National	DM77S191	1322-52
		DM77S191A	1322-29
		DM77S191B	1322-6
77S195	National	DM77S195A	1323-25
		DM77S195B	1323-18
77S280	National	DM77S280	1319-68
77S281	National	DM77S281	1319-70
77S288	National	DM77S288	1316-15
77S290	National	DM77S290	1322-50
77S291	National	DM77S291	1322-53
		DM77S291A	1322-30
		DM77S291B	1322-7
77S321	National	DM77S321	1323-57
77S421	National	DM77S421	1323-58
77V000	OKI	77V000	4058-6
770	Fujitsu	MB770H-5	1351-11
7700	Fujitsu	MB7700H	648-147
77000	Fairchild	μA77000	1134-52
			1164-37
7702	TI	TL7702A	1224-112
		TL7702M	1228-134
7705	TI	TL7705A	1224-113
		TL7705M	1228-135
	Toshiba	TA7705	1123-63
7709	TI	TL7709A	1224-114
	Toshiba	TA7709	1118-52
	VersaLogic	VL7709	4877-49
771	Fairchild	μA771AC	1151-40
		μA771AM	1151-41
		μA771BC	1159-6
		μA771BM	1159-7
		μA771C	1165-38
		μA771LC	1167-40
77100	**HoneywellSPT**		
		HADC77100	⋆ **2997**
			⋆ **2999**
			925-1
		HADC77100A	⋆ **2997**
			⋆ **2999**
			921-47
7712	Robotrol	RSD7712	4873-12
	TI	TL7712A	1224-115
7715	TI	TL7715A	1224-116
772	DataTrans	DT772	4859-4
	Fairchild	μA772AC	1174-7
		μA772AM	1174-8

(Continued)

Base Number	Source	Device	Page-Line
772	Fairchild		(Cont'd)
		μA772BC	1176-52
		μA772BM	1176-53
		μA772C	1180-45
		μA772LC	1181-18
	Xylogics	772	4881-33
7720	Gould	S7720	646-3
			1194-80
			¶ 406-20
	NEC	μPD7720	889-51
		μPD7720A	646-5
77200	**HoneywellSPT**		
		HADC77200	⋆ **2997**
			⋆ **3000**
			925-5
77230	NEC	μPD77230	645-110
7728	Robotrol	RSD7728	4873-1
77300	**HoneywellSPT**		
		HADC77300A	⋆ **2997**
			917-23
		HADC77300B	
			⋆ **2997**
			922-11
7738	Toshiba	TA7738	1123-22
774	DataTrans	DT774	4859-7
	Fairchild	μA774BC	1185-29
		μA774BM	1185-30
		μA774C	1188-43
		μA774LC	1189-19
	Harris	**HI774AJD-5**	⋆ **2738**
			⋆ **2746**
			⋆ **2748**
			933-47
		HI774AKD-5	⋆ **2738**
			⋆ **2746**
			⋆ **2748**
			929-41
		HI774ALD-5	⋆ **2738**
			⋆ **2746**
			⋆ **2748**
			929-42
		HI774ASD-2	⋆ **2738**
			⋆ **2746**
			⋆ **2748**
			934-1
		HI774ATD-2	⋆ **2738**
			⋆ **2746**
			⋆ **2748**
			934-2
7742	TI	TMS7742	841-15
775	Atec	775	4874-2
7750	Fujitsu	MB7750-10	649-8
			1354-71
7751	NEC	μPD7751	1123-4
	Sanyo	LA7751	1125-103
7752	NEC	μPD7752	1122-137
7755	Sanyo	LA7755	1125-104
7757	Toshiba	TA7757	1120-75
7758	Robotrol	RSD-7758	4878-16
776	Fairchild	μA776C	1133-102
			1133-45
			1178-35
		μA776M	1133-103
			1177-3
	Thomson	μA776C	1162-23
		μA776M	1159-26
77600	**HoneywellSPT**		
		HADC77600	⋆ **2997**
			925-38
77604501			
	NationalInst	77604501	4867-13
77605901			
	NationalInst	77605901	4886-16
77606201			
	NationalInst	77606201	4886-17
77606601			
	NationalInst	77606601	4860-24
77606701			
	NationalInst	77606701	4860-25
77606901			
	NationalInst	77606901	4854-41
77607001			
	NationalInst	77607001	4869-6
77607101			
	NationalInst	77607101	4869-7
77609201			
	NationalInst	77609201	4849-41

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
77609301			
	NationalInst	77609301	4886-15
7761	NEC	μPD7761	1122-121
77611201			
	NationalInst	77611201	4893-43
77611401			
	NationalInst	77611401	4849-42
77611731			
	NationalInst	77611731	4867-11
77612101			
	NationalInst	77612101	4893-42
77612201			
	NationalInst	77612201	4893-41
7762	NEC	μPD7762	1122-122
77650	Thomson	MK77650	4876-33
77655	Thomson	MK77655	4876-19
77665	Thomson	MK77665	4876-7
77666	Thomson	MK77666	4876-8
77670	Thomson	MK77670	4875-52
77671	Thomson	MK77671	4874-22
77672	Thomson	MK77672	4873-41
77673	Thomson	MK77673	4873-42
77674	Thomson	MK77674	4876-20
77676	Thomson	MK77676	4874-30
77677	Thomson	MK77677	4873-45
77678	Thomson	MK77678	4875-29
77679	Thomson	MK77679	4875-30
777	GE/Intersil	μA777C	1160-22
7770	SGS	TDA7770	1123-43
77753	Thomson	MK77753	4877-22
77754	Thomson	MK77754-0	4877-44
77760	Thomson	MK77760	4877-9
77761	Thomson	MK77761-0	4877-45
77762	Thomson	MK77762	4877-8
77763	Thomson	MK77763	4877-33
77764	Thomson	MK77764	4877-52
77765	Thomson	MK77765	4878-2
7779	Toshiba	TC7779	977-93
		T7779	⋆ **3306**
			885-35
778	DataTrans	DT778	4860-52
77852	Thomson	MK77852	4877-5
77950	Thomson	MK77950	4878-18
77963	Thomson	MK77963-0	4878-21
77967	Thomson	MK77967	4879-3
78	Amperex	BGY78	1123-118
	Fairchild	μA78GC	1213-39
		μA78MGC	1213-38
		μ78HG	1213-40
78A093	**SiliconSys**	**SSI78A093**	⋆ **3199**
			1193-40
78A207	**SiliconSys**	**SSI78A207**	⋆ **3199**
			1198-119
78A217	**SiliconSys**	**SSI78A217F**	⋆ **3199**
			1197-73
78A400	**SiliconSys**	**SSI78A400**	⋆ **3199**
			1195-85
78A420	**SiliconSys**	**SSI78A420**	⋆ **3199**
			1195-86
78C05	NEC	μPD78C05	835-31
78C06	NEC	μPD78C06	835-32
	VersaLogic	SL78C06	4817-2
		VL78C06	4817-3
78C11	NEC	78C11	837-7
78C120	National	DS78C120	991-43
78C14	NEC	78C14	837-8
78C16	**IDT**	**IDT78C16A-100**	
			⋆ **2807**
			⋆ **2838**
			1310-8
		IDT78C16A-120	
			⋆ **2807**
			⋆ **2838**
			1310-12
		IDT78C16A-150	
			⋆ **2807**
			⋆ **2838**
			1310-17
		IDT78C16A-250	
			⋆ **2807**
			⋆ **2838**
			1310-46
		IDT78C16A-300	
			⋆ **2807**
			⋆ **2838**
			1310-76

(Continued)

Base Number	Source	Device	Page-Line
78C16	**IDT**		**(Cont'd)**
		IDT78C16A-350	
			⋆ **2807**
			⋆ **2838**
			1311-12
		IDT78C16A-55	
			⋆ **2807**
			⋆ **2838**
			1309-58
		IDT78C16A-70	
			⋆ **2807**
			⋆ **2838**
			1309-68
		IDT78C16A-90	
			⋆ **2807**
			⋆ **2838**
			1310-4
78C1600			
	EXEL	XLE78C1600-25	
			4070-45
		XLE78C1600-35	
			4070-52
		XLE78C1600-45	
			4070-61
		XLM78C1600-35	
			4070-55
		XLM78C1600-45	
			4070-63
		XLS78C1600-25	
			4070-49
		XLS78C1600-35	
			4070-58
		XLS78C1600-45	
			4070-65
78C18	**IDT**	**IDT78C18A-100**	
			⋆ **2807**
			⋆ **2839**
			1310-9
		IDT78C18A-120	
			⋆ **2807**
			⋆ **2839**
			1310-13
		IDT78C18A-55	
			⋆ **2807**
			⋆ **2839**
			1309-59
		IDT78C18A-70	
			⋆ **2807**
			⋆ **2839**
			1309-69
		IDT78C18A-90	
			⋆ **2807**
			⋆ **2839**
			1310-5
78C20	National	DS78C20	992-1
78C256	**IDT**	**IDT78C256A-100**	
			⋆ **2807**
			1313-61
		IDT78C256A-120	
			⋆ **2807**
			1313-66
		IDT78C256A-55	
			⋆ **2807**
			1313-47
		IDT78C256A-70	
			⋆ **2807**
			1313-50
		IDT78C256A-90	
			⋆ **2807**
			1313-57
78C258	**IDT**	**IDT78C258A-100**	
			⋆ **2807**
			1313-62
		IDT78C258A-120	
			⋆ **2807**
			1313-67
		IDT78C258A-55	
			⋆ **2807**
			1313-48
		IDT78C258A-70	
			⋆ **2807**
			1313-51
		IDT78C258A-90	
			⋆ **2807**
			1313-58

Base Number	Source	Device	Page-Line
78C29	Micrel	MM78C29	638-76
			988-32
	National	MM78C29	638-77
			988-33
78C30	Micrel	MM78C30	638-1
			987-45
	National	MM78C30	638-2
			987-46
78C64	**IDT**	**IDT78C64A-100**	
			⋆ **2807**
			1311-72
		IDT78C64A-120	
			⋆ **2807**
			1311-77
		IDT78C64A-55	
			⋆ **2807**
			1311-52
		IDT78C64A-70	
			⋆ **2807**
			1311-56
		IDT78C64A-90	
			⋆ **2807**
			1311-65
78C68	**IDT**	**IDT78C68A-100**	
			⋆ **2807**
			1311-73
		IDT78C68A-120	
			⋆ **2807**
			1312-1
		IDT78C68A-55	
			⋆ **2807**
			1311-51
		IDT78C68A-70	
			⋆ **2807**
			1311-57
		IDT78C68A-90	
			⋆ **2807**
			1311-66
78C75	SGS	L78C75C	1204-69
78C800	EXEL	XLE78C800-25	4070-46
		XLE78C800-35	4070-53
		XLE78C800-45	4070-62
		XLM78C800-35	4070-56
		XLM78C800-45	4070-64
		XLS78C800-25	4070-50
		XLS78C800-35	4070-59
		XLS78C800-45	4070-66
		XL78C800	⋆ **4228**
			4044-14
			4078-69
78H000			
	OKI	MSM78H000	4057-37
		78H000	4058-9
78H05	Fairchild	μA78H05	1203-98
		μA78H05A	1203-99
78H08	Fairchild	μA78H08C	1205-15
78H12	Fairchild	μA78H12A	1206-87
78H800			
	EXEL	XLE78H800-25	4070-47
		XLE78H800-35	4070-54
		XLM78H800-25	4070-48
		XLM78H800-35	4070-57
		XLS78H800-25	4070-51
		XLS78H800-35	4070-60
78LS120			
	National	DS78LS120	991-41
78L005	Toshiba	TA78L005	1202-32
		TA78L005A	1202-33
78L006	Toshiba	TA78L006	1203-120
		TA78L006A	1203-121
78L007	Toshiba	TA78L007	1204-57
		TA78L007A	1204-58
78L008	Toshiba	TA78L008	1204-79
		TA78L008A	1204-80
78L009	Toshiba	TA78L009	1205-32
		TA78L009A	1205-33
78L010	Toshiba	TA78L010	1205-50
		TA78L010A	1205-51
78L012	Toshiba	TA78L012	1205-90
		TA78L012A	1205-91
78L015	Toshiba	TA78L015	1206-119
		TA78L015A	1206-120
78L018	Toshiba	TA78L018	1207-119
		TA78L018A	1207-120

Base Number	Source	Device	Page-Line
78L02	TI	μA78L02AC	1202-2
		μA78L02C	1202-3
78L020	Toshiba	TA78L020	1208-59
		TA78L020A	1208-60
78L024	Toshiba	TA78L024	1208-96
		TA78L024A	1208-97
78L04	Panasonic	AN78L04	1202-5
78L05	Fairchild	μA78L05C	1202-14
	Motorola	**MC78L05AC**	⋆ **2926**
			⋆ **2959**
			1202-18
		MC78L05C	⋆ **2926**
			⋆ **2959**
			1202-19
	National	LM78L05A	1202-21
		LM78L05C	1202-22
	NEC	μPC78L05	1202-27
	Panasonic	AN78L05	1202-28
	Samsung	MC78L05	1202-29
	TI	μA78L05AC	1202-30
		μA78L05C	1202-31
78L06	Panasonic	AN78L06	1203-119
	TI	μA78L06AC	1204-53
		μA78L06C	1204-54
78L07	Panasonic	AN78L07	1204-56
78L075	Toshiba	TA78L075	1204-67
		TA78L075A	1204-68
78L08	**Motorola**	**MC78L08AC**	⋆ **2959**
			1204-73
		MC78L08C	⋆ **2927**
			⋆ **2959**
			1204-74
	NEC	μPC78L08	1204-75
	Panasonic	AN78L08	1204-76
	TI	μA78L08AC	1204-77
		μA78L08C	1204-78
78L09	Fairchild	μA78L09C	1205-28
	Panasonic	AN78L09	1205-29
	TI	μA78L09AC	1205-30
		μA78L09C	1205-31
78L10	NEC	μPC78L10	1205-45
	Panasonic	AN78L10	1205-46
	TI	μA78L10AC	1205-48
		μA78L10C	1205-49
78L12	Fairchild	μA78L12C	1205-77
	Motorola	**MC78L12AC**	⋆ **2927**
			⋆ **2959**
			1205-79
		MC78L12C	⋆ **2927**
			⋆ **2959**
			1205-80
	National	DS78L12	688-11
		LM78L12A	1205-83
		LM78L12C	1205-84
	NEC	μPC78L12	1205-85
	Panasonic	AN78L12	1205-86
	Samsung	MC78L12	1205-87
	TI	μA78L12AC	1205-88
		μA78L12C	1205-89
78L132	Toshiba	TA78L132	1206-97
		TA78L132A	1206-98
78L14	Raytheon	CGA78L14	4059-3
78L15	Fairchild	μA78L15C	1206-107
	Motorola	**MC78L15AC**	⋆ **2928**
			⋆ **2959**
			1206-108
		MC78L15C	⋆ **2928**
			⋆ **2959**
			1206-109
	National	LM78L15A	1206-112
		LM78L15C	1206-113
	NEC	μPC78L15	1206-114
	Panasonic	AN78L15	1206-115
	Samsung	MC78L15	1206-116
	TI	μA78L15AC	1206-117
		μA78L15C	1206-118
78L18	**Motorola**	**MC78L18AC**	⋆ **2928**
			1207-116
		MC78L18C	⋆ **2928**
			1207-117
	Panasonic	AN78L18	1207-118
78L20	National	DS78L20	991-50
	Panasonic	AN78L20	1208-58

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
78L24	**Motorola**	**MC78L24AC**	⋆ **2928**
			1208-93
		MC78L24C	⋆ **2928**
			1208-94
	Panasonic	AN78L24	1208-95
78L62	Fairchild	μA78L62C	1204-52
78L82	Fairchild	μA78L82C	1205-21
78M05	Fairchild	μA78M05C	1202-56
		μA78M05M	1202-57
	IPS	**IP78M05**	⋆ **2854**
			1202-58
		IP78M05A	⋆ **2854**
			1202-59
		IP78M05AC	⋆ **2854**
			1202-60
		IP78M05C	⋆ **2854**
			1202-61
	Motorola	**MC78M05C**	⋆ **2926**
			⋆ **2959**
			1202-64
	National	LM78M05	1202-66
	NEC	μPC78M05	1202-67
	Samsung	MC78M05C	1202-68
	SGS	L78M05C	1202-72
	TI	μA78M05C	1202-77
		μA78M05M	1202-78
78M06	Fairchild	μA78M06C	1203-123
		μA78M06M	1203-124
	Motorola	**MC78M06C**	⋆ **2927**
			1203-127
	Panasonic	AN78M06	1204-1
	Samsung	MC78M06C	1204-2
	SGS	L78M06C	1204-3
	TI	μA78M06C	1204-10
78M07	Panasonic	AN78M07	1204-61
78M08	Fairchild	μA78M08C	1204-84
		μA78M08M	1204-85
	Motorola	**MC78M08C**	⋆ **2927**
			1204-88
	NEC	μPC78M08	1204-89
	Panasonic	AN78M08	1204-90
	Samsung	MC78M08C	1204-91
	SGS	L78M08C	1204-92
	TI	μA78M08C	1204-99
78M10	NEC	μPC78M10	1205-57
	Panasonic	AN78M10	1205-47
	Samsung	MC78M10C	1205-58
	TI	μA78M10C	1205-61
78M12	Fairchild	μA78M12C	1205-95
		μA78M12M	1205-96
	IPS	**IP78M12**	⋆ **2854**
			1205-97
		IP78M12A	⋆ **2854**
			1205-98
		IP78M12AC	⋆ **2854**
			1205-99
		IP78M12C	⋆ **2854**
			1205-100
	Motorola	**MC78M12C**	⋆ **2927**
			⋆ **2959**
			1205-103
	National	LM78M12	1205-105
	NEC	μPC78M12	1205-106
	Panasonic	AN78M12	1205-107
	Samsung	MC78M12C	1205-108
	SGS	L78M12C	1205-109
	TI	μA78M12C	1205-116
		μA78M12M	1205-117
78M15	Fairchild	μA78M15C	1207-1
		μA78M15M	1207-2
	IPS	**IP78M15**	⋆ **2854**
			1207-3
		IP78M15A	⋆ **2854**
			1207-4
		IP78M15AC	⋆ **2854**
			1207-5
		IP78M15C	⋆ **2854**
			1207-6
	Motorola	**MC78M15C**	⋆ **2928**
			⋆ **2959**
			1207-9
	National	LM78M15	1207-11
	NEC	μPC78M15	1207-12
	Panasonic	AN78M15	1207-13
	Samsung	MC78M15C	1207-14
	SGS	L78M15C	1207-15
			(Continued)

Base Number	Source	Device	Page-Line
78M15			(Cont'd)
	TI	μA78M15C	1207-21
78M18	**Motorola**	**MC78M18C**	⋆ **2928**
			1207-125
	NEC	μPC78M18	1208-1
	Panasonic	AN78M18	1208-2
	Samsung	MC78M18C	1208-3
	SGS	L78M18C	1208-4
78M20	**Motorola**	**MC78M20C**	⋆ **2928**
			1208-63
	Panasonic	AN78M20	1208-64
	SGS	L78M20C	1208-65
	TI	μA78M20C	1208-72
78M24	Fairchild	μA78M24C	1208-101
		μA78M24M	1208-102
	Motorola	**MC78M24C**	⋆ **2928**
			1208-105
	NEC	μPC78M24	1208-106
	Panasonic	AN78M24	1208-107
	Samsung	MC78M24C	1208-108
	SGS	L78M24C	1208-109
	TI	μA78M24C	1208-116
78N05	Panasonic	AN78N05	1202-54
78N06	Panasonic	AN78N06	1203-122
78N07	Panasonic	AN78N07	1204-59
78N08	Panasonic	AN78N08	1204-83
78N09	Panasonic	AN78N09	1205-34
78N10	Panasonic	AN78N10	1205-53
78N12	Panasonic	AN78N12	1205-94
78N15	Panasonic	AN78N15	1206-123
78N18	Panasonic	AN78N18	1207-122
78N20	Panasonic	AN78N20	1208-61
78N24	Panasonic	AN78N24	1208-99
78P05	Fairchild	μA78P05	1203-111
78P09	NEC	μPD78P09	835-33
			875-67
78P12	Fairchild	μA78P12	1206-93
78P233	**SiliconSys**	**SSI78P233**	⋆ **3199**
			1194-109
78P243	**SiliconSys**	**SSI78P243**	⋆ **3199**
			1197-31
78P8050			
	SiliconSys	**SSI78P8050**	⋆ **3199**
			1197-107
78P8060			
	SiliconSys	**SSI78P8060**	⋆ **3199**
			1197-105
78S05	SGS	L78S05	1203-43
		L78S05C	1203-44
78S09	SGS	L78S09	1205-39
		SL78S09C	1205-41
78S10	SGS	L78S10	1205-67
		L78S10C	1205-68
78S12	SGS	L78S12C	1206-67
78S15	SGS	L78S15	1207-83
		L78S15C	1207-84
78S18	SGS	L78S18	1208-51
		L78S18C	1208-52
78S24	SGS	L78S24	1209-30
		L78S24C	1209-31
78S40	Fairchild	μA78S40C	1216-43
			¶ 441-36
		μA78S40M	1216-44
			¶ 441-36
	Motorola	**μA78S40**	⋆ **2930**
			1217-5
			¶ 441-35
	Samsung	μA78S40	1217-44
78S75	SGS	L78S75	1204-70
78T05	**Motorola**	**MC78T05**	⋆ **2926**
			1203-75
		MC78T05A	⋆ **2926**
			1203-76
		MC78T05AC	⋆ **2926**
			1203-77
		MC78T05C	⋆ **2926**
			1203-78
78T06	**Motorola**	**MC78T06**	⋆ **2927**
			1204-47
		MC78T06C	⋆ **2927**
			1204-48
78T08	**Motorola**	**MC78T08**	⋆ **2927**
			1205-13
		MC78T08C	⋆ **2927**
			1205-14

Base Number	Source	Device	Page-Line
78T12	**Motorola**	**MC78T12**	⋆ **2927**
			1206-80
		MC78T12A	⋆ **2927**
			1206-81
		MC78T12AC	⋆ **2927**
			1206-82
		MC78T12C	⋆ **2927**
			1206-83
78T15	**Motorola**	**MC78T15**	⋆ **2928**
			1207-98
		MC78T15A	⋆ **2928**
			1207-99
		MC78T15AC	⋆ **2928**
			1207-100
		MC78T15C	⋆ **2928**
			1207-101
78T18	**Motorola**	**MC78T18**	⋆ **2928**
			1208-48
		MC78T18C	⋆ **2928**
			1208-49
78T24	**Motorola**	**MC78T24**	⋆ **2928**
			1209-27
		MC78T24C	⋆ **2928**
			1209-28
78V000	OKI	78V000	4058-8
780	Clearpoint	VXR780	4881-8
	Motorola	**TL780-12C**	⋆ **2926**
			1206-35
		TL780-15C	⋆ **2926**
			1209-51
		TL780-5C	⋆ **2926**
			1203-15
	NEC	μPD780	835-34
			874-56
		μPD780-1	874-57
		μPD780-2	874-58
	TI	TL780-05C	1203-36
		TL780-12C	1206-59
		TL780-15C	1207-78
	Xylogics	780	4881-30
7800	Dataram	DR-7800	4894-31
	National	DS7800	688-9
	S-MOS	**SLA7800**	⋆ **4305**
			4069-10
	Sanyo	LA7800	1126-52
78005	Toshiba	TA78005A	1202-112
7801	Pro-Log	7801	4819-8
	Sanyo	LA7801	1126-20
78012	Toshiba	TA78012A	1206-5
78015	Toshiba	TA78015A	1207-31
7802	Pro-Log	7802	4817-34
	Sanyo	LA7802	1126-21
7803	National	DS7803	1000-37
	Pro-Log	7803A	4815-29
	Thomson	MK7803	4882-7
7804	Pro-Log	7804	4815-31
	VersaLogic	VL7804A	4817-4
7805	Fairchild	μA7805C	1202-115
		μA7805M	1202-116
	GoldStar	GL7805	1202-117
	IPS	**IP7805**	⋆ **2854**
			1202-124
		IP7805A	⋆ **2854**
			1202-125
		IP7805AC	⋆ **2854**
			1203-1
		IP7805C	⋆ **2854**
			1203-2
	Motorola	**MC7805**	⋆ **2926**
			1203-11
		MC7805A	⋆ **2926**
			1203-12
		MC7805AC	⋆ **2926**
			1203-13
		MC7805C	⋆ **2926**
			1203-14
	National	LM7805	1203-22
	NEC	μPC7805	1202-97
	Panasonic	AN7805	1202-98
	Samsung	MC7805C	1202-99
	SGS	L7805	1202-100
		L7805AC	1203-23
		L7805C	1202-101
	SiliconG	SG7805ACK	1203-29
		SG7805ACP	1202-105
		SG7805ACR	1203-30
			(Continued)

Base Number	Source	Device	Page-Line
7805	SiliconG		(Cont'd)
		SG7805ACT	1202-75
		SG7805AK	1203-31
		SG7805AP	1202-106
		SG7805AT	1202-76
		SG7805CK	1203-32
		SG7805CP	1202-107
		SG7805CR	1203-33
		SG7805K	1203-34
		SG7805P	1202-108
	TI	μA7805C	1202-109
	Thomson	μA7805	1202-110
	Unitrode	**UC7805**	⋆ **3325**
			1203-37
		UC7805A	⋆ **3325**
			1202-113
		UC7805AC	⋆ **3325**
			1202-114
		UC7805C	⋆ **3325**
			1203-38
	Ziatech	ZT7805	4819-6
7806	Fairchild	μA7806C	1204-19
	GoldStar	GL7806	1204-20
	Motorola	**MC7806**	⋆ **2927**
			1204-24
		MC7806A	⋆ **2927**
			1204-25
		MC7806AC	⋆ **2927**
			1204-26
		MC7806C	⋆ **2927**
			1204-27
	Panasonic	AN7806	1204-12
	Pro-Log	7806	4815-36
	Samsung	MC7806C	1204-13
	Sanyo	LA7806	1126-22
	SGS	L7806	1204-28
		L7806AC	1204-29
		L7806C	1204-30
	SiliconG	SG7806ACK	1204-36
		SG7806ACP	1204-14
		SG7806ACR	1204-37
		SG7806ACT	1204-6
		SG7806AK	1204-38
		SG7806AP	1204-15
		SG7806AT	1204-7
		SG7806CK	1204-39
		SG7806CP	1204-16
		SG7806CR	1204-40
		SG7806CT	1204-8
		SG7806K	1204-41
		SG7806P	1204-17
		SG7806T	1204-9
	TI	μA7806C	1204-42
	Thomson	μA7806	1204-18
	VersaLogic	VL7806	4815-9
7807	National	DS7807	1000-38
	NEC	μPD7807	835-35
			875-68
	Panasonic	AN7807	1204-63
	VersaLogic	VL7807	4815-10
7808	Fairchild	μA7808C	1204-106
		μA7808M	1204-107
	GoldStar	GL7808	1204-108
	Motorola	**MC7808**	⋆ **2927**
			1204-114
		MC7808A	⋆ **2927**
			1204-115
		MC7808AC	⋆ **2927**
			1204-116
		MC7808C	⋆ **2927**
			1204-117
	NEC	μPC7808	1204-102
	Panasonic	AN7808	1204-103
	Robotrol	RSD7808	4821-21
	Samsung	MC7808C	1204-104
	SGS	L7808	1204-118
		L7808AC	1204-119
		L7808C	1204-120
	SiliconG	SG7808ACK	1205-3
		SG7808ACP	1204-105
		SG7808ACR	1205-4
		SG7808ACT	1204-95
		SG7808AK	1205-5
		SG7808AP	1205-17
		SG7808AT	1204-96
		SG7808CK	1205-6
			(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
7808	SiliconG		(Cont'd)
		SG7808CP	1205-18
		SG7808CR	1205-7
		SG7808CT	1204-97
		SG7808K	1205-8
		SG7808P	1205-19
		SG7808T	1204-98
	TI	µA7808C	1205-9
7809	GoldStar	GL7809	1205-38
	NEC	µPD7809	835-36
			875-69
	Panasonic	AN7809	1205-37
	SGS	L7809	1205-40
7810	National	DS7810	665-148
	NEC	µPD7810	835-37
			875-70
	Panasonic	AN7810	1205-63
	Sanyo	LA7810	1126-23
	TI	µA7810C	1205-66
78109	Thomson	MK78109	4877-43
7811	National	DS7811	665-149
	NEC	µPD7811	835-38
			875-71
78110	Thomson	MK78110	4877-50
7812	Fairchild	µA7812C	1206-8
		µA7812M	1206-9
	GoldStar	GL7812	1206-10
	IPS	**IP7812**	⋆ **2854**
			1206-17
		IP7812A	⋆ **2854**
			1206-18
		IP7812AC	⋆ **2854**
			1206-19
		IP7812C	⋆ **2854**
			1206-20
	Motorola	**MC7812**	⋆ **2927**
			1206-31
		MC7812A	⋆ **2927**
			1206-32
		MC7812AC	⋆ **2927**
			1206-33
		MC7812C	⋆ **2927**
			1206-34
	National	DS7812	666-45
		LM7812	1206-41
	NEC	µPC7812	1205-119
	Samsung	MC7812C	1205-120
	SGS	L7812	1206-42
			1206-68
		L7812AC	1206-43
		L7812C	1206-44
			1206-69
	SiliconG	SG7812ACK	1206-51
		SG7812ACP	1206-52
		SG7812ACR	1205-123
		SG7812ACT	1205-112
		SG7812AK	1206-53
		SG7812AR	1206-1
		SG7812AT	1205-113
		SG7812CK	1206-54
		SG7812CP	1206-55
		SG7812CR	1206-2
		SG7812CT	1205-114
		SG7812K	1206-56
		SG7812R	1206-3
		SG7812T	1205-115
	TI	µA7812C	1206-57
	Unitrode	**UC7812**	⋆ **3325**
			1206-6
		UC7812A	⋆ **3325**
			1206-60
		UC7812AC	⋆ **3325**
			1206-61
		UC7812C	⋆ **3325**
			1206-7
78146	Thomson	MK78146	4873-46
7815	Fairchild	µA7815C	1207-36
		µA7815M	1207-37
	GoldStar	GL7815	1207-38
	IPS	**IP7815**	⋆ **2854**
			1207-45
		IP7815A	⋆ **2854**
			1207-46
		IP7815AC	⋆ **2854**
			1207-47
			(Continued)

Base Number	Source	Device	Page-Line
7815	**IPS**		**(Cont'd)**
		IP7815C	⋆ **2854**
			1207-48
	Motorola	**MC7815**	⋆ **2928**
			1207-56
		MC7815A	⋆ **2928**
			1207-57
		MC7815AC	⋆ **2928**
			1207-58
		MC7815C	⋆ **2928**
			1207-59
	National	LM7815	1207-65
	NEC	µPC7815	1207-23
	Samsung	MC7815C	1207-24
	SGS	L7815	1207-25
		L7815AC	1207-66
		L7815C	1207-26
	SiliconG	SG7815ACK	1207-70
		SG7815ACP	1207-71
		SG7815ACR	1207-27
		SG7815ACT	1207-17
		SG7815AK	1207-72
		SG7815AR	1207-28
		SG7815AT	1207-18
		SG7815CK	1207-73
		SG7815CP	1207-74
		SG7815CR	1207-29
		SG7815CT	1207-19
		SG7815K	1207-75
		SG7815R	1207-30
		SG7815T	1207-20
	TI	µA7815C	1207-76
	Unitrode	**UC7815**	⋆ **3325**
			1207-32
		UC7815A	⋆ **3325**
			1207-33
		UC7815AC	⋆ **3325**
			1207-34
		UC7815C	⋆ **3325**
			1207-35
	WinSystems	LPM7815	4819-3
		MCM7815	4821-41
7817	SiliconG	SG7817AP	1208-19
78172	Thomson	MK78172-42	4872-45
		MK78172-56	4872-46
78175	Thomson	MK78175-40	4872-47
78177	Thomson	MK78177-26	4873-21
7818	Fairchild	µA7818C	1208-24
		µA7818M	1208-25
	Motorola	**MC7818**	⋆ **2928**
			1208-31
		MC7818A	⋆ **2928**
			1208-32
		MC7818AC	⋆ **2928**
			1208-33
		MC7818C	⋆ **2928**
			1208-34
	NEC	µPC7818	1208-12
	Panasonic	AN7818	1208-13
	Samsung	MC7818C	1208-14
	SGS	L7818	1208-17
		L7818AC	1208-35
		L7818C	1208-18
	SiliconG	SG7818ACK	1208-41
		SG7818ACP	1208-20
			1208-42
		SG7818ACT	1208-7
		SG7818AK	1208-43
		SG7818AP	1208-21
		SG7818AT	1208-8
		SG7818CK	1208-44
		SG7818CP	1208-45
		SG7818CT	1208-9
		SG7818K	1208-46
		SG7818P	1208-22
		SG7818T	1208-10
	TI	µA7818C	1208-47
78185	SiliconSys	SSI78185	1200-1
7819	National	DS7819	665-136
78192	Thomson	MK78192	4874-27
78198	Thomson	MK78198	4879-16
78199	Thomson	MK78199	4879-8
7820	AD	AD7820K	923-38
		AD7820L	918-45
		AD7820T	923-39
		AD7820U	918-46
			(Continued)

Base Number	Source	Device	Page-Line
7820			(Cont'd)
	Maxim	AD7820B	923-32
		AD7820C	918-39
		AD7820K	923-33
		AD7820L	918-40
		AD7820T	923-34
		AD7820U	918-41
	National	DS7820	992-2
			¶ 424-7
		DS7820A	991-56
			¶ 424-7
	Panasonic	AN7820	1208-76
	SGS	L7820	992-5
	SiliconG	SG7820ACT	1208-68
		SG7820AT	1208-69
		SG7820CT	1208-70
		SG7820K	1208-82
		SG7820R	1208-83
		SG7820T	1208-71
7822	National	DS7822	990-6
7824	AD	AD7824K	923-25
		AD7824T	923-26
	Fairchild	µA7824C	1209-3
		µA7824M	1209-4
	GoldStar	GL7824	1209-5
	Maxim	AD7824B	923-47
		AD7824C	919-3
		AD7824K	923-48
		AD7824L	919-4
		AD7824T	923-49
		AD7824U	919-5
	Motorola	**MC7824**	⋆ **2928**
			1209-10
		MC7824A	⋆ **2928**
			1209-11
		MC7824AC	⋆ **2928**
			1209-12
		MC7824C	⋆ **2928**
			1209-13
	NEC	µPC7824	1208-118
	Panasonic	AN7824	1208-119
	Samsung	MC7824C	1208-120
	SGS	L7824	1208-122
		L7824C	1208-123
	SiliconG	SG7824ACK	1209-19
		SG7824ACP	1208-124
		SG7824ACR	1209-20
		SG7824ACT	1208-112
		SG7824AK	1209-21
		SG7824AP	1208-125
		SG7824AT	1208-113
		SG7824CK	1209-22
		SG7824CP	1208-126
		SG7824CR	1209-23
		SG7824CT	1208-114
		SG7824K	1209-24
		SG7824P	1209-1
		SG7824T	1208-115
	TI	µA7824C	1209-25
7828	AD	AD7828K	923-27
		AD7828T	923-28
	Maxim	AD7828B	923-50
		AD7828C	919-6
		AD7828K	923-51
		AD7828L	919-7
		AD7828T	923-52
		AD7828U	919-8
783	Cyberchron	CMI783	4867-18
	TI	TL783C	1214-109
7830	National	DS7830	987-54
			¶ 424-7
7831	National	DS7831	986-1
			988-8
	TI	DS7831	985-50
7832	National	DS7832	985-52
			988-10
	TI	DS7832	985-51
7833	National	DS7833	995-34
7834	National	DS7834	995-29
7835	National	DS7835	995-27
7836	National	DS7836	990-42
7837	National	DS7837	990-54
7838	AMD	AM7838	995-25
	National	DS7838	995-26
7839	National	DS7839	995-32

Base Number	Source	Device	Page-Line
7840	**GoldStar**	**GCL7840**	⋆ **4242**
			4048-29
		LL7840	4048-30
	Laserpath	LP7840C	4052-22
		LP7840P	4052-23
	LSI Logic	LL7840	4053-19
	Raytheon	**RL7840**	⋆ **4297**
			4059-5
7842	VersaLogic	VL7842	4815-11
785	Siemens	TCA785	1230-125
7852	Antona	ANC7852	4821-38
7863	Pro-Log	7863	4823-1
7875	National	DM7875	657-102
	SGS	L7875	1204-71
		L7875C	1204-72
7880	Antona	ANC7880	4821-7
	National	DS7880	980-79
	Pro-Log	7880	4817-1
78808	SMC	COM78808	1011-71
		78808	1010-58
	TI	TCM78808	1012-5
7885	Fairchild	µA7885C	1205-25
	Pro-Log	7885	4819-9
	Samsung	MC7885C	1205-26
	TI	µA7885C	1205-27
7889	National	DS7889	980-118
	Pro-Log	7889	4819-1
79	Fairchild	µA79GC	1215-2
		µA79HG	1214-117
		µA79MGC	1215-1
	Lambda	LAS79HG	1215-3
	Laserpath	LAS79HG	1215-5
79C14	VersaLogic	VL79C14	4873-29
79H000			
	OKI	MSM79H000	4057-32
		79H000	4057-54
79L03	Motorola	MC79L03AC	1209-55
		MC79L03C	1209-56
79L04	Panasonic	AN79L04	1209-57
79L05	**Motorola**	**MC79L05AC**	⋆ **2959**
			1209-65
		MC79L05C	⋆ **2926**
			⋆ **2959**
			1209-66
	National	LM79L05	1209-68
		LM79L05A	1209-69
	Panasonic	AN79L05	1209-70
	Samsung	MC79L05C	1209-71
	TI	MC79L05	1209-72
		MC79L05A	1209-73
79L06	Panasonic	AN79L06	1210-35
79L12	**Motorola**	**MC79L12AC**	⋆ **2927**
			⋆ **2959**
			1210-102
		MC79L12C	⋆ **2927**
			⋆ **2959**
			1210-103
	National	LM79L12	1210-105
		LM79L12A	1210-106
	Panasonic	AN79L12	1210-107
	Samsung	MC79L12C	1210-108
	TI	MC79L12	1210-109
		MC79L12A	1210-110
79L15	**Motorola**	**MC79L15A**	⋆ **2928**
			⋆ **2959**
			1211-95
		MC79L15AC	⋆ **2928**
			⋆ **2959**
			1211-64
		MC79L15C	⋆ **2928**
			⋆ **2959**
			1211-65
	National	LM79L15	1211-67
		LM79L15A	1211-68
	Panasonic	AN79L15	1211-69
	Samsung	MC79L15C	1211-70
	TI	MC79L15	1211-71
		MC79L15A	1211-72
79L18	**Motorola**	**MC79L18AC**	⋆ **2928**
			1212-40
		MC79L18C	⋆ **2928**
			1212-25
	Panasonic	AN79L18	1212-26
79L20	Panasonic	AN79L20	1212-55

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
79L24	Motorola	MC79L24AC	1212-76
		MC79L24C	⋆ **2928**
			1212-77
	Panasonic	AN79L24	1212-78
79M05	Fairchild	μA79M05AC	1209-76
		μA79M05M	1209-77
	IPS	**IP79M05**	⋆ **2854**
			1209-78
		IP79M05A	⋆ **2854**
			1209-79
		IP79M05AC	⋆ **2854**
			1209-80
		IP79M05C	⋆ **2854**
			1209-81
	Motorola	**MC79M05**	⋆ **2926**
			⋆ **2959**
			1209-83
	National	LM79M05	1209-87
	Samsung	MC79M05C	1209-88
	TI	μA79M05C	1209-92
		μA79M05M	1209-93
79M06	Samsung	MC79M06C	1210-38
	TI	μA79M06C	1210-39
79M08	Fairchild	μA79M08AC	1210-56
	Samsung	MC79M08C	1210-59
	TI	μA79M08C	1210-62
79M10	Samsung	MC79M10	1210-90
79M12	Fairchild	μA79M12AC	1210-118
		μA79M12M	1210-119
	IPS	**IP79M12**	⋆ **2854**
			1210-120
		IP79M12A	⋆ **2854**
			1210-121
		IP79M12AC	⋆ **2854**
			1210-122
		IP79M12C	⋆ **2854**
			1210-123
	Motorola	**MC79M12C**	⋆ **2927**
			⋆ **2959**
			1211-1
	National	LM79M12	1211-3
	Samsung	MC79M12C	1211-4
	TI	μA79M12C	1211-5
		μA79M12M	1211-6
79M15	Fairchild	μA79M15AC	1211-81
		μA79M15M	1211-82
	IPS	**IP79M15**	⋆ **2854**
			1211-84
		IP79M15A	⋆ **2854**
			1211-85
		IP79M15AC	⋆ **2854**
			1211-86
		IP79M15C	⋆ **2854**
			1211-87
	Motorola	**MC79M15C**	⋆ **2928**
			⋆ **2959**
			1211-89
	National	LM79M15	1211-91
	Samsung	MC79M15C	1211-92
	TI	μA79M15C	1211-93
79M18	Samsung	MC79M18	1212-30
79M20	TI	μA79M20C	1212-59
79M24	Samsung	MC79M24C	1212-82
	TI	μA79M24C	1212-83
79N04	Panasonic	AN79N04	1209-58
79N05	Panasonic	AN79N05	1209-75
79N06	Panasonic	AN79N06	1210-36
79N07	Panasonic	AN79N07	1210-50
79N08	Panasonic	AN79N08	1210-55
79N09	Panasonic	AN79N09	1210-83
79N10	Panasonic	AN79N10	1210-88
79N12	Panasonic	AN79N12	1210-117
79N15	Panasonic	AN79N15	1211-80
79N18	Panasonic	AN79N18	1212-28
79N20	Panasonic	AN79N20	1212-56
79N24	Panasonic	AN79N24	1212-80
79V000	OKI	79V000	4057-53
7900	Sanyo	LA7900	1126-29
7901	AMD	AM7901A	1192-44
79018	**AT&T**	**M79018Dx-15**	
			⋆ **2528**
			1355-1
7902	Samsung	MC7902C	1209-52
7905	AMD	AM7905A	1192-45
	Fairchild	μA7905C	1209-101
		μA7905M	1209-102
			(Continued)

Base Number	Source	Device	Page-Line
7905			(Cont'd)
	GoldStar	**GL7905**	⋆ **2701**
			1209-103
	IPS	**IP7905**	⋆ **2854**
			1209-110
		IP7905A	⋆ **2854**
			1209-111
		IP7905AC	⋆ **2854**
			1209-112
		IP7905C	⋆ **2854**
			1209-113
	Motorola	MC7905	1210-28
		MC7905.2C	⋆ **2927**
			1210-29
		MC7905C	⋆ **2926**
			1209-120
	National	LM7905	1210-1
	NEC	μPC7905	1209-95
	Panasonic	AN7905	1209-96
	Samsung	MC7905-2C	1210-34
		MC7905C	1209-97
	SGS	L7905C	1210-2
	SiliconG	SG7905	1210-31
		SG7905A	1210-8
		SG7905C	1210-9
	TI	μA7905C	1210-10
	Thomson	μA7905	1210-11
	Unitrode	**UC7905**	⋆ **3325**
			1210-12
		UC7905A	⋆ **3325**
			1210-13
		UC7905AC	⋆ **3325**
			1210-14
		UC7905C	⋆ **3325**
			1210-15
7906	**Motorola**	**MC7906C**	⋆ **2927**
			1210-45
	Panasonic	AN7906	1210-41
	Samsung	MC7906C	1210-42
	TI	μA7906C	1210-46
7907	Panasonic	AN7907	1210-53
7908	Fairchild	μA7908C	1210-63
		μA7908M	1210-57
	GoldStar	GL7908	1210-79
	Motorola	**MC7908C**	⋆ **2927**
			1210-65
	NEC	μPC7908	1210-66
	Samsung	MC7908C	1210-67
	SGS	L7908C	1210-68
	SiliconG	SG7908	1210-74
		SG7908A	1210-75
		SG7908AC	1210-76
		SG7908C	1210-77
	TI	μA7908C	1210-78
7909	**GoldStar**	**GL7909**	⋆ **2701**
			1211-83
	Panasonic	AN7909	1210-86
791	NEC	μPD791	1222-77
	Thomson	μA791	1163-24
7910	AMD	AM7910	1196-34
	Panasonic	AN7910	1210-92
	S-MOS	SVM7910	1116-79
	Thomson	EF7910	1196-33
7911	AMD	AM7911	1195-111
7912	Fairchild	μA7912C	1211-17
		μA7912M	1211-18
	GoldStar	**GL7912**	⋆ **2701**
			1211-19
	IPS	**IP7912**	⋆ **2854**
			1211-26
		IP7912A	⋆ **2854**
			1211-27
		IP7912AC	⋆ **2854**
			1211-28
		IP7912C	⋆ **2854**
			1211-29
	Motorola	MC7912AC	1211-36
		MC7912C	⋆ **2927**
			1211-37
	National	LM7912	1211-38
	NEC	μPC7912	1211-11
	Panasonic	AN7912	1211-12
	Samsung	MC7912C	1211-13
	SGS	L7912C	1211-39
	SiliconG	SG7912	1211-45
		SG7912A	1211-46
			(Continued)

Base Number	Source	Device	Page-Line
7912	SiliconG		(Cont'd)
		SG7912AC	1211-47
		SG7912C	1211-48
	TI	μA7912C	1211-49
	Thomson	μA7912	1211-50
	Unitrode	**UC7912**	⋆ **3325**
			1211-51
		UC7912A	⋆ **3325**
			1211-52
		UC7912AC	⋆ **3325**
			1211-53
		UC7912C	⋆ **3325**
			1211-54
7914	VersaLogic	VL7914	4873-39
7915	Fairchild	μA7915C	1211-105
		μA7915M	1211-106
	GoldStar	**GL7915**	⋆ **2701**
			1211-107
	IPS	**IP7915**	⋆ **2854**
			1211-114
		IP7915A	⋆ **2854**
			1211-115
		IP7915AC	⋆ **2854**
			1211-116
		IP7915C	⋆ **2854**
			1211-117
	Motorola	**MC7915AC**	⋆ **2928**
			1211-124
		MC7915C	⋆ **2928**
			1211-125
	National	LM7915	1212-2
	NEC	μPC7915	1211-99
	Panasonic	AN7915	1211-100
	Samsung	MC7915C	1211-101
	SGS	L7915C	1212-3
	SiliconG	SG7915	1212-9
		SG7915A	1212-10
		SG7915AC	1212-11
		SG7915C	1212-12
	TI	μA7915C	1212-13
	Thomson	μA7915	1212-14
	Unitrode	**UC7915**	⋆ **3325**
			1212-15
		UC7915A	⋆ **3325**
			1212-16
		UC7915AC	⋆ **3325**
			1212-17
		UC7915C	⋆ **3325**
			1212-18
7918	**Motorola**	**MC7918C**	⋆ **2928**
			1212-41
	NEC	μPC7918	1212-34
	Panasonic	AN7918	1212-35
	Samsung	MC7918C	1212-36
	SGS	L7918C	1212-42
	SiliconG	SG7918	1212-48
		SG7918A	1212-49
		SG7918AC	1212-50
		SG7918C	1212-51
	TI	μA7918C	1212-52
792	NEC	μPD792	1222-72
	Plessey	SL792	1102-16
7920	Panasonic	AN7920	1212-61
	S-MOS	SVM7920	1116-80
	SGS	L7920C	1212-64
	SiliconG	SG7920	1212-67
		SG7920A	1212-68
		SG7920AC	1212-69
		SG7920C	1212-70
7924	**GoldStar**	**GL7924**	⋆ **2701**
			1212-88
	Motorola	**MC7924C**	⋆ **2928**
			1212-92
	NEC	μPC7924	1212-85
	Panasonic	AN7924	1212-86
	Samsung	MC7924C	1212-87
	SGS	L7924C	1212-93
	TI	μA7924C	1212-94
793	Plessey	SL793	1102-17
7930	S-MOS	SLA7930	4069-11
		SVM7930	1116-81
7940	S-MOS	SVM7940	1116-82
795	NEC	μPD795	1222-51
			1222-66
7950	AMD	AM7950	1198-48
	S-MOS	SVM7950	1116-83

Base Number	Source	Device	Page-Line
7952	SGS	L7952C	1210-30
7953	AMD	AM7953	1198-49
796	Chrislin	CI796-EDC	4862-51
		CI796-EDC-2MB	
			4862-16
7960	S-MOS	SVM7960	1116-84
	Sanyo	LC7960	613-51
7961	Sanyo	LC7961	613-93
7970	AMD	AM7970	889-1
			1194-106
	S-MOS	SVM7970	1116-85
798	Fairchild	μA798C	1178-45
799	NEC	μPD799	1222-73
7990	AMD	AM7990	883-91
			883-99
	S-MOS	SVM7990	1116-86
7991	AMD	AM7991A	883-104
7992	AMD	AM7992A	883-105
7995	AMD	AM7995	883-106
8	AMD	AMPALR8ALM	4073-95
	Burr-Brown	**MPC8D**	⋆ **2543**
			914-68
		MPC8S	⋆ **2543**
			914-8
		PWR8XX	1220-146
	Chrislin	CI-MIV8	4867-46
		CI-MIV8-EDC	4867-36
		CI-VME8	4889-52
	Datel	**ADCEK8B**	⋆ **2575**
			922-7
		ADCET8BC	⋆ **2575**
			922-10
		ADCMC8BC	925-25
		DACHF8BMM	
			⋆ **2574**
			944-14
		DACIC8BC	⋆ **2576**
			945-30
		DACUP8BC	⋆ **2576**
			946-24
		DACUP8BM	⋆ **2576**
			946-25
		FLJ-R8	1219-12
		HDAS8MC	⋆ **2577**
			930-8
			1220-75
		HDAS8MM	⋆ **2574**
			⋆ **2577**
			1220-76
	DUAL	IOS8	4888-1
	IndComp	ZPM8	4811-8
	Intech	**RGBDAC8E**	⋆ **2799**
			883-29
			949-12
	IntSolutions	VM-ICP8	4888-2
	IMI	MPY8	644-41
	LMS	NVR8	1312-18
	LogicDev	LMU8U	644-45
		LMU8UC	603-158
		LMU8UM	603-159
	Magnum	S-D/A8	4893-26
	Matrox	MBC8b/512B	4829-8
	MicroSys	STD8-1	4711-18
		STD8-2	4711-19
		STD8-21	4711-20
		STD8-22	4711-21
	Minntronics	MZV8-11	4867-23
	National	MF8	1228-146
	Octagon	Sup-8	4894-38
		SUP-8	4865-39
	PlesseyMicro		
		PME 8EP	4889-14
		PME 8SE	4889-15
	SBE	COM8	4839-7
		VCOM8	4839-21
	WinSystems	LPM-SBC8	4817-10
		LPMSBC8	4817-11
		MCM-SBC8	4817-14
8A1200	Signetics	8A1200	4060-30
			4060-32
			¶ 404-33
8A1260	Signetics	8A1260	4060-31
			4060-33
			¶ 404-33

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
8A1542	Signetics	8A1542	4060-36
			4060-37
			¶ 404-33
8A1664	Signetics	8A1664	4060-38
			4060-39
8A1864	Signetics	8A1864	4060-41
			4060-42
8A2176	Signetics	8A2176	4060-45
			4060-46
8B3	**S-MOS**	**SLA8B3S**	⋆ **4305**
			4059-46
8C8024	MicronTech	MT8C8024-10	1345-58
		MT8C8024-12	1346-1
		MT8C8024-15	1346-8
		MT8C8024-8	1345-49
8C901	Cypress	CY8C901-69C	803-10
8C9024	MicronTech	MT8C9024-10	1346-23
		MT8C9024-12	1346-32
		MT8C9024-15	1346-39
		MT8C9024-8	1346-15
8F0	**S-MOS**	**SLA8F0S**	⋆ **4305**
			4059-47
8J3	**S-MOS**	**SLA8J3S**	⋆ **4305**
			4059-48
8K9	VLSI Tech	VT8K9	1370-20
		VT8K9-35	1370-21
		VT8K9-40	1370-24
		VT8K9-45	1370-27
		VT8K9-55	1370-29
8L14	MMI	PAL8L14AC	4073-16
8L48	Raytheon	CGA8L48	4058-35
8MP612			
	IDT	**IDT8MP612**	⋆ **2803**
			⋆ **2845**
			1381-5
8MP624			
	IDT	**IDT8MP624**	⋆ **2803**
			⋆ **2845**
			1385-5
8MP628			
	IDT	**IDT8MP628-50**	
			⋆ **2803**
			⋆ **2849**
			1370-36
8MP656			
	IDT	**IDT8MP656-50**	
			⋆ **2803**
			⋆ **2849**
			1377-52
8MP824			
	IDT	**IDT8MP824-50**	
			⋆ **2803**
			⋆ **2847**
			1385-65
		IDT8MP824-60	
			⋆ **2803**
			⋆ **2847**
			1385-74
8M464	**Dense-Pac**	**DPS8M464**	⋆ **2578**
			1374-63
	IDT	IDT8M464S-100B	
			1376-65
		IDT8M464S-55	1376-21
		IDT8M464S-65	1376-22
		IDT8M464S-65B	
			1376-23
		IDT8M464S-85	1376-63
		IDT8M464S-85B	
			1376-64
8M612	**Dense-Pac**	**DPE8M612**	⋆ **2582**
			1314-44
		DPS8M612	⋆ **2580**
			1381-3
		DPZ8M612	⋆ **2585**
			1314-45
	IDT	**IDT8M612**	⋆ **2803**
			⋆ **2846**
			1381-6
		IDT8M612-B	⋆ **2803**
			⋆ **2846**
			1381-7
8M624	**Dense-Pac**	**DPE8M624**	⋆ **2582**
			1314-59
		DPS8M624	⋆ **2580**
			1384-86
		DPZ8M624	⋆ **2585**
			1314-62
			(Continued)

Base Number	Source	Device	Page-Line
8M624			(Cont'd)
	IDT	**IDT8M624**	⋆ **2846**
			1385-6
		IDT8M624-B	⋆ **2846**
			1385-13
8M628	**Dense-Pac**	**DPE8M628**	⋆ **2582**
			1313-17
		DPS8M628	⋆ **2579**
			1370-35
		DPZ8M628	⋆ **2585**
			1313-19
	IDT	**IDT8M628S-100B**	
			⋆ **2803**
			⋆ **2850**
			1370-44
		IDT8M628S-50	
			⋆ **2803**
			⋆ **2850**
			1370-37
		IDT8M628S-60	
			⋆ **2803**
			⋆ **2850**
			1370-38
		IDT8M628S-60B	
			⋆ **2803**
			⋆ **2850**
			1370-39
		IDT8M628S-70	
			⋆ **2803**
			⋆ **2850**
			1370-40
		IDT8M628S-70B	
			⋆ **2803**
			⋆ **2850**
			1370-41
		IDT8M628S-85	
			⋆ **2803**
			⋆ **2850**
			1370-42
		IDT8M628S-85B	
			⋆ **2803**
			⋆ **2850**
			1370-43
8M656	**Dense-Pac**	**DPE8M656**	⋆ **2582**
			1313-37
		DPS8M656	⋆ **2579**
			1377-50
		DPZ8M656	⋆ **2585**
			1313-39
	IDT	**IDT8M656S-100B**	
			⋆ **2803**
			⋆ **2850**
			1377-65
		IDT8M656S-50	
			⋆ **2803**
			⋆ **2850**
			1377-53
		IDT8M656S-60	
			⋆ **2803**
			⋆ **2850**
			1377-56
		IDT8M656S-60B	
			⋆ **2803**
			⋆ **2850**
			1377-57
		IDT8M656S-70	
			⋆ **2803**
			⋆ **2850**
			1377-58
		IDT8M656S-70B	
			⋆ **2803**
			⋆ **2850**
			1377-59
		IDT8M656S-85	
			⋆ **2803**
			⋆ **2850**
			1377-62
		IDT8M656S-85B	
			⋆ **2803**
			⋆ **2850**
			1377-63
8M824	**IDT**	**IDT8M824**	⋆ **2803**
			⋆ **2848**
			1385-75
		IDT8M824-B	⋆ **2803**
			⋆ **2848**
			1386-9

Base Number	Source	Device	Page-Line
8M856	**IDT**	**IDT8M856L-100B**	
			⋆ **2803**
			⋆ **2851**
			1379-84
		IDT8M856L-45	
			⋆ **2803**
			⋆ **2851**
			1378-60
		IDT8M856L-50	
			⋆ **2803**
			⋆ **2851**
			1378-63
		IDT8M856L-55B	
			⋆ **2803**
			⋆ **2851**
			1379-6
		IDT8M856L-60	
			⋆ **2803**
			⋆ **2851**
			1379-11
		IDT8M856L-65B	
			⋆ **2803**
			⋆ **2851**
			1379-14
		IDT8M856L-70	
			⋆ **2803**
			⋆ **2851**
			1379-31
		IDT8M856L-75B	
			⋆ **2803**
			⋆ **2851**
			1379-34
		IDT8M856L-85	
			⋆ **2803**
			⋆ **2851**
			1379-52
		IDT8M856L-90B	
			⋆ **2803**
			⋆ **2851**
			1379-54
8M864	IDT	IDT8M864L-120	
			1368-79
		IDT8M864L-120B	
			1369-15
		IDT8M864L-150	
			1369-44
		IDT8M864L-150B	
			1369-45
		IDT8M864L-200	
			1369-86
		IDT8M864L-200B	
			1369-87
		IDT8M864L-65	1367-65
		IDT8M864L-75	1368-5
		IDT8M864L-75B	
			1368-6
		IDT8M864L-85	1368-15
		IDT8M864L-85B	
			1368-17
8P4	MMI	PLE8P4C	4079-26
		PLE8P4M	4079-27
8P8	MMI	PLE8P8C	4079-25
		PLE8P8M	4079-28
8TS805	Signetics	N8TS805	677-124
		S8TS805	677-125
8TS806	Signetics	N8TS806	668-50
		S8TS806	677-126
8TS807	Signetics	N8TS807	678-2
8TS808	Signetics	N8TS808	668-51
8T04	Signetics	S8T04	979-55
8T05	Signetics	S8T05	979-25
8T09	Raytheon	RM8T09	665-131
	Signetics	**N8T09**	⋆ **3022**
			665-132
			985-54
		S8T09	665-133
			985-55
8T10	**Signetics**	**N8T10**	⋆ **3022**
			667-126
		S8T10	667-127
8T125	**Signetics**	**N8T125**	⋆ **3022**
			686-74
			997-18
		S8T125	686-75
			997-19

Base Number	Source	Device	Page-Line
8T126	**Signetics**	**N8T126**	⋆ **3022**
			689-89
			994-57
		S8T126	689-92
			995-1
8T127	**Signetics**	**N8T127**	⋆ **3022**
			689-90
			994-58
		S8T127	689-93
			995-2
8T128	Signetics	N8T128	689-104
			995-11
		S8T128	689-107
			995-14
8T129	**Signetics**	**N8T129**	⋆ **3022**
			689-105
			995-12
		S8T129	689-108
			995-15
8T13	**Signetics**	**N8T13**	⋆ **3022**
			985-17
		S8T13	985-18
8T15	**Signetics**	**N8T15**	⋆ **3022**
			985-6
8T16	**Signetics**	**N8T16**	⋆ **3022**
			990-4
		S8T16	990-5
8T20	Raytheon	RC8T20	681-157
	Signetics	**N8T20**	⋆ **3022**
			681-158
8T23	**Signetics**	**N8T23**	⋆ **3022**
			985-13
8T24	**Signetics**	**N8T24**	⋆ **3022**
			990-9
8T245	**Signetics**	**N8T245**	⋆ **3022**
			686-177
		S8T245	686-178
8T26	**GoldStar**	**GD8T26A**	⋆ **2694**
			689-85
	Motorola	**MC8T26A**	⋆ **2951**
			689-86
			865-90
			994-54
	National	DS8T26A	689-87
			865-92
			994-55
		DS8T26AM	689-88
			994-56
	Signetics	**N8T26A**	⋆ **3022**
			689-91
			994-59
		S8T26A	689-94
	TI	N8T26	689-95
		N8T26A	689-96
8T28	AMD	N8T28	689-98
	GoldStar	**GD8T28**	⋆ **2694**
			689-99
	Motorola	**MC8T28**	⋆ **2951**
			689-101
			865-91
			995-8
	National	DS8T28	689-102
			865-93
			995-9
		DS8T28M	689-103
			995-10
	Signetics	**N8T28**	⋆ **3022**
			689-106
			995-13
		S8T28	689-109
8T31	Signetics	N8T31	689-134
			873-119
8T32	Signetics	N8T32	689-135
			873-122
		S8T32	689-138
			874-1
8T33	Signetics	N8T33	689-136
			873-123
		S8T33	689-139
			874-2
8T34	**Signetics**	**N8T34**	⋆ **3022**
			995-31
8T3404	**Signetics**	**N8T3404**	⋆ **3022**
			677-41
8T35	Signetics	S8T35	689-140
			873-116

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
8T36	Signetics	N8T36	689-137
			873-114
		S8T36	689-141
			873-117
8T37	**Signetics**	**N8T37**	* **3022**
			990-57
8T38	**Signetics**	**N8T38**	* **3022**
			994-10
8T380	**Signetics**	**N8T380**	* **3022**
			689-15
8T39	Signetics	S8T39	689-142
8T80	Signetics	S8T80	665-152
8T90	Signetics	S8T90	659-141
8T95	**Motorola**	**MC8T95**	* **2951**
			659-18
			865-94
	Signetics	**N8T95**	* **3022**
			659-20
			865-98
		S8T95	865-102
8T96	**Motorola**	**MC8T96**	* **2951**
			660-54
			865-95
	Signetics	**N8T96**	* **3022**
			660-56
			865-99
8T97	**Motorola**	**MC8T97**	* **2951**
			659-19
			865-96
	Signetics	**N8T97**	* **3022**
			659-21
			865-100
		S8T97	659-22
			865-103
8T98	**Motorola**	**MC8T98**	* **2951**
			660-55
			865-97
	Signetics	**N8T98**	* **3022**
			660-57
			865-101
		S8T98	660-58
			865-104
8X01	Signetics	N8X01A	688-26
		8X01A	982-11
8X02	Signetics	N8X02A	688-69
8X16	**Dense-Pac**	**DPE8X16V**	* **2583**
			1313-18
		DPP8X16	* **2584**
			1370-34
		DPS8X16	1370-32
		DPS8X16V	* **2583**
			1370-33
		DPV8X16	* **2582**
			1327-96
		DPV8X16V	* **2582**
			* **2584**
			1327-95
8X18	**Dense-Pac**	**DPF8X18**	* **2585**
			1307-38
8X24	**Dense-Pac**	**DPE8X24V**	* **2583**
			1313-20
		DPV8X24	* **2582**
			1328-2
		DPV8X24V	* **2582**
			* **2584**
			1328-1
8X300	Signetics	N8X300	873-106
		S8X300-1	873-108
		S8X300-2	873-109
		8X300	839-32
			¶ 416-9
8X300KT100			
	Signetics	8X300KT100SK	
			4813-4
8X305	Signetics	N8X305	873-107
		S8X305	873-110
		8X305	839-33
			¶ 417-1
8X310	Signetics	N8X310	874-8
		S8X310	874-9
8X32	**Dense-Pac**	**DPE8X32V**	* **2583**
			1313-21
		DPP8X32	* **2584**
			1370-45
		DPV8X32	* **2582**
			1328-4

(Continued)

Base Number	Source	Device	Page-Line
8X32	**Dense-Pac**		(Cont'd)
		DPV8X32V	* **2582**
			* **2584**
			1328-3
8X320	Signetics	N8X320	688-50
			874-7
8X330	Signetics	N8X330	873-113
8X350	Signetics	N8X350	874-16
			1350-91
		S8X350	874-17
			1350-92
8X353	Signetics	N8X353	874-14
		S8X353	874-15
8X355	Signetics	N8X355	874-10
		S8X355	874-11
8X36	**Dense-Pac**	**DPF8X36**	* **2585**
			1307-39
8X360	Signetics	N8X360	874-12
		S8X360	874-13
8X371	Signetics	N8X371	873-120
		S8X371	873-121
8X372	Signetics	N8X372	873-124
		S8X372	874-3
8X374	Signetics	N8X374	874-5
		S8X374	874-6
8X376	Signetics	N8X376	873-115
		S8X376	873-118
8X382	Signetics	N8X382	873-125
		S8X382	874-4
8X401	**Signetics**	**8X401**	* **3078**
			839-34
8X41	Signetics	N8X41	688-19
			881-84
			888-63
8X42	Signetics	N8X42	873-126
8X60	Signetics	N8X60	688-40
			873-111
			999-53
		S8X60	873-112
			999-54
		8X60	* **3188**
			1307-52
8X8	**Dense-Pac**	**DPE8X8V**	* **2583**
			1311-64
		DPP8X8	* **2584**
			1366-72
		DPS8X8V	* **2583**
			1366-71
8X9	**Dense-Pac**	**DPF8X9**	* **2585**
			1307-37
80	AD	ADADC80-12	932-4
		ADADC80-15	926-47
		ADADC80Z-10	927-1
		ADADC80Z-12	932-5
		ADDAC80/CBI	958-25
		ADDAC80/CCD	971-14
	Apex	**PA80J**	* **2458**
			1165-10
		PA80Q	* **2458**
			1165-11
	AppBusComp		
		CRT80	4847-47
	ApplSys	ACS/80	4819-7
	Babcock	S80 I/M	4862-23
		S80 MEM	4862-60
		S80 OUTPUT	4861-58
		S80CPU	4807-13
	Burr-Brown	**ADC80A-10**	* **2541**
			936-5
		ADC80A-12	* **2541**
			932-9
		ADC80H-AH-12	
			* **2541**
			964-39
		ADC80MAH-12	
			* **2541**
			933-35
		DAC80-CBI-I	* **2542**
			958-22
		DAC80-CBI-V	* **2542**
			964-4
		DAC80-CCD-I	* **2542**
			971-22
		DAC80Z-CBI-I	
			* **2542**
			958-18

(Continued)

Base Number	Source	Device	Page-Line
80	**Burr-Brown**		(Cont'd)
		DAC80Z-CBI-V	
			* **2542**
			964-5
		DAC80Z-CCD-I	
			* **2542**
			971-23
		SHC80	1227-140
	Comark	MT80	4857-14
	Datricon	ACS80	4817-23
		Z80PIO	4876-31
	Devtek	DS-Z80	4878-46
		DSZ80	4703-17
	DistComp	DCS/80	4705-1
	DiversTech	CBC80C/24	4807-12
	HybridSys	HSDAC80CBI-I	961-36
		HSDAC80CBI-V	962-20
	Intel	iSBC80/10B	4807-35
		iSBC80/20-4	4807-31
		iSBC80/24A	4809-2
	Interdesign	ULA80DSB	4045-29
	KSystems	STDVTTRZ80	4879-6
	Magnum	Z80ALBE	4811-9
	Matrix	MF80A	4821-2
	Matrox	PBC80	4807-23
		ZBC80	4807-20
	MCE	MCE80	1162-17
	MicroInds	mBLC80/05	4809-3
		mSBC80/04	4803-25
		mSBC80/05	4809-4
		mSBC80/16D	4809-5
		MSBC 80/16	4809-25
	MicroNet	DAC80	963-18
		MNADC80	932-10
	PEP-Modular		
		MPMZ80A	4807-4
		MPMZ80D	4807-5
	PMI	**OP80A**	* **2967**
			* **2970**
			1147-49
		OP80E	* **2967**
			* **2970**
			1147-46
		OP80F	* **2967**
			* **2970**
			1150-17
		OP80G	* **2967**
			* **2970**
			1150-24
	Raytheon	RG80	688-108
		RLA80	* **2984**
			* **4299**
			4069-1
		RL80	678-71
	RELMS	Z80SAM	4807-15
	TeledyneP	TPDAC80I	956-2
		TPDAC80V	956-34
	Titan/SESCO		
		SECS80/BMC	4861-21
		SECS80/TC1	4861-48
		SECS80/028	4861-26
		SECS80/056	4861-27
		SECS80/10A	4809-1
		SECS80/1553	4860-39
		SECS80/164A	4861-33
		SECS80/208	4857-32
		SECS80/30	4809-11
		SECS80/506	4858-28
		SECS80/519	4861-12
		SECS80/534	4853-7
		SECS80/544	4809-12
		SECS80/544A	4809-26
		SECS80/724	4859-45
		SECS80/732	4859-29
		SECS80/86	4829-2
	VersaLogic	VID80	4871-36
	Wintek	**MDS80**	* **4913**
			4866-2
	Zendex	ZX80/15	4809-14
	Zilog	**Z80**	* **3418**
			843-7
			874-69
80A35	Intel	80A35	868-135
80A39	Intel	80A39	868-136
80A48	Intel	80A48L	869-31
80A49	Intel	80A49	869-32

Base Number	Source	Device	Page-Line
80C20	**Zilog**	**Z80C20-Z-GLU**	
			* **3418**
			880-30
80C286	**Harris**	**80C286-10**	* **2729**
			847-6
		80C286-12	* **2729**
			847-7
		80C286-16	* **2729**
			847-8
80C30	**Zilog**	**Z80C30Z-SCC**	
			* **3418**
			880-33
80C31	Intel	M80C31	827-1
		80C31	827-8
			870-43
			¶ 450-23
	Matra-Harris		
		80C31	827-29
	Signetics	**SCC80C31**	* **3072**
			870-46
80C32	Matra-Harris		
		80C32	827-30
80C35	GE/Intersil	IM80C35	821-23
			868-132
	Intel	80C35	868-137
	NEC	μPD80C35	835-39
			869-4
	OKI	MSM80C35	837-10
			869-8
	Signetics	SCC80C35	869-11
	Toshiba	**TMP80C35A**	* **3306**
			869-17
80C351	Signetics	SCC80C351	870-65
80C382	Siemens	SAB80C382	1198-90
80C39	Fujitsu	MBL80C39	821-15
			868-129
	GE/Intersil	IM80C39	821-24
			868-133
	Intel	M80C39	827-2
		80C39	827-9
			868-138
	NEC	μPD80C39	869-5
	OKI	MSM80C39	837-11
			869-9
	Signetics	SCC80C39	869-12
	Toshiba	**TMP80C39A**	* **3306**
			841-27
			869-18
		TMP80C39A-6	
			* **3306**
			869-19
80C40	OKI	MSM80C40	869-10
	Signetics	SCC80C40	869-13
	Toshiba	**TMP80C40A**	* **3306**
			869-20
		TMP80C40A-6	
			* **3306**
			869-21
80C47	**Toshiba**	**TMPZ80C47P**	
			* **3306**
			882-16
80C48	GE/Intersil	IM80C48	821-25
			869-27
	Intel	80C48	869-33
	NEC	μPD80C48	835-40
			869-50
	OKI	MSM80C48	837-12
			869-55
	Signetics	SCC80C48	869-58
	Toshiba	**TMP80C48A**	* **3306**
			868-119
80C482	Siemens	SAB80C482	1198-91
80C49	Fujitsu	MBL80C49	869-25
	GE/Intersil	IM80C49	821-26
			869-28
	Intel	M80C49	827-3
		80C49	827-10
			869-34
	NEC	μPD80C49	869-51
	OKI	MSM80C49	869-56
	Signetics	SCC80C49	869-59
	Toshiba	**TMP80C49A**	* **3306**
			869-64
		TMP80C49A-6	
			* **3306**
			869-65

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
80C50	NEC	μPD80C50	869-52
		80C50	837-9
	OKI	MSM80C50	869-57
	Signetics	SCC80C50	869-60
	Toshiba	**TMP80C50A**	⋆ **3306**
			869-66
		TMP80C50A-6	
			⋆ **3306**
			869-67
80C51	GE/Intersil	IM80C51	870-49
	Intel	M80C51	827-4
			870-51
		80C51	827-11
			870-52
	Matra-Harris		
		80C51	827-31
	OKI	MCM80C51	870-55
	Signetics	**SCC80C51**	⋆ **3072**
			870-57
80C52	Matra-Harris		
		80C52	827-32
80C58	OKI	MSM80C58	604-11
80C85	**Calmos**	**CA80C85B**	⋆ **2553**
			819-23
			872-5
		CA80C85S	⋆ **2553**
			819-24
			873-35
	Harris	**HS80C85RH**	⋆ **2708**
			872-6
	OKI	MSM80C85A	837-13
			872-15
80C86	**Harris**	**HS80C86RH**	⋆ **2708**
			847-4
			875-96
		MD80C86	⋆ **2702**
			847-5
			875-100
		80C86	⋆ **2730**
			⋆ **2768**
			847-9
			875-97
			¶ 410-33
			¶ 453-5
		80C86-2	⋆ **2730**
			⋆ **2768**
			847-10
			875-98
			¶ 410-33
			¶ 453-5
	Intel	80C86	847-18
		80C86-2	847-19
	OKI	MSM80C86	875-99
80C88	**Harris**	**MD80C88**	⋆ **2702**
			877-39
		80C88	⋆ **2730**
			⋆ **2768**
			877-32
		80C88-2	⋆ **2730**
			⋆ **2768**
			877-33
	Intel	80C88	827-12
		80C88-2	827-13
	OKI	MSM80C88	877-38
80C95	National	MM80C95	606-52
80C96	National	MM80C96	608-79
80C97	National	MM80C97	606-53
80C98	National	MM80C98	608-80
80P103	Datricon	Z80P103	4876-39
80S102	Datricon	Z80S102	4875-11
80S104	Datricon	Z80S104	4875-15
800	AD	RTI800	4849-23
	Burr-Brown	DAC800-CBI-I	958-19
		DAC800-CBI-V	958-20
		MPC800K	⋆ **2543**
			914-66
		MPC800S	⋆ **2543**
			914-67
	Datel	**ADC800**	⋆ **2575**
			937-14
	Dexter	DR800	4807-11
	Fujitsu	BC800	4046-5
	Inmos	**IMST800**	⋆ **2776**
			853-23
	Matrox	MSBX800	4854-16
		STD800	4872-40

(Continued)

Base Number	Source	Device	Page-Line
800			(Cont'd)
	Miller	MCPU800	4815-33
	Motorola	**MCA800ECL**	⋆ **4282**
			4055-38
	National	NSC800	835-21
			873-81
		NSC800-1	835-22
			873-83
		NSC800-4	835-23
			873-84
	Onset	MOR800	4846-16
	SMC	MPU800	841-1
			873-82
		MPU800-1	841-2
			873-85
		MPU800-4	841-3
			873-86
	TeledyneS	TSC800C	937-15
			¶ 422-28
	Telefunken	TBA800	1117-115
	Thomson	TBA800	1117-119
	Unitrode	PIC800	1218-25
	VTC	**VJ800**	⋆ **4343**
			4069-23
			¶ 450-13
800x2	AD	RTI800x2	4850-4
800AV1	Sharp	LU800AV1	839-11
800V1	Sharp	LU800V1	839-12
8000	AMCC	Q8000J	4041-29
	Cherry	CS8000	4065-17
	CMD ASIC	GAL8000	4043-1
	Cubit	8000	4817-25
	CIC	GAC8000	4043-40
	Davidge	DSB8000	4813-29
	Fairchild	FGC8000	4044-28
	Fujitsu	**C8000AV**	⋆ **4229**
			⋆ **4231**
			4047-5
	Gould	**GB8000D**	⋆ **4244**
			4048-44
	Holt	**HI8000**	⋆ **2769**
			886-29
	Honeywell	HE8000	4050-1
	Motorola	**BCA8000RAM**	
			⋆ **4285**
			4056-16
	SMS	OMTI8000	4848-12
	Sierra	SC8000	4086-5
	SingleBoard	MBX8000	4837-28
		SBS8000	4717-15
	Thomson	GB8000D	4055-28
		MKGB8000D	4055-29
	Western	**WD8000S**	⋆ **4911**
			4847-60
		WD8000SH	⋆ **4911**
			4847-61
	Zilog	**Z8000**	⋆ **3418**
			878-21
80000	**Zilog**	**Z80000**	⋆ **3419**
			855-15
			¶ 409-20
		Z80000-CPU	⋆ **3419**
			881-10
			¶ 409-20
800035	MicroAide	800035	4873-57
80006	Fujitsu	C80006UM	4047-4
8001	AMD	Z8001	845-8
			878-14
		Z8001A	878-15
		Z8001A-8	878-16
	MonSys	MSC8001	4807-24
	SEEQ	**8001**	⋆ **2991**
			885-23
			¶ 411-30
			¶ 414-31
			¶ 415-20
	SGS	Z8001	878-17
		Z8001A	878-18
		Z8001B	878-23
	Sharp	LH8001	849-21
			878-19
		LH8001A	849-22
			878-20
		LH8001B	849-23
	SingleBoard	MBX8001	4827-21

(Continued)

Base Number	Source	Device	Page-Line
8001			(Cont'd)
	Zilog	**Z8001-CPU**	⋆ **3418**
			851-28
			878-22
		Z8001-06CPU	
			⋆ **3418**
			851-29
		Z8001-10CPU	
			⋆ **3418**
			851-30
8002	AMD	Z8002	845-9
			878-6
		Z8002A	878-7
		Z8002A-8	878-8
	SGS	Z8002	878-9
		Z8002A	878-10
		Z8002B	878-13
	Sharp	LH8002	849-24
			878-11
		LH8002A	849-25
			878-12
		LH8002B	849-26
	SingleBoard	MBX8002	4827-22
	SMC	CRT8002	883-20
			1302-15
	Zilog	**Z8002-06CPU**	
			⋆ **3418**
			851-34
		Z8002-10CPU	
			⋆ **3418**
			853-1
8003	**SEEQ**	**8003**	⋆ **2991**
			883-94
			¶ 411-30
			¶ 414-31
			¶ 415-20
	Sharp	LH8003	849-27
		LH8003A	849-28
	WDC	WD8003E	4847-53
8004	MonSys	MSC8004	4807-25
		MSC8004A	4807-26
	Sharp	LH8004	849-29
		LH8004A	849-30
	SMC	COM8004	982-7
			¶ 417-3
8005	**SEEQ**	**8005**	⋆ **2991**
			883-95
	Siemens	SDA8005	944-1
	Zilog	**Z8005-06CPU**	
			⋆ **3418**
			853-6
		Z8005-10CPU	
			⋆ **3418**
			853-7
8007	**GE/Intersil**	**ICL8007**	⋆ **2673**
			1150-26
			¶ 430-2
		ICL8007AC	⋆ **2673**
			1132-31
			1168-49
			¶ 430-2
		ICL8007AM	⋆ **2673**
			1132-32
			1168-50
			¶ 430-2
		ICL8007C	⋆ **2673**
			1169-9
			¶ 430-2
		ICL8007M	⋆ **2673**
			1168-21
			¶ 430-2
	MonSys	MSC8007/A	4807-27
	SMS	SMS8007	4858-23
8009	SMS	SMS8009	4858-22
801	Burr-Brown	MPC801K	912-52
		MPC801S	912-53
		MP801	4860-12
	Harris	HIDAC801	958-31
	Onset	CPU801	4805-6
	Unitrode	PIC801	1218-26

Base Number	Source	Device	Page-Line
8010	DistComp	DCS8010A	4807-36
	Holt	**HI8010**	⋆ **2769**
			⋆ **4253**
			978-9
			¶ 425-16
			¶ 425-17
			¶ 426-6
	MicroSys	SB8010	4815-30
	SGS	Z8010-MMU	878-68
		Z8010A-MMU	878-69
	Sharp	LH8010	878-70
		LH8010A	878-71
	Siemens	SDA8010	645-6
	Signetics	OM8010	1122-112
8011	**Holt**	**HI8011**	⋆ **2769**
			977-39
	Signetics	OM8011	1122-113
8012	**Burr-Brown**	**DAC8012**	⋆ **2541**
			960-18
	Holt	**HI8012**	⋆ **2769**
			977-40
	PMI	**DAC8012A**	⋆ **2974**
			961-11
		DAC8012B	⋆ **2974**
			966-38
		DAC8012E	⋆ **2974**
			961-12
		DAC8012F	⋆ **2974**
			966-39
		DAC8012G	⋆ **2974**
			961-13
		DAC8012H	⋆ **2974**
			966-40
	TI	OPI8012	1223-70
8013	**GE/Intersil**	**ICL8013C**	⋆ **2677**
			1223-20
		ICL8013M	⋆ **2677**
			1223-21
	TI	OPI8013	1223-69
80130	Intel	80130	875-81
8014	Analogic	MP8014	936-43
	MonSys	MSC8014	4807-29
	TI	OPI8014	1223-72
8015	Analogic	MP8015	937-11
	Sanyo	LB8015	692-113
	TI	OPI8015	1223-71
8016	AMD	AMZ8016	878-43
		AMZ8016A	878-44
	Analogic	MP8016	937-26
	Intech	**A8016**	⋆ **2799**
			937-25
		A8016-10	⋆ **2799**
			937-22
		A8016-16	⋆ **2799**
			937-24
		A8016-8	⋆ **2799**
			937-20
	MicroInds	mBLC8016	4862-58
	Zilog	**Z8016-Z-DTC**	⋆ **3418**
			878-45
8017	MonSys	MSC8017	4807-30
	SMC	COM8017	1011-38
8018	**AD**	**ADSP8018**	⋆ **2450**
			644-69
			647-13
	GE/Intersil	ICL8018AC	1229-1
		ICL8018AM	1229-2
	SMC	COM8018	1011-39
80180	Zilog	Z80180-MPU	874-83
80186	AMD	80186-1	875-129
		80186-3	875-130
		80186-6	875-131
	Fujitsu	MBL80186	845-24
			875-116
		MBL80186-6	875-117
	Intel	80186	847-20
			875-118
	Siemens	SAB80186	875-132
		SAB80186-1	878-87
80188	AMD	80188-1	875-122
		80188-3	875-123
		80188-6	875-124
	Devtek	80188	4703-20
	Fujitsu	MBL80188	821-16
		MBL80188-6	821-17

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
80188			(Cont'd)
	Intel	80188	847-21
			875-126
	Siemens	SAB80188	875-125
		SAB80188-1	873-67
8019	GE/Intersil	ICL8019AC	1229-3
		ICL8019AM	1229-4
802	AD	RTI802	4849-24
	Burr-Brown	MP802	4860-13
	Marconi	MA802	1197-108
	Motorola	MHW802	1104-48
8020	Cubit	8020	4819-20
	GE/Intersil	ICL8020AC	1229-5
		ICL8020AM	1229-6
	Intel	8020H	869-94
	Micrel	**MPD8020**	⋆ **4276**
			4068-31
	MicroSys	SB8020	4815-32
	SEEQ	**8020**	⋆ **2991**
			883-101
	Siemens	SDA8020	1220-66
	Siliconix	SI8020A	969-25
		SI8020C	969-26
8021	**GE/Intersil**	**ICL8021C**	⋆ **2673**
			1133-113
			1133-46
		ICL8021M	⋆ **2673**
			1133-47
			1134-1
	Intel	8021H	827-14
			869-95
			¶ 409-16
	Signetics	8021	839-35
	Siliconix	SI8021A	967-51
			¶ 422-8
		SI8021C	967-52
			¶ 422-8
	SMC	CRT8021	882-119
		CRT8021-003	882-120
	Toshiba	BM8021	4719-17
8022	GE/Intersil	ICL8022C	1134-21
			1178-36
		ICL8022M	1134-22
			1175-23
	Intel	8022	869-96
			¶ 409-16
	Toshiba	BM8022	4719-18
8023	**GE/Intersil**	**ICL8023C**	⋆ **2673**
			1134-25
		ICL8023M	⋆ **2673**
			1134-26
	SEEQ	**8023A**	⋆ **2991**
			883-102
8024	**Holt**	**HI8024**	⋆ **2769**
			886-32
8027	Micrel	MIC8027	977-86
80280	Zilog	Z80280-MPU	874-84
80286	AMD	80286-1	879-90
		80286-6	879-91
		80286-8	879-92
	Fujitsu	MBL80286-6	845-25
			876-121
		MBL80286-8	845-26
			877-1
	Intel	80286	847-22
			875-89
	Siemens	SAB80286	879-93
		SAB80286-1	878-88
80287	Intel	80287	877-66
			881-36
803	**Burr-Brown**	**ADC803**	⋆ **2541**
			645-21
		ADC803B	⋆ **2541**
			929-3
		ADC803C	⋆ **2541**
			933-34
		ADC803S	⋆ **2541**
			929-4
		SHC803	⋆ **2543**
			1227-141
	Marconi	MA803	1195-61
	NEC	μPC803	1181-24
	Sharp	SM803	839-13

Base Number	Source	Device	Page-Line
8030	AMD	Z8030	878-78
		Z8030A	878-79
	Holt	HI8030	978-8
	SGS	Z8030-SCC	878-80
		Z8030A	878-75
	Sharp	LH8030	878-82
		LH8030A	878-83
	Zilog	**Z8030-Z-SCC**	⋆ **3418**
			878-81
			¶ 409-13
8031	AMD	Z8031	878-24
		Z8031A	878-25
		8031AH	870-40
		8031AH-15	870-41
	Fujitsu	MBL8031	821-18
			870-42
	Holt	**HI8031**	⋆ **2769**
			980-37
	Intel	8031AH	827-15
			870-44
			¶ 415-24
	Matra-Harris		
		8031	827-33
	SGS	Z8031	878-26
		Z8031A	878-27
	Siemens	SAB8031A	870-76
		SAB8031A-12	870-61
		SAB8031A-16	870-78
		8031	870-45
	Signetics	SCN8031	870-47
8032	Intel	8032	827-16
	Matra-Harris		
		8032	827-34
	Siemens	SAB8032A	870-74
		SAB8032A-T40/85	
			870-67
		SAB8032A-16	870-75
80320	**Zilog**	**Z80320**	⋆ **3419**
			881-11
8035	CalDevices	CSB8035	4042-24
	Fujitsu	MBL8035	821-19
			868-130
	Intel	M8035HL	827-5
		M8035L	868-134
		8035AHL	827-17
			868-139
			¶ 409-16
	National	INS8035	835-6
			868-143
		INS8035L	835-7
			868-144
	NEC	μPD8035L	837-1
			869-6
	Signetics	SCN8035A	869-14
		8035	839-36
	Toshiba	**TMP8035**	⋆ **3306**
			841-28
			869-22
8036	AMD	Z8036	878-31
		Z8036A	878-32
	SGS	Z8036-CIO	878-33
		Z8036A-CIO	878-34
	Sharp	LH8036	878-35
		LH8036A	878-36
	Zilog	**Z8036-Z-CIO**	⋆ **3418**
			878-37
			¶ 409-13
			¶ 409-5
8037	Analogic	MP8037	938-24
8038	AMD	Z8038	878-54
	Exar	XR8038	1191-59
		XR8038A	1191-60
		XR8038M	1191-61
	GE/Intersil	**ICL8038C**	⋆ **2677**
			1191-62
			¶ 438-7
		ICL8038M	⋆ **2677**
			1191-63
			¶ 438-7
	LupiData	LD8038	4873-14
	SGS	Z8038-FIO	878-55
		Z8038A-FIO	878-56
	Sharp	LH8038	878-57
		LH8038A	878-58

(Continued)

Base Number	Source	Device	Page-Line
8038			(Cont'd)
	Zilog	**Z8038**	⋆ **3418**
			880-31
			¶ 409-13
		Z8038-Z-FIO	⋆ **3418**
			878-59
			¶ 409-13
80386	Intel	80386	853-24
		80386-16	881-28
		80386-20	881-29
80387	Intel	80387	881-37
	Weitek	80387	881-38
8039	Fujitsu	MBL8039	821-20
			868-131
	Intel	M8039HL	827-6
		8039AHL	827-18
			868-140
			¶ 409-16
		8039HL	868-141
			¶ 409-16
	National	INS8039	835-8
			868-145
		INS8039L	835-9
			868-146
	NEC	μPD8039L	837-2
			869-7
	Signetics	SCN8039A	869-15
		8039	839-37
	Toshiba	**TMP8039**	⋆ **3306**
			841-29
			869-23
		TMP8039-6	⋆ **3306**
			869-24
804	**Burr-Brown**	**ADC804**	⋆ **2541**
			931-42
		ADC804S	⋆ **2541**
			931-43
		SHC804	⋆ **2543**
			1227-142
8040	Intel	8040AHL	827-19
			868-142
	LupiData	LD8040-C	4875-50
		LD8040-IO	4875-34
		LD8040-K	4878-39
		LD8040-P	4875-49
	National	INS8040	835-10
			868-147
		INS8040L	835-11
			869-1
		INS8040UL	835-12
		NS8040U	869-2
		NS8040UL	869-3
	Rockwell	R8040	1199-148
	Signetics	SCN8040	869-16
		8040	839-38
8041	Fujitsu	MBL8041A	870-20
			871-136
			873-36
	Intel	8041A	873-37
			¶ 409-16
			¶ 413-7
		8041AH	870-22
			871-137
			886-100
			¶ 409-16
			¶ 413-7
		8041AH-2	870-23
			871-138
			¶ 409-16
			¶ 413-7
	NEC	μPD8041	870-29
			871-141
			873-39
		μPD8041A	870-30
8042	Intel	8042	870-24
			886-102
8043	**GE/Intersil**	**ICL8043C**	⋆ **2673**
			1181-44
		ICL8043M	⋆ **2673**
			1181-42
	PMI	**DAC8043**	⋆ **2974**
			961-20
8044	Intel	8044	870-34
			886-104
8045	Siliconix	Si8045K	967-12
		Si8045T	967-24

Base Number	Source	Device	Page-Line
8046	SMC	COM8046	691-7
			1009-30
		COM8046T	691-8
			1009-31
8048	Fujitsu	MBL8048	821-21
			869-26
	GE/Intersil	**ICL8048C**	⋆ **2672**
			1103-59
			¶ 431-18
	Intel	M8048H	869-29
		8048	869-35
			¶ 409-16
			¶ 413-7
		8048AH	827-20
			869-36
			¶ 409-16
			¶ 413-7
		8048H	869-37
			¶ 409-16
			¶ 413-7
	National	INS8048	835-13
			869-42
		INS8048L	835-14
			869-43
	NEC	μPD8048	837-3
			869-53
	Signetics	SCN8048A	869-61
		8048	839-39
	Toshiba	**TMP8048**	⋆ **3306**
			841-30
			869-68
		TMP8048A	⋆ **3306**
			869-91
8049	**GE/Intersil**	**ICL8049C**	⋆ **2672**
			1103-54
			¶ 431-18
	Intel	M8049H	869-30
		8049AH	827-21
			869-38
			¶ 409-16
			¶ 409-29
		8049H	869-39
			¶ 409-16
			¶ 409-29
		8049HL	869-40
			¶ 409-16
			¶ 409-29
	National	INS8049	835-15
			869-44
		INS8049L	835-16
			869-45
	NEC	μPD8049	837-4
			869-54
	Signetics	**SCN8049A**	⋆ **3076**
			869-62
		8049	839-40
	Toshiba	**TMP8049**	⋆ **3306**
			841-31
			869-69
		TMP8049-6	⋆ **3306**
			869-70
		TMP8049A	⋆ **3306**
			869-92
805	**Marconi**	**MA805**	⋆ **2882**
			885-76
			1010-49
	Octagon	805	4874-15
	TeledyneS	TSC805	939-11
8050	Intel	8050AH	827-22
			869-41
	National	INS8050	835-17
			869-46
		INS8050L	835-18
			869-47
		INS8050U	835-19
		INS8050UL	835-20
		NS8050U	869-48
			¶ 412-1
		NS8050UL	869-49
			¶ 412-1
	Rockwell	R8050	1197-106
	Signetics	SCN8050A	869-63
		8050	839-41

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
8051	Fujitsu	MBL8051	821-22
			870-48
	GE/Intersil	IM8051	870-50
	Intel	8051AH	827-23
			870-53
			¶ 415-24
	Matra-Harris		
		8051	827-35
	Siemens	SAB8051A	870-77
		SAB8051A-12	870-62
		SAB8051A-16	870-79
		8051	870-56
	Signetics	SCN8051	870-58
80512	Siemens	SAB80512	870-71
80515	Siemens	SAB80515	870-72
			881-54
8052	AMD	AM8052	878-38
	GE/Intersil	**ICL8052**	*** 2667**
			939-47
			¶ 422-19
		ICL8052A	*** 2667**
			936-32
			937-6
			938-23
			¶ 422-19
	Intel	8052	827-24
			870-54
	Magnum	8052BASIC	4813-13
	Matra-Harris		
		8052	827-36
	Siemens	SAB8052A	870-73
			881-53
		SAB8052A-T40/85	
			870-68
8053	GE/Intersil	ICL8053	939-48
		ICL8053A	939-64
80532	Siemens	SAB80532	870-69
80535	Siemens	SAB80535	870-70
			881-55
8055	**Marconi**	**MA8055**	*** 2882**
			885-79
			1010-50
8057	CalDevices	CSB8057	4042-27
806	Motorola	MHW806	1104-49
		MHW806A	1104-50
8060	LupiData	LD8060	4879-21
	National	INS8060	864-37
			¶ 409-22
	Rockwell	R8060	1197-104
	SGS	Z8060-FIFO	878-49
		Z8060A-FIFO	878-50
	Sharp	LH8060	878-51
		LH8060A	878-52
	Zilog	**Z8060**	*** 3418**
			880-29
		Z8060-Z-FIFO	
			*** 3418**
			878-53
80600	Crystal	CS80600	1198-108
8063	GE/Intersil	ICL8063C	1116-119
		ICL8063M	1116-120
8065	AMD	AMZ8065	878-28
			888-77
8068	AMD	AMZ8068	878-40
	GE/Intersil	**ICL8068**	*** 2667**
			939-49
			¶ 422-19
		ICL8068A	*** 2667**
			939-65
			¶ 422-19
	MicronTech	MT8068-10	1339-35
		MT8068-12	1339-36
		MT8068-15	1339-38
	Zilog	**Z8068**	*** 3418**
			888-101
		Z8068-DCP	*** 3418**
			878-41
		Z8068-Z-DCP	*** 3418**
			878-42
8069	**GE/Intersil**	**ICL8069**	*** 2676**
			1225-76
		ICL8069M	*** 2676**
			1225-77
	Maxim	ICL8069	1225-78
		ICL8069M	1225-79

Base Number	Source	Device	Page-Line
807	**Datel**	**MVD807**	*** 2577**
			914-41
		MXD807	*** 2577**
			914-69
8070	Rockwell	R8070	1199-150
			¶ 431-34
			¶ 432-1
			¶ 432-22
8071	Lambda	LAS8071P	1221-44
	Sanyo	LM8071	1119-131
8073	National	INS8073	869-93
808	**Datel**	**MV808**	*** 2577**
			913-31
		MX808	*** 2577**
			914-9
		MX808M	*** 2577**
			914-10
	Marconi	**MA808**	*** 2890**
			1195-62
	Motorola	MHW808A	1104-51
8080	AMD	8080A	819-21
			870-84
		8080A-1	870-85
		8080A-2	870-86
	CalDevices	CSB8080	4042-28
	Intel	M8080A	870-87
		8080A	827-25
			870-88
			¶ 408-23
			¶ 413-14
		8080A-1	870-89
			¶ 408-23
			¶ 413-14
		8080A-2	870-90
			¶ 408-23
			¶ 413-14
	National	INS8080A	870-91
		INS8080A-1	870-92
		INS8080A-2	870-93
8082	MicroSys	SB8082	4878-22
8085	AMD	8085A	819-22
			871-146
		8085A-1	871-147
		8085A-2	872-1
		8085AH	872-2
		8085AH-1	872-3
		8085AH-2	872-4
	Devtek	DS-8085	4878-47
		DS8085	4703-18
	Intel	M8085A	872-7
		M8085AH	872-8
		8085AH	827-26
			872-9
			¶ 415-25
		8085AH-2	872-10
			¶ 415-25
	NEC	μPD8085A-2	837-5
			872-13
		μPD8085AH	872-14
	Onset	CPU8085A	4805-8
	PEP-Modular		
		MPM8085A	4807-9
	Siemens	SAB8085AH	872-18
		SAB8085AH-2	872-19
	Toshiba	**TMP8085A**	*** 3306**
			841-32
			872-16
		TMP8085A-2	*** 3306**
			841-33
8086	AMD	8086	845-10
			875-82
		8086-1	875-83
		8086-2	875-84
	Chrislin	CI8086 +	4862-50
	Fujitsu	MBL8086	845-27
			875-85
		MBL8086-1	845-28
			875-86
		MBL8086-2	845-29
			875-87
	Intel	M8086	875-88
		8086	847-23
			875-90
			¶ 410-7
		8086-1	875-91
			¶ 410-7

(Continued)

Base Number	Source	Device	Page-Line
8086	Intel		(Cont'd)
		8086-2	875-92
			¶ 410-7
		8086-20	881-30
			¶ 410-7
	NEC	μPD8086	875-93
		μPD8086-2	849-12
			875-94
	Siemens	SAB8086	849-31
		SAB8086-1	849-32
		SAB8086-2	849-33
		SAB8086C	875-95
	Thomson	MK8086	851-19
8086 + 2			
	Chrislin	CI8086 + 2MB	4862-17
8087	Intel	8087-2	847-24
8088	AMD	8088	843-26
			877-27
		8088-1	877-28
		8088-2	877-29
	Devtek	DS-8088	4879-1
		DS8088	4703-19
	Fujitsu	MBL8088	877-30
		MBL8088-2	877-31
	Intel	8088	877-34
		8088-2	877-35
	MicroSys	SB8088	4819-14
	NEC	μPD8088	843-33
			877-36
		μPD8088-2	877-37
	Onset	CPU8088	4805-9
	Siemens	SAB8088	875-127
		SAB8088-1	873-68
		SAB8088-2	875-128
	WinSystems	LPM8088-5	4817-9
		MCM8088-5	4819-12
8089	AMD	8089	875-119
		8089A-3	843-27
	Fujitsu	MBL8089	875-120
	Intel	8089	843-31
			875-121
8090	Sharp	LH8090	878-66
		LH8090A	878-67
8091	Lambda	LAS8091P	1221-45
8093	National	DM8093	658-63
8094	National	DM8094	658-86
8095	National	DM8095	658-137
8096	Intel	8096	878-101
	National	DM8096	660-9
8097	National	DM8097	658-138
8098	National	DM8098	660-10
81	**Apex**	**PA81J**	*** 2458**
			1155-1
	PMI	**SMP81E**	*** 2975**
			1228-83
		SMP81F	*** 2975**
			1228-84
81C1000			
	Fujitsu	**MB81C1000-10**	
			*** 2621**
			1345-2
81C1001			
	Fujitsu	MB81C1001-10	
			1345-3
81C1002			
	Fujitsu	MB81C1002	1345-32
81C1003			
	Fujitsu	MB81C1003	1344-82
81C17	SMC	COM81C17	886-94
81C20	MicroSys	SB81C20	4877-15
81C4256			
	Fujitsu	MB81C4256-10	
			1341-73
81C4257			
	Fujitsu	MB81C4257-10	
			1341-74
81C4258			
	Fujitsu	MB81C4258-10	
			1341-75
81C4259			
	Fujitsu	MB81C4259-10	
			1341-76
81C466	Fujitsu	MB81C466	1338-59
81C52	Siemens	SAB81C52	878-99
		SAE81C52	878-100

Base Number	Source	Device	Page-Line
81C55	**Harris**	**HS81C55RH**	*** 2709**
			869-171
			873-7
	OKI	MSM81C55	870-11
			873-20
81C56	**Harris**	**HS81C56RH**	*** 2709**
			869-172
			873-8
81C64	**Dense-Pac**	**DPS81C64**	*** 2578**
			1382-6
81C67	Fujitsu	MB81C67-45W	1371-28
		MB81C67-55W	1371-52
81C68	Fujitsu	MB81C68	1363-62
		MB81C68-45W	1363-77
		MB81C68-55W	1364-51
		MB81C68A	1362-41
81C69	Fujitsu	MB81C69A-30	1362-45
81C71	Fujitsu	MB81C71	1382-33
		MB81C71A	1381-55
		MB81C71A-25	1381-40
		MB81C71A-35	1381-68
81C74	Fujitsu	MB81C74	1373-14
		MB81C74-45	1374-78
81C75	Fujitsu	MB81C75	1373-15
		MB81C75-35	1374-14
		MB81C75-45	1375-14
81C78	Fujitsu	MB81C78A	1366-74
		MB81C78A-35	1366-43
		MB81C78A-45	1366-83
81C79	Fujitsu	MB81C79A	1370-22
		MB81C79A-35	1366-44
		MB81C79A-45	1366-84
81C81	**Fujitsu**	**MB81C81**	*** 2622**
			1387-11
		MB81C81-45	*** 2622**
			1387-1
		MB81C81-55	*** 2622**
			1387-13
		MB81C81A	*** 2622**
			1386-74
81C84	Fujitsu	MB81C84	1383-77
		MB81C84-45	1383-52
		MB81C84-55	1383-82
		MB81C84A	1383-46
81C86	Fujitsu	MB81C86	1384-10
81LS95	AMD	AM81LS95	659-46
	National	DM81LS95	659-54
81LS96	AMD	AM81LS96	660-69
	National	DM81LS96	660-71
81LS97	AMD	AM81LS97	659-47
	National	DM81LS97	659-55
81LS98	AMD	AM81LS98	660-70
	National	DM81LS98	660-72
810	**Datel**	**ADC810**	*** 2575**
			645-15
		ADC810MC	*** 2575**
			929-11
		ADC810MM	*** 2574**
			929-12
	Fujitsu	**MB810A**	*** 2614**
			649-80
	Gennum	**LC810**	*** 2687**
			1154-14
	National	NSC810	873-94
		NSC810-1	873-95
		NSC810-4	873-96
	SGS	TBA810	1117-100
			¶ 430-16
		TBA810CB	1119-16
			¶ 430-16
	SMC	MPU810A	873-97
		MPU810A-1	873-98
		MPU810A-4	873-99
	Telefunken	TBA810	1117-116
	TI	TL810C	1110-12
	Thomson	TBA810	1117-120
	Unitrode	PIC810	1218-27
8100	Davidge	DSB8100	4813-30
	Lambda	LAS8100	1001-49
			¶ 440-12
	National	MM8100	1193-13
	SGS	TDA8100	1125-21
8101	Lambda	LAS8101	1001-50
			¶ 440-6
810701	Syscon	810701	4869-3

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
811	**Burr-Brown**	**DAC811A**	⋆ **2541**
			962-2
		DAC811B	⋆ **2541**
			956-27
		DAC811J	⋆ **2541**
			968-4
		DAC811K	⋆ **2541**
			956-35
		DAC811R	⋆ **2541**
			962-3
		DAC811S	⋆ **2541**
			956-28
	Datel	**ADC811MC**	⋆ **2575**
			929-22
		ADC811MM	⋆ **2574**
			929-23
	Fujitsu	**MB811A**	⋆ **2614**
			649-81
	Marconi	**MA811**	⋆ **2889**
			1193-24
	NEC	μPC811	1154-12
	TI	TL811C	1112-27
	Unitrode	PIC811	1218-28
8116	Analogic	MP8116	973-6
	GIM	AY5-8116	1009-43
		AY5-8116T	1009-44
	SMC	COM8116	691-17
			1009-47
		COM8116T	691-18
			1009-48
812	Analogic	ADAM812	929-40
	Burr-Brown	**DAC812B**	⋆ **2542**
			965-7
		DAC812C	⋆ **2542**
			957-34
	NEC	μPC812	1175-9
	Sharp	SM812	839-14
8120	AMD	AM8120	878-85
	MicroSys	SB8120	4877-35
8121	AMD	AM8121	878-86
	National	DM8121	681-86
8122	MicroSys	SB8122	4877-34
8123	National	DM8123	680-161
81256	Fujitsu	MB81256-12W	1340-50
		MB81256-15W	1340-87
81257	Fujitsu	MB81257-12W	1340-51
		MB81257-15W	1340-88
8126	GIM	AY5-8126	881-77
	SMC	COM8126	691-9
			1009-32
		COM8126T	691-10
			1009-33
8127	AMD	AM8127	878-29
813	**Fujitsu**	**MB813A**	⋆ **2614**
			649-82
	NEC	μPC813	1154-13
	Sharp	SM813	839-15
8130	MicroSys	SB8130-128	4877-54
		SB8130-64	4877-46
	National	DM8130	656-145
	Sprague	ULN8130A	1224-92
8131	National	DM8131	656-80
	Sprague	ULN8131A	1224-93
8132	**Dense-Pac**	**DPS8132**	⋆ **2578**
			1378-24
8136	GIM	AY5-8136	1009-45
		AY5-8136T	1009-46
	National	DM8136	656-82
	SMC	COM8136	691-19
			1009-49
		COM8136T	691-20
			1009-50
814	**Fujitsu**	**MB814A**	⋆ **2614**
			649-83
	Sharp	SM814	839-16
8140	LSI Logic	LL8140	4052-43
8146	SMC	COM8146	691-11
			1009-34
		COM8146T	691-12
			1009-35
815	AD	RTI815	4850-8
	Datel	**ADC815MC**	⋆ **2575**
			918-17
		ADC815MM	⋆ **2574**
			918-18

(Continued)

Base Number	Source	Device	Page-Line
815			(Cont'd)
	Marconi	**MA815**	⋆ **2890**
			1195-71
	TeledyneS	TSC815	939-5
815x2	AD	RTI815x2	4850-5
8150	AMD	AM8150C	882-61
8151	AMD	AM8151C	882-68
8152	AMD	AM8152AC	883-33
		AM8152AM	883-34
8153	SGS	TDA8153	1125-94
8154	National	INS8154	864-49
			871-122
8155	AMD	8155	869-168
			873-3
		8155-2	869-169
			873-4
	Intel	M8155	873-9
		M8155H	869-173
		8155	870-1
			873-10
		8155-2	870-2
			873-11
		8155H	870-3
		8155H-2	870-4
	NEC	μPD8155	870-9
			873-18
	OKI	MSM8155	873-21
	Siemens	SAB8155	872-70
		SAB8155-2	872-71
	Toshiba	**TMP8155**	⋆ **3306**
			870-12
		TMP8155-2	⋆ **3306**
			873-22
8156	AMD	8156-2	869-170
			873-5
		8156H	873-6
	Intel	8156	870-5
			873-12
		8156-2	870-6
			873-13
		8156H	870-7
		8156H-2	870-8
	NEC	μPD8156	870-10
			873-19
	SMC	COM8156	691-21
			1009-51
		COM8156T	691-22
			1009-52
	Toshiba	**TMP8156**	⋆ **3306**
			870-13
		TMP8156-2	⋆ **3306**
			873-23
8157	AMD	AM8157	883-31
8158	AMD	AM8158C	883-43
8159	AMD	AM8159	883-47
816	ACE	DPC816	4825-12
	AD	ADADC816	926-3
	Datel	**ADC816**	⋆ **2575**
			645-14
		ADC816MC	⋆ **2575**
			926-4
		ADC816MM	⋆ **2574**
			926-5
816H64			
	EDI	816H64C-35C	1384-74
		816H64C-45C	1384-83
		816H64C-45MHR	1384-84
		816H64C-55C	1384-92
		816H64C-55MHR	1384-93
		816H64C-70MHR	1385-9
8160	National	DM8160	656-74
	SGS	TDA8160	1122-30
8162	SGS	TDA8162	1122-31
8163	AMD	AM8163	878-84
8164	Dense-Pac	DPS8164	1382-7
		DPX8164	1382-72
8167	Fujitsu	MBM8167A-85W	1372-8
		MB8167A-70W	1371-94
8168	Fujitsu	MBM8168-85W	1365-36
		MB8168-70W	1365-25

Base Number	Source	Device	Page-Line
817	AD	RTI817	4849-29
	Datel	**ADC817**	⋆ **2575**
			645-16
		ADC817MC	⋆ **2575**
			929-9
		ADC817MM	⋆ **2574**
			929-10
817x2	AD	RTI817x2	4849-28
8170	SGS	TDA8170	1126-59
8171	Fujitsu	MB8171-55	1382-53
		MB8171-70	1382-67
8172	SGS	TDA8172	1126-60
8177	AMD	AM8177	883-15
8180	Hughes	HVGA8180	4050-12
8181	**Dense-Pac**	**DPS8181**	⋆ **2578**
			1386-76
8185	Intel	M8185	873-24
		8185	873-25
		8185-2	873-26
8186	**Dense-Pac**	**DPS8186**	⋆ **2578**
			1383-90
	MonSys	MSC8186	4827-28
8190	SGS	TDA8190	1125-135
82	**Apex**	**PA82J**	⋆ **2458**
			1155-2
		PA82Q	⋆ **2458**
			1155-3
	Burr-Brown	DAC82K	945-25
	HybridSys	HSADC82	919-36
	MCE	MCE82	1181-29
	PMI	**RPT82**	⋆ **2975**
			1197-48
	Sharp	IR3.82	1198-18
82AC51	S-MOS	SMC82AC51	872-79
82A203	Chips&Tech	82A203	881-21
			¶ 416-5
82A204	Chips&Tech	82A204	881-22
			¶ 416-5
82A205	Chips&Tech	82A205	881-20
			¶ 416-5
82A303	Chips&Tech	82A303	883-50
82A304	Chips&Tech	82A304	883-51
82A305	Chips&Tech	82A305	876-52
82A306	Chips&Tech	82A306	876-48
82A436	Chips&Tech	82A436	882-29
82A442	Chips&Tech	82A442	882-105
82B305	Chips&Tech	82B305	881-59
82C01	**UMC**	**UM82C01**	⋆ **3314**
			876-65
82C03	Intel	82C03	871-17
			872-43
82C06	National	INS82C06	871-42
82C08	**Harris**	**HS82C08RH**	⋆ **2710**
			870-114
	Intel	82C08	871-18
	National	MM82C08	687-143
82C100	Chips&Tech	82C100	876-23
	VLSI Tech	VL82C100	880-1
82C101	Chips&Tech	82C101	876-22
	VLSI Tech	VL82C101	880-2
82C102	VLSI Tech	VL82C102	879-115
82C103	VLSI Tech	VL82C103	879-113
82C104	VLSI Tech	VL82C104	879-114
82C11	SMC	COM82C11	885-101
	Unicorn	UC82C11	889-33
	UMC	**UM82C11**	⋆ **3314**
			876-71
82C12	**Calmos**	**CA82C12**	⋆ **2553**
			871-145
			871-45
			873-51
			877-26
	Harris	**HS82C12RH**	⋆ **2710**
			871-46
	OKI	MSM82C12	871-53
82C138	Harris	HPL82C138	614-48
82C139	Harris	HPL82C139	614-49
82C19	National	MM82C19	632-137
82C201	Chips&Tech	82C201	881-27
82C202	Chips&Tech	82C202	881-26
82C206	Chips&Tech	82C206	885-26
	Unicorn	UC82C206	879-111
			881-41
82C211	Chips&Tech	82C211	881-18
82C212	Chips&Tech	82C212	881-23
82C215	Chips&Tech	82C215	881-19

Base Number	Source	Device	Page-Line
82C284	Intel	82C284-10	879-101
		82C284-12	879-102
		82C284-6	879-99
		82C284-8	879-100
	Unicorn	UC82C284	879-103
	VLSI Tech	**VL82C284**	⋆ **3338**
			879-98
82C288	AMD	82C288	876-5
	Unicorn	UC82C288	879-95
	VLSI Tech	**VL82C288**	⋆ **3339**
			879-96
82C301	Chips&Tech	82C301	886-88
82C302	Chips&Tech	82C302	885-74
82C338	Harris	HPL82C338	614-50
82C339	Harris	HPL82C339	614-51
82C37	**Calmos**	**CA82C37A**	⋆ **2553**
			872-87
			876-81
			880-4
	Harris	HS82C37ARH	872-88
		MD82C37	⋆ **2702**
			872-89
		82C37A	⋆ **2731**
			⋆ **2768**
			⋆ **4249**
			872-90
			876-53
	S-MOS	SMC82C37	876-55
		SMC82C37AC	872-103
		SMC82C37AC-4	872-104
		SMC82C37AC-5	872-105
	Toshiba	**TMP82C37**	⋆ **3306**
			874-125
		TMP82C37A-5	⋆ **3306**
			872-42
	Unicorn	UC82C37A	873-71
			876-56
			878-95
			879-104
			881-35
	VLSI Tech	**VL82C37A**	⋆ **3337**
			872-106
82C384	Unicorn	UC82C384	881-32
82C389	VLSI Tech	VL82C389	879-112
			879-69
82C43	Fujitsu	MBL82C43	869-116
	GE/Intersil	IM82C43I	871-38
		IM82C43M	871-39
	NEC	μPD82C43	869-130
			872-63
	OKI	MCM82C43	869-132
	Toshiba	**TMP82C43**	⋆ **3306**
			869-133
82C431	Chips&Tech	82C431	882-72
82C432	Chips&Tech	82C432A	882-100
82C433	Chips&Tech	82C433	882-38
82C434	Chips&Tech	82C434A	882-53
82C435	Chips&Tech	82C435	883-45
82C437	Chips&Tech	82C437	882-78
82C441	Chips&Tech	82C441	882-106
82C50	**Harris**	**MD82C50**	⋆ **2702**
			875-135
			1009-16
		82C50-Cell	⋆ **2731**
			⋆ **2768**
			⋆ **4249**
			875-136
			1009-13
		82C50A	⋆ **2731**
			⋆ **2768**
			⋆ **4249**
			875-137
			1009-14
	National	NS82C50	1011-34
	VLSI Tech	**VL82C50**	⋆ **3329**
			864-47
			870-105
			1011-43
		VL82C50A	⋆ **3329**
			1011-44
	Western	**WD82C50**	⋆ **3381**
			1009-15
82C501	SMC	COM82C501	883-96

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
82C502	SMC	COM82C502	883-97
82C51	OKI	MSM82C51A	869-143
			871-79
			872-78
			1010-69
	S-MOS	SMC82C51A	871-80
			872-80
	Toshiba	**TMP82C51A-2**	
			⋆ 3306
			872-81
		TMP82C51A-8	
			⋆ 3306
			872-82
82C516	**Exar**	**XRT82C516**	⋆ 2611
			886-78
			889-10
82C52	**Harris**	**HS82C52RH**	⋆ 2711
			876-101
			1011-52
		MD82C52	⋆ 2702
			876-102
			1011-53
		82C52	⋆ 2731
			⋆ 2768
			⋆ 4249
			876-103
			1011-54
		82C52-Cell	⋆ 2731
			⋆ 2768
			⋆ 4249
			876-104
			1011-55
82C53	OKI	MSM82C53-5	872-135
	Toshiba	**TMP82C53**	⋆ 3306
			874-109
		TMP82C53-2	⋆ 3306
			872-136
82C54	**Calmos**	**CA82C54**	⋆ 2553
			872-124
			873-66
			880-6
	Harris	**HS82C54RH**	⋆ 2712
			876-90
		82C54	⋆ 2731
			⋆ 2768
			⋆ 4249
			876-91
		82C54-Cell	⋆ 2731
			⋆ 2768
			⋆ 4249
			876-92
	Intel	82C54	872-126
	S-MOS	SMC82C54A	869-159
			871-108
		SMC82C54AC	876-93
	Toshiba	**TMP82C54**	⋆ 3306
			872-137
		TMP82C54-2	⋆ 3306
			872-138
	Unicorn	UC82C54	873-74
			876-94
			878-98
	VLSI Tech	VL82C54	870-141
			872-32
			876-51
82C55	**Calmos**	**CA82C55A**	⋆ 2553
			872-142
			876-95
			878-73
			880-7
			886-3
	Harris	**HS82C55ARH**	
			⋆ 2712
			876-96
		MD82C55	⋆ 2702
			876-97
		82C55A	⋆ 2732
			⋆ 2768
			⋆ 4249
			876-98
		82C55A-Cell	⋆ 2732
			⋆ 2768
			⋆ 4249
			876-99
	Intel	82C55A	871-112
	OKI	MSM82C55A	871-118

(Continued)

Base Number	Source	Device	Page-Line
82C55			(Cont'd)
	S-MOS	SMC82C55A-5	869-165
			871-120
		SMC82C55AC-5	
			872-148
	Toshiba	**TMP82C55**	⋆ 3306
			875-12
	Unicorn	UC82C55A	873-72
			876-70
			878-96
	UMC	UM82C55A	876-100
82C550	Chips&Tech	82C550	886-77
82C550x2			
	Chips&Tech	82C550x2	885-70
82C550x3			
	Chips&Tech	82C550x3	885-40
82C551	Chips&Tech	82C551	886-74
82C551x2			
	Chips&Tech	82C551x2	885-21
82C57	OKI	MSM82C57	872-102
82C570	Chips&Tech	82C570	881-87
82C59	**Calmos**	**CA82C59A**	⋆ 2553
			872-112
			876-82
			880-5
	Harris	**HS82C59ARH**	
			⋆ 2713
			876-72
		MD82C59	⋆ 2702
			876-73
		82C59A	⋆ 2732
			⋆ 2768
			⋆ 4249
			876-74
		82C59A-Cell	⋆ 2732
			⋆ 2768
			⋆ 4249
			876-75
	Intel	82C59A-2	876-84
	OKI	MSM82C59A	876-76
	S-MOS	SMC82C59AC	876-77
			876-86
	Toshiba	**TMP82C59**	⋆ 3306
			872-66
			873-64
		TMP82C59A-2	
			⋆ 3306
			872-122
	Unicorn	UC82C59A	873-73
			876-78
			878-97
			880-3
			881-44
	VLSI Tech	VL82C59A	876-50
82C605	Chips&Tech	82C605	876-25
82C606	Chips&Tech	82C606	876-24
82C611	Chips&Tech	82C611	881-24
82C612	Chips&Tech	82C612	881-25
82C684	**Exar**	**XR82C684**	⋆ 2613
			889-65
82C764	Chips&Tech	82C764	875-134
		82C764A	884-7
82C79	**Toshiba**	**TMP82C79**	⋆ 3306
			874-131
		TMP82C79-2	⋆ 3306
			872-67
82C82	**Harris**	**MD82C82**	⋆ 2702
			877-19
		82C82	⋆ 2733
			⋆ 2768
			877-20
			¶ 405-8
			¶ 417-11
82C83	**Harris**	**MD82C83**	⋆ 2702
			877-11
		82C83	⋆ 2733
			⋆ 2768
			877-12
82C84	**Calmos**	**CA82C84A**	⋆ 2553
			872-30
			876-29
			879-97
			881-88
	Harris	**MD82C84**	⋆ 2702
			876-42

(Continued)

Base Number	Source	Device	Page-Line
82C84	**Harris**		**(Cont'd)**
		82C84A	⋆ 2734
			⋆ 2768
			⋆ 4249
			876-43
		82C84A-Cell	⋆ 2734
			⋆ 2768
			⋆ 4249
			876-44
	Intel	82C84A	876-36
		82C84A-5	875-133
	OKI	MSM82C84A	876-45
	Unicorn	UC82C84A	873-70
			876-46
			878-94
	UMC	UM82C84A	876-47
	VLSI Tech	VL82C84A	876-27
82C85	**Harris**	**HS82C85RH**	⋆ 2713
			876-39
		MD82C85	⋆ 2702
			876-40
		82C85	⋆ 2734
			⋆ 2768
			876-41
82C86	**Harris**	**MD82C86**	⋆ 2702
			877-3
		82C86	⋆ 2733
			⋆ 2768
			877-4
82C87	**Harris**	**MD82C87**	⋆ 2702
			876-113
		82C87	⋆ 2733
			⋆ 2768
			876-114
82C88	**Calmos**	**CA82C88**	⋆ 2553
			872-17
			875-115
			879-89
			881-52
	Harris	**MD82C88**	⋆ 2702
			876-8
		82C88	⋆ 2734
			⋆ 2768
			⋆ 4249
			876-9
		82C88-Cell	⋆ 2734
			⋆ 2768
			⋆ 4249
			876-10
	Intel	82C88	876-19
	OKI	MSM82C88	876-15
	Unicorn	UC82C88	873-69
			876-17
			878-89
	UMC	UM82C88	875-104
	VLSI Tech	VL82C88	876-49
82C89	**Harris**	**MD82C89**	⋆ 2702
			875-142
		82C89	⋆ 2734
			⋆ 2768
			875-143
82HM185			
	GE/Intersil	82HM185C	1389-29
82HS1281			
	Signetics	N82HS1281	1328-7
82HS187			
	Signetics	**N82HS187**	⋆ 3178
			1319-51
		N82HS187A	⋆ 3178
			1319-35
82HS189			
	Signetics	**N82HS189**	⋆ 3179
			1319-52
		N82HS189A	⋆ 3179
			1319-36
82HS191			
	Signetics	N82HS191	1320-69
82HS195			
	Signetics	N82HS195	1323-11
		N82HS195A	1323-6
		N82HS195B	1322-89
		S82HS195	1323-19

Base Number	Source	Device	Page-Line
82HS321			
	Signetics	**N82HS321**	⋆ 3180
			1323-41
		N82HS321A	⋆ 3180
			1323-34
		N82HS321B	⋆ 3180
			1323-29
82HS641			
	Signetics	**N82HS641**	⋆ 3182
			1325-59
		N82HS641A	⋆ 3182
			1325-9
		N82HS641B	⋆ 3182
			1324-32
82LS05	National	INS82LS05	871-13
82LS135			
	Signetics	N82LS135	1317-6
82LS16	Signetics	N82LS16	1348-79
		S82LS16	1348-95
82LS17	Signetics	N82LS17	1348-77
82LS181			
	Signetics	N82LS181	1319-82
		S82LS181	1319-83
82M56	Dense-Pac	DPS82M56	1387-21
		DPX82M56	1386-72
82PC08	National	MM82PC08	687-144
			873-87
			873-88
82PC12	National	MM82PC12	873-105
82S09	Signetics	S82S09	1348-53
82S104	TI	TIB82S104A	4079-65
82S105	TI	N82S105A	4079-55
82S115	Signetics	N82S115	1318-14
82S123	Signetics	N82S123	1316-50
		N82S123A	1316-26
		S82S123	1316-53
82S126	Signetics	N82S126	1316-82
		N82S126A	1316-95
		S82S126	1316-93
82S129	Signetics	N82S129	1316-85
		N82S129A	1316-64
		S82S129	1316-94
82S130	Signetics	N82S130	1317-24
		N82S130A	1317-11
		S82S130	1317-41
82S131	Signetics	N82S131	1317-26
		N82S131A	1317-10
		S82S131	1317-42
82S135	Signetics	N82S135	1316-104
82S137	Signetics	N82S137	1318-77
		N82S137A	1318-62
		N82S137B	1318-52
		S82S137	1318-85
		S82S137A	1318-82
82S141	Signetics	N82S141	1318-15
		N82S141A	1318-64
		S82S141	1318-27
82S147	Signetics	N82S147A	1317-94
		N82S147B	1317-53
82S150	Signetics	S82S150	4078-32
82S16	Signetics	N82S16	1348-89
82S167	**TI**	**TIB82S167B**	⋆ 4320
			4079-57
		82S167A	4079-56
82S17	Signetics	N82S17	1348-86
82S181	Signetics	N82S181	1319-66
		N82S181A	1319-53
		N82S181B	1319-37
		N82S181C	1319-14
		S82S181	1319-76
		S82S181A	1319-75
82S183	Signetics	N82S183	1319-62
		S82S183	1319-77
82S185	Signetics	N82S185	1320-33
		N82S185A	1320-8
		N82S185B	1320-2
		S82S185	1320-34
		S82S185A	1320-29
82S19	Signetics	N82S19	1348-50
		S82S19	1348-52
82S191	Signetics	N82S191	1322-55
		N82S191A	1320-22
		N82S191C	⋆ 3184
			1335-55
		S82S191	1322-59
		S82S191A	1320-30

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
82S210	Signetics	S82S210	1351-10
82S212	Signetics	N82S212	1351-7
		N82S212A	1351-4
		S82S212	1351-9
82S23	Signetics	N82S23	1316-46
		N82S23A	1316-21
		S82S23	1316-51
82S25	Signetics	N82S25	1347-98
		S82S25	1348-14
82S2708			
	Signetics	S82S2708	1319-78
82S30	Signetics	S82S30	681-38
82S31	Signetics	S82S31	681-39
82S32	Signetics	S82S32	681-40
82S41	**Signetics**	**N82S41**	⋆ **3022**
			676-28
82S50	**Signetics**	**N82S50**	⋆ **3022**
			664-30
82S52	**Signetics**	**N82S52**	⋆ **3022**
			664-85
82S62	AMD	AM82S62C	690-68
		AM82S62M	690-69
	Signetics	**N82S62**	⋆ **3022**
			690-75
82S82	**Signetics**	**N82S82**	⋆ **3022**
			658-42
82S83	**Signetics**	**N82S83**	⋆ **3022**
			656-13
82US123			
	Signetics	N82US123	1316-9
82US23			
	Signetics	N82US23	1316-8
820	AD	RTI820	4850-19
	Inmos	**IMSM820-35**	⋆ **2793**
			1383-36
		IMSM820-45	⋆ **2793**
			1383-76
		IMSM820-55	⋆ **2793**
			1384-9
		IMSM820-70	⋆ **2793**
			1384-27
	ITT	DF820	1193-72
	Motorola	MHW820	1104-52
	National	COP820	864-38
		COP820C	833-37
	Octagon	820	4878-3
	SGS	TBA820	1117-58
			¶ 430-17
		TBA820M	1117-59
			¶ 430-17
	TI	TL820C	1111-50
		TL820M	1111-24
	Thomson	TBA820	1117-72
8200	MicroSys	PS8200	4877-28
	Raytheon	RM8200	683-47
	Siemens	SDA8200	916-10
	Signetics	PCF8200	1122-125
8201	Raytheon	RM8201	683-48
8202	Intel	8202A	871-19
			872-44
			876-57
			999-71
			¶ 410-7
	National	INS8202	870-133
	Raytheon	RM8202	684-47
8203	Intel	8203	871-20
			872-45
			876-58
			999-72
	National	INS8203	870-134
	Raytheon	RM8203	684-48
8204	Cherry	CS8204	1199-119
	Samsung	ML8204	1199-130
	SGS	ML8204	1199-103
8205	Cherry	CS8205	1199-120
	Exar	XRT8205	1199-121
	Intel	8205	869-104
			871-11
			872-41
			999-73
	SGS	ML8205	1199-104
	Toshiba	TC8205P	886-33
8206	Intel	8206	871-21
			982-19
	Western	WD8206	982-20
82062	Intel	82062	887-18
82064	Intel	82064	887-24
8207	Intel	8207	876-59
82072	Intel	82072	884-10
8208	Intel	8208	876-60
	National	INS8208	870-127
821	Burr-Brown	MP821-05	4860-10
		MP821-15	4860-11
	ITT	DF821	1193-73
	National	COP821	864-39
		COP821C	833-38
8210	CalDevices	CSB8210	4042-33
8211	**GE/Intersil**	**ICL8211C**	⋆ **2676**
			1230-20
			¶ 440-26
		ICL8211M	⋆ **2676**
			1230-21
			¶ 440-26
	Maxim	MAX8211	1228-132
8212	**GE/Intersil**	**ICL8212C**	⋆ **2676**
			1230-22
			¶ 440-26
		ICL8212M	⋆ **2676**
			1230-23
			¶ 440-26
	Intel	M8212	871-47
		8212	871-48
			¶ 408-23
	Maxim	MAX8212	1228-133
	National	DP8212	864-51
			871-49
		DP8212M	871-50
		INS8212	864-52
			871-51
	NEC	μPB8212	871-52
	PMI	**DAC8212A**	⋆ **2964**
			⋆ **2974**
			⋆ **2976**
			961-14
		DAC8212B	⋆ **2964**
			⋆ **2974**
			⋆ **2976**
			966-41
		DAC8212E	⋆ **2964**
			⋆ **2974**
			⋆ **2976**
			961-15
		DAC8212F	⋆ **2964**
			⋆ **2974**
			⋆ **2976**
			966-42
		DAC8212G	⋆ **2964**
			⋆ **2974**
			⋆ **2976**
			961-16
		DAC8212H	⋆ **2964**
			⋆ **2974**
			⋆ **2976**
			966-43
8214	Intel	M8214	889-37
		8214	869-135
	National	DM8214	679-110
8216	AMD	M8216	870-112
	Intel	M8216	870-115
		8216	869-97
			870-106
			872-21
	National	DP8216	870-120
		DP8216M	870-121
		INS8216	870-128
	NEC	μPB8216	869-99
			870-130
			872-24
8218	Intel	8218	870-132
82188	Intel	82188	876-20
8219	Intel	8219	872-26
822	ITT	DF822	1193-74
	National	COP822	864-40
		COP822C	803-2
	Octagon	822	4878-4
	Telefunken	U822	1190-106
		U822BS	691-81
8220	LSI Logic	LL8220	4052-49
82200	Siemens	SAB82200	876-66
82202	Chips&Tech	82202A	881-17
			881-60
8221	**PMI**	**DAC8221**	⋆ **2974**
			960-20
8222	MicroInds	mBLC8222	4857-23
	PMI	**DAC8222A**	⋆ **2974**
			970-23
		DAC8222B	⋆ **2974**
			970-40
		DAC8222E	⋆ **2974**
			970-24
		DAC8222F	⋆ **2974**
			970-41
		DAC8222G	⋆ **2974**
			970-25
		DAC8222H	⋆ **2974**
			970-42
82220	Siemens	SAB82220	876-21
8224	Intel	M8224	870-137
		8224	870-138
			¶ 408-23
	MicroInds	mBLC8224	4857-24
	National	DP8224	870-139
		INS8224	870-140
82257	Siemens	SAB82257	879-107
		SAB82257-6	879-106
82258	Intel	82258	876-54
			881-33
	Siemens	SAB82258	883-69
		SAB82258-1	879-105
8226	AMD	M8226	870-113
	Intel	M8226	870-116
		8226	869-98
			870-107
			872-22
	National	DP8226	870-122
		DP8226M	870-123
		INS8226	870-129
	NEC	μPB8226	869-100
			870-131
			872-25
8228	Intel	M8228	871-127
		8228	871-128
			¶ 408-23
	MicroInds	mBLC8228	4858-25
	National	DP8228	871-130
		DP8228M	871-131
		INS8228	871-134
	TI	TIM8228	871-66
82284	Fujitsu	MBL82284	875-105
	Intel	82284	875-106
	Siemens	SAB82284	878-92
		SAB82284-1	878-93
82288	AMD	82288	875-101
	Fujitsu	MBL82288	875-102
	Intel	82288	875-103
	Siemens	SAB82288	878-90
			881-83
		SAB82288-1	878-91
82289	Intel	82289	879-94
	Siemens	SAB82289	881-79
8229	MicroInds	mBLC8229	4858-26
823	ITT	DF823	1193-75
8231	AMD	AM8231	870-98
	Intel	M8231A	870-100
		8231A	870-101
			888-54
	Raytheon	RM8231	681-41
8232	AMD	AM8232	646-7
			871-22
			889-6
	Intel	8232	646-8
			871-23
			889-7
	Raytheon	RM8232	681-37
8233	Raytheon	RM8233	680-76
	Signetics	S8233	680-78
8234	Raytheon	RM8234	680-23
	Signetics	**N8234**	⋆ **3022**
			680-24
		S8234	680-25
8237	AMD	8237A	872-84
		8237A-4	872-85
		8237A-5	872-86
	Intel	8237	881-34
			883-74
		8237A	872-92
		8237A-4	872-93
8237	Intel		(Cont'd)
		8237A-5	872-94
	NEC	μPD8237A-5	872-99
	Siemens	SAB8237A	883-77
		SAB8237A-5	883-78
	Toshiba	**TMP8237**	⋆ **3306**
			874-126
		TMP8237A	⋆ **3306**
			872-107
		TMP8237A-5	⋆ **3306**
			872-108
8238	Intel	8238	871-129
	National	DP8238	871-132
		DP8238M	871-133
		INS8238	871-135
	TI	TIM8238	871-67
82384	Intel	82384	881-31
824	Telefunken	U824	1190-107
8241	Raytheon	RM8241	676-34
8242	Raytheon	RM8242	676-88
	Signetics	**N8242**	⋆ **3022**
			676-106
			676-89
		S8242	676-107
8243	Fujitsu	MBL8243	869-117
	Intel	M8243	869-118
		8243	869-119
			871-40
			872-62
			886-95
	National	INS8243	869-129
	NEC	μPD8243	869-131
			872-64
	Raytheon	RM8243	689-145
	Toshiba	**TMP8243**	⋆ **3306**
			871-41
8244	National	INS8244	871-60
8245	National	INS8245	871-61
82450	**UMC**	**UM82450**	⋆ **3316**
			875-138
8246	National	INS8246	871-62
8247	National	INS8247	871-15
8248	National	INS8248	871-16
	PMI	**DAC8248A**	⋆ **2974**
			⋆ **2976**
			970-26
		DAC8248E	⋆ **2974**
			⋆ **2976**
			970-27
		DAC8248F	⋆ **2974**
			⋆ **2976**
			970-43
		DAC8248G	⋆ **2974**
			⋆ **2976**
			970-28
		DAC8248H	⋆ **2974**
			⋆ **2976**
			970-44
	Siemens	SAB8248A	876-35
825	**Datel**	**ADC825MC**	⋆ **2575**
			918-25
		ADC825MM	⋆ **2574**
			918-26
8250	National	DP8250	870-102
		INS8250	864-44
			870-103
			1011-41
			¶ 408-6
	Raytheon	RM8250	664-29
	Toshiba	**TC8250**	⋆ **3306**
			886-27
		TC8250A	⋆ **3306**
			886-28
	UMC	**UM8250**	⋆ **3315**
			875-139
	Western	**WD8250**	⋆ **3381**
			1009-17
82501	Intel	82501	885-38
8251	AMD	8251	871-71
			872-73
		8251A	869-136
	Intel	M8251A	871-72
		8251	1010-66
			¶ 408-23

(Continued)

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
8251	Intel		(Cont'd)
		8251A	869-137
			871-73
			872-74
			¶ 408-23
	National	INS8251	864-45
			871-75
	NEC	μPD8251	869-139
			871-76
			872-75
		μPD8251A	869-140
			871-77
			872-76
			1010-67
		μPD8251AF	869-141
			1010-68
	SMC	COM8251A	864-46
			870-104
			1010-70
	Toshiba	**TMP8251A**	⋆ **3306**
			869-144
82515	**Exar**	**XRT82515**	⋆ **2611**
			886-79
			889-11
82520	Siemens	SAB82520	1197-103
8253	AMD	8253	869-155
			871-102
		8253-2	869-156
			871-103
		8253-5	872-123
	Intel	M8253	872-125
		8253	872-127
		8253-5	872-128
	National	INS8253	871-104
		INS8253-5	871-105
			872-132
	NEC	μPD8253-2	869-157
			871-106
			872-133
		μPD8253-5	869-158
			871-107
			872-134
	Toshiba	**TMP8253-5**	⋆ **3306**
			872-139
8254	Intel	8254	872-129
	National	INS8254	864-43
			871-114
	UMC	UM8254	872-140
8255	AMD	8255A	869-160
			871-109
		8255A-5	869-161
			871-110
			872-141
	Intel	M8255A	871-111
		8255A	869-162
			871-113
			885-98
		8255A-5	872-143
	National	INS8255	864-48
			871-115
	NEC	μPD8255	869-163
			871-116
		μPD8255A-2	872-146
		μPD8255A-5	869-164
			871-117
			872-147
	OKI	MSM8255A	871-119
	Toshiba	**TMP8255A-5**	⋆ **3306**
			872-149
8256	**Dense-Pac**	**DPS8256**	⋆ **2579**
			1387-10
	Intel	8256	871-65
			876-67
		8256AH	871-68
	Siemens	SAB8256A	869-134
			872-72
			876-68
8257	Intel	M8257	871-89
			872-91
		8257	871-90
			872-95
			883-75
			¶ 408-23
			¶ 408-28

(Continued)

Base Number	Source	Device	Page-Line
8257	Intel		(Cont'd)
		8257-5	871-91
			872-96
			¶ 408-23
			¶ 408-28
	NEC	μPD8257	871-93
			872-100
		μPD8257-5	871-94
			872-101
82586	Intel	82586	881-42
			885-39
	SMC	COM82586	883-98
82588	Intel	82588	881-43
8259	AMD	8259A	872-109
		8259A-2	872-110
		8259A-8	872-111
	Fujitsu	MBL8259A	876-83
	Intel	M8259A	872-113
		8259	869-145
			881-45
		8259-5	869-146
		8259A	869-147
			871-95
			872-114
			876-85
		8259A-2	869-148
			871-96
			872-115
			885-29
		8259A-5	885-30
		8259A-8	869-149
			871-97
			872-116
	MicronTech	MT8259	1343-1
		MT8259-10	1342-74
		MT8259-12	1343-5
		MT8259-15	1343-13
		MT8259-8	1342-71
	National	INS8259	871-98
	NEC	μPD8259	869-150
			871-99
			872-119
		μPD8259-2	869-151
			871-100
			872-120
	Siemens	SAB8259A	876-87
		SAB8259A-2	876-88
		SAB8259A-8	876-89
	Toshiba	**TMP8259A**	⋆ **3306**
			869-153
	UMC	UM8259	869-154
826	Datel	ADC826MC	926-14
		ADC826MM	⋆ **2574**
			926-15
	Octagon	826	4877-7
	TeledyneS	TSC826	939-3
8260	Raytheon	RM8260	657-8
8262	Raytheon	RM8262	690-42
	Signetics	**N8262**	⋆ **3022**
			690-43
		S8262	690-44
8263	Raytheon	RM8263	681-22
8264	Fujitsu	MB8264A-12W	1337-71
			¶ 446-23
		MB8264A-20W	1338-26
			¶ 446-23
	Raytheon	RM8264	681-23
8266	Raytheon	RM8266	679-156
	Signetics	**N8266**	⋆ **3022**
			679-157
		S8266	679-158
8267	Raytheon	RM8267	680-159
827	**Datel**	**ADC827MC**	⋆ **2575**
			929-19
		ADC827MM	⋆ **2574**
			929-20
	S-MOS	SLA827S	4059-42
8270	Raytheon	RM8270	682-148
			1393-34

Base Number	Source	Device	Page-Line
8271	Intel	8271	869-106
			871-25
			872-51
			884-53
		8271-6	869-107
	Raytheon	RM8271	682-150
			1393-35
	Signetics	**N8271**	⋆ **3022**
			682-151
			1393-32
		S8271	682-152
			1393-33
82716	Matra-Harris		
		82716/VSDD	886-110
8272	Intel	8272A	884-70
	Unicorn	UC8272A	884-54
	UMC	UM8272A	884-75
82720	Intel	82720	882-73
8273	Intel	8273	870-18
			871-123
			873-33
	Raytheon	RM8273	684-53
			1395-81
	Signetics	**N8273**	⋆ **3022**
			684-54
			1395-82
		S8273	684-55
			1395-83
82730	Intel	82730	876-105
			882-102
82731	Intel	82731	876-110
			883-21
8274	Intel	8274	871-125
			888-18
	Raytheon	RM8274	684-51
			1395-79
	Signetics	**N8274**	⋆ **3022**
			684-52
		S8274	1395-80
8275	Intel	8275	869-101
			870-142
			872-33
			882-81
			¶ 408-23
	MicroSys	SB8275	4813-34
	Siemens	SAB8275	882-108
	Western	WD8275	882-82
8276	Intel	8276	870-143
			882-55
	MicroSys	SB8276	4876-35
	Siemens	SAB8276	882-109
	Western	WD8276	882-51
8277	MicroSys	SB8277	4872-24
8278	MicroSys	SB8278	4872-27
82786	Intel	82786	881-39
8279	Intel	8279	871-54
			885-33
			¶ 408-23
		8279-5	871-55
			¶ 408-23
	NEC	μPD8279-5	871-56
	Toshiba	**TMP8279**	⋆ **3306**
			874-132
		TMP8279-5	⋆ **3306**
			872-68
828	Telefunken	U828	1126-4
8280	National	DM8280	662-95
	Raytheon	RM8280	662-96
8281	National	DM8281	660-85
	Raytheon	RM8281	660-87
8282	Fujitsu	MBL8282	877-18
	Intel	M8282	877-21
		8282	877-22
	NEC	μPB8282	877-23
	Siemens	SAB8282	877-25
8283	Fujitsu	MBL8283	877-10
	Intel	M8283	877-13
		8283	877-14
	NEC	μPB8283	877-15
	Siemens	SAB8283	877-17
8284	AMD	8284A	876-28
	Fujitsu	MBL8284A	876-30
	Intel	M8284	876-31
		8284A	876-38
		8284A-1	876-37
	NEC	μPB8284A	876-33

(Continued)

Base Number	Source	Device	Page-Line
8284			(Cont'd)
	Raytheon	RM8284	662-42
	Siemens	SAB8284B	873-59
		SAB8284B-1	873-60
	Signetics	S8284	662-43
8285	Raytheon	RM8285	663-41
8286	AMD	8286	876-120
	Fujitsu	MBL8286	877-2
	Intel	M8286	870-32
			871-143
			873-41
			877-5
		8286	873-45
	NEC	μPB8286	877-7
	Siemens	SAB8286	877-9
8287	AMD	8287	876-111
	Fujitsu	MBL8287	876-112
	Intel	M8287	870-33
			871-144
			873-42
			876-115
		8287	873-44
	NEC	μPB8287	876-117
	Siemens	SAB8287	876-119
8288	AMD	AM8288	876-4
		8288	876-6
	Fujitsu	MBL8288	876-7
	Intel	M8288	876-11
		8288	876-12
		8288-1	876-18
	NEC	μPB8288	876-13
	Siemens	SAB8288	876-16
8289	AMD	AM8289	875-140
	Fujitsu	MBL8289	875-141
	Intel	M8289	875-144
		8289	875-145
	NEC	μPB8289	876-2
	Siemens	SAB8289	876-3
		SAB8289-1	873-53
82891	National	INS82891	884-111
82893	National	INS82893	884-112
829	Octagon	829	4877-53
8290	Raytheon	RM8290	662-97
8291	Intel	8291	869-115
		8291A	871-35
			872-61
			876-64
			884-123
	National	DM8291	660-86
	Raytheon	RM8291	660-88
8292	Intel	8292	871-33
			872-59
			884-116
8293	Intel	8293	871-36
			884-124
8294	Intel	8294	871-8
			888-104
	National	INS8294	870-97
8295	Intel	8295	885-103
			¶ 410-8
83	ACE	DPC83U	4813-19
	Apex	**PA83**	⋆ **2458**
			1130-117
			1131-61
			1154-45
		PA83A	⋆ **2458**
			1148-15
		PA83M	⋆ **2458**
			1130-118
			1131-62
			1154-46
		PA83Q	⋆ **2458**
			1154-44
	Cyberchron	CSM83/22	4867-25
	MCE	MCE83	1181-30
	PMI	**RPT83**	⋆ **2975**
			1197-49
	Sharp	IR3.N83	1198-17
83C001	**UMC**	**UM83C001**	⋆ **3318**
			882-15
83C002	**UMC**	**UM83C002**	⋆ **3319**
			882-20
83C154	Matra-Harris		
		83C154	829-1
83C351	Signetics	SCC83C351	870-66

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
83C503	**Western**	**WD83C503**	★ **3383**
			886-75
83C510	**Western**	**WD83C510**	★ **3383**
			886-73
83C55	Calmos	CA83C55A	1389-32
	Harris	HS83C55RH	870-14
			873-27
	OKI	MSM83C55	870-17
			873-30
83C580	**Western**	**WD83C580**	★ **3383**
			886-76
83C70	**UMC**	**UM83C70**	★ **3317**
			1199-146
83C71	**UMC**	**UM83C71**	★ **3317**
			1197-71
830	Burr-Brown	MP830-72	4861-11
	Datel	**ADC830C**	★ **2575**
			921-35
	Fujitsu	**C830UHB**	★ **4229**
			★ **4233**
			4045-41
	Inmos	**IMSM830-45**	★ **2794**
			1378-59
		IMSM830-55	★ **2794**
			1379-4
		IMSM830-70	★ **2794**
			1379-30
		IMSM830-85	★ **2794**
			1379-51
	MicroPwr	MP830	1106-82
	Micro-Link	STD-830	4878-25
	National	NSC830	873-100
		NSC830-1	873-101
		NSC830-4	873-102
	SMC	MPU830	873-103
	Telefunken	TCA830	1117-66
	VTC	VJ830	4069-22
8300	National	DM8300	682-97
			1393-82
8301	MicroSys	SB8301	4871-51
	National	DM8301	664-64
	NCR	NCR8301	888-73
8303	AMD	DP8303	996-26
	MicroSys	SB8303	4871-50
	National	DP8303	996-35
	Tech80	8303	4879-14
8304	AMD	DP8304B	686-162
			996-12
	Analogic	AH8304E	940-19
		AH8304T	645-24
			940-20
			940-21
	Marconi	MA8304	4053-37
	National	DP8304	870-124
			996-13
		DP8304B	996-36
	Tech80	8304	4876-45
8306	Thomson	TS8306	868-82
8307	AMD	DP8307	996-27
	GoldStar	**GD8307**	★ **2694**
			979-4
	National	DP8307	996-37
	Thomson	TS8307	868-83
8308	AMD	DP8308	996-28
	Analogic	AH8308E	950-4
		AH8308T	645-44
			950-5
		MP8308	950-8
		MP8308ECL	950-6
	Datel	**DAC8308**	★ **2576**
			944-6
	Intech	**VDAC8308TH**	★ **2799**
			949-21
	National	DP8308	996-38
	Thomson	TS8308	868-84
8309	National	DM8309	679-58
831	MicroPwr	MP831	1106-83
	National	NSC831	873-89
		NSC831-1	873-90
		NSC831-4	873-91
	SMC	MPU831	873-92
8310	National	DM8310	662-117
		DP8310	1007-18
	NCR	NCR8310	888-82
8311	National	DM8311	665-108
		DP8311	1007-19
8312	National	DM8312	681-35
8316	Burr-Brown	MP8316-V	4860-1
	National	DM8316	660-119
8318	Analogic	MP8318	950-9
		MP8318ECL	950-7
	Datel	**DAC8318**	★ **2576**
			944-7
	National	DM8318	690-8
832	Comark	CBX-AD832	4854-30
	MicroPwr	MP832	1106-84
	National	LM832	1116-97
			¶ 435-23
	Octagon	832	4876-48
8320	LSI Logic	LL8320	4053-4
	MicroSys	SB8320	4871-52
832000	Fujitsu	MB832000	1392-74
8321	UMC	UM8321	882-117
8322	National	DM8322	680-74
83256	Fujitsu	MB83256-25	1391-84
8326	UMC	UM8326	884-87
		UM8326B	884-88
8328	Thomson	TS8328	868-85
8329	UMC	UM8329	884-97
		UM8329B	884-98
833	MicroPwr	MP833	1106-85
	Motorola	**LM833**	★ **2921**
			★ **2958**
			1178-7
	National	LM833	1178-6
			¶ 429-11
	NEC	μPD833	1119-33
8334	National	DM8334	677-47
834	Panasonic	DN834	692-74
8340	National	DP8340	1011-27
	S-MOS	SMC8340F	837-29
8341	MicroSys	SB8341	4871-44
	National	DP8341	1010-72
834100	Fujitsu	MB834100	1392-80
8342	National	DP8342	1011-28
			¶ 431-30
8343	National	DP8343	1010-71
			¶ 431-30
8345	MicroSys	SB8345	4871-45
835	National	LMC835	1116-77
			¶ 435-22
	Panasonic	DN835	692-75
8350	National	DP8350	870-144
			882-54
			¶ 408-34
			¶ 408-6
			¶ 409-31
8352	National	DP8352	870-145
8353	National	DP8353	870-146
8355	Intel	8355	870-15
			873-28
		8355-2	870-16
			873-29
	MicroSys	SB8355	4871-49
	Toshiba	**TMP8355**	★ **3306**
			873-31
8356	National	DP8356	871-121
8360	**Commodore**		
		8360	★ **2560**
			883-5
	S-MOS	SMC8360F	837-30
	Sanyo	LM8360	1119-40
8361	Sanyo	LM8361	1119-41
8362	S-MOS	SMC8362F	837-31
8363	Sanyo	LM8363	1119-50
8364	S-MOS	SMC8364F	837-32
	Sanyo	LM8364	1119-51
8365	**Commodore**		
		8365	★ **2560**
			883-6
8366	**Commodore**		
		8366	★ **2560**
			883-7
837	National	LM837	1182-37
	Panasonic	DN837	692-76
8372	Sanyo	LM8372	1119-121
838	Panasonic	DN838	692-77
839	Panasonic	DN839	692-78
	TI	TIFPLA839C	4079-6
		TIFPLA839M	4079-7
8391	National	DP8391	878-121
			¶ 415-5
8392	National	DP8392	880-36
			885-37
			¶ 415-5
8396	Intel	8396	878-102
8398	**UMC**	**UM8398**	★ **3318**
			882-21
84	Amperex	BGY84	1123-119
		BGY84A	1123-120
	AD	ADADC84-10	927-15
		ADADC84-12	930-13
	Apex	**PA84**	★ **2458**
			1130-130
			1131-63
			1154-43
		PA84A	★ **2458**
			1148-14
		PA84M	★ **2458**
			1155-6
		PA84Q	★ **2458**
			1155-5
		PA84S	★ **2458**
			1155-4
	Burr-Brown	**ADC84K-10**	★ **2541**
			926-24
		ADC84K-12	★ **2541**
			930-17
	Cyberchron	CDM84/73R	4867-34
	Intech	**ADC84**	★ **2799**
			930-10
	MCE	MCE84	1186-44
	MicroNet	MNADC84-10	926-22
		MNADC84-12	929-43
	TI	TLO84I	1186-39
84C00	S-MOS	SMC84C00	874-59
	SGS	Z84C00A	874-75
		Z84C00B	874-78
	Signetics	**SCC84C00**	★ **3070**
			839-28
	Toshiba	**TMPZ84C00**	★ **3306**
			874-66
		TMPZ84C00-3	
			★ **3306**
			874-67
		TMPZ84C00A	★ **3306**
			874-74
		TMPZ84C00A-6	
			★ **3306**
			874-77
		TMPZ84C00A-8	
			★ **3306**
			874-80
	Zilog	**Z84C00-CPU**	★ **3417**
			874-70
84C01	**Toshiba**	**TMPZ84C01**	★ **3306**
			874-68
84C011	**Toshiba**	**TMPZ84C011A**	
			★ **3306**
			875-61
		TMPZ84C011A-6	
			★ **3306**
			875-64
84C013	**Toshiba**	**TMPZ84C013A**	
			★ **3306**
			875-62
		TMPZ84C013A-6	
			★ **3306**
			875-65
84C015	**Toshiba**	**TMPZ84C015A**	
			★ **3306**
			875-63
		TMPZ84C015A-6	
			★ **3306**
			875-66
84C02	**Toshiba**	**TMPZ84C02-6**	
			★ **3306**
			874-72
84C10	**Toshiba**	**TMPZ84C10**	★ **3306**
			874-122
		TMPZ84C10A	★ **3306**
			874-127
		TMPZ84C10A-6	
			★ **3306**
			874-128
	Zilog	**Z84C10-DMA**	★ **3417**
			874-123
84C12	MicroSys	SB84C12	4870-32
84C20	SGS	Z84C20	874-133
	Signetics	**SCC84C20**	★ **3070**
			839-29
	Toshiba	**TMPZ84C20**	★ **3306**
			875-9
		TMPZ84C20A	★ **3306**
			874-135
		TMPZ84C20A-6	
			★ **3306**
			875-1
	Zilog	**Z84C20-PIO**	★ **3417**
			875-10
84C23	MicroSys	SB84C23	4873-31
84C30	SGS	Z84C30	874-95
	Toshiba	**TMPZ84C30**	★ **3306**
			874-104
		TMPZ84C30A	★ **3306**
			874-107
		TMPZ84C30A-6	
			★ **3306**
			874-108
	Zilog	**Z84C30-CTC**	★ **3417**
			874-105
84C40	SGS	Z84C40	875-13
	Signetics	**SCC84C40**	★ **3070**
			839-30
	Toshiba	**TMPZ84C40**	★ **3306**
			875-45
		TMPZ84C40A	★ **3306**
			875-22
		TMPZ84C40A-6	
			★ **3306**
			875-25
	Zilog	**Z84C40-SIO**	★ **3417**
			875-50
84C41	SGS	Z84C41	875-14
	Toshiba	**TMPZ84C41**	★ **3306**
			875-46
		TMPZ84C41A	★ **3306**
			875-23
		TMPZ84C41A-6	
			★ **3306**
			875-26
	Zilog	**Z84C41-SIO**	★ **3417**
			875-51
84C42	SGS	Z84C42	875-15
	Toshiba	**TMPZ84C42**	★ **3306**
			875-47
		TMPZ84C42A	★ **3306**
			875-24
		TMPZ84C42A-6	
			★ **3306**
			875-27
	Zilog	**Z84C42-SIO**	★ **3417**
			875-52
84C43	**Toshiba**	**TMPZ84C43**	★ **3306**
			875-48
84C44	SGS	Z84C44	875-16
	Toshiba	**TMPZ84C44A**	★ **3306**
			875-21
	Zilog	**Z84C44-SIO**	★ **3417**
			875-53
84C60	**Toshiba**	**TMPZ84C60**	★ **3306**
			874-91
	Zilog	Z84C60-CPU	874-92
84C61	**Toshiba**	**TMPZ84C61**	★ **3306**
			874-93
84C66	MicroSys	SB84C66	4873-30
84C80	**Zilog**	**Z84C80-GLU**	★ **3417**
			874-130
84H08	**Dense-Pac**	**DPS84H08**	★ **2578**
			1366-18
84H16	EDI	84H16C-25C	1372-52
		84H16C-35C	1373-70
		84H16C-35MHR	
			1373-71
		84H16C-45MHR	
			1374-75
		84H16CL-45C	1374-76
		84H16CL-55C	1375-65
		84H16CL-55MHR	
			1375-66
		84H16CL-70MHR	
			1376-24
		84H16CP-20C	1372-28
		84H16CP-30C	1373-19

(Continued)

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
84H16	EDI		(Cont'd)
		84H16CP-30MHR	1373-20
		84H16CP-40MHR	1374-69
84H64	EDI	84H64C-35C	1374-10
		84H64C-45C	1375-11
		84H64C-45MHR	1383-51
		84H64C-55C	1375-85
		84H64C-55LMHR	1383-80
		84H64C-55MHR	1383-81
		84H64C-70LMHR	1384-13
		84H64C-70MHR	1384-14
840	**AD**	**AD840**	⋆ **2435** 1131-21
	MicroPwr	MP840	1106-86
	National	COP840	864-41
		COP840C	835-1
	TI	TIFPLA840C	4079-4
		TIFPLA840M	4079-5
8400	Cubit	8400	4819-18
	GoldStar	**Z8400**	⋆ **2691** 874-53
	Intech	**A8400**	⋆ **2799** 1230-93
	National	DP8400	982-55
			¶ 414-33
			¶ 426-19
			¶ 426-22
	SGS	Z8400	874-73
		Z8400A	874-76
		Z8400B	874-79
		Z8400H	874-81
	Signetics	TDA8400	1122-3
	Zilog	**Z8400-CPU**	⋆ **3417** 874-71
8402	**Intech**	**A8402**	⋆ **2799** 1230-94
	National	DP8402	688-75
		DP8402A	982-31
8403	National	DP8403	982-32
8404	Analogic	AH8404T	940-22 940-23
	Intech	**A8404**	⋆ **2799** 1230-95
	National	DP8404	982-33
8405	National	DP8405	982-34
8408	National	DP8408	999-81 999-84
			¶ 411-27
	PMI	**DAC8408A**	⋆ **2973** ⋆ **2976** 943-24
		DAC8408B	⋆ **2973** ⋆ **2976** 945-13
		DAC8408E	⋆ **2973** ⋆ **2976** 943-25
		DAC8408F	⋆ **2973** ⋆ **2976** 945-14
		DAC8408G	⋆ **2973** ⋆ **2976** 943-26
		DAC8408H	⋆ **2973** ⋆ **2976** 945-15
	Thomson	TS8408	868-86
8409	National	DP8409	999-85
			¶ 411-27
			¶ 414-33
841	**AD**	**AD841**	⋆ **2436** 1131-40
	MicroPwr	MP841	1106-87
	National	COP841	864-42
8410	SGS	Z8410	874-117
	Zilog	**Z8410-DMA**	⋆ **3417** 874-124
84110	**Toshiba**	**BAC84110**	⋆ **3306** 885-92
841101	Syscon	841101	4869-4
8412	MicroSys	SB8412	4871-42
84120	**Toshiba**	**MIC84120**	⋆ **3306** 885-93
8414	MicroSys	SB8414	4875-42
8415	NCR	NCR8415	889-68
8416	Fujitsu	MB8416	1358-37
		MB8416-20	1358-38
		MB8416-20L	1358-39
8417	Fujitsu	MB8417	1358-40
		MB8417-20	1358-41
		MB8417-20L	1358-42
	National	DP8417	999-82
			¶ 415-1
8418	Burr-Brown	MP8418	4859-35
		MP8418-AO	4859-36
		MP8418-EXP	4859-31
		MP8418-PGA	4859-37
		MP8418-PGA-AO	4859-38
	Fujitsu	MB8418-20	1358-43
		MB8418-20L	1358-44
		MB8418A-12	1357-64
		MB8418A-12L	1357-63
		MB8418A-15	1358-5
		MB8418A-15L	1358-6
	National	DP8418	999-83
			¶ 415-1
8419	National	DP8419	1003-13
			¶ 414-33
			¶ 415-1
842	**AD**	**AD842**	⋆ **2437** 1131-25
	MicroPwr	MP842	1106-88
	Telefunken	U842BS	1190-108
8420	**GoldStar**	**Z8420**	⋆ **2691** 875-2
	MicroSys	SB8420	4875-53
	Orion	**UniLab 8420**	⋆ **4760** 4715-1
	SGS	Z8420	874-134
	Zilog	**Z8420-PIO**	⋆ **3417** 875-11
8421	Fujitsu	MB8421	1357-43
		MB8421-120	1357-83
		MB8421-90	1357-34
8422	Fujitsu	MB8422	1357-42
		MB8422-120	1357-82
		MB8422-90	1357-33
	MicroSys	SB8422	4871-43
8424	MicroSys	SB8424	4870-24
84240	National	DP84240	1000-33
84244	National	DP84244	1000-34
84256	**Fujitsu**	**MB84256-10L**	⋆ **2623** 1379-59
		MB84256-100	⋆ **2623** 1379-60
		MB84256-12	⋆ **2623** 1380-4
		MB84256-15L	⋆ **2623** 1380-32
		MB84256-150	⋆ **2623** 1380-33
8428	National	DP8428	999-86
			¶ 415-1
	Thomson	TS8428	868-87
8429	National	DP8429	999-88
			¶ 415-1
843	MicroPwr	MP843	1106-89
8430	Burr-Brown	MP8430	4859-39
	GoldStar	**Z8430**	⋆ **2691** 874-94
	SGS	Z8430	874-96
	Zilog	**Z8430-CTC**	⋆ **3417** 874-106
84300	National	DP84300	999-96
84312	National	DP84312	879-52 999-90
8432	MicroInds	mBLC8432	4862-27
	Signetics	TDA8432	883-53
84322	National	DP84322	879-53 999-91
84332	National	DP84332	876-61 999-92
844	MicroPwr	MP844	1106-90
	Telefunken	U844BS	1190-109
8440	**GoldStar**	**Z8440**	⋆ **2691** 875-28
	SGS	Z8440	875-17
	Signetics	TDA8440	1127-82
	Zilog	**Z8440-SIO**	⋆ **3417** 875-54
8441	SGS	Z8441	875-18
	Zilog	**Z8441-SIO**	⋆ **3417** 875-55
84412	National	DP84412	1003-14
8442	SGS	Z8442	875-19
	Signetics	TDA8442	941-39
	Zilog	**Z8442-SIO**	⋆ **3417** 875-56
84422	National	DP84422	876-62
8443	Signetics	TDA8443	1125-99
		TDA8443A	1125-100
84432	National	DP84432	873-61
8444	Dense-Pac	DPS8444	1383-37
	SGS	Z8444	875-20
	Signetics	tda8444	941-38
	Zilog	**Z8444-SIO**	⋆ **3417** 875-57
845	MicroPwr	MP845	1106-91
8450	Burr-Brown	MP8450	4859-40
8451	MicroSys	SB8451	4871-32
	National	DP8451	884-136
846	**AD**	**AD846**	⋆ **2438** 1140-46
8460	National	DP8460	884-134 999-23
8461	National	DP8461	884-135
8462	National	DP8462	999-17
8463	National	DP8463	999-18
8464	Exar	XR8464B	885-4
	Fujitsu	MB8464-12	1368-71
		MB8464-12L	1368-72
		MB8464-12LL	1368-73
		MB8464-15W	1369-32
		MB8464-15X	1369-33
		MB8464-20W	1369-81
		MB8464A-10	1368-31
		MB8464A-10L	1368-32
		MB8464A-10LL	1368-33
		MB8464A-10W	1368-34
		MB8464A-100	1368-35
		MB8464A-15	1369-34
		MB8464A-15L	1369-35
		MB8464A-15LL	1369-36
		MB8464A-15W	1369-37
		MB8464A-70	1367-70
		MB8464A-70L	1367-71
		MB8464A-70LL	1367-72
		MB8464A-80	1368-7
	MicroLinear	ML8464X	885-5
	MicroSys	SB8464	4873-49
	National	DP8464	885-6 999-16
8466	MicroSys	SB8466	4876-11
	National	DP8466	999-12
847	**Datel**	**ADC847A**	⋆ **2575** 924-13
		ADC847B	⋆ **2575** 917-12
	S-MOS	**SLA847S**	⋆ **4305** 4059-44
8470	**GoldStar**	**Z8470**	⋆ **2691** 875-58
	National	DP8470	884-90
	SGS	Z8470	874-129
	Zilog	**Z8470-DART**	⋆ **3417** 875-60
8471	Sanyo	LM8471	1119-122
8472	National	DP8472	884-22
8474	National	DP8474	884-23
848	NEC	μPD848	1118-106
8480	National	DP8480	649-66
8481	National	DP8481	687-163
8482	National	DP8482	649-67
8483	National	DP8483	687-164
8488	MicroInds	mBLC8488	4857-6
8489	NCR	NCR8489	1118-71
8495	Intech	A8495	1223-23
8496	NCR	NCR8496	1118-72
85	Amperex	BGY85	1123-121
		BGY85A	1123-122
		BGY85H	1123-123
	AD	ADADC85-10	926-25
		ADADC85-12	930-18
		ADDAC85/CBI	958-26
		ADDAC85/CCD	971-15
		ADDAC85C/CBI	958-27
		ADDAC85C/CCD	971-16
	Apex	**PA85**	⋆ **2458** 1151-31
		PA85A	⋆ **2458** 1145-20
	Burr-Brown	**ADC85-10**	⋆ **2541** 926-26
		ADC85-12	⋆ **2541** 930-19
		DAC85H-CBI-I	⋆ **2542** 958-7
		DAC85H-CBI-V	⋆ **2542** 963-37
		SHC85	⋆ **2543** 1227-143
		SHC85ET	⋆ **2543** 1227-144
	Comark	MC85	4809-7
		MF85	4858-38
		MR85-032	4862-24
		MR85-064	4862-31
		MR85-096	4862-36
		MR85-128	4862-38
	Cyberchron	CDM85/73R	4867-33
	Datel	ADC85-12	930-14
	HybridSys	HSADC85B	930-15
		HSADC85C	930-16
	Intech	**ADC85**	⋆ **2799** 930-11
	MicroNet	DAC85-CBI	958-24
		DAC85-CCD	971-24
		MNADC85-10	926-23
		MNADC85-12	929-44
	Siemens	SKC85	4813-15
	Solarcom	SCMT85	4821-40
		SCMT85-C	4819-4
	Titan/SESCO	SECS85/10	4809-27
85C11	Zilog	Z85C11	874-42
85C30	**VLSI Tech**	**VL85C30**	⋆ **3342** 886-63
	Zilog	**Z85C30-SCC**	⋆ **3418** 878-76
85C81	VLSI Tech	VL85C81	876-26 879-32
85S06	National	DM85S06	1316-4
85S07	National	DM85S07	1316-5
85S47	National	DM85S47A	1316-2
85S68	National	DM85S68	678-129 1347-89
85X431	National	DM85X431	1305-9
850	AD	RTI850	4850-20
	Burr-Brown	DAC850-CBI-I	958-13
		DAC850-CBI-V	962-21
	Fujitsu	**C850AVB**	⋆ **4229** ⋆ **4231** 4045-42
		C850AVL	⋆ **4229** ⋆ **4231** 4045-43
	Matra-Harris	MB850	4054-16
	Octagon	850	4878-41
	Systech	MTI850/1650	4860-40
8500	Cubit	8500	4833-19
	GE/Intersil	**ICH8500**	⋆ **2674** 1132-7 1169-6
		ICH8500A	⋆ **2674** 1132-1 1169-5

(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
8500			(Cont'd)
	Lambda	LAS8500	1003-51
			¶ 438-23
	MicroSys	SB8500	4871-13
	Motorola	MC8500	982-8
	VDA	V8500	886-37
8501	Lambda	LAS8501	1003-52
	Motorola	MC8501	982-54
8502	Motorola	MC8502	983-1
	SMC	COM8502	1011-40
8503	Motorola	MC8503	983-4
8504	Motorola	MC8504	689-129
			983-8
8505	Marconi	MA8505	4053-38
	Toshiba	**TC8505AF**	* 3306
			882-10
		TC8505AP	* 3306
			882-11
8506	Motorola	MC8506	983-2
8507	Motorola	MC8507	868-53
			889-38
850701	Syscon	850701	4849-35
851	Burr-Brown	DAC851-CBI-I	958-14
			958-21
		DAC851-CBI-V	962-22
	Contemporary		
		S851	4878-42
	TI	TL851	1228-124
8510	GE/Intersil	ICH8510I	1003-17
			1103-123
			1130-83
			1131-97
			1222-122
			¶ 430-13
		ICH8510M	1003-18
			1103-124
			1130-84
			1131-98
			¶ 430-13
	Marconi	MA8510	4053-39
	MicroSys	SB8510	4870-40
	National	DP8510	888-75
	Siemens	PSB8510	1193-117
	Sprague	ULN8510EP	993-20
	Thomson	TS8510	1195-18
85101	Fujitsu	MB85101A-15	1338-7
85102	Fujitsu	MB85102A-15	1339-54
85108	Fujitsu	MB85108A-10	1340-33
		MB85108A-15	1340-86
8511	Thomson	TS8511	1195-23
8512	National	DP8512	889-69
	Thomson	TS8512	1195-24
8513	Thomson	TS8513	1195-17
8514	Thomson	TS8514	1195-16
8515	GE/Intersil	ICH8515I	1103-121
		ICH8515M	1103-122
	Marconi	MA8515	4053-43
	National	DP8515	690-101
8516	ILC-DDC	ADH8516-11	933-44
		ADH8516-12	929-8
	National	DP8516	690-102
	Zilog	**Z8516-DTC**	* 3418
			878-46
			880-28
8518	ILC-DDC	SH8518	1228-31
852	TI	TL852	1228-126
8520	GE/Intersil	ICH8520I	1003-19
			1103-125
			1130-64
			1131-99
			1222-123
		ICH8520M	1003-20
			1103-126
			1130-65
			1131-100
	MicroSys	SB8520	4871-33
	Motorola	MC8520	982-16
85201	Fujitsu	MB85201-12	1345-16
		MB85201-15	1345-18
85203	Fujitsu	MB85203-10	1341-67
		MB85203-12	1342-18
		MB85203-15	1342-34
85204	Fujitsu	MB85204-10	1341-68
		MB85204-12	1342-19
		MB85204-15	1342-35

Base Number	Source	Device	Page-Line
85208	Fujitsu	MB85208-12	1345-17
		MB85208-15	1345-22
8521	Toshiba	BM8521	4719-19
85210	Fujitsu	MB85210-15	1343-66
85211	Fujitsu	MB85211-12	1343-64
		MB85211-15	1343-67
85213	Fujitsu	MB85213-12	1343-2
		MB85213-15	1343-17
85214	Fujitsu	MB85214-12	1343-3
		MB85214-15	1343-11
85226	Fujitsu	MB85226-10	1343-32
85227	Fujitsu	MB85227-10	1343-33
		MB85227-12	1343-34
		MB85227-15	1343-45
8523	Sanyo	LM8523	1123-57
8524	**Dense-Pac**	**DPS8524**	* 2579
			1384-44
		DPX8524	1384-41
85259	MicronTech	MT85259-10	1342-54
		MT85259-12	1342-58
		MT85259-15	1342-62
		MT85259-8	1342-52
8528	ILC-DDC	DAC8528-11	965-18
			¶ 423-3
		DAC8528-12	957-33
			¶ 423-3
853	Contemporary		
		S853	4879-4
	TI	TL853	1228-125
8530	AMD	Z8530	886-61
		Z8530A	885-90
	GE/Intersil	ICH8530I	1003-21
			1103-127
			1130-60
			1131-101
			1222-124
		ICH8530M	1003-22
			1103-128
			1130-61
			1131-102
	ILC-DDC	TH8530	1229-77
			¶ 421-21
	SGS	Z8530	886-60
		Z8530A	886-64
	Thomson	TS8530	1195-12
	Zilog	**Z8530-SCC**	* 3418
			878-77
			880-34
8531	AMD	Z8531	881-69
	SGS	Z8531	881-67
		Z8531A	881-68
	Thomson	TS8531	1195-13
8532	Thomson	TS8532	1195-14
8536	AMD	Z8536	882-24
		Z8536A	882-25
	SGS	Z8536	882-22
		Z8536A	882-23
	Zilog	**Z8536-CIO**	* 3418
			880-27
			882-26
			¶ 409-5
8538	**Zilog**	**Z8538-FIO**	* 3418
			878-72
854	Burr-Brown	SDM854	1220-123
8540	Tektronix	8540	4717-25
	Thomson	TS8540	1195-26
8542	National	DM8542	667-80
8544	National	DM8544	688-23
8550	Tektronix	8550	4719-1
	Thomson	TS8550	1194-120
8551	National	DM8551	667-125
	Thomson	TS8551	1194-121
8553	ILC-DDC	BUS8553	1011-23
8555	ILC-DDC	BUS8555/56	1011-24
8556	National	DM8556	660-112
8559	ILC-DDC	BUS8559	1011-25
856	Burr-Brown	SDM856J	1220-124
		SDM856K	1220-125
	Datel	**ADC856C**	* 2575
			926-6
		ADC856M	* 2575
			926-7
8560	National	DM8560	663-87
	Zilog	**Z8560-FIFO**	* 3418
			878-48

Base Number	Source	Device	Page-Line
856140	Tektronix	856140 Systems	4719-2
8562	**Commodore**		
		8562	* 2560
			883-8
8563	**Commodore**		
		8563	* 2560
			883-13
	National	DM8563	662-11
8564	**Commodore**		
		8564	* 2560
			883-9
8565	**Commodore**		
		8565	* 2560
			883-10
	Toshiba	**TC8565AF**	* 3306
			882-13
		TC8565AP	* 3306
			882-14
8566	**Commodore**		
		8566	* 2560
			883-11
	Toshiba	**TC8566AF**	* 3306
			884-68
8568	**Commodore**		
		8568	* 2560
			883-14
8569	**Commodore**		
		8569	* 2560
			883-12
857	Burr-Brown	SDM857	1220-126
	Marconi	MA857	1197-102
	Toshiba	TC857OP	1011-31
8570	National	DM8570	683-60
			1395-46
	Toshiba	**TC857OF**	* 3306
			1011-32
		TC857OP	* 3306
			1011-33
8571	Signetics	PCF8571	1348-56
8573	**Holt**	**HI8573**	* 2769
			1189-42
	Signetics	**PCF8573**	* 3139
			888-88
8574	**Holt**	**HI8574**	* 2769
			1115-10
8575	**Holt**	**HI8575**	* 2769
			1113-30
	National	DM8575	4081-61
8576	National	DM8576	4081-62
		DM8576AAA	1303-3
	Signetics	**PCF8576**	* 3127
			977-144
	Toshiba	**TC8576AF**	* 3306
			888-83
8577	Signetics	PCF8577	978-5
	Toshiba	**TC8577AP**	* 3306
			888-85
8578	**Toshiba**	**TC8578AP**	* 3306
			888-84
858	Micro-Link	STD858	4879-19
	National	NSC858	873-104
8580	VDA	V8580	886-38
8581	AD	AD8581B	874-116
		AD8581L	921-11
	Zilog	**Z8581-CGC**	* 3418
			878-30
			¶ 408-26
			¶ 410-9
8582	GIM	PCD8582	1308-63
8583	Signetics	PCF8583	693-1
8589	**Dense-Pac**	**DPS8589**	* 2579
			1384-55
		DPX8589	1384-56
	National	DM8589	678-113
			1348-13
859	National	NSC859	873-93
8590	National	DM8590	1394-95
8592	Siemens	PSB8592	1200-19
8593	Siemens	PSB8593	1200-20
8599	National	DM8599	678-122
			1347-103
86	AMD	iAPX86/10	845-5
		iAPX86/20	845-6
	Amperex	BGY86	1123-124
	Comark	MR86-128	4862-37

(Continued)

Base Number	Source	Device	Page-Line
86	Comark		(Cont'd)
		MR86-256	4862-43
		MR86-384	4862-48
		MR86-512	4862-52
		MT86	4857-13
	Den/Pas	DSB86/35	4823-27
		DSB86/37A	4823-26
	DistComp	DCS/86	4705-2
		DCS/86/16	4829-5
		DCS86/16	4829-7
		DCS86/8	4809-24
	DiversTech	CBC86C/05	4827-26
		CBC86C/14	4827-27
	Intel	iSBC86/05A	4827-23
		iSBC86/14	4829-14
		iSBC86/30	4829-15
		iSBC86/35	4823-22
		SDK86	4831-28
	Kern	01-86-010	4851-29
	LitMach	DPX86/ME	4827-29
	Matrox	MBC86/12A	4829-9
	MicroInds	mSBC86/35	4823-28
	Microbar	DBC86	4829-3
		GPC86	4829-4
		MM86	4861-52
			4865-5
	PMI	DAC86C	950-36
			955-39
			971-6
		DAC86E	950-31
			955-36
			971-3
		RPT86	* 2975
			1197-53
	Teletek	SBC86/87	4833-11
	Titan/SESCO		
		SECS86/05	4827-30
		SECS86/10	4829-16
		SECS86/20	4829-17
	Zendex	ZX86	4829-11
		ZX86/05A	4823-8
		ZX86/28	4823-7
86C010	**VLSI Tech**	**VL86C010**	* 3343
			880-77
86C08	**Zilog**	**Z86C08-MCU**	* 3419
			874-22
86C10	**Zilog**	**Z86C10-MCU**	* 3419
			874-23
86C110	**VLSI Tech**	**VL86C110**	* 3344
			999-98
86C20	**Zilog**	**Z86C20-MCU**	* 3419
			874-24
86C21	**Zilog**	**Z86C21-MCU**	* 3419
			874-25
86C310	**VLSI Tech**	**VL86C310**	* 3345
			886-107
86C410	**VLSI Tech**	**VL86C410**	* 3346
			885-22
86C81	VLSI Tech	VL86C81	874-90
			880-26
	Zilog	Z86C81	874-52
86C91	Zilog	Z86C91	874-35
86E11	SGS	Z86E11	874-43
		Z86E11A	874-44
86E21	**Zilog**	**Z86E21-MCU**	* 3419
			874-26
86LS52	National	DM86LS52	678-57
86LS62	National	DM86LS62	678-58
86M44	Dense-Pac	DPS86M44	1383-34
		DPX86M44	1383-35
		DP86M44	* 2579
			1383-8
86S128	National	DM86S128	1302-11
			1302-3
86S64	National	DM86S64	1302-12
			1302-4
860	AD	RTI860	4850-18
	Octagon	860	4873-7
	VTC	VJ860	4069-25
8600	Clearpoint	VXR8600	4881-3
	Plessey	SP8600A	691-92
		SP8600B	691-93
	Toshiba	**TC8600F**	* 3306
			884-100
	Zilog	Z8600-MCU	874-38

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
8601	MicroSys	SB8601	4870-16
	National	DM8601	682-6
	SGS	Z8601	874-40
		Z8601A	874-41
	Siliconix	SI8601	920-38
	Toshiba	**TC8601F**	*** 3306**
			883-107
	Zilog	**Z8601**	*** 3419**
			874-39
		Z8601-MCU	*** 3419**
			843-12
			874-27
8602	National	DM8602	682-58
	Plessey	SP8602A	691-82
		SP8602B	691-83
	Siliconix	SI8602	1220-101
	Toshiba	**TC8602F**	*** 3306**
			883-108
8603	Siliconix	Si8603	922-42
	Zilog	**Z8603**	*** 3419**
			874-32
8604	Siliconix	Si8604	922-43
8605	Plessey	SP8605B	691-84
		SP8605M	691-85
8606	Plessey	SP8606B	691-79
		SP8606M	691-80
8607	Plessey	SP8607A	691-86
		SP8607B	691-87
860901	Syscon	860901	4849-40
861	Thomson	TAA861	1167-5
8610	Plessey	SP8610	651-7
8611	MTC	8611	4863-21
	Plessey	SP8611A	651-8
		SP8611B	651-9
	SGS	Z8611	874-45
		Z8611A	874-46
	Zilog	**Z8611**	*** 3419**
			874-47
8613	National	DM8613	666-139
	Plessey	SP8613	691-90
	Zilog	**Z8613**	*** 3419**
			874-33
8614	National	DS8614	692-11
8615	National	DS8615	692-15
8616	National	DS8616	692-18
8617	National	DS8617	692-27
	Plessey	SP8617B	651-10
862	Burr-Brown	SDM862A	1220-107
		SDM862B	1220-108
		SDM862J	1220-109
		SDM862R	1220-111
		SDM862S	1220-112
	Octagon	862	4872-20
			4873-38
8620	**Orion**	**UniLab 8620**	*** 4760**
			4715-2
	SMS	OMTI8620	4848-19
8621	National	DS8621	692-33
			1190-83
			1191-104
	SGS	Z8621	874-48
		Z8621A	874-49
8622	National	DS8622	692-41
			1190-85
8627	National	DS8627	692-12
8628	National	DS8628	692-7
8629	National	DS8629	692-38
			1190-77
	Plessey	SP8629	692-39
			1190-78
863	Burr-Brown	SDM863A	1220-113
		SDM863B	1220-114
		SDM863J	1220-115
		SDM863K	1220-116
		SDM863R	1220-117
		SDM863S	1220-118
8630	Comark	MC8630/35	4823-25
	MicroSys	SB8630	4870-15
	Plessey	SP8630A	691-105
		SP8630B	691-106
864	Contemporary		
		S864	4873-10
	Octagon	864	4873-2
8640	National	DS8640	990-45
8641	Intel	8641A	870-25
			871-139
	National	DS8641	994-32
8643	Plessey	SP8643	1191-86
		SP8643B	691-108
8644	**Dense-Pac**	**DPS8644**	*** 2579**
			1383-38
8645	**Dense-Pac**	**DPS8645**	*** 2579**
			1383-39
8647	Plessey	SP8647	1191-87
		SP8647A	691-109
		SP8647B	691-110
8654	National	DS8654	1004-86
8655	Plessey	SP8655A	692-13
		SP8655B	692-14
8657	Plessey	SP8657A	692-8
		SP8657B	692-9
8658	Plessey	SP8658	692-10
8659	Plessey	SP8659A	692-4
		SP8659B	692-5
8665	Plessey	SP8665B	691-103
8668	Plessey	SP8668B	691-104
8669	National	DS8669	979-73
867	Intech	A867-14	972-11
		A867-16	973-44
8671	SGS	Z8671	874-37
	Zilog	**Z8671-MCU**	*** 3419**
			843-21
			874-28
8678	National	DM8678	1302-13
			1302-5
868	Contemporary		
		S868	4873-5
	Datel	**ADC868**	*** 2575**
			645-18
8680	Plessey	SP8680	651-15
		SP8680A	691-111
		SP8680B	691-112
	Toshiba	TC8680F	883-109
8681	SGS	Z8681	874-18
		Z8681A	874-19
	Zilog	**Z8681-MCU**	*** 3419**
			843-22
			874-29
8682	SGS	Z8682	874-20
8684	SGS	Z8684	874-21
8685	Plessey	SP8685	1191-88
		SP8685A	691-113
		SP8685B	691-114
8690	Plessey	SP8690	1191-89
			¶ 435-12
		SP8690A	692-1
			¶ 435-12
		SP8690B	692-2
			¶ 435-12
86900	Fujitsu	MB86900	645-72
8691	**Zilog**	**Z8691**	*** 3419**
			874-36
86910	Fujitsu	MB86910	644-14
8692	National	DS8692	1004-87
8693	National	DS8693	1004-88
8694	National	DS8694	1004-89
86950	Fujitsu	MB86950	646-85
86975	Fujitsu	MB86975	646-72
87	Amperex	BGY87	1123-125
	AD	ADDAC87/CBI	958-23
	Burr-Brown	**ADC87/883B**	*** 2541**
			*** 2543**
			930-1
		ADC87U	*** 2541**
			*** 2543**
			930-2
		DAC87/CBI	*** 2542**
			*** 2544**
			964-10
		DAC87H-CBI-I	
			*** 2542**
			*** 2544**
			958-8
		DAC87H-CBI-V	
			*** 2542**
			*** 2544**
			963-38
	HybridSys	HSDAC87AS	968-15
		HSDAC87ASB	965-8
		HSDAC87AT	969-36
87	HybridSys		(Cont'd)
		HSDAC87ATB	964-6
		HSDAC87AU	956-37
		HSDAC87AUB	956-36
	Intech	**ADC87**	*** 2799**
			930-12
	MicroNet	MNADC87	929-45
		MNDAC87	963-19
	PMI	**RPT87**	*** 2975**
			1197-50
	Ziatech	ZT87	4858-2
87C256	**Intel**	**87C256**	*** 2861**
			1332-7
		87C256-2	*** 2861**
			1331-53
		87C256-20	*** 2861**
			1331-54
		87C256-25	*** 2861**
			1332-8
		87C256-3	*** 2861**
			1332-45
		87C256-30	*** 2861**
			1332-46
87C64	Intel	87C64	1326-81
		87C64-1	1326-47
		87C64-15	1326-48
		87C64-2	1327-1
		87C64-20	1327-2
		87C64-25	1327-35
		87C64-3	1327-65
		87C64-30	1327-66
87LS181			
	National	DM87LS181	1319-80
87P50	National	NS87P50	835-25
			869-71
87SR181			
	National	DM87SR181	1319-19
87SR183			
	National	DM87SR183	1319-20
		DM87SR183B	1319-5
87SR191			
	National	DM87SR191	1320-61
87SR193			
	National	DM87SR193	1320-62
87SR25	National	DM87SR25	1317-68
		DM87SR25B	1317-64
87SR27	National	DM87SR27	1317-98
		DM87SR27B	1317-62
87SR474			
	National	DM87SR474	1317-69
87SR476			
	National	DM87SR476	1317-70
		DM87SR476B	1317-65
87S180	National	DM87S180	1319-45
87S181	National	DM87S181	1319-63
		DM87S181A	1318-63
87S184	National	DM87S184	1320-11
87S185	National	DM87S185	1320-16
		DM87S185A	1320-1
		DM87S185B	1319-98
87S188	National	DM87S188	1316-10
87S190	National	DM87S190	1322-34
87S191	National	DM87S191	1322-40
		DM87S191A	1321-58
		DM87S191B	1321-28
87S195	National	DM87S195A	1323-10
		DM87S195B	1323-5
87S280	National	DM87S280	1319-46
87S281	National	DM87S281	1319-50
87S288	National	DM87S288	1316-12
87S290	National	DM87S290	1322-35
87S291	National	DM87S291	1322-41
		DM87S291A	1321-59
		DM87S291B	1321-29
87S321	National	DM87S321	1323-52
87S401	National	DM87S401	1304-55
		DM87S401A	1304-67
87S402	National	DM87S402	1304-88
		DM87S402A	1304-102
87S421	National	DM87S421	1323-53
870	**Burr-Brown**	**DAC870U**	*** 2544**
			963-16
		DAC870V	*** 2544**
			963-17
	Octagon	870	4877-27
			4879-10
8700	Commodore	8700	4079-9
	Fujitsu	**C8700UHB**	*** 4229**
			*** 4233**
			4047-6
	TeledyneS	TSC8700	922-8
87001	Fujitsu	MB87001A	1191-13
87003	Fujitsu	MB87003	1193-111
87004	Fujitsu	MB87004	1193-112
87007	Fujitsu	MB87007	1194-3
87008	Fujitsu	MB87008	1194-4
8701	Commodore	8701	867-139
	TeledyneS	TSC8701	927-10
87012	Fujitsu	MB87012	883-92
8702	National	MM8702A-4	1317-7
	TeledyneS	TSC8702	933-27
8703	TeledyneS	TSC8703	922-9
87030	**Fujitsu**	**MB87030**	*** 2624**
			886-50
8704	TeledyneS	TSC8704	927-11
870401	Syscon	870401	4850-2
8705	TeledyneS	TSC8705	933-28
87064	Fujitsu	MB87064	645-103
			888-107
8708	National	INS8708	1319-86
871	Contemporary		
		M871	4870-29
		P871	4870-30
		S871P	4870-31
	Octagon	871	4878-24
			4878-43
872	**S-MOS**	**SLA872S**	*** 4305**
			4059-45
8720	National	COP8720C	835-2
	Plessey	SP8720	691-89
			1191-74
8721	National	COP8721C	835-3
8722	National	COP8722C	835-4
8735	Plessey	SP8735B	691-100
8737	MicroInds	mBLC8737-1	4859-34
		mBLC8737-3	4859-32
		MIB8737-1	4859-27
		MIB8737-3	4859-28
8740	MicroSys	SB8740	4875-36
	Plessey	SP8740	1191-78
		SP8740A	691-96
		SP8740B	691-97
8741	Intel	M8741A	870-21
		8741A	870-26
			871-140
			873-38
			886-99
			¶ 409-16
			¶ 413-7
	NEC	μPD8741A	871-142
			873-40
	Plessey	SP8741	1191-80
		SP8741A	691-98
		SP8741B	691-99
	Signetics	μPD8741A	870-31
8742	Intel	8742	870-27
			886-101
8743	Plessey	SP8743	1191-82
		SP8743B	691-101
		SP8743M	691-102
8744	Intel	8744	870-35
			886-103
8748	AMD	AM8748	868-120
	Intel	M8748	868-122
		8748-8	868-123
			¶ 409-16
			¶ 413-7
		8748H	827-27
			868-124
			¶ 409-16
			¶ 413-7
	NEC	μPD8748	837-6
			868-127
8749	Fujitsu	MBL8749	868-121
	Intel	M8749H	827-7
		8749H	868-125
		8749H-8	868-126
	NEC	μPD8749	868-128
8750	TeledyneS	TSC8750	939-10
8751	AMD	8751H	870-37
	Intel	M8751H	870-38

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
8751	Intel		(Cont'd)
		8751	870-39
			¶ 415-24
		8751H	827-28
			¶ 415-24
	TeledyneS	TSC8751	939-52
8755	Intel	M8755A	872-46
		8755A	869-166
			872-47
			873-1
	NEC	μPD8755A	869-167
			872-48
			873-2
	OKI	MSM8755	872-49
	Plessey	SP8755A	692-21
		SP8755B	692-22
8764	Fujitsu	MB8764	645-104
			888-108
8780	**Burr-Brown**	**OPA8780U**	⋆ **2545**
			1165-6
		OPA8780UM	⋆ **2545**
			1165-5
		OPA8780V	⋆ **2545**
			1165-4
		OPA8780VM	⋆ **2545**
			1165-3
8790	Plessey	SP8790	1190-5
			¶ 435-12
		SP8790A	692-60
			1190-1
			¶ 435-12
		SP8790B	692-61
			1190-2
			¶ 435-12
8792	Plessey	SP8792	1191-105
		SP8792A	1191-106
8793	Plessey	SP8793	1191-93
		SP8793A	1191-94
8794	Plessey	SP8794A	692-62
			1190-3
		SP8794B	692-63
			1190-4
8795	**Fujitsu**	**MB8795B**	⋆ **2625**
			883-93
88	ACE	DPC88U	4823-3
	AMD	iAPX88/10	843-24
		iAPX88/20	843-25
	Amperex	BGY88	1123-126
	Apex	**PA88**	⋆ **2458**
			1156-41
		PA88A	⋆ **2458**
			1148-17
	Clearpoint	QRAM88B	4867-44
	Dense-Pac	**DPN88**	⋆ **2580**
			1311-46
			1370-10
	DiversTech	CBC88C/25	4807-33
	Intech	**DAC88**	⋆ **2799**
			964-7
	Intel	iSBC88/25	4809-17
		iSBC88/45	4823-29
			4852-27
		iSB88/40A	4809-20
	MicroInds	mSBC88/40	4809-18
		mSBC88/40A	4809-19
	MicroNet	DAC88	964-17
	Origin	OR88C	4861-25
	PMI	**DAC88E**	⋆ **2974**
			950-32
			955-37
		DMX88E	914-29
		DMX88F	914-31
		MUX88E	⋆ **2975**
			914-23
		MUX88F	⋆ **2975**
			914-28
	Robotrol	ADA88	4849-26
	Solarcom	SCMT88	4819-10
	Titan/SESCO		
		SECS88/10	4809-28
		SECS88/20	4809-29
	Vesta	ipc-SBC88	4803-16
		ipc-SBC88-1	4803-27
		ipc-STD88-2	4825-4
88C120	National	DS88C120	991-44
88C20	National	DS88C20	992-3
88C29	National	MM88C29	638-78
			988-34
88C30	National	MM88C30	638-3
			987-47
88C681	**Exar**	**XR88C681**	⋆ **2612**
			1009-62
			¶ 423-27
88H04	**Dense-Pac**	**DPS88H04**	⋆ **2578**
			1365-48
	EDI	88H04C-25C	1365-43
		88H04C-25MHR	1365-44
		88H04C-35C	1365-46
		88H04C-35MHR	1365-47
		88H04C-45C	1365-52
		88H04C-45MHR	1365-53
		88H04C-55MHR	1365-59
88H08	**Dense-Pac**	**DPS88H08**	⋆ **2578**
			1366-70
88H16	**Dense-Pac**	**DPS88H16**	⋆ **2578**
			1376-79
88LS120			
	National	DS88LS120	991-42
88L12	National	DS88L12	688-12
880	**Intech**	**A880**	⋆ **2799**
			1228-35
	Octagon	880B	4825-2
8800	CalDevices	CHA8800	4042-49
	Clearpoint	VXR8800	4880-33
	Comark	DP8800	4803-29
	National	DS8800	688-10
	Systek	8800	4825-22
	Zilog	Z8800	874-30
8801	**Zilog**	**Z8801**	⋆ **3419**
			874-34
8803	National	DS8803	1000-39
8804	Mitel	MT8804A	1193-38
	Systech	DCP8804	4858-35
8806	Ziatech	ZT 8806	4819-13
8807	MonSys	MSC8807	4711-26
	National	DS8807	1000-40
	Ziatech	ZT 8807	4819-16
8808	**Dense-Pac**	**DPS8808**	⋆ **2579**
			1367-22
	EDI	8808AC-10LMHR	1368-52
		8808AC-12LMHR	1369-10
		8808AC-15LMHR	1369-67
		8808ACL-15MHR	1369-31
		8808ACL-20MHR	1369-80
		8808CL-10MHR	1368-30
		8808CL-12MHR	1368-70
		8808CL-85MHR	1368-9
		8808HC-45C	1366-81
		8808HC-45MHR	1366-82
		8808HC-55C	1367-30
		8808HC-55MHR	1367-31
		8808HC-70C	1367-68
		8808HC-70MHR	1367-69
	Harris	**HM8808**	⋆ **2705**
			⋆ **2764**
			1369-68
		HM8808A	⋆ **2705**
			⋆ **2764**
			1369-69
		HM8808AB	⋆ **2705**
			⋆ **2764**
			1369-11
		HM8808AS	⋆ **2705**
			⋆ **2764**
			1368-53
		HM8808B	⋆ **2705**
			⋆ **2764**
			1369-12

(Continued)

Base Number	Source	Device	Page-Line
8808	**Harris**		(Cont'd)
		HM8808S	⋆ **2705**
			⋆ **2764**
			1368-54
	Ziatech	ZT8808	4817-12
8809	Ziatech	ZT8809	4817-16
881	**Datel**	**ADC881**	⋆ **2575**
			918-35
	Fujitsu	**MB881**	⋆ **2615**
			649-76
	Intech	A881	1228-36
	LMS	GR881	1369-78
8810	National	DS8810	665-150
	Systek	8810	4825-23
8811	National	DS8811	665-151
	Plessey	NJ8811	1190-114
8812	Mitel	MT8812	1193-39
	National	DS8812	666-46
	Plessey	NJ8812	1190-115
	Ziatech	ZT8812/8813	4819-15
88128	EDI	88128C-10C	1386-17
		88128C-10MHR	1386-18
		88128C-12C	1386-26
		88128C-12MHR	1386-27
		88128C-15C	1386-34
		88128C-15MHR	1386-35
8814	Ziatech	ZT8814/8815	4819-5
8816	EDI	8816C-10C	1377-17
		8816C-10MHR	1377-18
		8816C-12C	1377-26
		8816C-12MHR	1377-27
		8816C-15C	1377-35
		8816C-15MHR	1377-36
		8816C-20MHR	1377-38
		8816C-85C	1377-12
		8816HC-35C	1376-78
		8816HC-45C	1376-85
		8816HC-45MHR	1376-86
		8816HC-55MHR	1377-3
		8816HCL-55C	1377-4
		8816HCL-55MHR	1377-5
		8816HCL-70C	1377-7
		8816HCL-70MHR	1377-8
	Harris	**HM8816**	⋆ **2705**
			⋆ **2764**
			1377-37
		HM8816H	⋆ **2705**
			⋆ **2764**
			1377-9
	Ziatech	ZT8816	4833-24
88164	Sierra	88164	4107-16
8817	Ziatech	ZT8817	4833-25
8819	National	DS8819	665-137
882	**Fujitsu**	**MB882**	⋆ **2615**
			649-77
	Intech	**A882**	⋆ **2799**
			1228-37
8820	National	DS8820	992-4
			¶ 424-7
		DS8820A	991-57
			¶ 424-7
	Plessey	MJ8820	1191-73
	Systech	DCP8820	4883-5
	Ziatech	ZT 8820	4877-12
	Zilog	Z8820	874-50
88200	Fujitsu	MB88200	863-70
88201	Fujitsu	MB88201	803-11
			863-71
88202	Fujitsu	MB88202	803-12
			863-72
88205	Aptek	AMS88205-5NC	1199-62
	Fujitsu	MB88205	863-73
8821	Ziatech	ZT 8821	4877-55
8822	National	DS8822	990-7
	Zilog	Z8822	874-51
8823	Ziatech	ZY8823	4877-31
8824	Ziatech	ZT8824	4877-24
8825	Ziatech	ZT8825	4817-15

Base Number	Source	Device	Page-Line
883	**Fujitsu**	**MB883**	⋆ **2615**
			649-78
883C23C32			
	Sprague	883C23C32	1389-68
883C23C33			
	Sprague	883C23C33	1389-69
883C23C64			
	Sprague	883C23C64	1390-50
883C23C65			
	Sprague	883C23C65	1390-52
883C4000			
	Sprague	883C4000B	625-6
883C4001			
	Sprague	883C4001B	625-163
		883C4001UB	625-164
883C4002			
	Sprague	883C4002B	625-50
883C4006			
	Sprague	883C4006B	636-32
			1394-51
883C4007			
	Sprague	883C4007UB	607-133
883C4008			
	Sprague	883C4008B	602-67
883C4009			
	Sprague	883C4009UB	605-114
883C4010			
	Sprague	883C4010B	605-167
883C4011			
	Sprague	883C4011B	623-108
		883C4011UB	623-109
883C4012			
	Sprague	883C4012B	622-163
883C4013			
	Sprague	883C4013B	617-112
883C4014			
	Sprague	883C4014B	635-131
			1395-29
883C4015			
	Sprague	883C4015B	633-143
			1394-35
883C4016			
	Sprague	883C4016B	905-16
883C4017			
	Sprague	883C4017B	611-139
883C4018			
	Sprague	883C4018B	614-12
883C4019			
	Sprague	883C4019B	624-17
883C4020			
	Sprague	883C4020B	611-48
883C4021			
	Sprague	883C4021B	634-121
			1395-30
883C4022			
	Sprague	883C4022B	613-133
883C4023			
	Sprague	883C4023B	623-41
883C4024			
	Sprague	883C4024B	610-98
883C4025			
	Sprague	883C4025B	625-96
883C4026			
	Sprague	883C4026AB	611-104
883C4027			
	Sprague	883C4027B	621-45
883C4028			
	Sprague	883C4028B	614-96
883C4029			
	Sprague	883C4029B	614-30
883C4030			
	Sprague	883C4030B	626-71
883C4033			
	Sprague	883C4033AB	611-105
883C4034			
	Sprague	883C4034B	634-137
			1394-91
883C4035			
	Sprague	883C4035B	634-75
			1394-10
883C4040			
	Sprague	883C4040B	611-14
883C4041			
	Sprague	883C4041UB	605-89
883C4042			
	Sprague	883C4042B	627-17
883C4043			
	Sprague	883C4043B	627-54

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
883C4044			
	Sprague	883C4044B	627-36
883C4046			
	Sprague	883C4046B	637-59
			1190-62
883C4047			
	Sprague	883C4047B	632-154
883C4049			
	Sprague	883C4049UB	605-154
883C4050			
	Sprague	883C4050B	606-30
883C4051			
	Sprague	883C4051B	913-64
883C4052			
	Sprague	883C4052B	912-27
883C4053			
	Sprague	883C4053B	908-45
883C4060			
	Sprague	883C4060B	611-79
883C4066			
	Sprague	883C4066B	905-9
883C4068			
	Sprague	883C4068B	623-172
883C4069			
	Sprague	883C4069UB	608-58
883C4070			
	Sprague	883C4070B	626-72
883C4071			
	Sprague	883C4071B	624-165
883C4072			
	Sprague	883C4072B	624-78
883C4073			
	Sprague	883C4073B	622-37
883C4075			
	Sprague	883C4075B	624-113
883C4076			
	Sprague	883C4076B	618-55
883C4077			
	Sprague	883C4077B	626-102
883C4078			
	Sprague	883C4078B	626-3
883C4081			
	Sprague	883C4081B	622-94
883C4082			
	Sprague	883C4082B	621-176
883C4085			
	Sprague	883C4085B	624-35
883C4086			
	Sprague	883C4086B	624-60
883C4093			
	Sprague	883C4093B	638-112
883C4094			
	Sprague	883C4094B	634-160
			1395-73
883C4099			
	Sprague	883C4099B	629-40
883C4160			
	Sprague	883C4160B	612-54
883C4161			
	Sprague	883C4161B	609-46
883C4162			
	Sprague	883C4162B	612-10
883C4163			
	Sprague	883C4163B	608-163
883C4174			
	Sprague	883C4174B	618-110
883C4192			
	Sprague	883C4192B	612-108
883C4193			
	Sprague	883C4193B	609-138
883C4402			
	Sprague	883C4402B	626-127
883C4404			
	Sprague	883C4404B	610-144
883C4412			
	Sprague	883C4412B	622-166
883C4416			
	Sprague	883C4416B	905-43
883C4426			
	Sprague	883C4426AB	611-106
883C4428			
	Sprague	883C4428B	615-37
883C4433			
	Sprague	883C4433AB	611-107
883C4441			
	Sprague	883C4441UB	605-75
883C4445			
	Sprague	883C4445B	633-100
883C4446			
	Sprague	883C4446B	637-60
			1190-63
883C4449			
	Sprague	883C4449UB	608-59
883C4502			
	Sprague	883C4502B	605-123
883C4504			
	Sprague	883C4504B	605-169
883C4508			
	Sprague	883C4508B	626-137
883C4510			
	Sprague	883C4510B	612-109
883C4511			
	Sprague	883C4511B	617-41
			979-89
883C4512			
	Sprague	883C4512B	632-56
883C4514			
	Sprague	883C4514B	616-55
883C4515			
	Sprague	883C4515B	616-56
883C4516			
	Sprague	883C4516B	609-139
883C4517			
	Sprague	883C4517B	633-153
			1396-10
883C4518			
	Sprague	883C4518B	613-44
883C4520			
	Sprague	883C4520B	610-9
883C4522			
	Sprague	883C4522B	612-137
883C4526			
	Sprague	883C4526B	609-158
883C4527			
	Sprague	883C4527B	637-96
883C4528			
	Sprague	883C4528B	633-68
883C4531			
	Sprague	883C4531B	643-65
883C4532			
	Sprague	883C4532B	642-100
883C4534			
	Sprague	883C4534B	616-144
			979-101
883C4555			
	Sprague	883C4555B	614-125
883C4556			
	Sprague	883C4556B	614-126
883C4581			
	Sprague	883C4581B	603-47
883C4582			
	Sprague	883C4582B	603-79
883C4584			
	Sprague	883C4584B	638-162
883C4585			
	Sprague	883C4585B	603-118
8830	National	DS8830	988-1
			¶ 424-7
	Toshiba	**TC8830F**	*** 3306**
			1122-107
	Ziatech	ZT8830	4819-17
88303	**Fujitsu**	**MB88303**	*** 2627**
			886-93
			1124-141
88305	Mitel	MH88305	1199-66
			¶ 431-35
8831	National	DS8831	986-2
			988-9
	Toshiba	**TC8831F**	*** 3306**
			1122-108
8832	EDI	8832C-10C	1379-57
		8832C-10MHR	1379-58
		8832C-12C	1380-1
		8832C-12L	1380-2
		8832C-12MHR	1380-3
		8832C-15C	1380-28
		8832C-15MHR	1380-29
		8832C-20MHR	1380-60
		8832C-70C	1379-15
		8832C-85C	1379-35
		8832CL-15C	1380-30
		8832CL-15MHR	1380-31
		8832CL-20C	1380-61
		8832CL-20MHR	1380-62

(Continued)

Base Number	Source	Device	Page-Line
8832	EDI		(Cont'd)
		8832HC-45C	1378-49
		8832HC-55C	1378-68
		8832HC-55MHR	1378-69
		8832HC-70C	1379-16
		8832HC-70MHR	1379-17
	Harris	**HM8832**	*** 2705**
			*** 2764**
			1380-34
	National	DS8832	985-53
			988-15
8833	National	DS8833	870-125
			995-35
8834	National	DS8834	995-30
8835	National	DS8835	870-126
			995-28
8836	National	DS8836	990-43
8837	National	DS8837	990-56
8838	National	DS8838	994-9
8839	National	DS8839	995-33
884	**Fujitsu**	**MB884**	*** 2615**
			649-79
8840	Mitel	MT8840	1196-55
	Ziatech	ZT 8840	4874-29
88401	Fujitsu	MB88401	803-13
			863-74
8841	Fujitsu	MB8841	803-14
			862-79
			¶ 410-28
88411	Fujitsu	MB88411	803-15
			863-75
88413	Fujitsu	MB88413	803-16
			863-76
8842	Fujitsu	MB8842	803-17
			862-80
88421	Fujitsu	MB88421	803-18
			863-77
88423	Fujitsu	MB88423	803-19
			863-78
8843	Fujitsu	MB8843	803-20
			862-81
8844	Fujitsu	MB8844	803-21
			862-82
	Ziatech	ZT8844	4821-30
8845	Fujitsu	MB8845	862-83
	Ziatech	ZT8845	4874-35
8846	Fujitsu	MB8846	862-84
8847	Fujitsu	MB8847	862-85
	Ziatech	ZT8847	4873-60
8848	Fujitsu	MB8848	862-86
	Ziatech	ZT8848	4873-61
8850	Ziatech	ZT8850	4874-28
88500	Mitel	MH88500	1198-58
88501	Fujitsu	MB88501	803-22
			863-79
88503	Fujitsu	MB88503	803-23
			863-80
8851	Fujitsu	MB8851	803-24
			862-71
		MB8851A	803-25
			862-72
		MB8851L	803-26
			862-73
88512	MicronTech	MT88512	1343-73
		MT88512-10	1343-72
		MT88512-12	1344-1
		MT88512-15	1344-2
		MT88512-8	1343-71
8853	Fujitsu	MB8853	803-27
			862-74
88535	Fujitsu	MB88535	803-28
			863-81
88536	Fujitsu	MB88536	803-29
			863-82
8854	Fujitsu	MB8854	803-30
		MB8854A	803-31
			862-75
		MB8854L	803-32
			862-76
	Ziatech	ZT8854	4817-13
88541	Fujitsu	MB88541	803-33
			863-83
88543	Fujitsu	MB88543	803-34
88545	Fujitsu	MB88545	803-35

Base Number	Source	Device	Page-Line
8855	Fujitsu	MB8855	862-77
88551	Fujitsu	MB88551	803-36
		MB88551H	803-37
88552	Fujitsu	MB88552	803-38
		MB88552H	803-39
8856	National	DS8856	979-24
88561	Fujitsu	MB88561	803-40
			1120-58
88562	Fujitsu	MB88562	805-1
			1120-59
8857	National	DS8857	979-106
8858	Fujitsu	MB8858	862-78
	National	DS8858	979-109
8859	National	DS8859	979-131
886	Octagon	886	4825-11
8860	CMD Micro	G8860X	1198-109
	Mitel	MT8860	1198-112
	Plessey	MV8860	1198-115
8862	Mitel	MT8862	1198-113
	Plessey	MV8862	1198-116
8863	Mitel	MT8863	1198-114
	National	DS8863	980-94
	Plessey	MV8863	1198-117
8864	National	DS8864	981-1
8865	CMD Micro	G8865X	1192-10
	Mitel	MT8865	1195-3
			¶ 431-35
	Plessey	MV8865	1195-4
8866	Fujitsu	MB8866	875-74
			884-55
8867	National	DS8867	980-122
8868	Fujitsu	MB8868A	1011-67
8869	National	DS8869	979-132
8870	**CMD Micro**	**G8870**	*** 2547**
			1199-57
	Mitel	MT8870	1199-67
			¶ 431-35
			¶ 432-4
		MT8870-1	1199-68
			¶ 431-35
			¶ 432-4
	National	DS8870	980-67
8871	National	DS8871	980-95
8872	Mitel	MT8872	1199-58
	National	DS8872	980-123
8874	National	DS8874	981-2
	Zilog	Z8874	874-31
8875	National	DM8875	657-103
8876	Fujitsu	MB8876A	866-89
			884-3
8877	Fujitsu	MB8877A	866-90
			884-4
	National	DS8877	980-68
888	**Intech**	**VDAC888E**	*** 2799**
			950-2
	National	NSC888	4811-1
	PMI	**DAC888A**	*** 2973**
			943-27
		DAC888B	*** 2973**
			945-16
		DAC888E	*** 2973**
			943-28
		DAC888F	*** 2973**
			945-17
	TI	**TIET888**	*** 3226**
			647-35
8880	**CMD Micro**	**G8880**	*** 2546**
			1199-60
	Mitel	MT8880	1199-97
			¶ 433-10
	National	DS8880	980-80
	Signetics	DS8880	980-82
8881	National	DS8881	981-23
	Signetics	**N8881**	*** 3022**
			673-59
		8881	981-24
8882	Ziatech	ZT8882	4878-15
8884	National	DS8884A	980-81
8887	Systek	8887	4825-30
8889	National	DS8889	980-119
8890	**Signetics**	**N8890**	*** 3022**
			659-71
8891	National	DS8891	980-62
	Signetics	**N8891**	*** 3022**
			659-72
		S8891	659-73

(Continued)

¶ Indicates page number in Application Note Directory.
* Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
8891	Signetics		(Cont'd)
		8891	980-63
8897	National	DS8897	980-93
8898	National	DM8898	688-107
8899	National	DM8899	688-102
89	**PMI**	**DAC89E**	⋆ **2974**
			950-33
			955-38
	Siemens	S89	691-78
890	Octagon	890	4825-1
	TI	**TIET890**	⋆ **3226**
			647-9
	VTC	VJ890	4069-28
8901	**GoldStar**	**GL8901**	⋆ **2701**
			1228-121
	Plessey	SP8901	692-55
			1190-116
			1191-110
	Siliconix	SI8901A	1227-95
			¶ 430-26
8906	National	DS8906	1190-133
	Plessey	SP8906	692-44
			1190-117
			1191-109
8907	National	DS8907	1191-1
8908	MicroInds	mBLC8908	4863-37
	National	DS8908	1191-2
891M2	EDI	891M2CL-15C	1385-25
		891M2CL-15MHR	
			1385-26
		891M2CL-20C	1385-31
		891M2CL-20MHR	
			1385-32
8910	GIM	AY3-8910A	886-71
			1118-69
	National	DS8910	1120-5
	SGS	M8910	865-110
8911	National	DS8911	1190-67
8912	CMD Micro	G8912B	1195-30
	GIM	AY3-8912A	886-72
			1118-70
	National	DS8912	1190-68
8913	GIM	AY3-8913	886-4
			1118-74
8915	ILC-DDC	HSDC8915	1227-59
8916	ILC-DDC	HSDC8916	1227-60
8917	ILC-DDC	HSDC8917	1227-61
8918	ILC-DDC	HSDC8918	1227-62
8919	ILC-DDC	HSDC8919	1227-63
892	Octagon	892	4825-9
8920	ILC-DDC	HSDC8920	1227-64
	Mitel	MT8920	889-58
8921	ILC-DDC	HSDC8921	1227-65
	National	DS8921	988-17
			¶ 425-18
8922	ILC-DDC	HSDC8922	1227-66
	National	DS8922	988-18
			¶ 425-18
8923	National	DS8923	988-19
			¶ 425-18
8930	GIM	AY8930	883-88
			¶ 436-18
	MicroInds	mBLC8930	4863-38
	Mitel	MT8930	1198-85
89311	Fujitsu	MB89311	884-1
89321	Fujitsu	MB89321	868-6
89322	Fujitsu	MB89322	870-148
89351	Fujitsu	MB89351	886-51
8937	ILC-DDC	BUS8937	1009-59
8940	Gould	S8940	1194-96
	Mitel	MT8940	1194-95
8942	Sanyo	LM8942	692-90
8950	Mitel	MT8950	1192-145
			¶ 433-18
89500	Exar	MH89500	1197-66
	Mitel	MH89500	1197-67
89512	MicronTech	MT89512	1344-5
		MT89512-10	1344-4
		MT89512-12	1344-6
		MT89512-15	1344-7
		MT89512-8	1344-3
8952	MicroSys	SB8952-4	4711-11
	Mitel	MT8952B	885-20
			¶ 432-6
8958	MicroInds	mBLC8958	4863-36
89581	MicroInds	mBLC89581	4863-35
8960	Mitel	MT8960	1192-97
8961	Mitel	MT8961	1192-64
89610	Mitel	MH89610	1198-59
89615	Mitel	MH89615	1198-73
8962	Mitel	MT8962	1192-98
89620	Mitel	MH89620	1198-60
89625	Mitel	MH89625	1198-74
8963	Mitel	MT8963	1192-65
	National	DS8963	980-96
89630	Mitel	MH89630	1192-29
89635	Mitel	MH89635	1192-28
8964	Mitel	MT8964	1192-99
8965	Mitel	MT8965	1192-66
8966	Mitel	MT8966	1192-100
8967	Mitel	MT8967	1192-67
897	Micro-Link	STD897	4878-27
	TI	**TIET897**	⋆ **3226**
			649-123
8970	Gould	S8970	1194-72
	Mitel	MT8970	1194-71
89700	Mitel	MH89700	1194-77
8972	Mitel	MT8972	1194-78
			¶ 432-16
			¶ 432-17
			¶ 432-6
	Sanyo	LM8972	1119-123
89726	Mitel	MH89726	1195-83
89728	Mitel	MH89728	1195-84
8973	National	DS8973	980-124
8975	Gould	S8975	1194-92
	Mitel	MT8975	1194-91
	National	DS8975	980-125
89750	Mitel	MH89750	1194-93
			¶ 434-1
8976	Mitel	MT8976	1194-94
89760	Mitel	MH89760	1194-90
89761	Mitel	MH89761	1194-97
8978	Mitel	MT8978	1194-89
89780	Mitel	MH89780	1194-88
8979	Mitel	MT8979	1194-87
8980	Gould	S8980	1194-85
	Mitel	MT8980D	1194-86
			¶ 433-36
			¶ 433-39
8981	Mitel	MT8981D	868-10
			1194-84
			¶ 433-36
8994	Mitel	MT8994	1194-82
8995	Mitel	MT8995	1194-83
9	AdvControl	CCB9	4893-4
	CompDyn	CPU9	4821-6
	Datel	**SHM9MM**	⋆ **2574**
			1227-107
	DUAL	V9TRK	4883-14
	Interdesign	ULA 9P	4067-3
		ULA9RA	4044-48
		ULA9RB	4044-49
		ULA9RC	4044-50
		ULA9RD	4044-51
	Matrix	CP9B	4821-24
		MF9B	4821-25
		SP9B	4821-26
		TS9B	4821-34
	Octagon	Sup-9	4894-33
		SUP-9	4865-25
	Supertex	ED9	637-108
			¶ 426-11
	Xicor	**X9MME**	⋆ **3415**
			1224-64
9CG11000			
	Performance		
		P9CG11000	4058-17
9C765	GoldStar	GM9C765	869-105
			871-24
			872-50
9K08	Sharp	IR9K08	942-38
9LP00	**Signetics**	**ACE9LP00**	⋆ **4301**
			4060-27
9P4	MMI	PLE9P4C	4079-32
		PLE9P4M	4079-34
9P8	MMI	PLE9P8C	4079-31
		PLE9P8M	4079-33
9R8	MMI	PLE9R8C	4079-29
		PLE9R8M	4079-30
9T04	Signetics	ACE9T04	4060-26
90	GigaBit	90GCDR	4894-48
	Heurikon	MLZ90	4807-14
	InnovRes	SBC90A	4807-22
	PMI	**OP90A**	⋆ **2970**
			1142-49
		OP90B	⋆ **2970**
			1144-12
		OP90E	⋆ **2970**
			1142-50
		OP90F	⋆ **2970**
			1144-13
	Raytheon	RG90	676-4
90C255	AMD	AM90C255-10	1340-3
		AM90C255-12	1340-34
		AM90C255-15	1340-73
90C256	AMD	AM90C256-10	1340-4
		AM90C256-12	1340-35
		AM90C256-15	1340-74
90C257	AMD	AM90C257-10	1340-5
		AM90C257-12	1340-36
		AM90C257-15	1340-75
90C26	SMC	COM90C26	885-42
90C32	SMC	COM90C32	885-45
90C62	SMC	COM90C62	885-44
90L44	AMD	AM90L44B	1360-66
		AM90L44BM	1360-67
		AM90L44C	1360-49
		AM90L44CM	1360-50
		AM90L44D	1360-30
900	Altera	EP900-1C	4078-44
		EP900-1M	4078-45
		EP900-2C	4078-50
		EP900-2M	4078-51
		EP900-3C	4078-58
		EP900-3M	4078-59
		EP900C	4078-62
		EP900M	4078-63
	ArrayTech	DHS900	4041-36
	CalDevices	CHA900	4042-36
		DLM900	4042-37
	Matrix	MSBX900	4854-20
	Matrox	MSBX900	4854-21
		SX900	4857-15
	MicroLinear	FB900F	4068-36
		FB900G	4068-33
		FB900H	4068-34
			4068-39
		FB900J	4068-32
		FB900L	4068-35
	Miller	MCPU900	4817-6
	Signetics	**ACE900**	⋆ **4302**
			4060-25
	Stynetic	TDS900	4805-10
	TeledyneS	TSC900A	1137-25
		TSC900B	1137-42
9000	**AD**	**AD9000J**	⋆ **2417**
			916-12
		AD9000S	⋆ **2417**
			916-13
90000	OKI	MSM90000	4085-15
9001	AD	AD9001	645-23
	Dense-Pac	**DPD9001**	⋆ **2578**
			1344-71
9002	**AD**	**AD9002**	⋆ **2418**
			923-2
	Intech	**PS9002**	⋆ **2799**
			1221-3
	National	DM9002C	672-100
9003	**AD**	**AD9003**	⋆ **2419**
			928-40
	CalDevices	CSB9003	4042-20
	Intech	**ADC9003**	⋆ **2799**
			928-41
9004	SMC	COM9004	1010-1
9006	National	DM9006C	674-50
	SMC	CRT9006-135	882-59
			¶ 414-23
			¶ 416-2
		CRT9006-83	882-60
			¶ 414-23
			¶ 416-2
9007	SMC	CRT9007A	883-23
			¶ 413-30
			¶ 414-22
			¶ 416-2
		CRT9007B	883-24
			¶ 413-30
			¶ 414-22
			¶ 416-2
		CRT9007C	883-25
			¶ 413-30
			¶ 414-22
			¶ 416-2
	Stantel-STC	CRT9007A	883-26
		CRT9007B	883-27
		CRT9007C	883-28
	UMC	**UM9007**	⋆ **3319**
			882-48
9009	CalDevices	CSB9009	4042-21
901	Abionics	MX901	4856-2
	Burr-Brown	MPV901	4885-9
		MPV901A	4885-20
		MPV901P	4885-21
	DataTrans	DT901/901-I	4846-13
	Octagon	901	4878-45
	ThirdDomain		
		VOA901	1127-2
	Zendex	ZBX901	4854-19
9012	**AD**	**AD9012**	⋆ **2420**
			921-15
	PMI	**ADC9012A**	⋆ **2973**
			930-22
		ADC9012B	⋆ **2973**
			934-4
		ADC9012E	⋆ **2973**
			930-23
		ADC9012F	⋆ **2973**
			934-5
		ADC9012G	⋆ **2973**
			930-24
		ADC9012H	⋆ **2973**
			934-6
9015	CalDevices	CSB9015	4042-22
9016	AMD	AM9016C	1337-41
		AM9016D	1337-34
		AM9016E	1337-24
		AM9016F	1337-17
	National	MM9016	1124-35
902	Burr-Brown	MPV902	4888-21
	IoInc	IoSCSI902	4870-13
	Micro-Link	VME902	4891-17
9020	**LSI Logic**	**LMA9020**	⋆ **4269**
			4052-46
9021	SMC	CRT9021B	882-118
			¶ 416-2
9022	Sharp	IR9022	1177-32
9024	CalDevices	CSB9024	4042-23
	Marconi	MA9024	4053-49
9026	SMC	COM9026	885-43
			¶ 415-22
			¶ 417-4
			¶ 417-8
9028	SMC	CRT9028	883-35
			¶ 414-24
903	National	LM903	1222-88
9032	SMC	COM9032	885-46
			¶ 417-4
9033	**LSI Logic**	**LMA9033**	⋆ **4268**
			4053-7
9038	CalDevices	CSB9038	4042-25
	Marconi	MA9038	4053-51
904	Burr-Brown	MPV904	4885-17
9041	SMC	CRT9041A	882-114
			¶ 410-10
		CRT9041B	882-115
			¶ 410-10
		CRT9041C	882-116
			¶ 410-10
9044	AMD	AM9044B	1360-68
		AM9044BM	1360-69
		AM9044CM	1360-51
		AM9044D	1360-31
		AM9044DM	1360-32
		AM9044E	1360-26
9046	SMC	COM9046	1122-124
9048	**AD**	**AD9048**	⋆ **2421**
			922-29

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
905	Burr-Brown	MPV905	4885-16
	MicroInds	mBLC905	4863-10
	Zendex	ZX905	4863-11
9050	**LSI Logic**	**LMA9050**	⋆ **4268**
			4053-12
9053	SMC	CRT9053	883-36
9055	CalDevices	CSB9055	4042-26
9058	SMC	HYC9058	885-47
906	Burr-Brown	MPV906	4885-4
	Zendex	ZX906B	4863-26
9064	SMC	COM9064	1010-2
9068	MicronTech	MT9068-10	1339-42
		MT9068-12	1339-44
		MT9068-15	1339-46
	SMC	HYC9068	885-48
9069	MicronTech	MT9069	1339-43
907	Burr-Brown	MPV907	4885-3
	Zendex	ZX907	4863-28
9072	**LSI Logic**	**LMA9072**	⋆ **4268**
			4053-17
908	Kontron	KDS908-04	4709-7
	PMI	**ADC908A**	⋆ **2963**
			⋆ **2973**
			922-12
		ADC908B	⋆ **2963**
			⋆ **2973**
			922-34
		ADC908E	⋆ **2963**
			⋆ **2973**
			922-13
		ADC908F	⋆ **2963**
			⋆ **2973**
			922-35
		ADC908G	⋆ **2963**
			⋆ **2973**
			922-14
		ADC908H	⋆ **2963**
			⋆ **2973**
			922-36
9080	AMD	AM9080A	819-20
		AM9080A-1	870-82
		AM9080A-2	870-83
	LSI Logic	LL9080	4052-37
9082	Sharp	IR9082	1175-5
9083	CalDevices	CSB9083	4042-29
9084	Sharp	IR9084	1184-22
9095	**LSI Logic**	**LMA9095**	⋆ **4268**
			4053-21
91	**Datel**	**SHM91MC**	⋆ **2571**
			⋆ **2577**
			1228-5
		SHM91MM	⋆ **2571**
			⋆ **2574**
			⋆ **2577**
			1228-6
	Heurikon	MLZ91A	4807-17
91C32	SMC	COM91C32	885-49
91H000			
	OKI	91H000	4085-17
91L01	AMD	AM91L01A	1350-76
		AM91L01AM	1350-77
		AM91L01B	1350-58
		AM91L01BM	1350-59
		AM91L01C	1350-41
		AM91L01CM	1350-42
91L11	AMD	AM91L11A	1350-78
		AM91L11B	1350-60
		AM91L11BM	1350-61
		AM91L11CM	1350-43
91L12	AMD	AM91L12A	1350-72
		AM91L12AM	1350-73
		AM91L12B	1350-62
		AM91L12BM	1350-63
		AM91L12C	1350-44
		AM91L12CM	1350-45
91L14	AMD	AM91L14B	1353-79
		AM91L14BM	1353-80
		AM91L14C	1353-60
		AM91L14CM	1353-61
		AM91L14E	1353-37
		AM91L14EM	1353-38
91L22	AMD	AM91L22-35	1349-67
		AM91L22-45	1349-82
		AM91L22-45M	1349-83
		AM91L22-60	1350-11
	Cypress	CY91L22-35C	1349-59

(Continued)

Base Number	Source	Device	Page-Line
91L22	Cypress		(Cont'd)
		CY91L22-45C	1349-77
91L24	AMD	AM91L24B	1353-81
		AM91L24BM	1353-82
		AM91L24C	1353-62
		AM91L24CM	1353-63
91L30	AMD	AM91L30A	1353-88
		AM91L30AM	1353-89
		AM91L30B	1353-73
		AM91L30BM	1353-74
		AM91L30C	1353-69
		AM91L30CM	1353-70
91L40	AMD	AM91L40A	1360-74
		AM91L40AM	1360-75
		AM91L40B	1360-61
		AM91L40BM	1360-62
		AM91L40C	1360-57
		AM91L40CM	1360-58
91M2	**Harris**	**HM91M2**	⋆ **2705**
			⋆ **2765**
			1385-27
			1386-37
91V000	OKI	91V000	4085-16
910	Burr-Brown	MPV910	4888-18
		MPV910-LV	4888-20
		MPV910-NS	4888-19
	Gennum	LA910	1104-26
	Intel	iRCX910	4846-14
			4863-29
	PMI	**ADC910**	⋆ **2973**
			926-21
	VTC	VJ910	4069-20
9100	LogicalDes	VME9100D	4887-40
	Siliconix	SI9100	1217-111
			¶ 435-34
			¶ 440-18
91000	LSI Logic	LL91000	4053-22
		LRH91000	4052-32
	OKI	MSM91000	4085-14
	Toshiba	THM91000-10	1346-28
		THM91000-12	1346-38
9101	AMD	AM9101A	1350-79
		AM9101AM	1350-80
		AM9101B	1350-64
		AM9101BM	1350-65
		AM9101C	1350-46
		AM9101CM	1350-47
		AM9101D	1350-32
	Siliconix	Si9101	1215-121
9102	Siliconix	Si9102	1215-122
9103	**Xicor**	**X9103**	⋆ **3395**
			1224-53
		X9103M	⋆ **3395**
			1224-54
9104	**Xicor**	**X9104**	⋆ **3395**
			1224-55
		X9104M	⋆ **3395**
			1224-56
9106	Toshiba	TC9106B	1191-8
9109	Toshiba	TC9109B	1191-9
911	Burr-Brown	MPV911	4886-7
	TeledyneS	TSC911	1137-41
9110	Siliconix	Si9110	1215-119
9111	AMD	AM9111A	1350-81
		AM9111AM	1350-82
		AM9111B	1350-66
		AM9111BM	1350-67
		AM9111C	1350-48
		AM9111CM	1350-49
		AM9111D	1350-33
	Siliconix	Si9111	1215-120
	Toshiba	TC9111B	1191-10
	TriQuint	TQ9111	652-67
			1103-109
9112	AMD	AM9112A	1350-74
		AM9112AM	1350-75
		AM9112B	1350-68
		AM9112BM	1350-69
		AM9112C	1350-50
		AM9112CM	1350-51
		AM9112D	1350-34
9114	AMD	AM9114B	1353-83
		AM9114BM	1353-84
		AM9114C	1353-64
		AM9114CM	1353-65
		AM9114E	1353-39

(Continued)

Base Number	Source	Device	Page-Line
9114	AMD		(Cont'd)
		AM9114EM	1353-40
9115	CalDevices	CSB9115	4042-30
9116	**Dense-Pac**	**DPS9116**	⋆ **2578**
			1355-49
91160	IMI	G91160	4051-48
9118	TI	TMS9118	883-16
912	AnalogSys	MA912	1174-18
	OKI	MSL912R	980-109
	ThirdDomain		
		VSM912	1127-7
9120	S-MOS	STC9120C	1196-76
9121	Toshiba	TC9121	1123-39
91210	**UMC**	**UM91210E**	⋆ **3320**
			1199-53
		UM91210F	⋆ **3320**
			1199-56
9122	AMD	AM9122-25	1349-58
		AM9122-35	1349-68
		AM9122-35M	1349-69
	Cypress	CY9122-25C	1349-53
		CY9122-35C	1349-62
		CY9122-45C	1349-78
	Toshiba	TC9122	613-66
91220	**UMC**	**UM91220**	⋆ **3320**
			1199-54
91225	**UMC**	**UM91225A**	⋆ **3321**
			1199-48
		UM91225B	⋆ **3321**
			1199-49
		UM91225C	⋆ **3321**
			1199-50
		UM91225D	⋆ **3321**
			1199-51
91230	UMC	UM91230	1194-21
9124	AMD	AM9124B	1353-85
			¶ 447-10
		AM9124BM	1353-86
			¶ 447-10
		AM9124C	1353-66
			¶ 447-10
		AM9124CM	1353-67
			¶ 447-10
91256	**Dense-Pac**	**DPD91256**	⋆ **2578**
			1341-25
91260	**UMC**	**UM91260**	⋆ **3321**
			1193-134
91261	**UMC**	**UM91261**	⋆ **3321**
			1199-52
91265	**UMC**	**UM91265**	⋆ **3322**
			1199-55
91270	**UMC**	**UM91270**	⋆ **3322**
			1193-135
9128	AMD	AM9128-10	1357-56
		AM9128-12M	1357-88
		AM9128-15M	1358-34
		AM9128-20	1358-70
		AM9128-20M	1358-71
		AM9128-70	1357-4
	GE/Intersil	**ISP9128**	⋆ **2662**
			637-6
	GIM	RO9128B	1391-46
		RO9128C	1391-35
		RO9128CS	1391-43
		RO9128DS	1391-26
	SMC	CRT9128	883-37
	TI	TMS9128	883-17
91288	**Dense-Pac**	**DPS91288**	⋆ **2579**
			1386-25
9129	TI	TMS9129	883-18
9130	AMD	AM9130A	1353-90
		AM9130AM	1353-91
		AM9130B	1353-75
		AM9130BM	1353-76
		AM9130C	1353-71
		AM9130CM	1353-72
		AM9130D	1353-53
		AM9130E	1353-46
	Toshiba	TC9130	637-136
91308	Sharp	IR91308	1163-38
9132	Toshiba	TC9132	1122-95
9134	Toshiba	TC9134	1122-96
9135	Toshiba	TC9135	637-137
9137	Toshiba	TC9137B	1124-137
9138	Toshiba	TC9138A	1123-34
9139	Toshiba	TC9139A	1123-35

Base Number	Source	Device	Page-Line
9140	AMD	AM9140A	1360-76
		AM9140AM	1360-77
		AM9140B	1360-63
		AM9140BM	1360-64
		AM9140C	1360-59
		AM9140CM	1360-60
		AM9140D	1360-38
		AM9140E	1360-27
	LSI Logic	LL9140	4052-41
		LRH9140	4052-33
	Toshiba	TC9140	1120-55
9141	**LSI Logic**	**LMA9141**	⋆ **4268**
			4053-24
	TriQuint	TQ9141	652-81
9142	Toshiba	TC9142	1116-87
9143	Toshiba	TC9143	1123-41
9144	Toshiba	TC9144	1123-42
91458	Sharp	IR91458	1178-46
9146	Toshiba	TC9146	1120-56
9147	Toshiba	TC9147	1120-57
9148	Toshiba	TC9148	1122-97
9149	Toshiba	TC9149	1122-98
915	OKI	MSL915R	980-110
9150	AMD	AM9150-20	1352-23
		AM9150-25	1352-35
		AM9150-35	1352-55
		AM9150-35M	1352-56
		AM9150-45	1352-81
		AM9150-45M	1352-82
	Toshiba	TC9150	1122-99
9151	AMD	AM9151-40	1352-57
		AM9151-50	1352-83
		AM9151-50M	1352-84
		AM9151-60	1353-5
		AM9151-60M	1353-6
	GIM	AY5-9151A	1193-66
		AY5-9151B	1193-67
	National	HS9151	1230-19
	TriQuint	TQ9151	653-3
			902-50
	UMC	UM9151-2	1194-42
9152	UMC	UM9152	1194-43
9153	SMC	CRT9153	883-38
	Toshiba	TC9153	1118-96
91531	UMC	UM91531	1193-116
9154	Toshiba	TC9154	1118-94
9155	Toshiba	TC9155	1118-85
9156	Toshiba	TC9156	1118-83
9158	Toshiba	TC9158	1120-100
9159	Toshiba	TC9159	1120-101
916	OKI	MSL916R	980-111
9160	Toshiba	TC9160	1201-8
	UMC	UM9160	1193-142
91603	UMC	T91603	1194-50
9161	TriQuint	TQ9161	652-72
	UMC	UM9161	1194-98
91610	UMC	UM91610	1193-105
91611	UMC	UM91611	1193-107
9162	Toshiba	TC9162	1003-1
9163	Toshiba	TC9163	1003-2
9164	Toshiba	TC9164	1003-3
91644	**Dense-Pac**	**DPD91644**	⋆ **2578**
			1337-55
9165	Toshiba	TC9165	1123-31
9166	Toshiba	TC9166	1123-33
9167	**Dense-Pac**	**DPS9167**	⋆ **2578**
			1371-4
	Toshiba	TC9167	1123-32
9168	CalDevices	CSB9168	4042-31
	Dense-Pac	**DPS9168**	⋆ **2578**
			1361-75
9169	Toshiba	TC9169	1116-72
	UMC	UM9169	1194-64
			¶ 431-32
		UM9169A	1199-46
			¶ 431-32
917	OKI	MSL917R	980-112
9170	Toshiba	TC9170	1116-71
9172	**STI**	**STEL9172**	⋆ **3207**
			4895-12
91764	IMI	G91764	4051-53
918	TeledyneS	TSC918	1140-21
9190	**LSI Logic**	**LMA9190**	⋆ **4269**
			4053-27
92	Heurikon	MLZ92A	4807-18
92C32	Western	WD92C32	884-92

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
92C81	SMC	FDC92C81	884-15
92H600			
	OKI	92H600	4058-5
92H800			
	OKI	92H800	4058-10
92L44	AMD	AM92L44B	1360-70
		AM92L44BM	1360-71
		AM92L44C	1360-52
		AM92L44CM	1360-53
		AM92L44D	1360-33
920	Intel	iRCX920	4846-15
			4863-30
	Plessey	ML920	1122-69
	ThirdDomain		
		VSC920	1127-4
	Thomson	TBA920	1125-41
9201	Exar	XR9201	945-41
	NEC	μPB9201	884-93
9205	CalDevices	CSB9205	4042-32
921	AnalogSys	MA921	1149-43
9210	**GE/Intersil**	**ISP9210**	⋆ **2660**
			604-94
		ISP9210M	⋆ **2660**
			604-95
921000	Sharp	LZ921000	4060-11
921024	**Dense-Pac**	**DPS921024**	⋆ **2578**
			1386-16
92110	Sharp	LZ92110	4060-12
9212	SMC	CRT9212	882-63
			¶ 416-2
	Stantel-STC	CRT9212H	882-64
92128	AMD	AM92128B	1391-45
		AM92128C	1391-34
		AM92128D	1391-23
		AM92128E	1391-8
921500	Sharp	LZ921500	4060-13
9216	**GE/Intersil**	**ISP9216**	⋆ **2661**
			604-54
		ISP9216M	⋆ **2661**
			604-55
	SMC	FDC9216	884-82
			¶ 415-7
			¶ 416-8
		FDC9216B	884-83
			¶ 415-7
			¶ 416-8
	Unicorn	UC9216	884-86
	Western	WD9216-01	884-89
921600	Sharp	LZ921600	4060-14
9218	AMD	AM9218B	1389-43
		AM9218C	1389-39
922	Plessey	ML922	1122-70
	Teltone	M922	1193-53
9220	LSI Logic	LL9220	4052-47
9222	SGS	L9222	1006-133
922200	Sharp	LZ922200	4060-15
9223	SMC	HDC9223	881-61
9224	SMC	HDC9224	887-12
			¶ 415-16
			¶ 416-13
9225	SMC	HDC9225	883-57
			1001-18
92256	AMD	AM92256C	1392-4
		AM92256D	1391-94
		AM92256E	1391-70
	Dense-Pac	**DPS92256**	⋆ **2578**
			1379-56
9226	SMC	HDC9226	887-8
9227	SMC	HDC9227	884-129
9229	SMC	FDC9229	884-94
			¶ 416-8
		FDC9229B	884-95
			¶ 416-8
923	Plessey	ML923	1122-71
92300	Sharp	LZ92300	4060-6
923000	Sharp	LZ923000	4060-16
9232	AMD	AM9232C	1389-70
		AM9232D	1389-61
9233	AMD	AM9233BC	1389-90
		AM9233BM	1389-91
		AM9233C	1389-71
		AM9233D	1389-62
9234	SMC	HDC9234	884-132
9236	SMC	FDC9236	884-84
9238	SMC	FDC9238	884-85
9239	**LSI Logic**	**LMA9239**	⋆ **4269**
			4053-28
	SMC	FDC9239	884-96
924	Plessey	ML924	1122-72
924000	Sharp	LZ924000	4060-17
92450	Sharp	LZ92450	4060-7
925	Cherry	CS925	1202-80
925000	Sharp	LZ925000	4060-18
9256	GIM	RO9256AB	1392-20
		RO9256AC	1392-5
		RO9256ACS	1392-16
		RO9256AD	1391-71
		RO9256ADS	1391-96
		RO9256B	1392-21
		RO9256C	1392-6
		RO9256CS	1332-64
			1392-17
		RO9256D	1391-72
		RO9256DS	1391-97
92560	**Harris**	**HM92560**	⋆ **2705**
			⋆ **2765**
			1377-68
			1380-50
		HM92560-5	⋆ **2705**
			⋆ **2765**
			1377-74
			1380-67
		HM92560-8	⋆ **2705**
			⋆ **2765**
			1377-69
			1378-4
			1380-51
			1380-72
		HM92560-9	⋆ **2705**
			⋆ **2765**
			1377-70
			1378-5
			1380-52
			1380-73
92564	**Dense-Pac**	**DPD92564**	⋆ **2578**
			1341-46
92570	**Harris**	**HM92570-5**	⋆ **2705**
			⋆ **2765**
			1378-10
			1380-78
		HM92570-8	⋆ **2705**
			⋆ **2765**
			1377-75
			1378-6
			1380-68
			1380-74
		HM92570-9	⋆ **2705**
			⋆ **2765**
			1378-1
			1378-7
			1380-69
			1380-75
9259	MicronTech	MT9259	1343-31
		MT9259-10	1343-27
		MT9259-12	1343-39
		MT9259-15	1343-50
		MT9259-8	1343-24
	NEC	μPD9259A	869-152
			871-101
			872-121
926	Plessey	ML926	1122-73
92600	Sharp	LZ92600	4060-8
92630	Sharp	LZ92630	4060-9
9264	AMD	AM9264B	1390-89
		AM9264C	1390-53
		AM9264D	1390-22
		AM9264E	1389-113
	Dense-Pac	**DPS9264**	⋆ **2578**
			1366-42
9265	AMD	AM9265B	1390-94
		AM9265C	1390-62
		AM9265D	1390-31
		AM9265E	1390-1
9266	SMC	FDC9266	884-52
			¶ 416-12
			¶ 416-8
9267	SMC	FDC9267	884-18
			¶ 416-12
9268	SMC	FDC9268	884-19
	STI	**STEL9268**	⋆ **3211**
			4895-15
927	Plessey	ML927	1122-74
	Teltone	M927	1199-78
9272	**STI**	**STEL9272**	⋆ **3208**
			4894-49
928	Plessey	ML928	1122-75
92800	Sharp	LZ92800	4060-10
9284	**LSI Logic**	**LMA9284**	⋆ **4268**
			4053-30
9287	**Dense-Pac**	**DPS9287**	⋆ **2578**
			1381-37
		DPX9287	1382-5
929	Plessey	ML929	1122-76
93	Heurikon	MLZ93	4807-19
93C46	**Hyundai**	**HY93C46**	⋆ **2770**
			1308-38
			¶ 445-24
		HY93C46M	⋆ **2770**
			1308-35
			¶ 445-24
	ICT	**93C46**	⋆ **2865**
			1308-39
93L00	Fairchild	93L00M	1393-31
93L28	Fairchild	93L28C	1395-75
		93L28M	1395-76
93L412	AMD	AM93L412	1350-12
		AM93L412AC	1349-84
		AM93L412AM	1350-5
		AM93L412M	1350-19
93L415	AMD	AM93L415A	1351-54
		AM93L415C	1351-61
		AM93L415M	1351-74
	Fairchild	93L415	1351-62
		93L415C	1351-63
		93L415M	1351-75
93L422	AMD	AM93L422	1350-14
		AM93L422AC	1350-1
		AM93L422AM	1350-6
		AM93L422M	1350-20
	Cypress	CY93L422AC	1349-75
		CY93L422AM	1350-4
		CY93L422C	1350-8
		CY93L422M	1350-18
	Fairchild	93L422AC	1349-80
		93L422AM	1350-7
		93L422C	1350-16
		93L422M	1350-21
93L425	AMD	AM93L425A	1351-57
		AM93L425M	1351-76
	Fairchild	93L425C	1351-66
		93L425M	1351-77
93S00	Fairchild	93S00C	682-116
			1393-101
		93S00M	682-117
			1393-102
93S10	Fairchild	93S10C	662-152
93S16	AMD	AM93S16C	660-157
		AM93S16M	660-158
	Fairchild	93S16C	660-161
93S41	Fairchild	93S41C	657-55
		93S41M	657-56
93S43	Fairchild	93S43C	657-107
			¶ 402-6
		93S43M	657-108
			¶ 402-6
93S46	Fairchild	93S46C	656-76
93S47	Fairchild	93S47C	656-77
		93S47M	656-78
93S48	AMD	AM93S48C	690-99
		AM93S48M	690-100
93S62	Fairchild	93S62C	690-70
		93S62M	690-71
93U422			
	Performance		
		P93U422-35C	1349-65
93Z341	Fairchild	93Z341AM	1319-28
93Z450	Fairchild	93Z450	1319-29
		93Z450A	1319-9
		93Z450C	1319-21
		93Z450M	1319-42
93Z451	Fairchild	93Z451	1319-31
		93Z451A	1319-12
		93Z451C	1319-22
		93Z451M	1319-43
93Z458	Fairchild	93Z458C	4075-54
		93Z458M	4076-30
93Z459	Fairchild	93Z459C	4075-55
			¶ 451-40
			¶ 451-46
			¶ 452-5
		93Z459M	4076-31
			¶ 451-40
			¶ 451-46
			¶ 452-5
93Z510	Fairchild	93Z510C	1321-53
		93Z510M	1322-24
93Z511	Fairchild	93Z511C	1321-56
		93Z511M	1322-26
93Z564	Fairchild	93Z564	1325-1
		93Z564AM	1325-48
		93Z564C	1325-49
		93Z564M	1325-69
93Z565	Fairchild	93Z565	1325-4
		93Z565AM	1325-50
		93Z565C	1325-51
		93Z565M	1325-70
93Z665	Fairchild	93Z665C	1324-31
		93Z665M	1325-2
93Z667	Fairchild	93Z667C-40	1324-43
		93Z667C-45	1325-5
		93Z667C-50	1325-19
		93Z667M	1325-3
		93Z667M-50	1325-20
		93Z667M-55	1325-55
930	AnalogSys	MD930	1001-41
	Burr-Brown	MPV930-48	4888-23
	Octagon	930	4878-26
	VTC	VJ930	4069-21
9300	**AD**	**AD9300J**	⋆ **2429**
			913-13
		AD9300S	⋆ **2429**
			913-14
	AMCC	Q9300J	4041-30
	Fairchild	9300C	682-93
			1393-67
		9300M	682-94
			1393-68
	National	DM9300	682-98
			1393-83
	Toshiba	TC9300-003A	1191-11
		TC9300-008	1191-12
9301	Fairchild	9301C	664-60
		9301M	664-61
	National	DM9301	664-65
9306	National	NMC9306	1308-2
	NEC	μPD9306	885-2
	SGS	M9306	1308-10
9307	National	NMC9307	1308-9
9308	Fairchild	9308C	676-130
		9308M	676-131
9309	Fairchild	9309C	679-56
		9309M	679-57
	National	DM9309	679-59
	Signetics	**N9309**	⋆ **3022**
			679-60
		S9309	679-61
931	ThirdDomain		
		VLC931	1109-32
9310	National	DM9310	662-118
	Signetics	**N9310**	⋆ **3022**
			662-119
9311	Fairchild	9311C	665-104
		9311M	665-105
	National	DM9311	665-109
9312	Fairchild	9312C	681-33
		9312M	681-34
	National	DM9312	681-36
9313	National	NMC9313B	1308-65
9314	Fairchild	9314C	676-169
		9314M	676-170
	National	NMC9314B	1309-38
	Signetics	S9314	676-171
9316	Fairchild	9316C	660-115
		9316M	660-116
	GIM	RO3-9316B	1389-45
		RO3-9316C	1389-42
	National	DM9316	660-120
	Signetics	**N9316**	⋆ **3022**
			660-121
9318	Fairchild	9318C	690-4
		9318M	690-5
	National	DM9318	690-9

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
9320	LSI Logic	LL9320	4053-2
		LRH9320	4052-34
9321	Fairchild	9321C	664-99
		9321M	664-100
9322	Fairchild	9322C	680-70
		9322M	680-71
	National	DM9322	680-75
	Signetics	**N9322**	⋆ **3022**
			680-77
9324	Fairchild	9324C	656-46
		9324M	656-47
	Signetics	**N9324**	⋆ **3022**
			656-57
9328	Fairchild	9328C	684-39
			1395-77
		9328M	684-40
			1395-78
9331	HybridSys	DAC9331-14	971-41
		DAC9331-16-4	974-32
		DAC9331-16-5	973-32
		DAC9331-16-6	973-18
	MicroPwr	MP9331-4	974-33
		MP9331-5	973-33
		MP9331-6	973-19
	Sharp	IR9331	1230-66
9334	Fairchild	9334C	677-43
			¶ 407-3
		9334M	677-44
			¶ 407-3
	National	DM9334	677-48
	Signetics	**N9334**	⋆ **3022**
			677-49
		S9334	677-50
9335	SGS	L9335	1001-25
9336	SGS	L9336	1001-26
9338	Fairchild	9338C	678-65
		9338M	678-66
	HybridSys	HS9338-0	969-30
			¶ 420-2
		HS9338-1	968-5
			¶ 420-2
		HS9338-2	963-40
			¶ 420-2
9340	Thomson	EF9340	887-1
			¶ 436-23
			¶ 436-24
			¶ 436-26
93403	Sharp	IR93403	1189-6
9341	Thomson	EF9341	887-2
			¶ 436-23
			¶ 436-24
			¶ 436-26
93412	AMD	AM93412	1349-73
		AM93412AC	1349-70
		AM93412AM	1349-85
		AM93412M	1350-13
93415	AMD	AM93415AC	1351-41
		AM93415AM	1351-48
		AM93415C	1351-55
		AM93415M	1351-68
	Fairchild	93415AC	1351-43
		93415C	1351-56
		93415M	1351-64
	Motorola	MCM93415M	1351-65
93419	Fujitsu	MBM93419	1348-51
9342	HybridSys	HS9342B	929-35
		HS9342C	929-36
93422	AMD	AM93422	1349-74
		AM93422AC	1349-71
		AM93422AM	1350-2
		AM93422M	1350-15
	Cypress	CY93422AC	1349-63
		CY93422AM	1349-79
		CY93422C	1349-76
		CY93422M	1350-9
	Fairchild	93422AC	1349-72
		93422AM	1349-81
		93422C	1350-3
		93422M	1350-17
93425	AMD	AM93425AC	1351-42
		AM93425AM	1351-49
		AM93425C	1351-58
		AM93425M	1351-69
	Fairchild	93425AC	1351-44
		93425AM	1351-60
		93425C	1351-59
			(Continued)

Base Number	Source	Device	Page-Line
93425	Fairchild		(Cont'd)
		93425M	1351-67
9345	National	NMC9345	1308-34
	Thomson	EF9345	884-126
9346	**Hyundai**	**HY9346**	⋆ **2770**
			1308-36
		HY9346M	⋆ **2770**
			1308-37
	National	NMC9346	1308-41
93479	Fairchild	93479AC	1351-3
		93479AM	1351-5
		93479C	1351-6
		93479M	1351-8
9348	Fairchild	9348C	690-97
		9348M	690-98
9349	HybridSys	DAC9349-12	964-31
		DAC9349-3D	971-31
935	Cherry	CS935	1202-81
9350	**LSI Logic**	**LMA9350**	⋆ **4268**
			4053-31
93500	IMI	G93500	4052-2
9353	OKI	MSM9353	978-85
9356	HybridSys	DAC9356	964-38
			¶ 420-2
	OKI	MSM9356	978-86
9358	Sharp	IR9358	1174-16
9362	OKI	MSL9362	1122-67
9363	OKI	MSL9363	1122-68
9364	Thomson	EF9364	882-80
			¶ 436-25
			¶ 442-32
9365	Thomson	EF9365	882-65
			¶ 411-25
			¶ 436-20
			¶ 436-8
9366	Thomson	EF9366	882-66
			¶ 411-25
			¶ 436-20
			¶ 448-10
9367	Thomson	EF9367	882-67
			¶ 411-25
			¶ 436-22
			¶ 436-8
9368	Fairchild	9368C	978-108
9369	Thomson	EF9369	868-90
937	Teltone	M937	1199-79
9370	Fairchild	9370C	978-106
9371	HybridSys	HS9371J	975-4
		HS9371K	973-34
		HS9371S	975-5
		HS9371T	973-35
9374	Fairchild	9374C	979-108
9377	HybridSys	DAC9377-16-4	969-31
		DAC9377-16-5	968-8
		DAC9377-16-6	973-23
		DAC9377-4D	971-32
	MicroPwr	MP9377-16-4	976-1
		MP9377-16-5	973-41
		MP9377-16-6	973-45
9378	HybridSys	HS9378C	975-33
		HS9378S	976-19
		HS9378T	975-34
9386	Fairchild	9386C	676-86
		9386M	676-87
	Signetics	**N9386**	⋆ **3022**
			676-90
		S9386	676-91
9393	HybridSys	HS9393B	957-21
		HS9393C	957-22
9394	HybridSys	HS9394B	957-23
		HS9394C	957-24
94C12	SMC	CRT94C12	883-46
940	ITT	TBA940	1125-25
	Thomson	TCA940	1117-121
9400	TeledyneS	9400	1230-113
			¶ 419-22
9401	AMD	AM9401C	1393-16
	Fairchild	9401C	688-24
			860-4
			982-9
		9401M	688-25
			860-5
			982-10
	Signetics	N9401	688-27
			860-6
			982-13
			(Continued)

Base Number	Source	Device	Page-Line
9401	Signetics		(Cont'd)
		S9401	860-7
			982-14
	TeledyneS	9401	1230-114
9402	TeledyneS	9402	1230-115
9403	Fairchild	9403AC	860-1
		9403AM	860-2
	HybridSys	HS9403B	930-20
		HS9403C	930-21
	Signetics	N9403	860-3
			1304-4
	TeledyneS	TSC9403	977-19
			1395-92
9404	HybridSys	HS9404J	935-3
		HS9404K	932-29
		HS9404SB	935-4
		HS9404TB	932-30
	TeledyneS	TSC9404	977-20
			1395-93
			¶ 422-29
			¶ 426-4
9408	HybridSys	HS9408J	935-1
		HS9408K	932-27
		HS9408SB	935-2
		HS9408TB	932-28
9410	HybridSys	HS9410J	934-37
			1220-102
		HS9410K	932-25
			1220-103
		HS9410S/B	1220-104
		HS9410SB	934-38
		HS9410T	1220-105
		HS9410TB	932-26
	Thomson	ETC9410	863-14
		ETL9410	863-21
9411	Thomson	ETC9411	863-15
		ETL9411	863-22
9413	Thomson	ETL9413	863-23
		ET9413	863-29
94132	GIM	RO94132	1324-11
		RO94132B	1389-94
		RO94132CS	1389-84
9414	Fairchild	F9414STC	888-102
		F9414STM	888-103
9420	LSI Logic	LL9420	4053-9
	S-MOS	SED9420CAC	884-80
		SED9420D	884-81
		STC9420C	1196-74
	Thomson	ETC9420	863-16
		ETL9420	863-24
		ET9420	863-30
9421	S-MOS	STC9421C	1196-37
	Thomson	ETC9421	863-17
		ETL9421	863-25
		ET9421	863-31
9422	S-MOS	STC9422C	1196-2
	Thomson	ETC9422	863-18
		ETL9422	863-26
		ET9422	863-32
9423	S-MOS	STC9423C	1196-35
9424	S-MOS	STC9424C	1195-102
9431	Sharp	IR9431	1228-116
9432	GIM	RO9432B	1389-95
		RO9432C	1389-74
		RO9432CS	1389-85
		RO9432D	1389-54
		RO9432DS	1389-63
9433	GIM	RO9433B	1389-96
		RO9433D	1389-55
		RO9433DS	1389-64
9440	Fairchild	F9440	845-20
		F9440M	878-103
9444	Thomson	ETC9444	863-19
		ETL9444	863-27
9445	Fairchild	F9445	845-21
	Thomson	ETC9445	863-20
		ETL9445	863-28
944516	Fairchild	F944516	878-104
944518	Fairchild	F944518	878-105
944520	Fairchild	F944520	878-106
944524	Fairchild	F944524	878-107
9450	Fairchild	F9450	645-102
			¶ 409-30
		F9450C	845-22
			¶ 409-30
			(Continued)

Base Number	Source	Device	Page-Line
9450	Fairchild		(Cont'd)
		F9450M	845-23
			¶ 409-30
9451	Fairchild	F9451	878-109
9452	Fairchild	F9452	878-108
94558	Sharp	IR94558	1179-28
94559	Sharp	IR94559	1179-36
9458	**GoldStar**	**GLC9458**	⋆ **2700**
			1168-6
9459	**GoldStar**	**GLC9459**	⋆ **2700**
			1168-7
9460	HybridSys	HS9460	888-21
9464	GIM	RO9464AB	1390-90
		RO9464ACS	1390-76
		RO9464B	1390-91
		RO9464C	1390-54
		RO9464CS	1390-77
947	Teltone	M947	1199-80
9471	S-MOS	STC9471	1195-109
9472	S-MOS	STC9472	1195-110
9474	HybridSys	HS9474J	934-33
			¶ 420-26
		HS9474K	932-23
			¶ 420-26
		HS9474S	934-34
			¶ 420-26
		HS9474SB	934-35
			¶ 420-26
		HS9474T	934-36
			¶ 420-26
		HS9474TB	932-24
			¶ 420-26
948	Teltone	M948	1199-81
9481	S-MOS	STC9481	1197-2
9482	S-MOS	STC9482	1197-1
949	Teltone	M949	1195-82
9490	S-MOS	STC9490C	1197-25
9491	TeledyneS	9491AM	1225-55
		9491B	1225-56
		9491BM	1225-57
9494	Sharp	IR9494	1217-66
9495	TeledyneS	TSC9495C	1226-50
9496	TeledyneS	TSC9496C	1227-8
95	GW-Three	SBC95-1	4825-7
		SBC95-2	4825-8
95C00	SMC	MSD95C00	886-45
95C02	SMC	MSD95C02	886-81
95C85	AMD	AM95C85	885-104
950	AppBusComp		
		FP950	4847-46
	Burr-Brown	MPV950D	4885-8
		MPV950S	4885-10
	Gennum	**LB950**	⋆ **2688**
			1104-27
	ITT	TBA950	1125-26
9500	**AD**	**AD9500**	⋆ **2445**
			646-84
	ITT	TDA9500	1125-28
9502	AD	AD9502	923-12
9503	ITT	TDA9503	1125-29
	National	HS9503	1224-66
	Xicor	**X9503**	⋆ **3395**
			1224-57
		X9503M	⋆ **3395**
			1224-58
95087	UMC	UM95087	1199-39
95089	UMC	UM95089	1199-40
951	Micro-Link	VME951	4891-18
9510	OKI	MSL9510R	980-113
9511	AMD	AM9511A	691-1
			888-50
			¶ 416-23
		AM9511A-1	870-99
			¶ 416-23
		AM9511A-4	888-51
			¶ 416-23
	OKI	MSL9511R	980-114
9512	AMD	AM9512	888-52
			¶ 416-23
		AM9512-1	888-53
			¶ 416-23
9513	AMD	AM9513A	889-62
	ITT	TDA9513	1125-30
9516	AMD	AM9516A-1	876-106
		AM9516A-4	876-107
		AM9516A-6	876-108
			(Continued)

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

Base Number	Source	Device	Page-Line
9516	AMD		(Cont'd)
		AM9516A-8	876-109
	HybridSys	HS9516-4	937-27
		HS9516-5	937-41
		HS9516-6	938-9
		HS9516B-4	938-10
		HS9516B-5	937-42
		HS9516B-6	937-28
		HS9516C-4	938-11
		HS9516C-5	937-43
		HS9516C-6	937-29
	Zilog	**Z9516-DTC**	*** 3418**
			878-47
95160	TI	SN95160B	685-161
9517	AMD	AM9517A	883-73
		AM9517A-1	883-71
		AM9517A-4	883-72
		AM9517A-5	871-88
9518	AMD	AM9518	871-7
	Zilog	**Z9518-DCP**	*** 3418**
			878-39
9519	AMD	AM9519A	882-18
952	Burr-Brown	MPV952	4883-27
	Datel	**DAS952R**	*** 2577**
			1220-130
	Plessey	SL952	1126-33
9520	AMD	AM9520	888-78
	HybridSys	HS9520B	929-1
		HS9520K	929-2
9521	**AD**	**AD9521**	*** 2442**
			1103-64
954	Burr-Brown	MPV954	4886-8
955	Siemens	TCA955	1004-15
9551	AMD	AM9551	871-70
	Siliconix	SI9551	977-63
9552	Siliconix	SI9552	977-54
9553	Siliconix	Si9553	977-59
		SI9553	977-60
9554	Siliconix	Si9554	977-50
		SI9554	977-51
9555	Siliconix	Si9555	981-59
9556	Siliconix	Si9556	981-60
9559	Siliconix	Si9559	978-90
	UMC	UM9559E	1199-41
		UM9559F	1199-42
956	Teltone	M956	1199-82
9560	Siliconix	Si9560	977-70
957	Teltone	M957	1199-83
9576	HybridSys	HS9576	937-23
9580	AMD	AM9580	999-22
9581	AMD	AM9581	999-13
9582	AMD	AM9582	886-68
	HybridSys	HS9582XJ	916-47
		HS9582XK	916-27
		HS9582XS	916-48
		HS9582XT	916-28
		HS9582YJ	916-46
		HS9582YK	916-26
		HS9582ZJ	916-42
9583	HybridSys	HS9583XJ	923-16
		HS9583XK	918-13
		HS9583XS	923-17
		HS9583XT	918-5
		HS9583YJ	923-8
9584	HybridSys	HS9584J	923-9
		HS9584K	918-6
		HS9584L	923-3
		HS9584Q	917-34
		HS9584S	923-10
		HS9584T	918-7
		HS9584U	923-4
		HS9584V	917-35
9588	HybridSys	HS9588	937-21
959	Teltone	M959	1193-62
96	LupiData	LD96IO	4876-49
	Zendex	ZX96/C-DOS	4721-3
		ZX96/CPM	4721-4
		ZX96/RMX	4721-5
96LS02	Fairchild	96LS02C	682-62
		96LS02M	682-63

Base Number	Source	Device	Page-Line
96LS488			
	Fairchild	96LS488DC	688-47
			884-118
			¶ 407-2
		96LS488DM	688-48
			884-119
			¶ 407-2
96L02	Fairchild	96L02C	682-54
		96L02M	682-55
96S02	Fairchild	96S02C	682-66
		96S02M	682-67
960	Burr-Brown	MPV960	4882-26
			4885-5
	VTC	VJ960	4069-24
9600	CreMicro	9600A	4805-30
	LSI Logic	LL9600	4053-14
		LRH9600	4052-35
	SMC	KR9600	871-57
			984-15
9601	Fairchild	9601C	682-4
		9601M	682-5
	National	DM9601	682-7
	Raytheon	RF9601	682-8
			688-76
	SMC	KR9601	871-58
			984-16
9602	Fairchild	9602C	682-56
		9602M	682-57
	National	DM9602	682-59
	Signetics	**N9602**	*** 3022**
			682-60
		S9602	682-61
	SMC	KR9602	871-59
			984-17
9609	CreMicro	9609	4805-31
9610	**AD**	**AD9610B**	*** 2440**
			1144-43
		AD9610T	*** 2440**
			1144-44
	CreMicro	9610	4847-36
96101	Fairchild	96101	665-157
		96101C	985-56
		96101M	985-57
96103	CreMicro	96103	4847-18
9611	**AD**	**AD9611**	*** 2441**
			1146-30
	CreMicro	9611	4847-26
9612	CreMicro	9612	4847-37
96122	**Dense-Pac**	**DPS96122**	*** 2580**
			1388-6
9616	CreMicro	9616A	4847-29
	Fairchild	µA9616HC	985-24
		µA9616HEC	985-25
		µA9616HM	985-26
96161	TI	SN96161B	685-162
96172	Fairchild	µA96172	989-19
96173	Fairchild	µA96173	992-41
96174	Fairchild	µA96174	989-20
96175	Fairchild	µA96175	992-42
96176	Fairchild	µA96176	998-3
96177	Fairchild	µA96177	998-1
96178	Fairchild	µA96178	998-2
9619	CreMicro	9619A	4805-26
962	Fairchild	µA962AM	688-4
9620	CreMicro	9620A	4847-17
	GoldStar	**GD9620**	*** 2694**
			889-9
9622	CreMicro	9622	4847-13
9623	CreMicro	9623	4847-39
9625	CreMicro	9625	4847-19
9633	CreMicro	9633	4847-35
9634	CreMicro	9634	4847-34
9636	Fairchild	µA9636AC	985-3
		µA9636AM	985-4
	TI	µA9636AC	985-5
		µ9636A	985-10
96364	Thomson	SFF96364	882-103
96366	Thomson	SFF96366	882-104
9637	Fairchild	µA9637AC	991-45
		µA9637AM	991-46
	TI	µA9637AC	991-47
9638	CreMicro	9638	4847-31
	Fairchild	µA9638C	988-29
		µA9638M	988-30
	TI	µA9638C	988-21

Base Number	Source	Device	Page-Line
9639	CreMicro	9639	4805-27
	Fairchild	µA9639A	991-40
		µA9639AC	991-51
	TI	µA9639C	985-2
9640	CreMicro	9640A	4847-45
	Fairchild	µA9640C	689-118
			995-54
		µA9640M	689-119
			995-49
9641	CreMicro	9641	4805-11
9642	CreMicro	9642	4847-20
9643	Fairchild	µA9643C	999-99
9645	Fairchild	µA9645C	1000-9
965	Siemens	TCA965	1230-117
9650	CreMicro	9650A	4847-12
	Fairchild	µA9650C	1220-20
	OKI	MSL9650	1302-8
9657	CreMicro	9657	4847-16
9659	CreMicro	9659	4846-42
966	OKI	MSL966	978-32
9661	CreMicro	9661	4847-44
9662	OKI	MSL9662	1302-18
9663	CreMicro	9663	4847-11
	OKI	MSL9663	1302-19
9664	OKI	MSL9664	1302-16
9665	Fairchild	µA9665C	1002-10
			1107-71
	OKI	MSL9665	1302-17
9666	Fairchild	µA9666C	1002-31
			1107-72
		µA9666M	1002-32
			1107-73
9667	Fairchild	µA9667C	1001-105
			1107-74
		µA9667M	1001-106
			1107-75
9668	Fairchild	µA9668C	1001-85
			1107-76
		µA9668M	1001-86
			1107-77
96685	**AD**	**AD96685**	*** 2446**
			1109-31
96687	**AD**	**AD96687**	*** 2446**
			1111-16
967	Teltone	M967	1199-84
96702	CreMicro	96702	4847-21
96703	CreMicro	96703	4847-15
9671	CreMicro	9671	4847-2
9674	Harris	HY9674J	934-14
968	Kontron	KDS968	4709-8
		KDS968-07	4709-9
9680	Plessey	SP9680	1112-58
9685	AD	AD9685	1110-27
	Plessey	SP9685	1112-16
			¶ 434-23
96850	**HoneywellSPT**		
		HCMP96850	*** 2997**
			*** 2999**
			1110-9
9687	AD	AD9687	1110-28
	Plessey	SP9687	1112-17
			¶ 434-23
96870	**HoneywellSPT**		
		HCMP96870	*** 2997**
			*** 2999**
			1111-43
969	Teltone	M969	1194-45
96900	**HoneywellSPT**		
		HCPM96900	*** 2997**
			1109-8
9697	OEI	9697	1168-40
97	AllenSys	FX97	4825-36
	PMI	**OP97A**	*** 2968**
			*** 2970**
			1138-1
		OP97E	*** 2968**
			*** 2970**
			1138-2
		OP97F	*** 2968**
			*** 2970**
			1140-23
97C09	National	AM97C09	911-8
970	**Intech**	**A970**	*** 2799**
			1221-9
	VTC	VJ970	4069-27

Base Number	Source	Device	Page-Line
9700	AD	AD9700	645-47
		AD9700B	942-5
		AD9700S	942-6
97000	**HoneywellSPT**		
		HDAC97000	*** 2997**
			645-51
			950-15
9701	**AD**	**AD9701S**	*** 2410**
			947-15
9702	AD	AD9702	940-6
	NCAI	9702	4858-15
9704	HybridSys	HS9704	1228-24
			¶ 423-17
9705	HybridSys	HS9705	1228-25
			¶ 423-17
9706	Fairchild	µA9706C	942-3
9708	Fairchild	µA9708	888-31
			1220-68
		µA9708C	925-22
		µA9708M	925-23
	TI	SPB9708	644-53
9709	National	AM9709C	911-9
971	**Intech**	**A971**	*** 2799**
			1221-10
9710	National	AM9710C	911-15
9711	National	AM9711C	910-74
9712	National	AM9712C	910-80
9714	HybridSys	HS9714K	1228-26
		HS9714TB	1228-27
9716	AMD	AM9716	1322-64
	HybridSys	HS9716K	1228-28
		HS9716TB	1228-29
972	**Intech**	**A972**	*** 2799**
			1221-11
9720	HybridSys	HS9720	1228-30
9725	Sharp	IR9725	1154-15
974	Datel	ADC974	938-12
9740	OEI	9740	1164-54
9754	Signetics	HEF9754V	977-7
9761	AMD	AM9761	870-36
9768	AD	AD9768	645-46
			942-4
	Plessey	SP9768	949-30
9770	Plessey	SP9770	645-63
			951-14
			955-35
9788	**Dense-Pac**	**DPS9788**	*** 2578**
			1372-51
9791	SMC	FDC9791	884-24
9793	SMC	FDC9793	884-25
9795	SMC	FDC9795	884-26
9797	SMC	FDC9797	884-27
98	Sophia	SA98	4717-21
98C10	National	NMC98C10	1308-60
		NMC98C10-1	1308-56
98C40	National	NMC98C40	1309-28
		NMC98C40-1	1309-9
98C64	National	NMC98C64-20	1312-23
		NMC98C64-25	1312-40
		NMC98C64-35	1312-82
980	Kontron	KDS980	4709-10
		KDS980-02	4709-11
		KOS980	4709-12
	Signetics	TCA980	1103-97
	Teltone	M980	1192-22
9808	OEI	9808	1149-34
981	SiliconSys	SS981	1192-21
	Teltone	M981	1192-23
9816	National	NMC9816A-20	1310-26
		NMC9816A-25	1310-50
		NMC9816A-35	1311-16
9817	National	NMC9817-20	1310-31
			¶ 444-27
			¶ 445-22
		NMC9817-25	1310-60
			¶ 444-27
			¶ 445-22
		NMC9817-35	1311-25
			¶ 444-27
			¶ 445-22
982	Teltone	M982	1192-24
9826	OEI	9826	1168-41
984	Teltone	M984	1192-16
9840	LSI Logic	LL9840	4053-18
985	Teltone	M985	4893-1

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number	Source	Device	Page-Line
9864	AMD	AM9864	1312-49
		AM9864-25	1312-50
		AM9864-25M	1312-51
		AM9864-3	1313-4
		AM9864-35M	1313-5
	GIM	RO9864AB	1390-95
		RO9864AC	1390-63
		RO9864ACS	1390-79
		RO9864AD	1390-3
		RO9864ADS	1390-33
		RO9864B	1390-96
		RO9864C	1390-64
		RO9864CS	1390-80
		RO9864D	1390-4
		RO9864DS	1390-34
987	Teltone	M987	4893-2
988	Teltone	M988	1199-94
989	Teltone	M989	4893-3
99C68	AMD	AM99C68-35	1362-66
		AM99C68-45	1363-69
		AM99C68-45M	1363-70
		AM99C68-55	1364-49
		AM99C68-55M	1364-50
		AM99C68-70	1365-6
		AM99C68-70M	1365-7
99C88	AMD	AM99C88-10	1368-28
		AM99C88-10M	1368-29
		AM99C88-12	1368-68
		AM99C88-12M	1368-69
		AM99C88-15	1369-29
		AM99C88-15M	1369-30
		AM99C88-20M	1369-79
		AM99C88-70	1367-67
990	Burr-Brown	MPV990	4891-28
	Telefunken	TBA990	1124-86
	TI	TM990/100MB	4831-21
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/101MB	4831-22
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/102	4833-32
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/201	4879-43
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/202	4879-42
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/203A	4879-44
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/303B	4879-30
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/304	4879-41
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/307	4880-1
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/308	4880-3
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/309	4879-36
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/310	4879-38
			¶ 418-1
			¶ 418-26
			¶ 418-30

(Continued)

Base Number	Source	Device	Page-Line
990	TI		(Cont'd)
		TM990/311	4879-39
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/314	4879-31
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/317	4880-2
			¶ 418-1
			¶ 418-26
			¶ 418-30
		TM990/959	4879-37
			¶ 418-1
			¶ 418-26
			¶ 418-30
9900	TI	TMS9900	877-42
			¶ 416-19
9901	RIFA	RM9901	1194-53
	TI	SPB9901	880-12
		TMS9901	877-62
9902	TI	TMS9902A	877-48
9903	TI	TMS9903	877-64
9904	TI	TIM9904	877-49
		TMS9904A	877-65
9905	TI	TIM9905	877-52
9906	OEI	9906	1131-39
			1136-14
			1166-5
	TI	TIM9906	877-47
9907	TI	TIM9907	877-58
9908	TI	TIM9908	877-61
991	Teltone	M991	1192-25
9910	OEI	9910	1102-55
			1128-39
9911	OEI	9911	1102-56
			1128-31
9914	OEI	AH9914	1131-14
			1169-1
		9914A	1130-124
			1131-15
			1136-30
			1169-3
	TI	**SMJ9914A**	⋆ **3222**
			877-55
		TMS9914A	877-56
	Western	WD9914	884-117
9915	OEI	9915	1111-5
9916	OEI	9916	1131-38
			1136-27
			1169-2
9918	OEI	9918	1130-125
			1136-28
9927	TI	TMS9927	877-43
993	Teltone	M993	1198-133
9937	TI	TMS9937	877-44
99531	TI	TCM99531	1197-65
		TMS99531	877-63
99532	TI	TMS99532A	1195-96
9963	OEI	9963	1102-52
			1128-10
99650	TI	TMS99650	877-57
9966	TI	SBP9966	880-11
			¶ 409-28
9981	TI	TMS9981	877-41
9989	TI	SBP9989	843-34
			880-10
			¶ 409-28
			¶ 412-3
9995	TI	TM9995	877-40

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number/Device	Source	Page-Line
ACIA-B	Matrix	4870-20
ACQ	AdvMicroSys	4872-38
AD/AM-824	Analogic	936-46
AD/AM-825	Analogic	937-12
AD/AM-826	Analogic	937-18
AD/AM-834	Analogic	937-1
AD/AM-835	Analogic	937-13
ADDA-1	Force	4888-27
ADDGEN-1	Datacube	4884-13
ADI	Matrix	4876-12
ADSHC-85	AD	1227-112
ADSHC-85E	AD	1227-113
ADSP-2100	AD	845-11
ADV-CMOS	CMD Micro	4083-28
AITG	KSystems	4856-20
		4868-13
AITG-PC	KSystems	4851-23
AITG-U	KSystems	4880-31
ALAN-1	GW-Three	4870-28
ALPHAMAP	Alphatron	4082-5
AMSSeries	Siemens	4809-9
Analyzer	Interactive	4892-6
	SilControls	4892-7
AOAD-82864	IndComp	4893-51
AOELI-8	IndComp	4893-39
AOISO-32	IndComp	4893-49
AOISO-320	IndComp	4893-50
AOLLI-8	IndComp	4893-45
AOSSR-8	IndComp	4895-19
AOUT-1	VersaLogic	4873-13
APM	PEP-Modular	4852-18
ARCNET-PC100	SMC	4847-51
ARCNET-PC200	SMC	4847-52
ARCNET-PC300	SMC	4847-50
ARCNET-S100	SMC	4868-22
ASBC-65-64	AppBusComp	4805-14
ASBC-65-8	AppBusComp	4805-15
ASCU-1	Force	4881-25
ASCU-2	Force	4882-20
ATCARD	Sigma Info	4827-6
ATTGSTD	KSystems	4879-5
ATTGVME	KSystems	4892-1
AU Library	Fujitsu	4083-4
AV Library	Fujitsu	4083-5
BASEboard	Interphase	4835-40
BHC Library	Barvon	4082-10
		4082-26
BHN Library	Barvon	4082-11
BiTURBO	Alloy	4851-9
BK	PEP-Modular	4852-5
BMUT	Astro	4863-20
BSTD	Astro	4878-14
BVME	Astro	4891-36
CARDINAL-01	SMC	4893-35
CARDINAL-02	SMC	4846-22
CARDINAL-03	SMC	4893-36
CBD	Gould	4083-18
CBXFDC	Comark	4854-6
CCB	Gould	4083-19
		4083-24
		4083-26
CCD	Gould	4083-22
CCF	Gould	4083-21
		4083-25
CCI	Gould	4083-27
CDI-Combo	CompDyn	4878-19
CDX-A/D-816	CompDyn	4854-17
CDX-MEM/CLOCK	CompDyn	4855-30
CDX-SAF/MOD	CompDyn	4854-1
CELLMOS	Marconi	4084-24
		4084-25
CELLSOS	Marconi	4084-26
		4084-27
CEU	PEP-Modular	4852-11
CFIO-20	Datricon	4876-23
CHMOS-1 Library	Intel	4084-18
CI-QBUS-EDC	Chrislin	4867-31
CI-RT	Chrislin	4850-31
CI-VMEmory	Chrislin	4888-32
CIPMI-EDC	Chrislin	4861-43
CLIPPER	Fairchild	853-20
CLONE/CAGE	MicroSys	4819-19
CMEM-32K	DUAL	4869-14
CMOS	AdvLinear	4082-4
	Calmos	4082-19
	ICDC	4084-7

(Continued)

Base Number/Device	Source	Page-Line
CMOS		(Cont'd)
	Mitsubishi	4085-8
		4085-9
	Plessey	4085-19
		4085-20
	TLSI	4086-24
	VMI	4087-5
		4087-6
CMOS II	TLSI	4086-23
CMOS II-DM	TLSI	4086-21
CMOS Library	Calmos	4082-20
		4082-21
	Fujitsu	4083-3
	GE/Intersil	4083-7
	IntCirSys	***4256**
		4084-10
		4084-11
		4084-12
		4084-13
		4084-15
		4084-17
		4084-8
	IMI	4084-19
	Sierra	4086-1
		4086-3
	SiliconSys	4086-11
	VLSI Tech	4087-8
		4087-9
CMOS LIBRARY	IntCirSys	4084-9
CMOS-CPU	Intelicom	4813-33
CMOS-DP	TLSI	4086-22
CMOS-Z80/800	Intelicom	4879-27
CMOS-32K	Intelicom	4877-23
CMOS-64K	Intelicom	4877-17
CMOS-85/800	Intelicom	4879-29
CMOSII Library	TLSI	4086-20
CMOSPIO	Intelicom	4874-43
CMOSSIO	Intelicom	4875-14
Color Card	Hercules	4849-5
Color Card/NP	Hercules	4849-15
Compile	Unicorn	9-3
COMPILE	Unicorn	4086-31
		4086-32
		4086-33
		4087-1
COMTROL	CompModules	4811-19
Control-It-All	Lomas	4868-27
CPS-MS	InterconMicro	4833-5
CPS-PC	InterconMicro	4827-4
CPS-QPC	InterconMicro	4805-34
CPU/MMU	Sys Datar	4821-27
CRC	Matrix	4877-11
CRT-VDP	Datricon	4872-42
CSM-B	Microbar	4865-13
Customation II	SMC	4086-15
Customation III	SMC	4086-14
DACHFBMC	Datel	944-13
DACHK	MicroNet	963-35
DACHK-12	**Intech**	***2799**
		962-24
DAM	PEP-Modular	4852-3
DCS/IWW/8B	DistComp	4809-22
DCSICB/86	DistComp	4829-6
DCSIWW/88	DistComp	4809-15
DIGIMAX	Datacube	4883-18
Digitalker	National	889-57
DIO	PEP-Modular	4851-36
Diskstor M-1	Comark	4703-8
Disktor M-2	Comark	4703-9
Disktor M-3	Comark	4703-10
Disktor M-4	Comark	4703-11
Disktor M-6	Comark	4703-12
DLM CMOS	Gould	4083-23
DMEM-256KP	DUAL	4869-13
DNXRAM	Clearpoint	4894-34
DRAM-E3	Force	4889-1
DRAM-E4	Force	4888-48
DRAM-1	Force	4888-39
DRAM-2	Force	4889-2
DRAM-256	CompDyn	4878-5
DSAC	Matrix	4870-22
DSIO	Thomson	4887-38
DSPXXX	Matrix	4870-14
DVME-660	Datel	4888-28
ECIMCA	ECISemi	4065-46
ECIMCB	ECISemi	4065-47

Base Number/Device	Source	Page-Line
ECIMCC	ECISemi	4065-48
ECIMCD	ECISemi	4065-49
ECX	MicroSys	4811-18
EDSC	ILC-DDC	1221-32
EiCOMPuMOS	DiversTech	4705-3
EM Series	AppMicroSys	4703-3
EM-SERIES	AppMicroSys	4703-2
EMEM-1MB	DUAL	4869-12
EMUNET-1	Emulogic	4705-6
EMUNET-2	Emulogic	4705-7
EPL	VLSI Tech	4080-4
EPROM	DUAL	4869-9
ERX-SERIES	ZAX	4719-25
ES Series	AppMicroSys	4703-5
ES-SERIES	AppMicroSys	4703-4
Euclid	Datacube	4884-8
EXOS-202	Excelan	4882-4
EXPANSION/186	Ampro	4870-4
EZ-PRO	**AMA**	***4751**
		4703-1
FACT	Fairchild	4082-30
FDC	PEP-Modular	4851-33
FEATUREMAX	Datacube	4884-27
FGZ	PEP-Modular	4851-31
FLJ-R	Datel	1219-10
FLJ-VB	Datel	1219-16
FLJ-VH	Datel	1219-17
FLJ-VL	Datel	1219-18
FLJ-VR	Datel	1219-13
Formulator Mark III	Fairchild	4705-8
FPMI	KSystems	4856-16
FRAMESTORE	Datacube	4884-16
GME	PEP-Modular	4851-30
GPIB-PC/CONV	NationalInst	4851-19
GPIB-RTPC	NationalInst	4851-20
GPIB-SE	NationalInst	4846-6
GPIB-100	RLCEnterprise	4878-20
GPIB-961P	NationalInst	4879-18
GPM	PEP-Modular	4851-32
Graphics Card	Hercules	4849-18
Graphics Plus	Hercules	4849-13
HAZITALL	Lomas	4869-18
HCMOS Library	Hughes	4084-5
HD/CTC	Teletek	4868-24
High Voltage	Micro-Rel	4085-3
		4085-4
HMOS Library	VLSI Tech	4087-10
		4087-11
HMS	Harris	4084-4
HMSDC-8700	ILC-DDC	1227-51
HPIO-64	CompDyn	4874-42
HPS	Systech	4865-2
		4887-21
HRCDX-14	ILC-DDC	1227-52
HSCDLMRH	Harris	4083-30
HSCDX-14	ILC-DDC	1227-56
HSCXXXRH	**Harris**	***2721**
		4084-2
HSDXXXRH	**Harris**	***2721**
		4084-1
HXCDX-14	ILC-DDC	1227-67
I/O A +	AppBusComp	4850-6
ICD-SERIES	ZAX	4721-1
ICE MPUS	WDC	4719-21
ICE-MPUS	WDC	4719-20
IceboxA	RELMS	4715-13
IceboxT	RELMS	4717-1
ICO-Cell	IC Options	4084-6
IDAM	Golden	4803-20
IDETIX	MicronTech	4805-37
IFC	PEP-Modular	4852-13
IIO	PEP-Modular	4852-8
Impel Library	IMP	4084-20
		4084-21
		4084-22
InColor Card	Hercules	4849-10
IntellecIII	Intel	4709-2
INTER	Signetics	4086-10
		4086-9
InterceptJr	GE/Intersil	4825-33
INTERCHIP A	Interconics	4051-22
INTERCHIP B	Interconics	4051-23
INTERCHIP C	Interconics	4051-24
INTERCHIP D	Interconics	4051-25
INTERCHIP E	Interconics	4051-27
INTERCHIP F	Interconics	4051-28

Base Number/Device	Source	Page-Line
INTERPOLATOR	Datacube	4884-30
IOSP	DUAL	4886-36
ipc-DISK-0	Vesta	4871-14
ipc-DISK-1	Vesta	4870-36
iPDS	Intel	4709-1
iSBC MEM/601	Intel	4865-12
iSBCCSM/001	Intel	4864-21
iSBCLNK/001	Intel	4864-24
iSBCMEM/310	Intel	4865-7
iSBCMEM/312	Intel	4865-6
iSBCMEM/320	Intel	4865-8
iSBCMEM/340	Intel	4865-9
ISL	Signetics	4086-8
JMEDM-2010	Technitrol	885-54
JMEDM-2020	Technitrol	885-55
JMEDM-2050	Technitrol	885-56
JMEDM-2100	Technitrol	885-57
JMEDM-2200	Technitrol	885-58
JMEDM-2250	Technitrol	885-59
JMEDM-2500	Technitrol	885-60
KDS	Kontron	4709-6
KPDS	Kontron	4709-13
KPI/KSE/KSA	Kontron	4711-1
LB	Gould	4083-13
LBR SERIES	AT&T	1224-67
LCD-III	Hitachi	805-28
LCD-IV	Hitachi	805-29
LDP-SCSI	Lomas	4869-17
Legacy II	Renaissance	4849-17
Legacy-FC	Renaissance	886-109
Legacy-VC	Renaissance	886-108
LF	Gould	4083-14
Liberty	Trimarchi	4868-5
Lightning One	Lomas	4833-27
Little Board/PLUS	Ampro	4813-27
Little Board/186	Ampro	4833-14
LittleBoard/PC	Ampro	4805-36
LK	Gould	4083-15
LL	Gould	4083-16
LO	Gould	4083-17
Low Voltage	Micro-Rel	4085-5
LPHDI	CIC	4082-27
LPM-A/D12	WinSystems	4872-30
LPM-CLK	WinSystems	4873-25
LPM-CLK-2	WinSystems	4873-26
LPM-CTC	WinSystems	4876-14
LPM-D/A8	WinSystems	4872-28
LPM-DSIO	WinSystems	4875-47
LPM-PIO	WinSystems	4874-44
LPM-UMC	WinSystems	4877-18
LSBX-AT/MOTHER	CompModules	4851-28
LSBX-SERIAL/4	CompModules	4857-10
		4864-6
LSBX-SUPER	CompModules	4863-32
		4865-19
LSBXCLOCK	CompModules	4863-34
		4865-21
LSBXMOTHER	CompModules	4863-25
		4865-17
LSBXSCSI	CompModules	4858-20
		4864-10
LSBXSUPER	CompModules	4863-31
		4865-18
MAC	Slicer	4831-25
Macrologic Bipolar	Fairchild	819-8
Macrologic CMOS	Fairchild	819-9
MADA	DSP-Systems	4859-1
MAGA A +	AppBusComp	4850-45
MALV Series	MasterLogic	4084-28
MASG Series	MasterLogic	4084-29
MAVERICK	Interphase	4848-18
MAX XFS	Datacube	4884-31
MAX-MUX	Datacube	4884-26
MAX-SCAN	Datacube	4884-17
MAX-SP	Datacube	4884-22
MAXGRAPH	Datacube	4884-23
MAXVISION	Datacube	4849-22
MC-GPIB	NationalInst	4851-21
MCA	Interdesign	4044-33
MCA Series	Motorola	1227-29
MCAseries	Motorola	1227-30
MCB	Interdesign	4044-34
MCC	Interdesign	4044-35
MCD	Interdesign	4044-41
MCE	Interdesign	4044-40
MCF	Interdesign	4044-46

Arranged alphanumerically from left to right.

© IC MASTER 1988

Base Number/Device	Source	Page-Line
MCG	Interdesign	4044-47
MCM-A/D12	WinSystems	4872-32
MCM-CLK	WinSystems	4878-33
		4878-34
MCM-CTC	WinSystems	4876-15
MCM-D/A	WinSystems	4876-13
MCM-D/A8	WinSystems	4872-11
MCM-DSI/O	WinSystems	4875-21
MCM-MODEM	WinSystems	4876-50
MCM-SPI/O	WinSystems	4875-26
MCMSBC	WinSystems	4815-5
MDRC	ILC-DDC	1221-29
MEGA-MEMORY	CompDyn	4877-6
MEGA-S-RAM	Lomas	4869-15
Megacell	Plessey	4085-18
MEGARAM	Lomas	4869-11
Metascope-PC	Metatek	4850-44
MFC	Vesta	4850-43
MHA	Interdesign	4045-30
MHB	Interdesign	4045-10
MHC	Interdesign	4045-11
MHD	Interdesign	4045-12
MHE	Interdesign	4045-13
MHF	Interdesign	4045-17
MHG	Interdesign	4045-18
MHH	Interdesign	4045-22
MIBII IIX	MicroInds	4865-10
MicroAT II	Faraday	4825-37
Micron Eye	MicronTech	4849-14
MicroPC	Faraday	4809-31
MicroPC/CMOS	Faraday	4809-32
MIMIC	Mimic	4846-2
MINIVIDEO	Datacube	4859-25
MLA	Interdesign	4067-42
MLAN-E	SBE	4839-8
MLB	Interdesign	4066-28
MLZVDC	Heurikon	4807-21
MMA	CustomArrays	4065-25
	Interdesign	4066-29
MMB	CustomArrays	4065-26
	Interdesign	4066-30
MMC	CustomArrays	4065-27
	Interdesign	4066-31
	Sys Datar	4877-38
MMD	CustomArrays	4065-28
	Interdesign	4066-33
MME	CustomArrays	4065-29
	Interdesign	4066-34
MMF	CustomArrays	4065-30
	Interdesign	4066-35
MMG	CustomArrays	4065-31
	Interdesign	4066-37
MMH	CustomArrays	4065-32
	Interdesign	4067-5
MMJ	CustomArrays	4065-33
	Interdesign	4067-2
MOA	Interdesign	4067-29
		¶ 449-32
		¶ 449-34
MOB	Interdesign	4067-36
		¶ 449-32
		¶ 449-34
MOC	Interdesign	4067-27
		¶ 449-34
MOD	Interdesign	4067-28
		¶ 449-34
Modular-Cell	**Waferscale**	⋆ **3376**
		4087-15
		4087-16
		4087-17
		4087-18
MOE	Interdesign	4067-31
		¶ 449-32
		¶ 449-34
MOF	Interdesign	4067-38
		¶ 449-32
		¶ 449-34
MOG	Interdesign	4067-34
		¶ 449-32
		¶ 449-34
MOH	Interdesign	4067-33
		¶ 449-32
		¶ 449-34
MOJ	Interdesign	4067-30
		¶ 449-32
		¶ 449-34

Base Number/Device	Source	Page-Line
MOL	Interdesign	4067-37
		¶ 449-32
		¶ 449-34
MOLE	National	4713-13
MOM	Interdesign	4067-40
		¶ 449-32
MON	Interdesign	4067-41
		¶ 449-32
MOP	Interdesign	4067-39
MOQ	Interdesign	4067-32
MOR	Interdesign	4067-35
MPD	Matrix	4874-25
MPREF-01	MicroPwr	1226-163
MPREF-02	MicroPwr	1226-20
MPREF-02A	MicroPwr	1226-21
MPREF-02C	MicroPwr	1226-22
MPREF-02D	MicroPwr	1226-23
MPREF-02F	MicroPwr	1226-24
MPREF-02H	MicroPwr	1226-25
MPREF-05	MicroPwr	1226-26
MPREF-10	MicroPwr	1226-164
MS-DR	Datricon	4877-19
MS-DSC	Matrix	4883-10
MS-PIM	Matrix	4886-42
MS-SSC	Matrix	4883-9
MSC	PEP-Modular	4851-34
MULTI-CELL2	VDA	4087-2
MULTI-CELL3	VDA	4087-3
MULTI-CELL5	VDA	4087-4
MULTI-SLAVE III	AdvDigital	4813-24
Multiboard-85	MicroDesigns	4803-26
MVME-321	Motorola	4881-34
MVMEXTCAC-1	Motorola	4888-35
MVMEXTCAC-2	Motorola	4888-36
MXD	PacificM	4861-39
MXK	PacificM	4861-38
NB-GPIB	NationalInst	4846-7
NCRGDSI	NCR	644-116
NDS-I	Intel	4709-4
NDS-II	Intel	4709-5
NET-BOARD	PC-Office	4847-54
NMOS	Plessey	4085-21
	TLSI	4086-26
NMOS Library	**IntCirSys**	⋆ **4256**
		4084-14
		4084-16
	TLSI	4086-25
Nth Engine	NthGraphics	4848-9
OCTAPORT	Lomas	4869-8
OPIO-1	Force	4888-29
PaCMOS II	GE/RCA	4085-23
PaCMOS IID	GE/RCA	4085-24
PACMOS III D	GE/RCA	4085-22
PaCMOS SOS	GE/RCA	4085-28
PaCMOS-C2L	GE/RCA	4085-26
PaCMOS-2	GE/RCA	4085-25
PC/VME	AjidaTech	4851-22
PC/VME-EXT	AjidaTech	4850-10
		4887-18
PC/VME-STD	AjidaTech	4849-31
		4885-48
pc Dial/Log	CMCIntl	4856-30
PC-PRO	Kern	4827-5
PC-SLAVE	AdvDigital	4827-7
PCG	Sys Datar	4870-19
PCHG-8	AdvMicroSys	4879-11
PCMC	AdvMicroSys	4871-9
PCVISIONplus	Imaging	4849-20
PDC	PEP-Modular	4852-1
PI	PEP-Modular	4852-9
PI/O-16	CompDyn	4874-12
PI/O-48	CompDyn	4874-13
PI/O-64	CompDyn	4874-14
PIA	Matrix	4870-18
PIC	Slicer	4831-26
PIM	Matrix	4874-45
PME CRR-2	PlesseyMicro	4888-50
PME DS/68-1	PlesseyMicro	4715-11
PME SCSI-1	PlesseyMicro	4882-37
PME SIO-3	PlesseyMicro	4887-14
PME SIO-4	PlesseyMicro	4887-15
PME-GDC-1	Plessey	4881-29
PME-SASI-1	Plessey	4886-25
PME-SIO-1	Plessey	4887-44
PME-WFC-1	Plessey	4886-24
PMECRR-1	Plessey	4888-38

Base Number/Device	Source	Page-Line
PMV CPU-1	PlesseyMicro	4845-17
PMV SME-1	PlesseyMicro	4888-49
PMV-CS/5	PlesseyMicro	4715-12
POACH/AT	ZyMOS	879-108
POACH/ATB	ZyMOS	879-109
POACH/ATF	ZyMOS	879-110
POACH/AT386	ZyMOS	881-40
POACH/XTB	ZyMOS	873-63
POACH/XT88	ZyMOS	873-62
POINT-1	DSP-Systems	4850-24
PPS	AjidaTech	4851-11
PRM	PEP-Modular	4852-21
PROTO/186	Ampro	4870-6
PROTOMAX	Datacube	4891-21
Proximity Board	Proximity	4849-34
PVM	PEP-Modular	4852-10
PYTHON/JR	GENROCO	4833-4
PYTHON/32T	GENROCO	4843-13
Q-LOGIC	TriQuint	653-2
		4086-30
QCOMM/6	CompModules	4831-31
RAMBO	Onset	1388-11
Rendition I	Renaissance	4848-8
Renegade	Renaissance	4849-7
Renegade-AC	Renaissance	886-106
Renegade-TC	Renaissance	886-112
RLC	Matrix	4875-2
ROI-STORE	Datacube	4884-21
RSBC-Z80/32	RELMS	4807-16
RSBC-Z80SP	RELMS	4807-28
RSU	Intelicom	4894-39
RT-SDA	RanchoTech	4869-45
RTI	AD	4873-18
RTRAM	Clearpoint	4850-38
RTX	Datricon	4879-15
S-A/D	Magnum	4893-14
S-CPU	Magnum	4894-40
S-MEM	Magnum	4894-29
S-PAR	Magnum	4893-47
S-SER	Magnum	4894-3
SAM	**Waferscale**	⋆ **3376**
		646-13
SASX	SBE	4856-1
SBC-I	Teletek	4813-22
SBC-II	Teletek	4813-21
SBSxCEN	SingleBoard	4870-3
SBSxFDC	SingleBoard	4854-4
SBSxSCSI	SingleBoard	4870-5
SBSxSCSI/CEN	SingleBoard	4855-31
SCC	Sys Datar	4875-25
SCM	DUAL	4883-2
SCSI	SBE	4870-8
SCSI/CLOCK	Ampro	4870-7
SCSI/IOP-STD	Ampro	4819-21
SCSI-CP	SBE	4870-12
SDU-I	Microbar	4711-22
SDU-II	Microbar	4711-23
SHMHUMC	Datel	1227-145
SHMHUMM	Datel	1227-146
SHMIC-1	**Datel**	⋆ **2577**
		1227-147
SHMIC-1M	Datel	1227-148
SHMLM-2	**Datel**	⋆ **2577**
		1227-149
SI/O-2	CompDyn	4875-23
SI/O-4	CompDyn	4875-24
SIBEC-II	BinaryTech	4807-10
SIBEC-51	BinaryTech	4811-13
SIBEC-51A	BinaryTech	4813-8
SIBEC-51B	BinaryTech	4813-6
SIBEC-51C	BinaryTech	4813-7
SiGateCMOS	AdvLinear	4082-3
Sigma	Datacube	4884-14
Slicer	Slicer	4831-27
SLM CMOS	Gould	4083-20
SLPCXAT	Slicer	4865-28
SMART A/D	CompDyn	4872-29
SNAP	Datacube	4884-28
SNXRAM	Clearpoint	4894-32
SoftCells	Gould	4083-12
SPARK-16	Fairchild	4831-29
SPICE	RELMS	4717-2
SRAM-1	Force	4888-46
SRAM-2	Force	4888-45
SRAM-64	CompDyn	4877-48
SSI SC-01	SiliconSys	1122-138

Base Number/Device	Source	Page-Line
Standard Cell	Calmos	4082-18
STARPLEX	National	4713-14
STARPLEXII	National	4713-15
STD DOS	Ziatech	4721-7
STD Multi-Dos	Ziatech	4721-8
STD PDS	Ziatech	4721-9
STD polyFORTH	Ziatech	4721-6
STD VRTX	Ziatech	4721-10
STEP-2	CompDyn	4871-24
STI-DIO	Solarcom	4874-52
STI-DIO-C	Solarcom	4874-53
STI-STD-CK	Solarcom	4878-23
STORAGER	Interphase	4858-21
SUPER PYTHON	GENROCO	4843-14
SUPER-SLAVE 16	AdvDigital	4833-9
SYSC	Western	887-29
Systemaster	Teletek	4813-20
SystemasterII	Teletek	4813-23
SystemCell	TI	4082-2
SYSTEMCELL	TI	4086-16
Targa I	CMCIntl	4856-31
Targa II	CMCIntl	4856-32
Targa III	CMCIntl	4856-33
TATTLETALE II	Onset	4803-17
Tattletale III	Onset	4803-18
Tattletale IV	Onset	4803-15
TBD	Thomson	4874-4
TCON	DUAL	4868-28
Text Card	Hercules	4849-6
Thunder Plus	Lomas	4833-28
Toolbox	WDC	4719-24
Transputer	Inmos	645-94
		881-51
TSGSM Series	Thomson	4086-19
TSM	PEP-Modular	4852-14
TSSB Series	Thomson	4086-17
TSSC Series	**Thomson**	⋆ **4326**
		4086-18
μCOM-4	NEC	809-5
μCOM-75	NEC	864-10
UDL	Orion	4715-3
UH Library	Fujitsu	4083-1
UHC/D-400	Sprague	665-138
		1006-137
UHC/D-402	Sprague	666-17
		1007-9
UHC/D-403	Sprague	666-18
		1007-10
UHC/D-406	Sprague	665-139
		1006-138
UHC/D-407	Sprague	666-1
		1006-145
UHC/D-408	Sprague	666-2
		1006-146
UHC/D-432	Sprague	666-10
		1007-3
UHC/D-433	Sprague	666-11
		1007-4
UHC/D-500	Sprague	665-140
		1006-139
UHC/D-502	Sprague	666-19
		1007-11
UHC/D-503	Sprague	666-20
		1007-12
UHC/D-506	Sprague	665-141
		1006-140
UHC/D-507	Sprague	666-3
		1006-147
UHC/D-508	Sprague	666-4
		1006-148
UHC/D-532	Sprague	666-12
		1007-5
UHC/D-533	Sprague	666-13
		1007-6
UMEM-64	CompDyn	4877-47
UniCELL	MCE	4085-1
UniCELL MGA	MCE	4085-2
UNIRAM	Clearpoint	4880-24
UPIO	Sys Datar	4874-49
V-Systems	Tektronix	4717-24
VAP-AP	DSP-Systems	4890-45
VAP-FS	DSP-Systems	4890-5
VBAT	PEP-Modular	4891-29
VBIRAM	Clearpoint	4881-11
VDIO	PEP-Modular	4883-8
VDMA	PEP-Modular	4883-11

¶ Indicates page number in Application Note Directory.
⋆ Indicates additional data is provided on the page noted.

© IC MASTER 1988

Base Number/Device	Source	Page-Line
VERSAmodule	Motorola	4835-1
VERSARAM	Clearpoint	4889-31
VESDI-32	DUAL	4843-16
VFIR	Datacube	4884-25
VGPM	PEP-Modular	4882-18
VH Library	Fujitsu	4083-2
VICCUR	KSystems	4856-4
		4866-32
VIOP	DUAL	4843-17
VME-HSMEM	IntSolutions	4889-4
VME-IMIO	IntSolutions	4886-21
VME-MEMI	IntSolutions	4889-6
VME-NOCI	Thomson	4887-24
VME-SBC	Thomson	4825-25
VME-SCSI	IntSolutions	4887-11
VMEM-D	PEP-Modular	4888-43
VMEM-S	PEP-Modular	4889-7
VMEM-S1	PEP-Modular	4888-33
VMEMEM-1	Alcyon	4889-28
VMEMEM-2	Alcyon	4889-37
VMERAM	Clearpoint	4889-19
VMIVME-DMA	VME-Microsys	4886-12
VMIVME-DMAL	VME-Microsys	4885-46
VMIVME-DMAL/485	VME-Microsys	4886-29
VMIVME-DR11W	VME-Microsys	4887-35
VMIVME-DR11W/485		
	VME-Microsys	4886-30
VMIVME-HSD	VME-Microsys	4886-32
VMIVME-MPCI	VME-Microsys	4891-5
VMIVME-RepeatL/485		
	VME-Microsys	4887-19
VMIVME-VMEnet	VME-Microsys	4881-22
VMIVME-1000	VME-Microsys	4885-32
VMIVME-1001	VME-Microsys	4885-33
VMIVME-1101	VME-Microsys	4885-36
VMIVME-1110	VME-Microsys	4885-37
VMIVME-1130	VME-Microsys	4887-47
VMIVME-1140	VME-Microsys	4887-2
VMIVME-1150	VME-Microsys	4885-38
VMIVME-1160	VME-Microsys	4885-35
VMIVME-1180	VME-Microsys	4885-34
VMIVME-2010	VME-Microsys	4884-40
VMIVME-2120	VME-Microsys	4885-40
VMIVME-2130	VME-Microsys	4885-41
VMIVME-2131	VME-Microsys	4885-42
VMIVME-2132	VME-Microsys	4885-43
VMIVME-2170	VME-Microsys	4885-39
VMIVME-2200	VME-Microsys	4887-4
VMIVME-2510	VME-Microsys	4885-30
VMIVME-2511	VME-Microsys	4885-44
VMIVME-2528	VME-Microsys	4885-45
VMIVME-2532	VME-Microsys	4885-29
VMIVME-3100	VME-Microsys	4885-22
VMIVME-3110	VME-Microsys	4883-37
VMIVME-5010	VME-Microsys	4886-4
VMIVME-5510	VME-Microsys	4887-28
VMIVME-6010	VME-Microsys	4886-11
VMSC	PEP-Modular	4882-28
VO-CGA	KSystems	4849-9
VO-Q	KSystems	4866-33
VOQ	KSystems	4856-5
VOSTD	KSystems	4872-43
VOTALKER AP	Votrax	4846-4
VOTALKER IB	Votrax	4851-12
VOTALKERAP	Votrax	4846-3
VOTALKERIB	Votrax	4846-1
VSBRAM	Clearpoint	4889-32
VSC Series	VLSI Tech	4087-7
VSCSI	DUAL	4883-4
VSCTR	Gordos	4875-6
VSIO	PEP-Modular	4887-34
VTTR-PC	KSystems	4851-24
VTTR-VMT	KSystems	4892-2
VUSC	DUAL	4843-29
WDC-SMD	DUAL	4868-26
WDLAN-H10	WDC	1198-47
WDSCS-XTS	Western	4870-9
WQDHV	Webster	4866-7
WQESD	Webster	4866-24
WQSMD	Webster	4866-25
WUESD	Webster	4880-11
WUSMD	Webster	4880-12
WW-DCODE	CompDyn	4878-29
XR-CMA	Exar	4044-1
XR-CMB	Exar	4044-4
XR-CMC	Exar	4044-5

Base Number/Device	Source	Page-Line
XR-CMD	Exar	4044-8
Zodiac	SGS	4085-31
Z80-DART	**Zilog**	* **3418**
		875-59
Z80-SIO	**Zilog**	* **3418**
		875-49
16-ASYMUX-A	Alcyon	4888-11
16A/D-A	Alcyon	4883-42
320/PC-20	Atlanta	4849-2
6-IBM/IO	Digitronics	4849-30
6-IBM/N	Digitronics	4849-43
6-SBX/IO	Digitronics	4860-27
6-SBX/N	Digitronics	4860-26
8-ASYMUX-A	Alcyon	4888-3

Arranged alphanumerically from left to right.

Last Page This Section. Next Page 301.

© IC MASTER 1988

PART NUMBER GUIDE

Each IC manufacturer has his own special method of identifying products, usually through a system of logos, device number prefixes and suffixes. This Part Number Guide is arranged alphabetically by manufacturer and describes each company's part number system. JAN nomenclature is also covered.

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

ADVANCED LINEAR DEVICES, INC.

ALD

ADVANCED LINEAR DEVICES, INC.

Package
- **P** PDIP
- **C** Size-Brazed Ceramic
- **Z** Dice in Waffle Pack
- **D** Cerdip
- **L** Leadless Chip Carrier
- **S** Small Outline
- **M** TO Metal Can

Number of Pins
- **A** 8
- **B** 14
- **C** 16
- **D** 18
- **E** 20
- **F** 22
- **G** 24
- **H** 28
- **I** 36
- **J** 40
- **K** 44
- **L** 48
- **M** 64
- **N** 68

Prefix	Device	Suffix
ALD	555	P A

Type — Package — Number of Pins

ADVANCED MICRO DEVICES

Note: Alternate source devices follow original manufacturer's part number and marking system.

Functional Group
- **21** MOS Memory
- **25** MSI
- **26** Computer Interface
- **27** Bipolar Memory & EPROM
- **28** MOS Memory
- **29** Bipolar Microprocessor
- **57/74** Same as 25
- **60** Analog, bipolar
- **61** Analog, bipolar
- **66** Analog, bipolar
- **79** Telecommunications
- **80** MOS Microprocessor
- **81** MOS and Bipolar Peripherals
- **82** MOS and Bipolar Peripherals
- **90** MOS
- **91** MOS RAM
- **92** MOS
- **93** Bipolar Logic, Memory
- **94** MOS
- **95** MOS Peripherals
- **1004** ECL Memory
- **104** ECL Memory
- **PAL** Program Logic
- **98** EEPROM
- **99** CMOS Memory

Type
- **L** Low Power
- **S** Schottky
- **LS** Low Power Schottky
- **(Blank)** Standard

Package
- **D** Hermetic DIP
- **P** Molded
- **F** Flat
- **X** Dice
- **L** Leadless chip-carrier

Temperature Range
- **C** Commercial
- **M** Military

Prefix	Device	Suffix
AM25	S 05	D M

Functional Group — Type — Device Number — Package — Temperature Range

ANALOG DEVICES

ANALOG DEVICES

- **AD** Analog Devices
- **HA** Hybrid A/D
- **HD** Hybrid D/A

General Information
- **A** Second Generation
- **DI** Dielectrically Isolated
- **Z** Operation on ±12V

Temperature Range
- **A,B,C** Industrial
- **J,K,L,M** Commercial
- **S,T,U** Military

Package
- **D** Hermetically Sealed DIP, ceramic or metal

Monolithic and Hybrid ICs

Prefix	Device	Suffix
AD	7516	AJN

General Information — Temperature — Package

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

ANALOG DEVICES (continued)

E Leadless chip carrier
F Ceramic Flatpack
G Pin grid array
H Metal can, hermetically sealed
M Metal can DIP, hermetically sealed—computer labs
N Plastic DIP
P Plastic leaded chip carrier
Q Cerdip
CHIPS Monolithic chip

Video Hybrid Products

Prefix	Device	Suffix
HAS	1015	EMB

ECL
Package
MIL Screening

AT&T

AT&T

BROOKTREE

Brooktree®

Family
100-199 D/A Converters
200-299 A/D Converters
300-399 Video Amplifiers
400-449 Color Lookup Tables
450-499 RAMDACS

Package
C Ceramic
P Plastic
M Metal
L Leadless chip carrier
G Pin grid array
F Flat package

Temperature Range and Grade
J Low grade
K Middle grade 0°C to 70°C
L High grade
A Low grade
B Middle grade −25°C to +85°C
C High grade
R Low grade
S Middle grade −55°C to +125°C
T High grade
EVM Evaluation module

Prefix	Device	Suffix		
Bt	100	K	C	M

Family
Temperature Range and Grade
Package
High-Rel Screening

BURR-BROWN

(Data Products Division)

BURR-BROWN®

General Information
A Improved Performance
L Latched
Z ±12V supply
HT Wide Temp Range

Temperature
J,K,L 0°C to +70°C
A,B,C −25°C to +85°C
R,S,T,V −55°C to +125°C

Package
M Metal Can, Hermetic
L Leadless Chip carrier
P Molded Plastic
H Ceramic, Hermetic
G General Ceramic

Screening
Q Enhanced Reliability
IQM MIL-STD 883 Screening Methods

Prefix	Device	Suffix
ADC	803	XXXX

General Information
Temperature Range
Package
Screening

(Analog Products Division)

Temperature Range
H,J,K,L 0°C to 70°C
A,B,C −25°C to +85°C
R,S,T,V −55°C to +125°C

Package
M Metal Can, Hermetic
P Plastic
G Ceramic
U Small Outline

Screening
Q Enhanced Reliability
IQM MIL-STD-883 Screening Methods

Prefix	Device	Suffix
OPA	111	XXX

Temperature Range
Package
Screening

(Military Products Division)

Temperature Range
V −55°C to +125°C
U −25°C to + 85°C
W −55°C to +125°C
(None)

Package
M Metal
L Chip Carrier

HiRel Designation
Mil 883/B (None)

Amplifiers/Multipliers ADC s/VFC s:

Prefix	Device	Suffix	
OPA	105	XM	/XXX

Temperature Range
Package
HiRel Designation

PART NUMBER GUIDE

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

BURR-BROWN (continued)

Temperature Range
- **V** −55°C to +125°C
- **U** −25°V to + 85°C
- (None)

Input Coding
- **CBI**
- **COB**

Output
- **V** Voltage
- **I** Current

HiRel Designation
- Mil 883/B (None)

DAC's:

Prefix	Device	Suffix
DAC	87	X-XXX-X/XXX

Range °C
Input Coding
Output
HiRel Designation

CALIFORNIA MICRO DEVICES MICROCIRCUITS DIVISION

Description
- **C** Special
- **G** Standard

Package
- **P** Plastic
- **C** Ceramic
- **D** Cerdip
- **E** Leaded Chip Carrier
- **L** Leadless Chip Carrier

Temperature Range
- **None** 0°C to +70°C
- **I** −40°C to +85°C

Prefix	Device	Suffix
G	65SCXXX	APL12

Description
Version
Package
Temperature Range
Speed/Power Variation

CHERRY SEMICONDUCTOR

CHERRY SEMICONDUCTOR

- **CS** Cherry Semiconductor
- **D** Diode Flip Chip
- **N** NPN Flip Chip
- **P** PNP Flip Chip

Package
- **O** Loose Component
- **D** Dual-In-Line
- **P** "Pill," Small Round Package
- **T** TO-Can
- **4** 4 Leads
- **8** 8 Leads

Circuit Style
- **B** National Dual Source
- **S** Signetics Dual Source

Prefix	Device	Suffix
CS	122	0D8
CS	555	B
D	823	

Package/Circuit

CIRCUIT TECHNOLOGY

CTI

Prefix	Device	Suffix
CT	3078	A

Company ID
Modification (if used)

CYBERNETIC MICRO SYSTEMS

- **CY** Chip
- **CYP** IC programmer
- **CYB** Development board
- **CYS** Interface software

(CMS may be used instead of logo)

- **no suffix** NMOS, Commercial
- **C** CMOS/ML Military 883B

Prefix	Device	Suffix
CY	600	C ML

IC
Data Acquisition
CMOS
Military

CYPRESS SEMICONDUCTOR

CYPRESS SEMICONDUCTOR

Processing
- **B** Hi Rel

Temperature Range
- **C** Commercial (0-70°C)
- **M** Military (−55 to +125°C)

Package
- **P** Plastic
- **D** Cerdip
- **G** Pin Grid Array
- **L** LCC
- **J** PLCC
- **S** SOIC
- **F** Flatpack
- **K** Cerpack
- **W** Windowed Cerdip
- **Q** Windowed LCC
- **T** Windowed pack
- **V** SOJ

Prefix	Device	Suffix
CY	7C 128	-45DMB

Speed Selection
Package
Temperature
Processing

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

DALLAS SEMICONDUCTOR

DS

Package
- **Q** Quad
- **S** SOIC
- **K** Application Kit

Voltage Range
- **AB** 5V ±5%
- **AD** 5V ±10%
- **Y** 5V ±10%

Temperature Range
- **Blank** 0°C to 70°C
- **IND** −40°C to 85°C
- **N** −40°C to 85°C

Prefix	Device	Suffix
DS	1225	AB-150

Voltage Range
Access Time (ns)

Prefix	Device	Suffix
DS	5000	32- 12

Memory Size (kBytes)
Performance (MHz)

Prefix	Device	Suffix
DS	1231	- 20

Hysteresis (mV)

Prefix	Device	Suffix
DS	1000	-500

Total Delay (ns)

Prefix	Device	Suffix
DS	1260	-250

Capacity (x10 mAHr)

DATEL

Family
- **ADC** A/D Converters
- **AM** Amplifiers
- **DAC** D/A Converters
- **DAS** Data Acquisition System
- **FLT** Filters
- **MV, MX** Multiplexer
- **SHM** Sample-Hold
- **VF** Voltage to Freq. Converters
- **VR** Voltage Reference
- **VI** Voltage Inverter
- **TT** Temperature Transducer

Package — Monolithic
- **1** 14 Pin DIP
- **2** TO-99

Seal — Hybrid
- **G** Epoxy
- **M** Hermetic

Temperature
- **C** 0°C to 70°C
- **M** −55°C to 125°C
- **R** −25°C to +85°C

Prefix	Device	Suffix
AM	490	2 A

Package
Selection

Prefix	Device	Suffix
DAC	HZ12B	G C

Seal
Temperature

EG & G RETICON

Type
- **A** Area
- **L** Linear
- **O** Circular
- **C** Evaluation Board

Family
- **D** Delay Lines
- **M** Modem Filter
- **F** Switched Capacitor Filter
- **U** Universal Active Filter
- **T** Transversal Filter
- **C** Board Level Product

Package
- **P** Plastic
- **C** Cerdip
- **B** Sidebrazed
- **L** Leadless Hermetic
- **S** PLCC
- **D** Dice
- **W** Wafer
- **E** Epoxy

Analog Devices

Prefix	Device	Suffix
R M	5604	A N P-011

Reticon (always R)
Family
Version
Analog, usually N
Package
Variations

Image Sensors

Prefix	Device	Suffix
R L	1234	C D E-567

Reticon
Type
Number of Elements
Series, e.g., A,C,H
Aperture Width
Window Configuration
Specific, e.g., standard, selected, etc.

©IC MASTER 1988

Manufacturer Device Identification	Part Number	
	Prefix	Suffix

ELANTEC

élantec

HIGH PERFORMANCE ANALOG INTEGRATED CIRCUITS

EL Linear
EP PNP Array
EN NPN Array

***Note:**
Alternate source devices follow original manufacturers part number and marking system, with an "E" added in front of the part number.

Package
J Ceramic DIP
F Flat pack
G TO-8 metal can
H TO-97 or TO-99 metal can
K TO-3
L Leadless chip carrier
N Plastic DIP
Die Tested in waffle pack

Performance
A Enhanced

Temperature Ranges
C −25°C to 85°C
None −55°C to 125°C

Screening
−8 Military
/E+ High-reliability commercial
/883B MIL-STD-883 Class B, Revision C processing

Example

Prefix	Device	Suffix
EL	2006	A C G/E+

Performance
Temperature Range
Package
Reliability Program

ELECTRONICS DESIGNS INCORPORATED

EDI

Original Numbering System (Products Introduced Before 1/87)

Family
4 DRAM
5 EEPROM
6 μPAK
7 UVEPROM
8 SRAM

Word Width
1 1 bit wide, etc.

Word Depth
01 1K
32 32K
128 128K

Technology
C CMOS, 4T
HC High Speed CMOS
CL Full CMOS, 6T
N Nibble Mode (DRAM

Speed
70 70 ns
10 100 ns

Power (8K × 8 family only)
Blank Standard Power
LP Low Power

Package
C Ceramic LCC on ceramic substrate
P Plastic CC on ceramic substrate
J Ceramic LCC
K Ceramic sidebrazed

Temperature Range
C Commercial
I Industrial
M Military

Screening
Blank Commercial
HR High Reliability

Original System (prior to 1/87)

Prefix	Device	Suffix
EDH	8 C 10 LP J M	

Prefix
Product Group
Technology
Speed
Power (8K × 8 family only)
Packaging
Temperature Range

New Numbering System (Products Introduced After 1/87)

Family
4 DRAM
5 EEPROM
6 μPAK
7 UVEPROM
8 SRAM
9 Special

Product Type
Blank Monolithic
M Module (Ceramic)
F Module (FR4)

Word Width
1 1 bit wide
8 8 bits wide

Word Depth
01 1K
32 32K
128 128K
1M 1M

Technology
B Bipolar
N NMOS
C CMOS, 4T STD Power
P CMOS, 4T Low Power
H CMOS, 6T STD Power
L CMOS, 6T Low Power

Speed
20 20 ns
200 200 ns

Package
P Monolithic/plastic DIP
C Monolithic/ceramic DIP
D CERDIP (600 mil)
T Thin DIP (400 mil)
L Leadless chip carrier
J Ceramic leaded chip carrier
Y Plastic leaded chip carrier
G PGA (Pin grid array)
F Flat Pack
U Die
S SIP
Z Vertical DIP
W SOIC
Q Skinny DIP (300 mil) Ceramic
R Skinny DIP (300 mil) Plastic

Temperature Range
C Commercial
I Industrial
B Military

New System (after 1/87)

Prefix	Device	Suffix
EDI	8 M C 100 C B	

Prefix
Product Group
Product Type
Technology
Speed
Packaging
Temperature Range

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

EXAR CORPORATION

XR Exar

Grade
- **C** Commercial
- **M** Military Ceramic package and −55°V to 125°C
- ( ) The absence of C or M Indicates a Commercial Part with Tighter Specs

Package
- **D** Dice
- **P** Plastic
- **N** Ceramic

Prefix	Device	Suffix
XR	567	CP

Grade
Package

EXEL

Exel Designator. All parts start with XL.
Temperature Range
- **S** 0°C to +70°C
- **E** −40°C to +85°C
- **A** −40°C to +105°C
- **M** −55°C to +125°C

Basic Part Number
Memory Products start with either 2 or 4.
Microperipheral Products start with 6 or 8.
'C' in the middle of the Part Number indicates a CMOS Device.

Note: Fields marked '*' are optional

Package
- **C** Cerdip
- **D** Plastic Leaded CC
- **L** Ceramic Leaded CC
- **P** Plastic DIP
- **P3** Skinny DIP (0.3")
- **S** Side Braze Ceramic DIP
- **U** Unpackaged (Die)

Speed*
Usually in nanoseconds for memories. See Data Sheet.

Special Features*
See Data Sheet.

For Example:
XLS2816AP-250/E2
2K×8 E^2PROM, 0°C to +70°C, Plastic, 250 nsec, 100 cycle endurance

Prefix	Device	Suffix
XL T	NNNNN P	-SSS/FFFFF

Temperature
Package Type
Speed
Special Features

FAIRCHILD

(Current)

(Current)

(Current)

(Discontinued)

(Discontinued)

A Schlumberger Company

Note: Alternate source devices follow original manufacturer's part number and marking systems.

- **F** Fairchild
- **SH** Hybrid
- **μA** Linear

Package
- **D** Ceramic DIP
- **E** Plastic Can
- **F** Flat Pack
- **H** Metal Can
- **J** Metal Power Package (TO-66)
- **K** Metal Power Package (TO-3)
- **P** Plastic DIP
- **R** Ceramic Mini DIP
- **S** Ceramic DIP (F6800 Family)
- **T** Mini DIP
- **U** Power Package (Molded, TO-220)
- **W** Plastic TO-92

Temperature—
Check Device Data for Specific Values
- **C** 0°C to 70°C/75°C (CMOS −40°C to 85°C)
- **L** MOS −55°C to 85°C Hybrid −20°C to 85°C
- **M** −55°C to 125°C

Prefix	Device	Suffix
μA	741	AHM

Electric Class (if used)
Package
Temperature

FERRANTI ELECTRIC

Package
- **E** Moulded DIL 0°C to +70°C
- **BE** Moulded DIP −40°C to +85°C
- **D** Moulded Small Outline (SO) 0°C to +70°C
- **J** Ceramic DIL −55°C to +125°C
- **BJ** Ceramic DIL −40°C to +85°C
- **CJ** Ceramic DIL 0°C to +70°C
- **AM** Ceramic Chip Carrier −55°C to +125°C
- **Q** PLCC 0°C to −70°C

Linearity Error
- **7** ±0.39%
- **8** ±0.19%
- **9** ±0.097%
- **10** ±0.049%

Tolerance
- **1** 1% **2** 2%

Temperature Range
- **A** −55°C to 125°C
- **AB** −55°C to 110°C
- **C** 0°C to 70°C

Data Converters

Prefix	Device	Suffix
ZN	432	CJ-10

Temperature Range
Linearity Error

Low Power References

Prefix	Device	Suffix
ZN REF	025	C 1

Temperature Range
Initial Tolerance

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

FUJITSU

(Current)

(Discontinued)

Prefix
- **MB** Micro Block
- **MBM** Micro Block Modified and Industry Standard Numbers

Suffix

Performance Variation
- **Y**
- **E**
- **H**
- **L** Low Power

Package
- **C** Ceramic
- **P** Plastic
- **Z** Cerdip

Example

Prefix	Device	Suffix
MB	8116	E P

Speed or Performance Variation

Package (Ordering purposes only)

GENERAL INSTRUMENT

GENERAL INSTRUMENT MICROELECTRONICS

Package
- **—** Plastic
- **J** Cerdip
- **D** Ceramic
- **L** PLCC (Plastic Leaded Chip Carrier)
- **K** LCC (Ceramic Leadless Chip Carrier)
- **KA** LCC-Thermally Unenhanced (Military only)
- **KB** LCC-Thermally Enhanced Grid Pattern (Military only)
- **S** Die in Waffle Pack
- **W** Die in Wafer Form

Screening
- **—** Commercial
- **R** MIL-STD-883 Method 5004, Class B

Temperature Range
- **—** 0° to +70°C
- **I** −40°C to +85°C
- **M** −55°C to +125°C

Access Time
- **—45** 45ns
- **—55** 55ns
- **—70** 70ns
- **—10** 100ns
- **—12** 120ns
- **—15** 150ns
- **—17** 170ns
- **—20** 200ns
- **—25** 250ns

Prefix	Device	Suffix
		XX X X/X

Access Time

Temperature Range

Screening

Package

GIGABIT LOGIC

GBL

Family
- **10G** PicoLogic
- **12G** NanoRam
- **16G** Analog and Interface
- **80G** ASIC
- **90G** Prototyping and Support

Package
- **C** C-Leaded Chip Carrier (40 I/O)
- **L** Leadless Chip Carrier (36 or 40 I/O)
- **F** Flat Package (36 I/O)
- **H** Hybrid
- **X** Unpackaged Die

Temperature Range
- **K** −40°C to 100°C
- **M** −55°C to 125°C

Prefix	Device	Suffix
XXG	XXXX	(X) - (B) C

Family

Temperature Range

Speed

Package

GOLDSTAR

GoldStar GOLD STAR CO.,LTD.

- **GS** Transistor
- **GL** Bipolar Linear IC
- **GLC** CMOS Linear IC
- **GM** MOS LSI
- **GD** Bipolar TTL, HC/HCT, Digital MST

Package
- **P** Plastic
- **C** Ceramic
- **E** CERDIP
- **FT** Flat
- **PL** LCC
- **SB** Side Braze
- **G** Pin Grid Array
- **S** Surface Mount
- **X** Dice

Temperature Range
- **M** Military
- **I** Industrial
- **C** Commercial

Prefix	Device	Suffix
GLC	555	P C

Type

Package

Temperature Range

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

GOULD INC. SEMICONDUCTOR DIVISION

GOULD Electronics

AMI Semiconductors
(Discontinued)

AMI
A Subsidiary of Gould Inc.
(Discontinued)

Family
S Standard

Package
P Plastic
D Cerdip
C Ceramic
L Leadless Chip Carrier

Pins/Package
8 Plastic
14 Plastic, Ceramic
16 Plastic, DIP and SOIC, Cerdip, Ceramic
18 Plastic, Cerdip, Ceramic
22 Plastic, Cerdip, Ceramic
24 Plastic, Cerdip, Ceramic
28 Plastic, DIP and SOIC, Cerdip, Ceramic
40 Plastic, Cerdip, Ceramic
48 Plastic, Ceramic
64 Plastic, Ceramic
20 Lead Chip Carrier
24 Lead Chip Carrier
28 Lead Chip Carrier
40 Lead Chip Carrier
44 Lead Chip Carrier—Plastic, Ceramic
48 Lead Chip Carrier
68 Lead Chip Carrier—Plastic, Ceramic, Pin Grid Array
84 Lead Chip Carrier—Plastic, Ceramic, Pin Grid Array
28 Lead Plastic Mini-Flat Package
44 Lead Plastic Mini-Flat Package
68 Lead Plastic Mini-Flat Package
100 Ceramic Pin Grid Array
124 Ceramic Pin Grid Array
144 Ceramic Pin Grid Array

Prefix	Device	Suffix
S	68A00	P
	5101L-1	C
	2559A	P

Version
Package Type

(Note: see latest Gould MOS PRODUCTS CATALOG)

PART NUMBER GUIDE

HARRIS SEMICONDUCTOR

Family
A Analog
C Communications
D Digital
I Interface
M Memory
PL Programmable Logic
S CICD
V High Voltage

Package
1 Ceramic DIP
1B Brazed Seal
2 TO-5
3 Epoxy DIP
4 Leadless Carriers
4P Plastic Leaded Chip Carrier
5 Ceramic Substrate
7 Mini DIP
9 Flat Pack
0 Chip Form

Temperature
1 −55°C to +200°C
2 −55°C to +125°C
4 −25°C to +85°C
5 0°C to +70°C
6 100% 25°C Probe (Dice Only)
7 Dash 7 Program, High Reliability −5 Temp, Range
8 Dash 8 Program; hi-rel processing with burn-in
9 −40°C to +85°C
9+ −40°C to +85°C with burn-in
RH Radiation Hardened
RRH Radiation Hardened with Severe Immunity
/883 −55°C to +125°C: MIL-STD-883 compliant processing

Prefix	Device	Suffix
HA1	2425	5

Family
Package
Temperature

80CXXX Family Product Number
Temperature Range
C Commercial (0°C to +70°C)
I Industrial (−40°C to +85°C)
M Military (−55°C to +125°C)
X −25°C

Package Type
P Plastic
D Ceramic DIP
X Chip Form
R Leadless Chip Carrier
S Plastic Leaded Chip Carrier
G Pin Grid Array

SPEED
Peripherals
5 5 MHz
Blank 8 MHz
CPU
Blank 5 MHz
2 8 MHz
CPU (80C286)
10 10 MHz
12 12.5 MHz
16 16 MHz
Hi-Rel Processing
B Dash 8 Program; hi-rel processing with burn-in
+ Industrial temperature grade with burn-in
/883 −55°C to +125°C: MIL-STD-883 compliant processing

Prefix	Device	Suffix
M D	82C59A—5	/B

Temperature
Package
Speed (MHz)
Hi-rel processing

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

HARRIS SEMICONDUCTOR (continued)

Harris Microwave (Gallium Arsenide) Products Family
- **A** Amplifiers (GaAs FETs)
- **D** Digital (GaAs)
- **F** Field Effect Transistors (GaAs)
- **K** Evaluation and Test Kits
- **M** Monolithic Microwave ICs (GaAs)
- **P** High Power FETs (GaAs)
- **R** RF/Analog MMICs

Package
- **1** 32-Pin Hermetic Metal Flat Pack
- **2** 16-Pin Hermetic Metal Flat Pack
- **3** 48-Pin Hermetic Metal Flat Pack

Prefix	Device	Suffix
HM D	12141	— I

Family

Package

HITACHI

HITACHI

Type
- **HA** Analog
- **HD** Digital
- **HM** Memory (RAM)
- **HN** Memory (ROM)

Package
- **P** Plastic DIP
- **C** Ceramic DIP
- **CP** Plastic Leaded Chip Carrier
- **FP** Flat Plastic Package
- **SO** Small Outline Package
- **PG** Pin Grid Array
- **S** Shrink Type Plastic DIP
- **CG** Glass Sealed Ceramic Leadless Chip Carrier
- **G** CERDIP

Prefix	Device	Suffix
HM	472114	A P

Model No.

Modification

Package

HOLT INTEGRATED CIRCUITS

HI Holt

Package
- **S** Ceramic Leadless Chip Carrier
- **L** Leaded Ceramic Chip Carrier
- **P** Plastic DIP
- **J** Plastic J-Lead (PLCC)

Processing
- **M** Military

Prefix	Device	Suffix
HI	8010	X X - XX

Package

Temperature Range

Version

HONEYWELL

- **H** Honeywell

Family
- **ADC** Analog to Digital Converter
- **DAC** Digital to Analog Converter
- **DAM** Digital to Analog Converter with Memory
- **CAL** Calibrator
- **CMP** Comparator

Electrical Grade
- **A, B, C** Increasing Grade
- **S** Single Grade

Temperature
- **M** −55°C to 125°C
- **I** −25°C to 85°C
- **C** 0 to 70°C

Package
- **J** Ceramic Side Brazed
- **D** Cerdip
- **C** Leadless Chip Carrier
- **G** Pin Grid Array
- **N** Plastic DIP
- **T** Plastic Quad
- **M** Hybrid Metal
- **H** Hybrid Ceramic
- **U** Die Only
- **L** Leaded Chip Carrier
- **S** Small Outline
- **X** Special Package

Options/Screening
- **+** Standard Burn-In
- **H** Standard Hi-Rel Screening
- **G** Special Electric

Prefix	Device	Suffix
H DAC	9700	S I D / ±

Honeywell

Family

Electrical Grade

Temperature Range

Package

Options/Screening

HUGHES AIRCRAFT

HUGHES AIRCRAFT COMPANY

Product Flow
- **HC** Commercial
- **HI** Industrial
- **HB** Class B
- **HM** Military

Package
- **P** Plastic
- **D** Ceramic
- **H** Dice
- **L** Leadless Chip Carrier
- **Y** Cerdip
- **Q** Quad Pack
- **F** Flat Pack

Prefix	Device	Suffix
HC	0438A	P

Package

HYBRID SYSTEMS

Hybrid Systems CORPORATION

Family
- **ADC94** Commercial Analog to Digital Converter
- **DAC3** Digital to Analog Converter
- **DAC93** Commercial Digital to Analog Converter
- **HS5** Analog to Digital Converter
- **R6** Precision Voltage Reference

Processing
- **C** Commercial Industrial Use
- **B** Per MIL-STD883B, Class B

Resolution
- **8** 8-Bits Binary
- **10** 10-Bits Binary
- **11** 11-Bits Binary
- **12** 12-Bits Binary

Prefix	Device	Suffix
DAC3	31	C-14

Processing

Resolution

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example
HYBRID SYSTEMS (continued)	**HS97** Sample/Hold **HS95** A/D Converter **HS93** D/A Converter	**14** 14-Bits Binary **16** 16-Bits Binary **18** 18-Bits Binary **2D** 2-Decade BCD **3D** 3-Decade BCD **4D** 4-Decade BCD	

ILC DATA DEVICE

DDC
ILC DATA DEVICE CORPORATION

Family
- **ADC** Analog to Digital
- **BUS** Data Bus Device
- **DAC** Digital to Analog
- **DDAC** Deglitched, Digital to Analog
- **DRC** Digital to Resolver
- **DSC** Digital to Synchro
- **HDSC** Hybrid Digital to Synchro or Resolver
- **HDP** Hybrid Data Processor
- **HMSDC** Hybrid Multiplexed Synchro to Digital
- **HSCT** Hybrid Solid State Control Transformer
- **HSDC** Hybrid Synchro to Digital
- **IDC** Inductosyn to Digital
- **MSDC** Multiplexed Synchro to Digital
- **PWR** Power
- **RDC** Resolver to Digital
- **SBA** Synchro Booster Amplifier
- **SDC** Synchro to Digital
- **SH** Sample and Hold
- **TD** Torque Driver
- **TH** Track and Hold

Converter Resolution
- **-6** 6-Bits
- **-8** 8-Bits
- **-10** 10-Bits
- **-11** 11-Bits
- **-12** 12-Bits
- **-14** 14-Bits
- **-16** 16-Bits

Temperature Range
- **1** −55°C to 125°C
- **2** −25°C to 85°C
- **3** 0°C to 70°C

Voltage Range (Synchro Converters Only)
- **-H** 90V at 400Hz
- **-M** 26V at 400 Hz
- **-L** 11.8V at 400 Hz
- **-6** 90V at 60Hz

Prefix	Device		Suffix
DAC	SL	1	883B

Prefix: DAC — Family
Device: SL — Temperature: 1
Suffix: 883B — MIL-STD-883 Level B Processing

INMOS

inmos®

Type
- **1** Static RAM
- **2** Dynamic RAM

Size (2^n) K
- **4** = 16K
- **5** = 32K
- **6** = 64K
- etc.....

Organization (2^n) Bits
- **0** = ×1
- **1** = ×2
- **2** = ×4
- etc.....

Option
- **0** Standard
- **I** Optional Function

Package
- **S** Ceramic DIP
- **K** Ceramic DIP, Solder Dipped
- **W** Ceramic LCC
- **N** Ceramic LCC, Solder Dipped
- **P** Plastic DIP

Speed
- **45** — 45ns Access Time
- **55** — 55ns Access Time
- **12** — 120ns Access Time
- etc.....

Screening
- **(Blank)** Commercial
- **M** MIL-883C
- **E** Extended Temperature
- **L** Low Power

Prefix	Device		Suffix	
IMS	1420		S	45 M

Prefix: IMS — Company
Device: 1420 — Type: 1; Size: 4; Organization: 2; Option: 0
Suffix: S — Package; 45 — Speed; M — Screening

INOVA

Family
- **S** Static RAM

Processing
- **C** Commercial
- **M** Hi Reliability
- **I** Industrial

Package
- **C** Ceramic Side Brazed

Prefix	Device		Suffix		
S	128K	8	-55	M	C

Prefix: S — Static Ram
Device: 128K — Number of Words: 128K; Bits per Word: 8
Suffix: -55 — Access/Cycle Time; M — Processing; C — Package

INTECH ADVANCED ANALOG

ADVANCED ANALOG
A Division of intech

©IC MASTER 1988

Manufacturer Device Identification	Part Number		
	Prefix	Suffix	Example

INTEGRATED DEVICE TECHNOLOGY

Integrated Device Technology, Inc.

Family
- **29** MSI Logic
- **39** Bit-Slice Microprocessor and MSI Logic
- **49** Bit-Slice Microprocessor and MSI Logic
- **54/74** MSI Logic
- **61** Static RAM
- **71** Static RAM (Proprietary)
- **72** Digital Signal Processing
- **7M/8M** Subsystems Modules (Hermetic)
- **7MP/8MP** Subsystems Modules (Plastic)

Power
- **L or LA** Low-Power
- **S or SA** Standard-Power

Package
- **P** Plastic DIP
- **TP** Plastic THINDIP
- **TD** THINDIP (CERDIP)
- **TC** THINDIP (Sidebraze)
- **D** CERDIP
- **C** Ceramic Sidebraze
- **XC** Ceramic Sidebraze Shrink-DIP
- **G** Pin Grid Array
- **SO** Plastic Small Outline IC
- **J** Plastic Leaded Chip Carrier
- **L** Leadless Chip Carrier
- **XL** Fine-Pitch Leadless Chip Carrier
- **ML** Medium-Pitch Leadless Chip Carrier
- **E** Cerpack
- **F** Flatpack
- **U** Die

Temperature Range
- **Blank** Commercial (0°C to 70°C)
- **B** Military (−55°C to 125°C, compliant to MIL-STD-883, Class B)

Prefix	Device	Suffix
IDT71	681 LA	35 C B

Power — Speed — Package — Temperature Range

INTEGRATED POWER SEMICONDUCTORS

INTEGRATED POWER SEMICONDUCTORS, LTD.

IPS

Family Description
- **D** Driver
- **M** Motor Control
- **P** Pulse Width Modulator
- **R** Regulator

Package
- **D** Small Outline Integrated Circuit (SOIC)
- **G** TO-220 Hermetic
- **H** TO-39 Metal Can
- **J** Ceramic DIP
- **K** TO-3 Metal Can
- **L** Side Brazed DIP & Batwing
- **N** Plastic DIP & Batwing
- **R** TO-66 Metal Can
- **T** TO-220 Molded
- **V** TO-218 Molded
- **W** Singe In-line Power Tab

Temperature Range
- **1** Military (−55°C to 125°C)
- **2** Industrial (−25°C to 85°C)
- **3** Commercial (0°C to 70°C)

Designator
- **LM** Second Source Devices
- **ULN** Second Source Devices
- **ULS** Second Source Devices
- **IP** Improved or Proprietary Devices

Screening
- **883B** MIL STD 883 Level B Rev C

Proprietary Device Marking

Prefix			Device		Suffix
IP	#	X	###	X	/883B

Device — Temperature Range — Family — Package — Screening

Alternate Source Device Marking

Prefix	Device			Suffix
XXX	####	X	X	/883B

Designator — Electrical — Package — Screening

INTEL

intel®

Description
- **M** Indicates Military Operating Temperature Range
- **I** Indicates Industrial Grade
- **J** Indicates a JAN qualified device, but is for internal identification purposes only. All JAN devices must be ordered by M38510 part number (Example: M38510/42001 BQB), and will be marked in accordance with MIL-M-38510 specifications.

Package Type
- **B** Hermetic Package, Type B
- **C** Hermetic Package, Type C
- **D** Hermetic Package, Type D
- **G** Hermetic Package, Pin Grid Array
- **I** Crystal Package
- **M** Metal Can Package
- **P** Plastic Package
- **R** Hermetic Package, Leadless Chip Carrier
- **X** Unpackaged Device

Examples:
- **D2147H1** High Speed 4096x1-Bit Static RAM (35ns, 180/30mA)
- **C8080A2** 8080A Microprocessor with 1.5 s cycle time, hermetic package Type C, commercial temperature range
- **MD8080A/B** 8080A Microprocessor, hermetic package Type D, military temperature range. MIL-STD-883 Level B processing*

*On military devices, B suffix indicates MIL-STD-883 Level B processing.

Prefix	Device	Suffix
M D	2114A	L—3

Description — Package — Power/Speed/Processing

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

INTERNATIONAL MICROCIRCUITS

Circuit Technology
- **4** Metal Gate CMOS, Single Metal
- **7** Silicon Gate CMOS, Single Metal
- **9** Silicon Gate CMOS, Double Metal
- **6** Silicon Gate CMOS, Double Metal

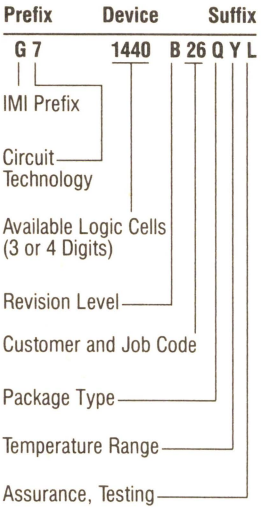
Revision Level—Serialized
- **A** First Design

Customer and Job Code—Serialized
- **00** Unassigned

Package Type
- **P** Plastic
- **Q** Cerdip
- **R** Chip Carrier
- **S** Special
- **T** No Package (Die)
- **U** Side Brazed
- **X** Prototype Part

Temperature Range
- **V** Special
- **W** 0°C to +70°C
- **X** Prototype Part
- **Y** −25°C to +85°C
- **Z** −55°C to +125°C

Assurance, Testing
- **K** Full Functional Test at 25°C
- **L** Special Test/Screen
- **M** MIL-STD-883B, 5004
- **X** Prototype



INTERSIL

(Current)

(Discontinued)

(Discontinued except for very small parts)

Prefix
- **AD** Analog Devices Alternate Source
- **D** Siliconix Driver/Level Translator IC Alternate Source
- **DG** Siliconix Analog Switch Alternate Source
- **DGM** Monolithic DG Analog Switch Replacement
- **ICL** Linear IC
- **ICM** Microperipheral IC
- **ICH** Hybrid IC
- **IM** Microcontroller and DSP IC
- **LH** National Semiconductor Hybrid Alternate Source
- **LM** National Semiconductor Linear Alternate Source
- **MM** National Semiconductor Analog Switch Alternate Source
- **NE** Signetics Alternate Source
- **SE** Signetics Alternate Source
- **G** Siliconix Analog Gate Alternate Source
- **LH** Analog Switch Family
- **ADC** National Semiconductor A/D Alternate Source
- **μA** Fairchild Linear Alternate Source

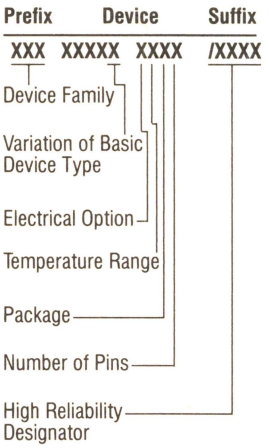
Package
- **A** TO-237
- **B** SOIC
- **C** TO-220
- **D** Ceramic dual-in-line
- **E** Small TO-8
- **F** Ceramic flat-pack
- **H** TO-66
- **I** 16 pin (.6 × .7 pin spacing) hermetic hybrid DIP
- **J** CERDIP dual-in-line
- **K** TO-3
- **L** Leadless ceramic
- **P** Plastic dual-in-line
- **S** TO-52
- **T** TO-5 type (also TO-78, TO-99, TO-100)
- **U** TO-72 type (also TO-18, TO-71)
- **V** TO-39
- **Z** TO-92
- **/W** Wafer
- **/D** Dice

Temperature Range
- **C** Commercial: 0°C to 70°C
- **I** Industrial: Either −25°C to 85°C or −40°C to 85°C (Specified on Datasheet)
- **M** Military: −55°C to +125°C

High Reliability Designator
- **JM38510/** MIL-M-38510 Device
- **/883B** MIL-STD-883B Screened Device
- **/HR** High-Reliability Device
- **/BR** Cost-Effective High-Reliability Device
- **/BI** Burn-in Only Process Flow

Number of Pins

A	8	**P**	20
B	10	**Q**	2
C	12	**R**	3
D	14	**S**	4
E	16	**T**	6
F	22	**U**	7
G	24	**V**	8 (0.230″ pin circle, isolated case)
H	42	**W**	10 (0.230″ pin circle, isolated case)
I	28	**Y**	8 (0.200″ pin circle, case to pin 4)
J	32	**Z**	10 (0.230″ pin circle, case to pin 5)
K	35		
L	40		
M	48		
N	18		



©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

JAN NOMENCLATURE

Prefix
J JAN
Qualified Device
M38510 Military Designation

Device
The "Slash" numbering signifies the specification and specifies the device type. See Military Parts Directory.
Note: The J or JAN prefix is very important. If it is not there it is not a JAN device.

Device Class
A Missiles and manned Spacecraft
B General Military
C Less Critical Military Applications

Case Outline
A 1/4″ × 1/4″ Flat Pack, 14-Pin
B 1/8″ × 1/4″ Flat Pack, 14-Pin
C 1/4″ × 3/4″ Dual-In-Line, 14-Pin
D 1/4″ × 3/8″ Flat Pack, 14-Pin
E 1/4″ × 3/4″ Dual-In-Line, 16-Pin
F 1/4″ × 3/8″ Flat Pack, 16-Pin
G 8-Lead Can
H 1/4″ × 1/4″ Flat Pack, 10-Lead
I 10-Lead Can
J 1/2″ × 1 1/4″ Dual-In-Line, 24-Pin
K 3/8″ × 1/2″ Flat Pack, 24-Pin
L 3/8″ × 1/2″ Flat Pack, 24-Pin
Z 1/4″ × 3/8″ Flat Pack, 24-Pin

Lead Finish
A Kovar or Alloy 42, with Hot Solder Dip
B Kovar or Alloy 42, with Bright Acid Tin Plate
C Kovar or Alloy 42, with Gold Plate

Prefix	Device	Suffix
JM38510	/XXXXX	BCB

Device Class
Case Outline
Lead Finish

LAMBDA

L Overvoltage regulator
LAS IC

LATTICE

Power
Blank Standard
L Low
Q 1/4 Power

Package
C Sizebrazed
D Cerdip
P Plastic
R Leadless Chip Carrier
J PLCC (J Lead)

Temperature
Blank 0°C to +70°C (75°C for GAL)
M −55°C to +125°C
I −25°C to +85°C

Burn-In
Blank No Burn-In
B Burned In

Mil Process
Blank No Mil Process
1883C 883C Process

Prefix	Device	Suffix
GAL	16V8	XX X X X X/883C

Speed
Power
Package
Temperature
Burn-In
MIL Process

©IC MASTER 1988

Manufacturer Device Identification | Part Number: Prefix | Part Number: Suffix | Example

LINEAR TECHNOLOGY CORPORATION

Description
- **LT** Linear Technology
- **LF, LH, LM** Alternate Source to NSC
- **OP** Alternate Source to PMI
- **SG** Alternate Source to Silicon General
- **UC** Alternate Source to Unitrode

Temperature
- **C** Commercial Range 0°C to 70°C
- **M** Military Range −55°C to +125°C

Package
- **D** Side brazed hermetic DIP
- **H** TO-5, TO-46 can
- **J** CerDIP
- **K** TO-3 (Steel)
- **N** Molded DIP
- **S** SOIC
- **P** 3 lead molded TO-247
- **T** 3, 5 lead molded TO-220
- **Z** 2, 3 lead molded TO-92

Prefix	Device	Suffix
LT	1001A	C H

Temperature Range
Package Type

MARCONI ELECTRONIC DEVICES INC.

Package
- **A** Pin Grid Array
- **C** Ceramic DIL
- **E** Epic
- **G** Cerdip
- **L** Leadless Chip Carrier
- **M** Module
- **N** Naked Die
- **P** Plastic DIL
- **Q** Quad Plastic J-Lead
- **R** Quad Cerpack J-Lead
- **S** SO Plastic
- **X** Special

Temperature Range
- **A** Special
- **B** 0 to 70°C
- **C** −55 to +125°C
- **F** −40 to +85°C

Screening & Inspection
- **A** BS/32
- **B** Mil Std-883C Class B
- **G** Commercial Hermetic
- **L** Commercial Plastic
- **S** Mil Std-883C Class S
- **T** ESA 9000
- **X** Special

Prefix	Device	Suffix
MA	15530	GBC-XXX

Package
Screening & Inspection
Temperature Range
Special Requirements/ Enhancements

MASTER LOGIC

ML

Family
- **ML** CMOS Gate Array
- **MLA** CMOS Custom
- **F** Other

Gate Capacity
- **50** 50 Gates
- **75** 75 Gates
- **100** 100 Gates
- **150** 150 Gates
- **200** 200 Gates
- **350** 350 Gates

Package
- **P** Plastic
- **CD** CerDIP
- **SB** Size Brazed

Pins
By Count

Prefix	Device	Suffix
ML	150	P-24

Family
Gate Capacity
Package
Pins

MATRA HARRIS SEMICONDUCTOR

Family
- **C** Communication
- **M** Memory

Package
- **0** Chip Form
- **1** Ceramic
- **3** Epoxy
- **4** Leadless Chip Carrier
- **5** Substrate and leadless assembly

Temperature
- **2** −55°C to +125°C
- **5** 0°C to +70°C
- **6** 100% 25°C Probe (Dice only)
- **8** Dash 8 Program
- **9** −40°C to +85°C

Version *
- CMOS Standard
- CMOS Ultra Fast Memories
  - **B** High Speed — Low Power
  - **C** Relaxed version
- **Blank** Standard product
  - **S** High speed — High power
  - **H** 25 ns
  - **K** 35 ns
  - **M** 45 ns
  - **N** 55 ns

Memories and Telecommunication Circuits

Prefix	Device	Suffix
H M 1	65261	B - 2

Family
Package
Version
Temperature

Temperature Range
- **Blank** Commercial (only one character before device type)
- **I** Industrial −40°C +85°C
- **M** Military −55°C +125°C
- **X** Dice probed at 25°C only

Package
- **C** Side brazed
- **D** Cerdip
- **G** Pin grid
- **P** Plastic
- **R** Leadless chip carrier
- **X** Dice form
- **S** PLCC

Miscellaneous
Speed: −2, −1
Dash 8 program
Rom code for microcontrollers only:••

Frequency Range
Blank DC-5 MHz

Microprocessors Microcontrollers Peripherals

Prefix	Device	Suffix
M D	8086	— / B

Temperature
Package
Frequency Range
Miscellaneous

©IC MASTER 1988

MATRA HARRIS SEMICONDUCTOR (continued)

Family
- **A** Gate Array 3μ/1 Metal
- **B** Gate Array 2μ/2 Metal

Package
- **0** Chip Form
- **1** Ceramic
- **3** Epoxy
- **4** LCC
- **5** PLCC Wafer
- **C** Side Brazed DIL
- **8** Pin grid Array
- **M** 123

Pin Count
"space" — 24

A 8	**F** 18	**K** 48
B 14	**G** 20	**L** 44
C 40	**H** 22	**M** 68
D 64	**I** 28	**R** 84
E 16	**J** 32	**T** 100

Temperature
- **2** −55°C to +125°C
- **5** 0°C to +70°C
- **6** 25°C probe
- **8** Dash 8 program −55°C to +125°C
- **9** −40°C to +85°C

U 120
V 144

Gate Arrays

Prefix	Device	Suffix
M A 1 C	—1200 A05	— 2

Family
Package
Pin Count
Gate Count
Custom Spec
Temperature

MAXIM INTEGRATED PRODUCTS

Family
- **100-200** Analog to Digital Converters
- **200-299** Interface Line Driver/Receivers
- **300-399** Analog Switches Analog Multiplexers
- **400-499** Op-Amps
- **500-599** Digital to Analog Converters
- **600-699** Power Supply Products
- **700-799** Microprocessor Peripherals Display Dirvers

Temperature Range
- **C** Commercial
- **I** Industrial
- **E** Extended Industrial
- **M** Military

Screening
- **/HR** High-Rel

Package

/D Die	**Q** Quad Package
P Plastic	**T** Metal Can
J CERDIP	**K** TO-3 Can
S Small Outline	**G** TO-8 Can
W Wide S.O.	

Pins

A 8	**I** 28
D 14	**L** 40
E 16	**H** 44
P 20	

Prefix	Device	Suffix
MAX	400	M J A/HR

Family
Temperature Range
Package
Pins
Screening

NOTE: Alternate source devices follow original manufacturers part number and marking system.

MICRO NETWORKS

MN Micro Networks

Package Designator (if applicable)
- **FP** Flat Pack
- **CD** Ceramic DIP
- **PD** Plastic DIP
- **TC** TO-can
- **CL** Ceramic Leadless
- **LC** Leadless Chip Carrier
- **LP** Plastic Leadless Carrier

Temperature Range

— 0°C to +70°C	**G** −55°C to +100°C
E −25°C to +85°C	**H** −55°C to +125°C
F −55°C to +85°C	

Processing and Screening
- — Micro Networks "Commercial Plus" processing and screening
- **B** 100% screening to MIL-STD-883 Method 5008

Prefix	Device	Suffix
MN	5250	A CL H B

Model Rev Letter
Package
Temperature Range
Processing

MICRON TECHNOLOGY, INC.

- **MT** Micron Technology
- **MB** Board Product

Family
- **4** DRAM
- **42** DPDRAM
- **5** SRAM
- **52** DPSRAM
- **53** FIFO
- **28** EEPROM
- **25** ROM

Module
- **8** DRAM
- **82** DPRAM
- **85** SRAM
- **83** CUSTOM

Process Technology
- **Blank** NMOS
- **C** CMOS

Package
- **Blank** Plastic DIP
- **Z** Plastic ZIP
- **EJ** Plastic PLCC
- **DJ** Plastic SOJ
- **DG** Plastic SOIC
- **PA** Plastic PGA
- **C** Ceramic DIP
- **EC** Ceramic CLCC
- **CJ** Ceramic SOJ
- **CG** Ceramic SOIC
- **F** Ceramic Flat Pack
- **CA** Ceramic PGA

Prefix	Device				Suffix
MT	VV	W	XXXX	YYY	ZZ	MMMM

Family
Process
Package
Access Time
Processing Level/ Temperature

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

MICRO POWER SYSTEMS

MP Micro Power

Temperature Range
J,K,L Commercial/Industrial
S,T,U Military

Package
D Ceramic DIP
N Plastic DIP
H TO-100 Type Can

Prefix	Device	Suffix
MP	7520	T D XXXX

Level of Performance
Package
Special Processing

MITEL SEMICONDUCTOR

Family
MD Digital
MH Hybrid
MT Telecommunications
CM Module

Package
C Ceramic Dual-In-Line (Cerdip)
D Ceramic Dual-In-Line (Side-Braze)
E Plastic Dual-In-Line
H Die in Tray Pack
P Plastic J-Lead Chip Carrier
W Die in Probed Wafer Form
Y Ceramic Leadless Chip Carrier

Prefix	Device	Suffix
MT	8804	A E

Electrical Specification
Package Type

MITSUBISHI

M Mitsubishi Integrated Circuit

Temperature Range
5 Industrial/Commercial
9 High Reliability

Series Designation
01-09 CMOS
1 Linear Circuit
3 TTL
10-19 Linear Circuit
32-33 TTL
41-47 TTL
84 CMOS
85,86 PMOS
87 NMOS
88 PMOS
89 CMOS
9 DTL
S0-S2 Schottky TTL

K,T,L,G,C,W Industry Standard Specifications

Package Style
K Glass-Sealed Ceramic
P Molded Plastic
S Metal-Sealed Ceramic
SP Molded Plastic (Shrink DIL)
FP Molded Plastic (Flat)

Package Outline
1 DIL Without Fin
2 Flat Without Fin
4 DIL Without Fin (Improved)
4B Shrink DIL Without Fin
10 DIL Without Fin and With Quartz Lid

Prefix	Device	Suffix
M5	89 81	S-45

Temperature Range
Original Product Series
Circuit Function
Package
Electrical Characteristic (1 or 2 digits)

Second Source

M5	K 4164	P

Series Designation
Circuit Function of Original Source type name
Package

MONOLITHIC MEMORIES

PAL/HAL—Family
PAL Programmable Array Logic
HAL Hard Array Logic

Output Type
H Active High
L Active Low
C Complementry
R Registered
X Exclusive or Registered
A Arithmetic Registered

Temperature Range
C Commercial
M Military

Interface
Temperature Range
74 Commercial
54 Military

Family
S Schottky
LS Low Power Schottky

Package Type
J Ceramic Dual-In-Line
N Plastic Dual-In-Line

Screening Level
883B MIL-STD-883, Method 5004 and 5005, Level B
883C MIL-STD-883, Method 5004 and Level C

Prefix	Device	Suffix
PAL	14 L 4 M J	883B

Family
Number of Array Inputs
Output Type
Number of Outputs
Temperature Range
Package Type
HI-REL Screening Level

Package Type
J Ceramic Dual-In-Line (600 Mil Wide)
JS Ceramic Dual-In-Line (300 Mil Wide)
N Plastic Dual-In-Line (600 Mil Wide)
NS Plastic Dual-In-Line (300 Mil Wide)
D Side Brazed Ceramic Dual-In-Line
F Flat Pack
L Leadless
T Inverted "D" Package

Prefix	Device	Suffix
SN	54 LS 373	J 883B

Standard Prefix
Temperature Range
Family
Package Type
HI-REL Screening Level

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

MONOLITHIC MEMORIES (continued)

FIFOs
Arithmetic

Temperature Range
- **67** Commercial
- **57** Military
- **C** CMOS

Package Type
- **J** Ceramic-In-Line
- **N** Plastic Dual-In-Line

Prefix **Device** **Suffix**
67 **401** **N**
- 67 — Temperature Range
- 401 — Device Number
- N — Package Type

ECL
All ECL Products are for commercial temperature range only
Family 10KH 10KH Technology

- **J** Ceramic

MC **10H** **131**
- MC — Prefix
- 10H — Family
- 131 — Device Number

PROMs-ROMs Character Generator-Logic
Temperature Range
- **6** Commercial
- **5** Military

Product
- 0 Character Generator O.C.
- **1** Character Generator T.S.
- **2** Read Only Memory (ROM)
- **3** Programmable Read Only Memory (PROM)
- **7** LSI Logic Product

Screening Level
See previous page

Family
- **-1** Schottky Process (PROMs)
- **-2** Improved Performance Over -1

Package Type
See Interface
Screening Level
See previous page

Prefix **Device** **Suffix**
5 **3** **41-I** **J** **883B**
- 5 — Temperature Range
- 3 — Product
- 41-I — Family
- J — Package Type
- 883B — HI-REL Screening Level

High Performance PROMs
Temperature Range
- **6** Commercial
- **5** Military

Product
- **3** Programmable Read Only Memory (PROM)

Family
- **S** Schottky
- **LS** Low Power Schottky
- **RA** Registered
- **DA** Diagnostic

Memory Size
- **0** 256 Bit
- **1** 1024 Bit
- **2** 2048 Bit
- **4** 4906 Bit
- **8** 8192 Bit
- **16** 16384 Bit
- **32** 32768 Bit

No. of Outputs
- **4** 4 Bit
- **8** 8 Bit

Output/Pin Out Designator
- **0** Open Collector
- **1** Three State
- **3** Two State

Performance
- **None** Standard
- **A** Enhanced

Package Type
See Interface

Screening Level
See previous page

Prefix **Device** **Suffix**
5 **3** **S** **24** **0** **A** **J** **883B**
- 5 — Temperature Range
- 3 — Product
- S — Family
- 24 — Memory Size
- 0 — Number of Outputs
- A — Output/Pin Out Designation
- J — Performance
- 883B — Package
- HI-REL Screening Level

MOTOROLA

(ICs may not have the circle on the marking)

Some second source ICs follow the original marking system.

Description
- **MC** Packaged Integrated Circuits
- **MCC** Unencapsulated Integrated Circuit Chips
- **MCCF** Flip-Chip Linear Integrated Circuits
- **MCM** Integrated Circuit Memories
- **LM** Pin-for-Pin Equivalent to Linear Integrated Circuits Made by National Semiconductor
- **MMS** Memory Systems

Package
- **F** Flat Ceramic Package
- **G** Metal Can Package (TO-5 Types)
- **K** Metal Power Package (TO-3 Types)
- **L** Ceramic Dual-In-Line Case
- **P** Plastic Package
- **PQ** ICs Packaged In Staggered-Lead Plastic DIP Packages
- **R** Metal Power Packages (TO-66 Types)
- **T** Plastic Package (TO-220 Type)
- **U** Ceramic Package

SOIC package (small outline IC package)

Prefix **Device** **Suffix**
MC **14510** **L**
- MC — Description
- L — Package

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

MOTOROLA (continued)

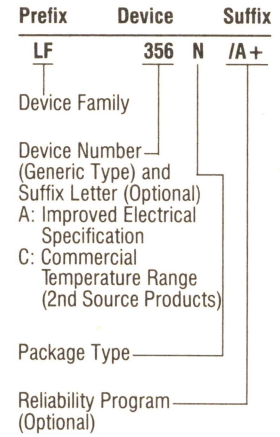
Package
Dual-In-Line plastic in 8, 14 and 16 leads
SOT package (small outline, transistor package), such as SOT 23, etc.
Leadless Ceramic Chip Carriers
Leaded Plastic Chip Carriers
Now: A ceramic package with a lead count, up to 68 leads of more for direct socketing with boards

NATIONAL SEMICONDUCTOR

National Semiconductor Corporation

Family

ADC Analog-Digital Converter
AF Active Filter
AH Analog Switch (Hybrid)
AM Transistor (FET)
BC Transistor (Small Signal)
BD Transistor (Power)
BF Transistor (Small Signal and FET)
BLC Board Level Computer
BLMX Board Level Multi-Tasking Executive
BLX Board Level Expansion
CD CMOS (4000-Series Only)
CIM CMOS Microcomputer Board
COP Family of Microcontrollers
DAC Digital to Analog Converter
DB Development Board
DH Digital (Hybrid)
DM Digital (Monolithic)
DP Interface (Microprocessor)
DS Interface
HPC High Performance Microcontrollers
HS Hybrid
ICM Integrated Computer Module
IDM Microprocessor (2901)
INS Microprocessor (4004/8080A)
ISE In-System Emulator
J FET
JM MIL-M38510
LF Linear (BI-FET)
LH Linear (Hybrid)
LM Linear (Monolithic)
LMC Linear CMOS
LP Linear Low Power
MA Module Macrocomponents
MCA Gate Array
MF Linear (Monolithic Filter)
MH MOS (Hybrid)
MJE Transistor (Power)
MPF FET
MPS Transistor (Small Signal)
MM CMOS
MMBF FET SOT-23
MMBT Bipolar Transistor SOT-23
MMBTA Bipolar Transistor SOT-23
MMBTH Bipolar Transistor SOT-23
NMC MOS Memory
NPDS Surface Mount Dual JFETS
NS Microprocessor Component (Memory Systems)
NS32 Microprocessor Component (Microprocessors, 32000)
NSC Microprocessor (800)
NSD Transistor (Power)
NSE Transistor (Power)
NSW Series 32000 Software
PAL Programmable Array Logic
PL Programmable Logic
PN Bipolar Plastic Transistor
PNP Discrete
RMC Rack Mount Computer



©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

NATIONAL SEMICONDUCTOR (continued)

SCX Gate Array
SD Special Digital
SE Transistor (Small Signal/Power)
SF Special FET
SK Special Kit
SL Special Linear
SM Special MOS
SN Digital (2nd Source)
TIP Transistor (Power)
TIS Transistor (Small Signal and FET)
TP Telecom Products
TMP Terminal Management Processor
TN Transistor (Power)
U FET
2N Transistor (Small Signal/Power)
92PE Transistor (Small Signal/Power)
92PU Transistor (Small Signal/Power)

Temperature Ranges
Linear Devices
With proprietary linear circuits, a 1-2-3 numbering system is employed. The 1 denotes a Military temperature range device (−55°C to 125°C), the 2 denotes an Industrial device (−25°C to 85°C), and the 3 denotes a Commercial device (0°C to 70°C). i.e. LM101/LM201/LM301. Exception to this are the LM1800 Series; some hybrid circuits which employ a "C" Suffix; and second-source products which follow the original manufacturer's numbering system.

Converter Products
Resolution
08 8 Bits
10 10 Bits
12 12 Bits
25 2½Digit
35 3½ Digit
37 3¾ Digit
45 4½ Digit

Form
C Complete
B Building Block
D Digital Panel Meter Chip
M Module
S Card Systems

Digital Devices
CDXXXX-CMOS — C Suffix −40°C to 85°C, M Suffix −55°C to 125°C.

DM54XX — All numbers beginning with 5 denote −55°C to 125°C temperature operation.

DM74XX — If the "74" is indicated, the operating temperature is 0°C to 70°C.

Technology
P PMOS
C CMOS
H Hybrid
B Bipolar
N NMOS
L Linear
I I^2L
Micro CMOS

DM7XXX — All other numbers beginning with 7 (besides the "74" shown above) are NSC proprietary products and a 7 here indicates −55°C to 125°C.

DM8XXX — All numbers beginning with 8 denote 0°C to 70°C temperature operation.

Prefix	Device		Suffix		
AD	C	08	00	P	C	N

Converter Products:
Form
Resolution
More Than One in Family
Technology
Temperature Range
Package

NCM CORPORATION

ncm corporation

Temperature
C Commercial
M Military
Package
D Ceramic DIP
F Ceramic Flatpack
L Leadless Carrier
N Plastic DIP

Digits 1, 2
20 Metal Gate, Full Custom
30 Metal Gate, Semi Custom
40 Si-gate, Full Custom
50 Bipolar Array
60 Analog, Custom
70 Si-gate, Semi Custom
Digits 3, 4
Device No.
Device No.
Device No.
Device No.
Device No.

Prefix	Device		Suffix	
NCM	40	02	Z	N

Technology
Device Number
Revision
Package

NCR MICROELECTRONICS DIVISION

NCR

Temperature
C 0° to 70°C
I −40°C to 85°C
HR −55°C to 125°C

Package
PD Plastic DIP
CD Ceramic DIP
PL Plastic LCC
SO Small Outline

Prefix	Device	Suffix	
NCR	23256	C	PD

Temperature
Package

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

NEC ELECTRONICS, INC.

NEC
NEC Electronics Inc.

Product Family
- **μPB** Bipolar Products
- **μPC** Linear Products
- **μPD** MOS Products

Memory Product Class
- **10** 10K ECL RAM
- **100** 100K ECL RAM
- **21** NMOS Static RAM
- **23** NMOS ROM
- **23C** CMOS ROM
- **27** NMOS EPROM
- **27C** CMOS EPROM
- **4** Bipolar PROM
- **40** NMOS Static RAM
- **41** NMOS Dynamic RAM
- **42** CMOS Dynamic RAM
- **43** MIX-MOS Static RAM
- **44** CMOS Static RAM

Package
- **AK** 32 Pin Ceramic LCC
- **B** Ceramic Flatpack
- **C** Plastic Molded DIP
- **CS** 20 Pin Plastic Shrink DIP (300 mil)
- **CT** 28 Pin Plastic Shrink DIP (400 mil)
- **CU** 40 Pin Plastic Shrink DIP (600 mil)
- **CW** 64 Pin Plastic Shrink DIP (750 mil)
- **CX** 24 Pin Plastic Shrink DIP (600 mil)
- **C-1-8** 40 Pin Plastic DIP 600 mil
- **D** Cerdip or Ceramic DIP
- **DW** 64 Pin Shrink Cerdip with Window
- **D-1-18** 40 Pin Ceramic DIP
- **E** Ceramic Piggyback DIP
- **G** 24 Pin Plastic SO (Small Outline)
- **G2** Plastic Miniflat
- **GR** 54 Pin Plastic Miniflat (Inverted Leads)
- **GF** 54 Pin Plastic Miniflat
- **G-00** 52 Pin Plastic Miniflat
- **G-1B** 64 Pin Plastic Miniflat
- **G-4** 44 Pin Plastic Miniflat
- **G-5** 44 Pin Plastic Leaded Chip Carrier (PLCC)
- **G-6** 44 Pin Plastic Miniflat
- **G-08** 40 Pin Ceramic Piggyback DIP (600 mil)
- **G-12** 64 Pin Plastic Miniflat
- **G-22** 44 Pin Plastic Miniflat
- **G-28** 42 Pin Ceramic Piggyback DIP
- **G-33** 42 Pin Ceramic Piggyback DIP
- **G-38** 42 Pin Ceramic Piggyback DIP
- **G-36** 64 Pin Plastic QUIP
- **K** 22 Pin Ceramic LCC
- **L** 18 Pin Plastic Leadless Chip Carrier
- **LA** 20/26 Pin Plastic SOJ
- **L-5** Plastic Leadless Chip Carrier
- **L-8** Plastic Leadless Chip Carrier
- **R** 132 Pin Ceramic Grid Array
- **R-8** 68 Pin Ceramic Grid Array
- **V** 16 Pin Plastic Zig-Zag Inline

Modules
- **A** SIMM Leaded
- **B** SIMM Socket Mounted
- **C** SIMM Leaded

Prefix	Device	Suffix
μPD	7220A	D

Prefix: Family; Device: Device; Suffix: Package

Prefix	Device	Suffix
μPC	1234	CW

Prefix: Family; Suffix: Package

Memory Parts

Prefix	Device	Suffix
μPD	41 256	V -12

Prefix: Family; Device: Product Class; Suffix: Package, Speed

OPTICAL ELECTRONICS

oei

Description
- **2000** Log/Anti-Log
- **3000** V/F-F/V Phase Detector
- **5000** Non-Linear Functions
- **6000** 3-D System Card
- **9000** Op Amps, Comparators Current Booster, etc.

PANASONIC (MATSUSHITA)

MATSUSHITA

Description
- **AN** Analog
- **DN** Digital Bipolar
- **MJ** Development Type
- **MN** MOS

Prefix	Device
DN	74LS00

PLESSEY

PLESSEY

(All ICs are marked PLESSEY)

Description
- **MJ** N-Channel MOS
- **ML** MOS Linear w/Gate Protection
- **MN** MNOS Digital
- **MP** MOS Digital
- **MT** MOS Linear (without Gate Protection)
- **MV** CMOS
- **NJ** N-Channel MOS
- **NOM** MNOS Memory Elements and Arrays
- **TAA,TBA,TDA** Alternate Sourced Consumer Devices
- **SL** Bipolar Linear
- **SP** Bipolar Digital

Package
- **CM** Multilead TO-5
- **DC** Dilmon
- **DG** Ceramic Dual-In-Line
- **DP** Plastic Dual-In-Line
- **EP** Power Stud
- **FM** Ten Lead Flatpak
- **GC** Leadless Carrier
- **GM** Fourteen Lead Flatpack
- **KM** TO-3
- **QG** Ceramic Quad-In-Line
- **QP** Plastic Quad-In-Line
- **RP** Power Findip
- **SP** Plastic Single-In-Line

Prefix	Device	Suffix
SP	8735B	DG

Prefix: Description; Suffix: Package

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

PRECISION MONOLITHICS

Description

- **ADC** Analog-to-Digital Converter
- **AMP** Instrumentation Amplifier
- **BUF** Buffer (Voltage Follower)
- **CMP** Comparator
- **DAC** Digital-to-Analog Converter
- **DMX** De-Multiplexer
- **GAP** General Purpose Analog Processor
- **JAN** Mil-M-38510 Slash Sheet
- **MAT** Matched Transistors
- **MUX** Multiplexer
- **OP** Operational Amplifier
- **PKD** Peak Detector
- **PM** PMI Second Source Product
- **REF** Voltage Reference
- **RPT** PCM Line Repeater
- **SMP** Sample/Hold Amplifier
- **SW** Analog Switch

Package

- **H** 6 lead TO-78
- **J** 8 lead TO-99
- **K** 10 lead TO-100
- **P** Epoxy B DIP
- **Q** 16 lead Ceramic DIP
- **R** 20 lead Ceramic DIP
- **T** 28 lead Ceramic DIP
- **V** 24 lead Ceramic DIP
- **X** 18 lead Ceramic DIP
- **Y** 14 lead Ceramic DIP
- **Z** 8 lead Ceramic DIP

Prefix	Device	Suffix
DAC	08	BI E Q/883

Burn-In Option
Electrical Grade
Package
MIL-STD-883 Class B

PRO ELECTRON

First Letter

- **T** Analog Circuit
- **U** Mixed Analog/Digital

Second Letter

No special significance.

Third Letter

Temperature Range

- **A** Temp. Range not specified below
- **B** 0°C to +70°C
- **C** −55°C to +125°C
- **D** −25°C to +70°C
- **E** −25°C to +85°C
- **F** −40°C to +85°C
- **G** −55°C to +85°C

Device or Serial Number

Either a 4-digit number assigned by PRO ELECTRON or the serial (even a combination of figures and letters) of an existing type designation which can be extended to a minimum of a 4-digit number by adding zeros in front of it.

Two Letters

First Letter: General Shape

- **C** Cylindrical
- **D** Dual-In-Line (DIL)
- **E** Power DIL (with External Heat Sink)
- **F** Flat (Leads on 2 Sides)
- **G** Flat (Leads on 4 Sides)
- **K** Diamond (TO-3 Family)
- **M** Multiple-In-Line (Except Dual-, Triple-, Quad-In-Line)
- **Q** Quad-In-Line (QUIL)
- **R** Power QUIL (with External Heat Sink)
- **S** Single-In-Line (as TO-127 or TO-220)
- **T** Triple-In-Line

Second Letter: Material

- **C** Metal-Ceramic
- **G** Glass-Ceramic (cerDIP)
- **M** Metal
- **P** Plastic

Prefix	Device	Suffix
TEC	1033	GC B/B

Temperature
Package
Quality Level

RAYTHEON SEMICONDUCTOR

Temperature

- **LH1,LM1** −55°C to 125°C
- **LM2** −25°C to 85°C
- **LM3** 0°C to 70°C
- **RC** 0°C to 70°C
- **RM** −55°C to 125°C
- **RV** −40°C to 85°C

HA Series

- **HA1** 14-Pin Ceramic DIP
- **HA3** 14-Pin Plastic DIP
- **XR** All Temps

Microcomputer Components

- **R**

Beam Lead Chips

- **RC** 0 to +70°C, C-level (commercial) visual
- **RM** −55 to +125°C, B-level (military) visual
- **NRF** Ray I, II, III, TTL device
- **RG** −55 to +125°C
- **RL** B-level visual
- **54LS** Low-Power Schottky TTL, −55 to +125°C, B-level visual

Package

Most Devices

- **BM** 16-Pin Epoxy-B DIP
- **CH** Chip, Visually Inspected to MIL-STD-883B, Method 2010, and Packaged in Waffle Pack
- **CJ** 14-Pin Ceramic Flatpak
- **CL** 16-Pin Ceramic Flatpak
- **CK** 14-Pin Ceramic Flatpak
- **CQ** 10-Pin Ceramic Flatpak
- **DC** 14-Pin Ceramic DIP
- **DD** 16-Pin Ceramic DIP
- **DE** 8-Pin Ceramic DIP
- **DM** 16-Pin Ceramic DIP
- **DZ** 40-Pin Ceramic DIP
- **F** Flatpak
- **FD** 64-Lead Ceramic Flatpak, Side Brazed
- **FV** 28-Lead Ceramic Flatpak
- **FZ** 42-Pin Ceramic Flatpak
- **H** 3, 8 or 10-Pin Metal Can
- **K** TO-3 Power Pack
- **M** 8 or 14-Pin Plastic Micro-Pak
- **LS** 20-Lead Chip Carrier (Square)
- **LV** 28-Lead Chip Carrier (Rectangular)
- **LW** 28-Lead Chip Carrier (Square)
- **MB** 16-Pin Epoxy-B DIP
- **ML** 16-Pin Ceramic DIP, Side Brazed

Prefix	Device	Suffix
RC	4136	DB
LM		H
HA1	4741	5
XR	2207	CN

Prefix	Device	Suffix
RC	4151	DE/ 883B

Temperature
RC 0 to 70°C
RM −55 to 125°C
RV −40 to 85°C
Package
Processing to MIL-STD-883B

Prefix	Device	Suffix
LM	139	J/ 883B

Package
Processing to MIL-STD-883B

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

RAYTHEON SEMICONDUCTOR (continued)

MS 20-Pin Ceramic DIP, Side Brazed
MZ 40-Pin Ceramic DIP, Side Brazed
N 24-Pin Flatpak
N Epoxy-B DIP (LM Series)
NB 8-Pin Epoxy-B DIP
PS 20-Pin Epoxy-B DIP
PU 24-Pin Epoxy-B DIP
PV 28-Pin Epoxy-B DIP
PZ 40-Pin Epoxy-B DIP
R 24-Pin Ceramic DIP
S Ceramic "Slim-DIP"
T 3, 8, 10 or 12-Pin Metal Can
TK 9-Pin TO-66 Power Pack

Prefix	Device	Suffix
DAC	10 B D M	/ 883B

Electrical Grade
Package
Temperature
Processing to MIL-STD-883B

Package
Beam Lead Chips
B
HA Series
2 −55°C to +125°C
5 0°C to +70°C
8 −55°C to +125°C

XR Series
M Ceramic −55°C to +125°C
N Ceramic −40°C to +85°C
P Epoxy −40°C to +85°C
CN Ceramic 0°C to +75°C
C Epoxy 0°C to +75°C

Prefix	Device	Suffix
REF	01	C T

Electrical Grade and Temperature
Package

Microcomputer Components Package
D Hermetic DIP
F Flatpak
P Plastic DIP
X Chip

Temperature
C 0°C to +75°C
M −55°C to +125°C

Process to MIL-M-883B
B Level B
S Level S

Prefix	Device	Suffix
	29611	A D M B

Performance
A—Enhanced
E—AMD Equivalent
Package
Temperature
Processing to MIL-STD-883B

Prefix	Device	Suffix
RFII	2	CJ

Temperature
0 or 1 −55 to 125°C
2 or 3 0 to 70°C
Package

Raytheon ICs are identified by an **RAY** prefix to the date code.

RCA

RCA Solid State

Description
CA Linear ICs
CD CMOS Digital ICs
CDM CMOS—LSI
CDP CMOS—LSI
CMM CMOS—LSI
MWS CMOS—LSI
LM Linear ICs
PA Gate Arrays
SC Standard Cells
CGA Gate Arrays
RS ASIC—LSI
CD54/74HC/HCT CMOS High-Speed Digital ICs
DC54/74AC/ACT CMOS Advanced High-Speed Digital ICs

Version
A Modified Version, Unilaterally Interchangeable with Prototype
B Modified Version, Unilaterally Interchangeable with A Version, and with Prototype
C Modified Version

Package
D Ceramic DIP
E Plastic DIP
EM Modified Dual-In-Line Plastic Package with "Power Slab"
EN Narrow-Body Plastic DIP
F Ceramic DIP, Frit Seal
H Chip
J 3-Layer Ceramic Leadless Chip Carrier
K Ceramic Flat Package
L Single Layer Ceramic Leadless Chip Carrier
M Small-Outline Plastic Package

Prefix	Device	Suffix
CD	4070	AD

Version
Package

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

RCA (continued)

Q Plastic-Chip-Carrier Package
Q Modified Quad-In-Line Plastic Package
QM Quad-In-Line Package with "Power Slab"
S TO-5 Package with DIL-CAN
T TO-5 Package with Straight Leads
V1 TO-5 Package with Radial Formed Leads
W Staggered Quad-In-Line Plastic Package

ROCKWELL

Rockwell

R Rockwell

NMOS Devices
Frequency Range
No Suffix 1 MHz
A 2 MHz
B 3 MHz
Package
C Ceramic
P Plastic
Q QUIP
Temperature
No Suffix 0°C to 70°C
E −40°C to 85°C (Industrial)
MT −55°C to 125°C (Military)
M MIL-STD-883, Class B

Prefix	Device	Suffix
R	6502	ACE

Frequency Range
Package
Temperature

CMOS Devices
Frequency Range
1 1 MHz
2 2 MHz
3 3 MHz
4 4 MHz
Package
C Ceramic
J PLCC
P Plastic
Q QUIP
Temperature
No Suffix 0°C to +70°C
E −40°C to +85°C
MT −55°C to 125°C (Military)
M MIL-STD-883, Class B

Prefix	Device	Suffix
R	65C02	C4E

Package
Frequency Range
Temperature

SANYO

SANYO

Designation
LA Bipolar Linear
LB Bipolar - Digital
LC CMOS
LE MNMOS
LM PMOS, NMOS
STK Thick Film

Prefix	Device
LA	1230

SEEQ

seeq
Technology, Incorporated

Temperature Range
Q For Commercial Temperature 0°C to +70°C
E For Extended Temperature −40°C to +85°C
M For Military Temperature −55°C to +125°C

MIL-STD-883
Level B Processing
Read access time of memory devices (ns)

Package
D Ceramic
L Leadless Chip Carrier
P Plastic DIP
N Plastic Leaded Chip Carrier
F Hermetic Flatpack

Prefix	Device	Suffix
D Q	2816	350 B

Package Type
Temperature Range
Read Access Time of Memory Device (ns)
MIL-STD-883 Level B Processing

SGS SEMICONDUCTOR CORPORATION

(Marking)

SGS SEMICONDUCTOR CORPORATION
(Current Logo)

Prefixes assigned by the European Association "PRO ELECTRON" (See PRO ELECTRON)
H High Level Logic
HB,HC CMOS
L,LS Linear Professional
M MOS
TAA Linear Consumer
TBA Linear Consumer
TCA Linear Consumer
TDA Linear Consumer

Prefix	Device
TDA	1200

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

SIEMENS

Prefixes assigned by the European Association "PRO ELECTRON". (See PRO ELECTRON)

Prefix	Device
SDA	5010
TDA	2030
UAA	170

SIERRA SEMICONDUCTOR

SIERRA SEMICONDUCTOR

Temperature Range
- **C** Commercial 0 to +70 deg. C
- **E** Extended −40 to +85 deg. C
- **M** Military −55 to +125 deg. C

Package Type
- **N** Molded dual in-line
- **J** Cerdip
- **D** Ceramic
- **V** PLCC
- **M** SOIC
- **P** PGA

Prefix	Device	Suffix
SC	12345	A B 1

Sierra CMOS
Part Number
Temp. Range
Package Type
Speed Selection

SIGNETICS

signetics

Temperature
- **N** 0°C to +70°C
- **S** −55°C to +125°C
- **NE** 0°C to +70°C
- **SA** −40°C to +85°C
- **SE** −55°C to +125°C
- **SU** −25°C to 85°C
- **55** −55°C to +125°C
- **75** 0°C to +70°C
- **DS** Alternate Source to National Part Number
- **MC** Alternate Source to Motorola Part Number
- **ULN** Alternate Source to Sprague Part Number
- **μA** Alternate Source to Fairchild Part Number
- **AM** Alternate Source to AMD Part Number

Device Family
- **CA,DS** Linear Industry Standard
- **DAC** D/A Converter
- **HEF** LOCMOS Family
- **JB** Mil Rel—Jan—Old Desig.
- **JM** Mil Rel—Jan—New Desig.
- **LF,LH** Linear Industry Standard
- **LM,MC** Linear Industry Standard
- **MB,MJ** CMOS
- **OM** Linear Industry Standard
- **PCD,PCE** CMOS
- **SAA,SAB** Digital Industry Standard
- **SAF** Digital Industry Standard
- **SD** Linear DMOS
- **SG,TAA** Linear Industry Standard
- **TBA,TCA** Linear Industry Standard
- **TDA,TDB** Linear Industry Standard
- **TEA** Linear Industry Standard
- **UA,ULN** Linear Industry Standard
- **SCN** Microprocessor N Channel
- **SCB** Microprocessor Bipolar
- **SCC** Microprocessor CMOS

Package
- **CK** Philips Die
- **D** 8, 14, 15-Lead DIL Plastic Microminiature (SO)
- **EC** 4-Lead TO-46 can
- **EE** 4-Lead TO-72 can
- **F** 14, 16, 18, 20, 22, 24, 28-Lead DIL CERDIP
- **FE** 8-Lead DIL CERDIP
- **G** 20, 28, 44-Lead Square Leadless
- **H** 4, 8, 10-Lead TO-5 can
- **I** 8, 10, 14, 16, 18, 24, 28, 40, 50-Lead DIL CERAMIC
- **K** 2-Lead TO-3 can
- **N** 8, 14, 16, 18, 20, 22, 24, 28, 40-Lead DIL PLASTIC
- **N14** 14-Lead DIL Plastic for those products available in both 8 and 14-Lead packages, the 14-Lead package will be identified with N14
- **Q** 10, 14, 16, 24-Lead CERAMIC Flat
- **R** 16, 18, 24, 28, 40-Lead CERAMIC-Beryllia-Flat
- **SK** Microprocessor Kits
- **TA** 8-Lead TO-5 can
- **U** 9-, 13-Lead Single-in-Line
- **Y** 24-Pin Ceramic Square Flat-pack with Radial Leads
- **W** 10, 14, 16, 24-Lead CERPAC

Prefix	Device	Suffix
	74123	N
N	8X02	N

Temperature
Package

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

SILICON GENERAL

SG Silicon General

Characteristics
- **A** Improved Electrical Specifications
- **C** Reduced Temperature Range

Package
- **F** Flat Pack
- **J** 14, 16-Pin DIP (CerDIP)
- **K** TO-3 Power Pack
- **M** 8-Pin Plastic DIP
- **N** 14, 16-Pin Plastic DIp
- **P** TO-220 Plastic
- **R** TO-66 (3-Pin and 8-Pin)
- **T** TO-5 Metal Can (TO-39/99/100/101)
- **Y** 8-Pin DIP (CerDIP)
- **W** 16-Pin Batwing (CerDIP)
- **S** Multiwatt 15
- **L** Leadless Chip Carrier

Prefix	Device	Suffix
SG	1524	J
SG	108A	T

Characteristics

Package

SILICON SYSTEMS INCORPORATED

Family
- **32B** HDD Interface
- **32C** HDD Controller
- **32D** HDD Data Recovery
- **32H** HDD Head Positioning
- **32M** HDD Motor Speed Controller
- **32P** HDD Pulse Detection
- **32R** HDD Read/Write Amp
- **34B** FDD Interface
- **34D** FDD Data Recovery
- **34P** FDD Pulse Detection
- **34R** FDD Read/Write Amp
- **35P** Tape Drive Pulse Detection
- **36+** Optical Storage
- **73A** Modem Analog Front End
- **73D** Modem Device Set
- **73K** K-Series Modem
- **73M** Modem/Modem Support
- **73T** Tone Signaling
- **78P** Digital Telecom
- **78A** Analog Telecom

Temperature Range (0)
- **C** Commercial (0°C to +70°C)
- **I** Industrial (−40°C to +85°C)
- **M** Military (−55°C to 125°C)

Package Type (R)
- **C** Side-brazed Ceramic
- **D** Ceramic DIP
- **F** Flat Pack
- **H** PLCC
- **P** Plastic DIP
- **T** Metal Can
- **S** Plastic, Skinny DIP
- **N** Small Outline, Narrow (150 mil)
- **L** Small Outline, Large (300 mil)
- **W** Small Outline, Wide (400 mil)

Release Level (0) (Revision)
- **A Through E**

Modifiers (0)
- **J** Burn-In (168 Hours)
- **K** Burn-In (48 Hours)
- **LJ** Low Noise Burn-In (168 Hours)
- **L** Low Power
- **LN** Low Noise
- **LQ** Low Noise, Resistor, Mirror Image
- **LR** Low Noise, Resistor
- **M** Mirror Image
- **S** Serial Version
- **SL** Low Power Serial
- **R** Damping Resistor
- **RM** Resistor, Mirror Image
- **U** On-Chip UART

Cannot Use A Through E in Left Position

Prefix	Device	Suffix
32R	510A	-6 C F

Family

No. of Channels

Temperature

Package

SILICONIX

Description (1, 2 or 3 letters)
- **D** Drivers
- **DF** Digital Function
- **DG** Analog Switches and Multiplexers
- **G** Multi-Channel FETs
- **L** Linear
- **LD** Linear Digital Combinations
- **SD** Siliconix DMOS Product
- **SI** Siliconix Proprietary or Second Source Parts
- **SJM** QPL Listed Part

Operating Temperature Range — ICs (1 Letter)
- **A** −55°C to +125°C
- **B** −20°C to + 85°C
- **C** 0°C to + 70°C
- **D** −40°C to + 85°C

B and D temperature range parts receive industrial processing unless a process option dash number is added

Packages (1 Letter)
- **A** Metal Can—Hermetic
- **J** Dual-In-Line Package—Plastic

ICs

Prefix	Device	Suffix
DG	187	A P /883
DG	303	A B P (-4)
DG	506	A C J

Family

Device Revision

Operating Temperature Range

Package

Process Option

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

SILICONIX (continued)

K Dual-In-Line Package—CERDIP
L Flat Package
M CLCC
N PLCC
P Dual-In-Line Package—Side Braze—Hermetic
R Dual-In-Line Package—Side Braze—Hermetic
Y Small Outline Package

Process Option
/883 MIL-STD-883. Class B Compliant—Non JAN
−2 Non Compliant—Non JAN
(−4) 160 Hour Burn-In
BS9000 BS9000 Compliant

Packages—MOSPOWER
Hermetic
A TO-3
B TO-39
E TO-52
G TO-18
P Sidebraze DIP
Plastic
D TO-220
F TO-202
J Plastic DIP
L TO-92
M TO-237
V TO-218
4-Pin DIP & SOT-23 also available

MOSPOWER

Prefix	Device			Suffix	
V	N	6	7	A	B

Vertical MOSPOWER
Substrate
Voltage [×10]
Selection
Geometry
Package

S-MOS SYSTEMS

SMOS SYSTEMS
(Current Logo)

(Product Marking)

Family
CI Converter IC
EA Sensor array
ED Display driver
LA Logic array
MC Microcontrollers and peripherals
MM Masked ROM
PM Programmable memories
RM Static RAM
SC Standard cell
TC Telecom IC
VM Melody IC

Package
C Plastic DIP
D Die form
F Quad flat package
H Ceramic DIP
J Plastic leaded chip carrier
M Small outline package (SOP)
N Skinny DIP
S Shrink DIP

Prefix	Device	Suffix
SRM	2016	C15

Family
Package
Speed (15=150 ns)

SOLITRON

(Current) (Discontinued)

CM CMOS
UC4xxx Linear
UC6xxx PMOS Memory (discontinued)
UC7xxx PMOS Memory (discontinued)

Process (CMOS)
(None) Limited Operating Voltage Range
A 3-15 Volt Operating Voltage
B 3-18 Volt Operating Voltage

Package Style, Temperature Range (CMOS)
D Ceramic DIP, −55°C to 125°C
E Epoxy DIP, −40°C to 85°C
F Cer DIP (Frit Seal) −55°C to 125°C
H Uncased Die
K Flatpack, −55°C to 125°C

Package Style, Temperature Range (Linear)
(None) TO-99, −65°C to 125°C
C TO-99, 0°C to 70°C
CE 8 lead MINI DIP, 0°C to 70°C
ID Uncased Die

Prefix	Device	Suffix
CM	4000	AD

Package/Temperature

SPRAGUE ELECTRIC

SPRAGUE

②

Family
UC CMOS/Complex Arrays
UD Power Drivers
UG Hall Effect Circuits
UL Linear Circuits

Temperature
N Limited Temperature Range −20°C to +85°C Typical
Q Industrial Temperature Range −40°C to +85°C

Package
A Plastic DIP
B Plastic DIP with Heat Sink Tabs
C Chip
CW Probed Wafer
D 3-Pin Metal Can
E Leadless Chip Carrier
H Hermetic DIP
J 14-Pin Hermetic Flat Pack
L Plastic SOIC
M 8-Pin Plastic DIP

Prefix	Device	Suffix
UL N	2111	A

Family
Temperature
Package

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

SPRAGUE ELECTRIC (continued)

S Military Temperature Range −55°C to +125°C

R Ceramic DIP
S 4-Pin SIP
T 3-Pin SIP
U Thin 3-Pin SIP
V Flange Mount TO-3
W 12-Pin SIP
Y TO-92 Transistor
Z 5-Lead TO-220

Family
UH Peripheral Power/Display Drivers

Package
C Hermetic Flatpack
D Hermetic DIP
K Chip
P Plastic DIP

Prefix	Device
UH P	400

UH — Family
P — Package

Prefix
Screening Level
BCL High Reliability
883C MIL-STD-883C
M38510/ MIL-M-38510

Package
C Cerdip
E Epoxy
F Epoxy Flatpack
HN Dice
HW Wafers

Prefix	Device	Suffix
883C	4XXXB	C

883C — Screening Level
4XXXB — Device Type
C — Package

Prefix	Device	Suffix
883C	23C164	C - 9898

883C — Screening Level
23C164 — Device Type
C — Package
9 — Standard Program
898 — Option or 4 Digit custom ROM number specifying data pattern and speed option

STANDARD MICROSYSTEMS

Family
COM Data Communications
CRT CRT Display
SR Shift Register
KR Keyboard Encoder
FDC Floppy Disk
CCC Cassette/Cartridge
HDC Hard Disk
MPU Microprocessor
HYC Hybrid Communications

Functional Options
T TTL Clock Input
H High Speed
ST ROM
STD Program Options
PRO See Catalog
HR MIL-STD-883 Level B Equivalent
BI Burned-In
A,B,C Speed
Program Options
X or XXX Specifies Mask Program
Package
No Letter Ceramic **CD** Cerdip
P Plastic
LJ Plastic Leaded Chip Carrier
LL Leadless Ceramic Chip Carrier
FA Quad Package—Straight Lead
GA Quad Package—Gull Lead

Prefix	Device	Suffix
COM	5016	T X P

COM — Family
T — Function
X — Program Option
P — Package

STANTEL COMPONENTS INC. (STC COMPONENTS LTD.)

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

TECHNITROL, INC.

Technitrol, Inc.

Family
MEDM 2

Prefix	Device	Suffix
MEDM 2	100	M Y

Frequency 10 MHz
Military
Special Testing

TELEDYNE PHILBRICK

TELEDYNE PHILBRICK

Description

1000 Series Operational Amplifier, Module
1300 Series Operational Amplifier, IC
1400 Series Operational Amplifier, FET IC
1700 Series Operational Amplifier Chopper Stabilized
2200 Series Power Supply, AC Input, PC Mount
2300 Series Power Supply, DC Input, PC Mount
2400 Series Power Supply, AC Input, Chassis Mount
4000 Series Digital to Analog Converters
4100 Series Analog to Digital Converters
4200 Series Modular Instrumentation Amplifiers
4300 Series Non-Linear Function Modules
4700 Series Voltage to Frequency and Frequency to Voltage Converters
4800 Series Sample-Hold Amplifiers
4900 Series Deglitchers

TELEDYNE SEMICONDUCTOR

Temperature
C 0°C to 70°C
M −55°C to 125°C
I −25°C to +85°C

Package
J CerDIP
P Plastic Dip
Y Dice
BQ Quad Flat Package

Device	Suffix
TSC7109	C P

Temperature
Package

TELEFUNKEN

Note:
ICs are marked **TFK**

Prefixes Assigned by the European Association "PRO ELECTRON" (See Pro Electron)
Proprietary Devices
U Integrated Circuits
B Bipolar
M MOS

Prefix	Device	Suffix
U	113	B

TEXAS INSTRUMENTS

AC Advanced Bipolar Circuits
SBP Bipolar Microprocessor
SMJ MOS Memory and Microprocessor 883B
SN Standard Circuit
SNJ Standard Circuit: 883B, JEDEC Std 101
TAC CMOS Logic Array
TAL Low-Power Schottky TTL Logic Array
TAT STL Logic Array
TL Linear Circuit
TLC LinCMOS™ Circuit
TIEF Transimpedance Amplifiers
TIES Infrared Source
TIFPLA Bipolar Field Programmable Logic Array
TIBPAL Bipolar Programmable Logic Array
FP Rect. Chip Carrier for DRAMs
TMS MOS Memory/Microprocessor
TM Microcomputer Module, Single-In-Line Package Memory Module
TBP Bipolar Memory
TC CCD Imager
TCM Telecommunications IC
TIED Infrared Detector
TIL Optoelectronic Circuit
VM Voice Memory Circuit
JANB JM38510—Qualified Circuits, Level B
JBP Bipolar PROM: 883C, JEDEC Std 101

Package
JT Ceramic DIP, 24-Pin, 300-mil
J,JG Ceramic DIP
JD Side braze ceramic DIP
KA,KC,KD,KF Plastic power tab
LP Plastic 3-lead
N,NE Plastic DIP
N Plastic DIP
T Metal Flat Pack
WA,W Ceramic Flat Pack
NT Plastic DIP, 24 pin 300 mil
U Ceramic Flat Pack
NF Plastic DIP, 28 pin 400 mil
FH Ceramic Single Layer Sq. Chip Carrier JEDEC Standard
FN Plastic Single Layer Sq. Chip Carrier
FK Multi-Layer Sq. Chip Carrier JEDEC Standard
FE Multi-Layer Rect. Chip Carrier
WC Ceramic Flat Pack
FG Multilayer Rect. Chip Carrier JEDEC Standard
8D Small-outline Package
14D Small-outline Package
16D Small-outline Package
FM Rect. Chip Carrier for DRAMs
DJ Small-outline Package J-Lead Package, Memory

Temperature (Most Devices) Digital & Interface Prefixes

Series	
−55°C to 125°C	0°C to 70°C
54	74
54H	74H

Prefix	Device	Suffix
SN 74	S188	J

Description
Temperature Range
Package

Prefix	Device	Suffix
TMS	4256	-15 NL

Speed
Package
Temperature Range

PART NUMBER GUIDE

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix		Part Number Suffix	Example
TEXAS INSTRUMENTS (continued)	**54L**		Low-power TTL	
	54LS	**74LS**	Low-power Schottky TTL	
	54S	**74S**	Schottky TTL	
	55	**75**	Standard Interface Circuits	
	54AS	**74AS**	Advanced Schottky TTL	
	54HC/54HCT	**74HC/74HCT***	High-Speed CMOS	
	54ALS	**74ALS**	Advanced Low-power Schottky TTL	
		76	Advanced Circuits	* −40°C to 85°C
	Bipolar Suffixes **C** 0°C to 70°C **E** −40°C to 85°C **I** −25°C to 85°C or ***** −40°C to 85°C **M** −55°C to 125°C	**MOS Suffixes** **L** 0°C to 70°C **M** −55°C to 125°C **E** −40°C to 85°C **S** Special Range **—** 0°C to 70°C	**Speed (MOS only)** — 15 150 ns Max. Access — 17 170 ns Max. Access — 20 200 ns Max. Access — 25 250 ns Max. Access — 35 350 ns Max. Access — 45 450 ns Max. Access — 2 200 ns Max. Access — 3 350 ns Max. Access — 4 450 ns Max. Access	

THOMSON COMPONENTS—MOSTEK

Designation
- **EF** Grenoble (France)
- **ET** Rousset (France)
- **MK** Carrolton (USA)

Technology
- **—** NMOS or HMOS
- **L** NMOS Low Power
- **C** CMOS
- **HC** HCMOS

Temperature
- **L** 0°C to 70°C
- **V** −40°C to 85°C

Package
- **N** Plastic DIL (MK, ET Prefix)
- **P** Plastic DIL (EF, TS Prefix)
- **FN** Plastic LCC (ET, TS, EF Prefix)
- **FP** Small Outline Package (EF, ET, TS Prefix)
- **Q** Plastic LCC (MK Prefix)
- **R** Ceramic Pin Grid Array (EF, ET, ET Prefix)
- **R** Ceramic Piggy Back (MK Prefix)
- **E** Ceramic Leadless Chip Carrier
- **J** CERDIP DIL (EF, TS Prefix)
- **Q** CERDIP DIL (ET Prefix)
- **C** Ceramic DIL (ET, TS, EF Prefix)
- **P** Ceramic DIL (MK Prefix)

Quality Level
- **—** Standard
- **D** Class D (STD + Burn-In)

Prefix	Device	Suffix
EF	68008	V P D 10 X

Technology
Temperature
Package
Quality Level
Frequency Range
Customer Code

Technology
- **—** NMOS
- **C** CMOS
- **L** Lower Power

Package
- **C** Ceramic DIL
- **J** Cerdip DIL
- **N** Plastic DIL
- **Q** UV Window Cerdip

Temperature Range
- **—** 0 to 70°C
- **E** −25 to 70°C
- **V** −40 to 85°C
- **M** −55 to 125°C

Quality Level
- **—** Standard
- **B/B** MIL-STD-883B

Prefix	Device	Suffix
ET C	2716	Q- 55 M B/B

Thomson Technology
Package
Speed
Temperature Range
Quality Level

- **MK** Standard Products
- **MKB** Military Hi-Rel screening to MIL-STD-883 Class B
- **MKI** Industrial Hi-Rel screening for −40°C to 85°C operation

Package
- **P** Gold side brazed ceramic DIP
- **J** CER-DIP
- **N** Epoxy DIP (Plastic)
- **K** Tin-side-brazed ceramic DIP
- **T** Ceramic DIP with transparent lid
- **E** Ceramic leadless chip carrier
- **D** Dual density RAM/PAC
- **F** Flat Pack

Prefix	Device	Suffix
MK	68901	P 00

Package
Dash Number

Technology
- **A** NMOS
- **B** CMOS/Bulk
- **G** CMOS/Si gate
- **X** Prototype

Package
- **C** Ceramic DIL
- **E** CLCC
- **J** Cerdip DIL
- **FN** PLCC
- **P** Plastic DIL
- **R** Pin Grid Array

Temperature Range
- **L** 0 to 70°C
- **V** −40 to 85°C
- **M** −55 to 125°C

Prefix	Device	Suffix
EF	68A00	C M B/B

Thomson Technology
Package
Temperature Range
Quality Level

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

THOMSON COMPONENTS—MOSTEK (continued)

Also see PRO ELECTRON Part Number Guide

Wafer-Back Finish
- **1** Silicon
- **2** Gold
- **4** Ai-Ni-Au

Quality Level
- **V** Chips in waffle pack with 100% visual inspection according to MIL-STD 883/Method 2010
- **N** V level plus sampling batch of 55 packaged ICs
- **T** N level plus burn-in on sampling batch of 55 packaged ICs
- **W** T level plus 1000-hour life test on sampling batch of 55 ICs
- **Z** W level plus serialization

Prefix	Device	Suffix
J	LM108A	1 V

Die
Wafer-Back Finish
Quality Level

TOSHIBA

Description
- **TA** Bipolar Linear
- **TC** CMOS
- **TD** Bipolar Digital
- **TMM** NMOS

Package
- **P** Plastic
- **M** Metal
- **A** Improved Type
- **C** Ceramic
- **F** Flat Pack
- **T** PLCC
- **J** SOJ
- **D** CERDIP
- **Z** ZIP

Prefix	Device	Suffix
TA	7173	AP

TRW LSI PRODUCTS

TRW LSI Products, Inc.
TRW Electronic Systems Group

Multiplier Family
- **H** 3rd Generation (2 m)
- **K** 4th Generation (1 m)

Example
MPY012HJ1C
MPY112KJ4C

Family
- **MPY** Triple Diffused Bipolar Multipliers
- **TDC** TRW Triple Diffused Bipolar Catalog Products
- **TMC** TRW CMOS Catalog Products
- **THC** TRW Hybrid I.C.'s

Screening and Temperature

Temp/Process	Com	Hi-Rel.	Only Com B.I.
T_A=0 to 70°C	C	S	G
T_C=55 to 125°C	F	A	N

For screening and temperature specifics, you must check in each data sheet to see applicable temperature range

Package
- **J0** 64 Lead Hermetic Ceramic DIP (Without Heat Sink, Lid Up)
- **J1** 64 Lead Hermetic Ceramic DIP (With Flat Heat Sink, Lid Down)
- **J3** 64 Lead Hermetic Ceramic DIP (Without Heat Sink, Lid Down)
- **J4** 48 Lead Hermetic Ceramic DIP
- **J5** 40 Lead Hermetic Ceramic DIP
- **J6** 28 Lead Hermetic Ceramic DIP
- **J7** 24 Lead Hermetic Ceramic DIP
- **J8** 18 Lead Hermetic Ceramic DIP
- **J9** 16 Lead Hermetic Ceramic DIP
- **A1** 68 Contact JEDEC Type 'A' Chip Carrier
- **C1** 68 Contact Hermetic Ceramic (Leadless) Chip Carrier
- **C2** 44 Contact Hermetic Ceramic (Leadless) Chip Carrier
- **C3** 28 Contact Hermetic Ceramic (Leadless) Chip Carrier
- **E1** Printed Circuit Board, Eurocard Format (100mm × 160mm)
- **P1** Printed Circuit Board, Standard Format (4.5 in. × 5.5 in.)
- **L1** 68 Lead Hermetic Ceramic Leaded Chip Carrier
- **B2** 24 Lead CERDIP (0.3 in. wide)
- **B5** 40 Lead CERDIP
- **B6** 28 Lead CERDIP
- **B7** 24 Lead CERDIP (0.6 in. wide)
- **B8** 18 Lead CERDIP
- **G5** 88 Pin Grid, Cavity Up No Heat Sink
- **G8** 68 Pin Grid, Cavity Up No Heat Sink
- **N0** 64 Lead Plastic DIP
- **N5** 40 Lead Plastic DIP
- **N6** 28 Lead Plastic DIP
- **N7** 24 Lead Plastic DIP
- **N9** 16 Lead Plastic DIP
- **S5** 32 Pin Hermetic Metal DIP
- **S7** 24 Pin Hermetic Metal DIP

Prefix	Device			Suffix
TDC	1016	J5	C	10

Package
Screening
Electrical

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example
TRW LSI PRODUCTS (continued)		**H5** 88 Pin Plastic Grid Cavity Up **H8** 68 Pin Plastic Grid Cavity Up **N8** 18 Lead Plastic DIP **R4** 84 Lead PLCC **R3** 68 Lead PLCC **R2** 44 Lead PLCC **R1** 28 Lead PLCC	
UNITED TECHNOLOGIES MICROELECTRONICS CENTER		**Package** **A** Leadless Chip Carrier **G** Pin Grid Array **K** Leaded Chip Carrier—Unformed Leads **L** Leaded Chip Carrier—Gull Wing	**Prefix** **Device** **Suffix** **UT** **1553BRTI** **G A** Package Processing
VTC INCORPORATED	**Additional Processing** **B** Burn-in (168 Hrs, T_J=150°C or Equivalent) **J** Screened to Class B, Mil Std 883 **R** Rad Hard **None** No Additional Processing	**Temperature Range** **74** Commercial (−40°C to 85°C) **54** Military (−55°C to 125°C) **Package** **P** Plastic DIP **PS** Plastic Slimline DIP **S** Ceramic DIP (Cerdip) **DS** Ceramic Slimline DIP (Cerdip) **PL** Plastic Leaded Chip Carrier (PLCC) **DL** Ceramic Leadless Chip Carrier (LCC) **PO** Plastic SOIC	**CMOS Interface Logic** **Prefix** **Device** **Suffix** **V** — **74** **ACT** **240** **P** VTC Additional Processing Temperature Range Family Device Type Package
	Additional Processing **B** Burn-in (168 Hrs, T_J=150°C or Equivalent) **J** Screened to Class B, Mil Std 883 **R** Rad Hard **None** No Additional Processing	**Temperature Range/Performance** **A thru I** Industrial (−25°C to +85°C) **J thru R** Commercial (0° to 70°C) **S thru Z** Military (−55°C to +125°C) **Package** **P** Plastic DIP **PS** Plastic Slimline DIP **D** Ceramic DIP (Cerdip) **J** Side Brazed Ceramic DIP **T** Metal Can **G** Pin Grid Array **F** Flatpack **PL** Plastic Leaded Chip Carrier (PLCC) **DL** Ceramic Leaded Chip Carrier (LCC) **X** Die	**Bipolar Products** **Prefix** **Device** **Suffix** **V** — **A** **705** **D** **J** VTC Additional Processing Family Part Number Package Temperature Range/ Performance
WAFERSCALE INTEGRATION, INC.	**Family Group** **57CXXX** Fast EPROM Memory **59XXX** Bit Slice **27CXXX** Slow EPROM Memory	**Package** **D** Cerdip (.6″) **P** Plastic Dip (.6″) **J** PLCC **B** Side Brazed Ceramic Dip **L** Ceramic Leaded Chip Carrier **G** Ceramic Pin Grid Array **S** Plastic Dip (.3″) **T** Cerdip (.3″) **C** Ceramic Leadless Chip Carrier **Temperature Range** **Blank** Commercial **M** Mil Temperature **B** Mil Std 883B	**Prefix** **Device** **Suffix** **WS57** **C64F-55** **D (Blank)** Family Device No. Package Temperature
VLSI TECHNOLOGY	**VC** Custom **VF** Foundry **VG** Gate Array **VL** Logic **VM** Government **VP** Programmable Devices	**Package** **A** Sidebrazed Ceramic DIP (EPROM) **C** Sidebrazed Ceramic DIP **D** Cerdip **F** Flatpack **G** Ceramic Pin Grid Array **K** Leadless Chip Carrier (EPROM) **L** JEDEC Type-B Ceramic Leadless Chip Carrier **P** Plastic DIP	**Prefix** **Device** **Suffix** **VC** **9999999** **BB** **PTE** Bin Code Package Temperature Range Environmental Code

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

VLSI TECHNOLOGY (continued)

Prefix
- **VS** User-Designed VLSI
- **VT** Memory
- **VU** Design Center

Temperature Range
- **C** Commercial
- **I** Industrial
- **M** Military

Suffix
- **Q** Plastic Leaded Chip Carrier
- **T** Ceramic Leaded Chip Carrier
- **V** Die-Plated
- **W** Die in Wafer Form
- **Y** DIP on PC Board
- **Z** Chip on PC Board

Environmental Code
- **B** Mil-Std-883C, Level B
- **Blank** Standard Screening
- **I** Military-Screened
- **J** Mil-M-38510

WESTERN DESIGN CENTER

Family
- **WC** Custom
- **W** Standard

Performance
- **2** 2 MHz
- **4** 4 MHz
- **6** 6 MHz
- **8** 8 MHz

Package
- **P** Plastic
- **C** Ceramic
- **D** Cerdip
- **E** Leadless Chip Carrier
- **X** Dice

Temperature
- **Blank** 0°C to +70°C
- **I** −40°C to +85°C
- **M** −55°C to +125°C

Prefix	Device	Suffix
W	65C816	P I -2

W — Family
P — Package
I — Temperature Range
-2 — Performance

WESTERN DIGITAL

WESTERN DIGITAL CORPORATION

(Current)

(Discontinued)

Package (Obsolete)
- **A** 40 Lead DIP-Ceramic
- **B** 40 Lead DIP-Relpak
- **C** 24 Lead DIP-Ceramic
- **E** 28 Lead DIP-Ceramic
- **F** 28 Lead DIP-Relpak
- **L** 18 Lead DIP-Ceramic
- **M** 18 Lead DIP-Plastic (Totally Encapsulated)
- **P** 40 Lead DIP—Plastic (Totally Encapsulated)
- **R** 28 Lead DIP-Plastic (Totally Encapsulated)
- **T** 48 Lead DIP-Ceramic
- **U** 20 Lead DIP-Ceramic
- **V** 20 Lead DIP-Plastic (Totally Encapsulated)
- **X** Ceramic Kit
- **Y** Plastic Kit

Prefix	Device	Suffix
WD	1943	M 00

Package
Special Parameter

Package (Current)
- **A** Ceramic Side Braze
- **C** Cerdip
- **P** Plastic (Encap)
- **D** Ceramic Chip Carrier-Leadless
- **G** Ceramic-Chip Carrier-Leaded
- **H** Plastic Chip Carrier-Leadless
- **J** Plastic Chip Carrier-Leaded

Lead Count
- **A** < 14 Lead
- **B** 14 Lead
- **C** 16 Lead
- **D** 18 Lead
- **E** 20 Lead
- **F** 22 Lead
- **G** 24 Lead
- **H** 28 Lead
- **L** 40 Lead
- **M** 44 Lead
- **N** 48 Lead
- **S** 64 Lead
- **T** 68 Lead
- **Z** Kit

Prefix	Device	Suffix
WD	1943	M 00

Package
Special Parameter

XICOR

Prefix
- **X** Xicor

Package
- **D** Ceramic DIP
- **E** Ceramic DIP
- **H** Die
- **J** Plastic LDCC
- **P** Plastic DIP

Temperature Range
- **Blank** 0 to 70°C
- **I** −40 to 85°C
- **M** −50 to 125°C

E²PROMs

Prefix	Device	Suffix
X	28C256	D M B-35

Process Technology
Package
Temperature Range
Processing Level
Access Time

©IC MASTER 1988

Manufacturer Device Identification	Part Number Prefix	Part Number Suffix	Example

XICOR (continued)

Processing Technology
- **Blank** NMOS
- **C** CMOS

Speed
- **20** 200 ns
- **25** 250 ns
- **Blank** 300 ns
- **35** 350 ns
- **45** 450 ns

Processing Level
- **Blank** Standard
- **B** Class B

Endurance
- **Blank** 1000 Data Changes/Bit
- **/5** 5000 Data Changes/Bit
- **/10** 10000 Data Changes/Bit

Serial E²PROMs

Prefix	Device	Suffix
X	24C04	D M B

Package
Temperature Range
Processing Level

NOVRAMs

Prefix	Device	Suffix
X	2212	D M B/10-35

Package
Temperature Range
Processing Level
Endurance
Access Time

Serial NOVRAMs

Prefix	Device	Suffix
X	2444	D M/10

Package
Temperature Range
Endurance

ZILOG

Z Zilog

Zilog
an affiliate of
EXXON Corporation
(Current)

Zilog
(Discontinued)

Environmental
Preferred
- **C** Plastic Standard
- **E** Hermetic Standard
- **F** Protopack Standard

Longer Lead Time
- **A** Hermetic Stressed
- **B** 833 Class B Military
- **D** Plastic Stressed
- **J** JAN 38510 Military

Package
Preferred
- **D** Cerdip
- **P** Plastic
- **V** Plastic Chip Carrier

Longer Lead Time
- **C** Ceramic
- **F** Plastic Quad Flat Pack
- **G** Ceramic PGA (Pin Grid Array)
- **L** Ceramic LCC
- **Q** Ceramic Quad-in-Line
- **R** Protopack
- **T** Low Profile Protopack

Temperature
Preferred
- **S** 0°C to +70°C

Longer Lead Time
- **E** −40°C to +85°C
- **M** −55°C to +125°C

Prefix	Device	Suffix
Z	80320	08 V S C RXXX

Speed
Package
Temperature
Environmental Flow
ROM Mask Number

©IC MASTER 1988

Last Page This Section. Next Page 401.

IS THIS A BORROWED COPY?

Avoid the hassle and order your own personal two-volume set of IC MASTER. It's the surest way to simplify your IC selection efforts.

Only IC MASTER allows you to examine and compare the specifications, relative strengths, and weaknesses of all devices in serious contention for your application. And only IC MASTER brings you actual manufacturers' data sheets, allowing you to make complete and definitive device selections.

You can order IC MASTER simply by charging it to your VISA or MasterCard credit card. To place your order call Marie Botta at (516) 227-1314.

APPLICATION NOTE DIRECTORY

The application notes in this directory can be located by function or device number.

1. To find out what is published by function, locate the closest topics in the index at right, turn to the pages indicated, and scan through the listings.

2. To find all the application notes covering a given device, look up the device in the Part Number Index at the front of this book. The ¶ sign leads to application notes.

The application notes are organized under the following headings: Digital, Microprocessor, Microcomputer Boards, Interface, Linear, Memory, ASIC/Custom, and Packaging. Beneath those headings are functional and applications categories arranged alphabetically. Within each category the notes are arranged in alphabetical sequence by title. When an application note fits under several categories, it is listed in one and cross-referenced by the others. If an application note covers specific devices or shows how certain devices are used, these device numbers are listed in parentheses just below the title.

The length of each application note is indicated in parentheses on the last line; if the note is bound into a book, the last line will show that it is part of a handbook, databook, or catalog.

Once you have determined which application notes you need, contact the manufacturer's sales office or write to the manufacturer. Be sure to give both the title and the application note number. Addresses and phone numbers are listed in the Manufacturers and Distributors Directory.

DIGITAL
Arithmetic....402
CMOS....402
Consumer....404
Counters....404
Gallium Arsenide....404
General....404
High-Speed Logic....405
I^2L....405
LSI, General....405
Multiplexers....405
Pulse Handling....405
Signal Processing....406
TTL, General....406
Trigger Circuits....406

MICROPROCESSOR
Applications....408
General....410
I/O....411
Programming....412
Systems....413

MICROCOMPUTER BOARDS
Applications....418

INTERFACE
Converters....419
Data Acquisition Systems....423
Data Transmission....423
Drivers....425
Encoders....426
Error Correction and Detection....426
MOS/Bipolar....426
Multiplexers....426
Switches....426

LINEAR
Active Filters....428
Amplifiers, Instrumentation....428
Amplifiers, Isolation....428
Amplifiers, Operational....428
Amplifiers, Power....430
Amplifiers, Preamplifier....430
Amplifiers, RF....430
Amplifiers, Special Purpose....430
Amplifiers, Video....431
Arrays....431
Communications....431
Comparators....434
Consumer, AM/FM....434
Consumer, Audio....435
Consumer, TV....435
Displays....436
Followers....436
General....436
Industrial Control....437
Instrumentation....438
Modulators....438
Motor Control....438
Multipliers....438
Phase-Locked Loops....438
Photosensitive Devices....439
Power Control....439
Power Supplies....440
Rectifiers....441
Regulators....441
Telecommunications....442
Thermal Considerations....442
Timers....442
Transducers....442
Video....442
Voltage References....443

MEMORY
Analog....444
Character Generators....444
Controllers....444
EAROMs....444
E^2PROMs....444
FIFOs/LIFOs....445
General....445
Microprogramming....446
PROMs....446
RAMs....446
ROMs....448
Shift Registers....448

ASIC/CUSTOM
Gate Arrays....449
General....449
Linear and Linear/Digital Arrays....450
Programmable Logic....450
Standard Cells....452

PACKAGING
General....453

©IC MASTER 1988

DIGITAL

Arithmetic

A Floating Point Package for The HPC 1
National Semiconductor AN–486 (54pp)

A Four-Cycle Butterfly Arithmetic Architecture 2
TRW/LSI

A Single-Board Floating Point Signal Processor 3
(TDC1022, TDC1033, TDC1042)
TRW LSI TP24 (6pp)

A 22-Bit Floating Point Registered Arithmetic Logic Unit 4
TRW LSI TP–23 (4pp)

AM25S10 Four-Bit Shifter 5
(AM25S10)
Advanced Micro Devices (10pp)

Applications of the TTL/MSI 93S43 4-Bit by 2-Bit Two's Complement Multiplier 6
(93S43)
Fairchild AN–329 (15pp)

Arithmetic Arrays Using Standard COS/MOS Building Blocks 7
(CD4001, CD4008, CD4011, CD4013, CD4019)
RCA ICAN–6600 (6pp)

COS/MOS Rate Multipliers—Versatile Circuits for Synthesizing Digital Functions 8
(CD4089, CD4527)
RCA ICAN–6739 (12pp)

Fast Multipliers Using TTL Read Only Memories
See listing under (Memory) ROMs. (Texas Instruments)

Floating Point Multiplier 9
TRW/LSI

Introducing and Applying the 8x8 CMOS/SOS Multiplier, GP503 10
(GP503)
RCA ICAN–7211 (7pp)

LSI Multipliers Application Notes 11
TRW/LSI

MECL 10,000 Arithmetic Elements MC10179, MC10180, MC10181
See listing under (Digital) High Speed Logic (Motorola).

Multiplier-Accumulator Application Notes 12
TRW/LSI

NBCD Sign and Magnitude Adder/Subtracter 13
(MC14560, MC14561)
Motorola AN–738 (7pp)

CMOS

A COS/MOS PCM Telemetry and Remote Data Acquisition Design 14
(CD4000 Series)
RCA ICAN–6289 (12pp)

A Simplified Approach to Testing CMOS Inverters and Gates 15
Solid State Scientific AN–107 (4pp)

A Typical Data-Gathering & Processing System Using CD4000A-Series COS/MOS Parts 16
(CD4000 Series)
RCA ICAN–6210 (11pp)

A 3 1/2 Digit DVM Using an Integrated Circuit Dual Ramp System
See listing under (Linear) Instrumentation (Motorola)

AC Characteristics of MM54HC/MM74HC High-Speed CMOS 17
(MM54/74HCXXX)
National Semiconductor AN–317 (6pp)

AC Characteristics of the V54/74ACT Interface Family 18
(V54/74ACT)
VTC Data Book and Applications Manual, Section 4 (9pp)

Advanced CMOS Logic Designer's Handbook 19
Texas Instruments SCAA001

Application of CD4016A Quad Bilateral Switch
See 'Transmission and Multiplexing of Analog or Digital Signals Using the CD4016A Quad Bilateral Switch' Under (Interface) Data Transmission. (RCA)

Application of the RCA-CD4093B COS/MOS Schmitt Trigger 20
(CD4093B)
RCA ICAN–6346 (6pp)

Applications of CD40107BE COS/MOS Dual Buffer 21
(CD40107BE)
RCA ICAN–6564

Applications of CMOS Integrated Circuits in Communications Equipment 22
(SCL4000 Series)
Sprague Solid State AN–108 (4pp)

Battery-Powered Digital-Display Clock/Timer and Metering Applications Utilizing the RCA CD4026A and CD4033A Decade Counters 7-Segment Output Types 23
(CD4009, CD4010, CD4026, CD4033)
RCA ICAN–6733 (16pp)

Characterization and Specification of the V54/74ACT Interface Family 24
(V54/74ACT)
VTC Data Book and Applications Manual, Section 6 (9pp)

CMOS Analog Multiplexers and Switches; Applications, Considerations 25
Harris Semiconductor AN–520 (9pp)

CMOS Breathes New Life Into Bit-Slice 26
(IDT49C410)
Integrated Device Technology AN–08 (12pp)

CMOS Expandable Gates 27
(SCL4402A, SCL4412A)
Sprague Solid State AN–102 (3pp)

CMOS/MOS Interfacing Simplified
See listing under (Interface) MOS/Bipolar (RCA)

CMOS/MOS Rate Multipliers—Versatile Circuits for Synthesizing Digital Functions
See listing under (Digital) Arithmetic (RCA)

CMOS Oscillators 28
National CMOS Databook AN–118 (4pp)

CMOS, the Ideal Logic Family 29
National CMOS Databook AN–77 (7pp)

CMOS Wave Shaping and Level Detection 30
Sprague Solid State AN–109 (5pp)

Comparison of MM54HC/MM74HC to 54LS/74LS, 54S/74S and 54ALS/74ALS Logic 31
(MM54/74HCXXX, 54LS/74LSXXX)
National Semiconductor AN–319 (6pp)

Comparison of the V54/74ACT to 54/74LS, 54/74S, and 54/74ALS Interface Families 32
(V54/74ACT, 54/74LS, 54/74S, 54/74ALS)
VTC Data Book and Applications Manual, Section 8 (8pp)

COS/MOS Electrostatic-Discharge Protection Networks 33
(CD4000 Series)
RCA ICAN–6572 (2pp)

© IC MASTER 1988

DIGITAL (Cont'd)

CMOS (Cont'd)

COS/MOS Integrated Circuits Manual 1
(CD4000 Series)
RCA CMS-272 5.00 (168pp)

DC Characteristics of the V54/74ACT Interface Family 2
(V54/74ACT)
VTC Data Book and Applications Manual, Section 5 (8pp)

Design Case: VME Backplane Drive Circuitry 3
(V54/74ACT)
VTC Data Book and Applications Manual, Section 2 (7pp)

Design of Fixed and Programmable Counters Using the RCA 4018A COS/MOS Presettable Divide-by-'N' Counter
See listing under (Digital) Counters. (RCA)

ESD and Latchup 4
(V54/74ACT)
VTC Data Book and Applications Manual, Section 7 (6pp)

Follow PC-Board Design Guidelines for Lowest CMOS EMI Radiation 5
(54HC/74HC)
National Semiconductor AN-399 (8pp)

Fundamentals of Testing COS/MOS Integrated Circuits 6
RCA ICAN-6532 (14pp)

Getting the Most Out of CMOS Devices for Analog Switching Jobs 7
Harris Semiconductor AN-521 (7pp)

Guide to Better Handling and Operations of CMOS Integrated Circuits 8
RCA ICAN-6525 (5pp)

HD-6440 Applications in Multiplexed Bus Systems 9
(HD6640)
Harris TB-33 (5pp)

High Precision Calibrator 10
(HCAL24010)
Honeywell (7pp)

High-Speed CMOS (MM54HC/MM74HC) Processing 11
(MM54HC/MM74HC)
National Semiconductor AN-310 (8pp)

How to Avoid Latch-up on COFIDEC HC5554/57 12
(HC5554, HC5557)
Matra-Harris Semiconductor 1027 (2pp)

Improved CMOS Gate Design 13
(SCL4000 Series)
Sprague Solid State AN-105 (3pp)

Interfacing Analog and Digital Displays with CMOS Integrated Circuits 14
(CD4000 Series)
RCA ICAN-6595 (12pp)

Interfacing COS/MOS with Other Logic Families 15
(CD4000A Series)
RCA ICAN-6602 (12pp)

Interfacing to MM54HC/MM74HC High-Speed CMOS Logic 16
(MM54/74HCXXX)
National Semiconductor AN-314 (10pp)

Interfacing with CMOS 17
Sprague Solid State AN-104 (5pp)

Introduction to CMOS Integrated Circuits with Three-State Outputs 18
Motorola AN-715 (19pp)

MM54C/74C Voltage Translation/Buffering
See listing under Interface (National)

National's Process Enhancements Eliminate the CMOS SCR Latch-Up Problem in 54HC/74HC Logic 19
(54/74HCXXX)
National Semiconductor AN-339 (8pp)

NBCD Sign and Magnitude Adder/Subtracter
See listing under Arithmetic (Motorola)

Noise Immunity Comparison of CMOS Versus Popular Bipolar Logic Families 20
Motorola AN-708A (8pp)

Noise Immunity of COS/MOS B-Series Integrated Circuits 21
(CD4000UB Series, CD4000B Series)
RCA ICAN-6587 (9pp)

Noise Immunity of COS/MOS Integrated-Circuit Logic Gates 22
(CD4000A, CD4001A)
RCA ICAN-6176 (8pp)

Parallel Clocking of Sequential CMOS Devices 23
(CD4000A Series, CD4000B Series)
RCA ICAN-6948 (2pp)

Partial System Power-Down with CMOS Devices 24
Texas Instruments SCLA005 (4pp)

Power Dissipation for the V54/74ACT Interface Family 25
(V54/74ACT)
VTC Data Book and Applications Manual, Section 3 (5pp)

QMOS HC/HCT Logic Designs For Battery Powered or Battery Backed-Up Operation 26
RCA ICAN-7373 (6pp)

Radiation Resistance of the COS/MOS CD4000A and CD4000B Series 27
(CD4000 Series)
RCA ICAN-6563 (3pp)

SN54/74HCT CMOS Logic Family 28
Texas Instruments SCLA001A (6pp)

SN74HC Input/Output Voltage Specifications 29
Texas Instruments SCLA002 (4pp)

System Power Models for HCMOS Devices 30
Texas Instruments SCLA003 (6pp)

The Best Solution to Your Complex Custom CMOS Requirements 31
Holt Integrated Circuits (12pp)

The DG308A Digitally Switches Analog Signals 32
(DG308A)
Siliconix AN83-1 (8pp)

The D469: An Optimized CMOS Quad Driver for MOS Power FET Switches 33
(D469)
Siliconix AN-83-11 (7pp)

Transmission-Line Effects Influence High-Speed CMOS 34
(54HC/74HC)
National Semiconductor AN-393 (6pp)

TSC426/427/428 System Design Practice 35
(TSC426, TSC427, TSC428)
Teledyne Semiconductor AN-25 (4pp)

Understanding and Eliminating Latch-Up in CMOS Applications 36
Mitel Semiconductor MSAN-107 (15pp)

Understanding Buffered and Unbuffered CMOS Characteristics 37
RCA ICAN-6558 (8pp)

Understanding CMOS 38
RCA CPI-280 (120pp) 10.00

DIGITAL (Cont'd)

CMOS (Cont'd)

Using the CD4047A in COS/MOS Timing Applications 1
(CD4047)
RCA ICAN-6230 (13pp)

Using the CD4520B to Design Dividers with Symmetrical Outputs 2
(CD4520B)
RCA ICAN-6362 (10pp)

Using the HS-3374 in a Transient Voltage or Transient Radiation Environment 3
(HS3374RH)
Harris Semiconductor AN-401 (3pp)

Using the SCL 4528 Dual Monostable Multivibrator 4
(SCL4528)
Solid State Scientific AN-111 (6pp)

Consumer

Handheld Calculator Battery Systems 5
National MOS/LSI Databook AN-149 (4pp)

High Voltage Shift Registers Move Displays
See listing under (Memory) Shift Registers (National)

Timekeeping Advances Through COS/MOS Technology 6
RCA ICAN-6086 (12pp)

Universal Count/Display Circuit 7
(ZN1040AE)
Ferranti (23pp)

Counters

A BASIC Program to Configure the CD4059A Programmable Divide-by-N Counter 8
(CD4059A)
RCA ICAN-7228 (5pp)

A Basic Selection Guide to Digital Counters 9
(CD4017, CD4024, CD4518)
RCA ICAN-6552 (6pp)

A 200 MHz Autoranging MECL-MCMOS Frequency Counter 10
(MC10000 Series)
Motorola AN-742 (11pp)

An MSI 500 MHz Frequency Counter Using MECL and MTTL
See listing under (Digital) High Speed Logic. (Motorola)

Battery-Powered 5 MHz Frequency Counter 11
Motorola AN-717 (9pp)

Design of Fixed and Programmable Counters Using the RCA 4018A COS/MOS Presettable Divide-by-'N' Counter 12
(CD4018)
RCA ICAN-6498 (6pp)

Five Digit Accumulator/Elapsed Time Indicator 13
(MC14534)
Motorola AN-743 (5pp)

New CMOS Counting Functions for Real-Time Applications 14
(CDP1878, CDP1879)
RCA ICAN-7116 (11pp)

Using the MK5009P MOS Counter Time-Base Circuit 15
(MK5009)
Thomson-Mostek AN-104 (4pp)

Gallium Arsenide

Application and Performance of Gigabits' 40 I/O Chip Carrier 16
Gigabit Logic AB1 (2pp)

Applying the 10G061 as a Universal Programmable Counter 17
(10G061)
GigaBit Logic AN-6

Baseline Reliability of Commercial Gallium Arsenide ICS 18
GigaBit Logic AR-17

Capacitor Diode FET Logic Circuit Approach for GaAs D-MESFET ICs 19
Gigabit Logic AR-5 (6pp)

Compiled Gallium Arsenide ASICs 20
GigaBit Logic AR-20

GaAs Digital ICs Impact Fiber System Design 21
(10G040A, 10G041A)
GigaBit Logic Ar-11

GaAs IC Die Handling Procedures 22
Harris Microwave Semiconductor Application Brief No. 102 (1pp)

GaAs IC Testing and Handling 23
Harris Microwave Semiconductor Application Brief No. 101 (1pp)

Guidelines for the Use of Digital GaAs ICs 24
GigaBit Logic AN-2

Interfacing Picologic and NanoRam ICs the Other Logic Families 25
Gigabit Logic AN-4 (23pp)

Interfacing with GaAs Digital ICs 26
Harris Microwave Semiconductor Application Brief No. 103 (2pp)

Minimizing Clock Skew through Use of the 10G010 and 10G011B Fanout Buffers 27
(10G010, 10G011B)
GigaBit Logic AB-2

Packages for Ultrahigh-Speed GaAs ICs 28
Gigabit Logic AR-3 (4pp)

The Operation and Application of PicoLogic GaAs Integrated Circuits 29
GigaBit Logic AN-1 (12pp)

Thermal Management of Picologic and NanoRam GaAs Digital IC Families 30
Gigabit Logic AN-3 (10pp)

Two Applications for the 10G024 Quad GaAs Flip-Flop 31
(10G024)
GigaBit Logic AR-19

General

Criteria for Choosing Resins and Evaluation Tests for Discrete and Integrated Power Devices in Plastic Packages
See listing under (Linear) General (SGS-ATES)

Digital Telephone-System Components - CODECs—and the μ and A-Laws 32
RCA ICAN-6941 (7pp)

Economics of ISL Gate Arrays 33
(8A1200, 8A1260, 8A1542)
Signetics

Hall Effect IC Applications 34
(UGN3604, UGN3605)
Sprague Electric CN-207 (40pp)

HMOS Reliability 35
Intel RR-18 (9pp)

How Cost Effective Are Custom IC's? 36
(MONOCHIP)
Interdesign APN-5 (6pp)

© IC MASTER 1988

DIGITAL (Cont'd)

General (Cont'd)

Logic Design for CMOS and NMOS Monochips 1
(MONOCHIP)
Interdesign APN–14 (15pp)

Nonvolatile Logic Applications 2
(MN9102, MN9105, MN9106, MN9107, MN9108)
Plessey (40pp)

What is This Thing Called Logic? 3
Vitelic Corp. AB–4 (5pp)

Worst Case Design For Integrated Circuits 4
Interdesign APN–2 (5pp)

High-Speed Logic

A High Speed FIFO Memory Using the MECL MC1143 Register File 5
(MCM10143)
Motorola AN–730 (6pp)

An Introduction to and Comparison of 54HCT/74HCT TTL Compatible CMOS Logic 6
(54HCTXXX, 74HCTXXX)
National Semiconductor AN368 (6pp)

An MSI 500 MHz Frequency Counter Using MECL and MTTL 7
(MECL)
Motorola AN–581 (9pp)

Bussing with MECL 10,000 Integrated Circuits
See listing under (Interface) Data Transmission (Motorola)

High-Speed CMOS Demands Proper Decoupling Techniques 8
(82C82)
Harris TB–49 (4pp)

Interconnection Techniques for Motorola's MECL 10,000 Series Emitter Coupled Logic 9
(MECL)
Motorola AN–556 (22pp)

Interfacing FAST to Multiport Memories 10
Signetics AN–204 (7pp)

Interfacing HC/HCT QMOS Logic with Other Families and Various Types of Loads 11
RCA ICAN–7325 (8pp)

Interfacing with MECL 10,000 Integrated Circuits 12
(MC1650, MC1692, MC10115, MC10116, MC10124, MC10125, MC10128, MC10129, MC10216)
Motorola AN–720 (9pp)

MECL Positive and Negative Logic 13
(MECL)
Motorola AN–567 (2pp)

Modification of LSTTL Test Programs to Test HCT High-Speed-CMOS Logic ICs 14
RCA ICAN–7323 (4pp)

M10800 MECL LSI Circuits are Designed for High-Performance Microprogrammed Processors 15
Motorola AN–792 (12pp)

Power Consumption in QMOS High-Speed Logic 16
RCA ICAN–7315 (6pp)

Power Supply Distribution and Decoupling for QMOS High-Speed-Logic ICs 17
RCA ICAN–7329 (2pp)

QMOS High Speed CMOS Logic 18
RCA ICAN–7337 (5pp)

Replacing LSTTL with QMOS High-Speed Logic ICs 19
RCA ICAN–7330 (6pp)

System Design Considerations 20
(V54/74ACT)
VTC Data Book and Applications Manual, Section 1 (13pp)

System Level Comparison of High Speed Technologies 21
GigaBit Logic AR–4 (7pp)

Terminating F100K ECL Inputs 22
(F100K)
Fairchild MHSL–3 (2pp)

Testing and Specifying FAST Logic 23
Signetics AN–202 (6pp)

The MC1600 Series MECL III Gates 24
(MC1660, MC1661, MC1662, MC1663, MC1664, MC1665)
Motorola AN–504 (14pp)

Understanding MECL 10,000 DC and AC Data Sheet Specifications 25
(MECL)
Motorola AN–701 (7pp)

Using FAST Logic Functions in Microprocessor Systems 26
(74FXX, 74SXX, 74LSXX)
Signetics AN–201 (7pp)

Using FAST Logic Functions in Microprocessor Systems 27
Signetics AN–201

Utility G/A Logic Simulation with a PC 28
(VNT001)
Siliconix AN83–12

I^2L

Custom IC Design Using I^2L Technology 29
(XR-IIL-CHIP)
Exar (5pp)

Digital Display Systems 30
Fairchild AN–212/2 (24pp)

Injection Current Sources 31
Fairchild MC–1 (4pp)

Monolithic I^2L Test Circuit Using XR-C409 32
(XR-C409)
Exar AN–17 (4pp)

LSI, General

Semi-Custom LSI Design with I^2L Gate Arrays Using XR300 and XR500 33
Exar AN–16 (6pp)

Multiplexers

DG536 Wide Band Multiplexer 34
(DG536)
Siliconix AN86–1

Improved System Performance Using Microprocessor Compatible Multiplexers 35
(DG526, DG527, DG528, DG529)
Siliconix AN83–4 (11pp)

Multiplexer Adds Efficiency to 32-Channel Telephone System 36
Siliconix TA73–1 (4pp)

Pulse Handling

Nanosecond Pulse Handling Techniques in I/C Interconnections 37
Motorola AN–270 (6pp)

DIGITAL (Cont'd)

Signal Processing

A Guide to the Use of the TDC1028: A Digital Filter Building Block 1
(TDC1028)
TRW LSI TP–22 (10pp)

A Radix 2 FFT Program for the HPC 2
National Semiconductor AN–487 (25pp)

An Introduction to Two Different Finite Impulse Response Structures 3
TRW LSI TP–31 (5pp)

Correlation—A Powerful Technique for Digital Signal Processing 4
TRW LSI Products TP–17

Data Input/Output Techniques for the GAPP 5
(NCR45CG72)
NCR Corporation AN5

Detection of Edges and Gradients in Binary and Gray Scale Images with the GAPP Processor 6
(NCR45CG72)
NCR Corporation GAPP AN3

Digital Filtering Using the HPC 7
National Semiconductor AN–485 (15pp)

Floating Point Hardware for Digital Signal Processing 8
TRW LSI Products TP–25

GAPP Chip Performs MxN Correlation on Binary Images 9
(NCR45CG72)
NCR Corporation GAPP AN4

GAPP Memory Expansion 10
(NCR45CG72)
NCR Corporation GAPP AN2

General Purpose Format Speech Synthesizer Module Using the Intel 2920 Signal Processor 11
(2920)
Intel AP–111 (24pp)

Hardware Development for a General Purpose Digital Filter Computing Machine 12
TRW/LSI

High Speed Finite Impulse Response Filtering Made Simple with Calmos FIR Controller 13
(CA29C128)
Salmos Systems (4pp)

High-Speed Servo Control with the 2920 Signal Processor 14
(2920)
Intel AP–124 (40pp)

Introduction to Public Key Encryption and Key Management with Calmos CA34C168 15
(CA34C168)
Calmos Systems (10pp)

Introduction to the Z-Transform and its Derivation 16
TRW/LSI

Number Crunching Using Bit-Serial Multipliers 17
(NCR74HCT384, NCR74HCT84, NCR74HCT784X4)
NCR Corporation ANM2

Real-Time Digital Image Transformation 18
(L4C381, LMU112, LMS512)
Logic Devices Incorporated AN (12pp)

Second Order Recursive Digital Filter Design with the TRW Multiplier-Accumulators 19
TRW/LSI

S7720 Digital Signal Processor 20
(S7720)
Gould AMI (12pp)

The HC5560 Digital Line Transcoder 21
(HC-5560)
Harris Analog Products AN–573 (14pp)

Ultra High Performance FFT Using DSP 'Designer Chips' 22
(LRF08, L4C381, LMA1010, LRP520, L5H32)
Logic Devices Incorporated AN (12pp)

Using the NCR45CF8 Finite Impulse Response Filter 23
(NCR45CF8)
NCR Corporation ANF1

Using the T7032 Clock Recovery Circuit 24
(T7032)
AT&T TN87–03SMOS (5pp)

Using the 2920 Signal Processor in Modem Applications 25
Intel AP–117 (40pp)

2920 Analog Signal Processor Design Handbook 26
(2920)
Intel (128pp) 7.50

Trigger Circuits

CMOS Schmitt Trigger—a Uniquely Versatile Design Component 27
(MM54C14, MM74C14)
National MOS/LSI Databook AN–140 (6pp)

CMOS Schmitt Triggers 28
(MC14093B, MC14583B, MC14584B)
Motorola AN–768A (8pp)

Designer's Encyclopedia of One-Shots 29
National Semiconductor AN–366 (30pp)

Designing with SN54/74LS123 Dual Retriggerable Monostable Multivibrators 30
(SN54LS123, SN74LS123)
Texas Instruments Application Report CA–196 (12pp)

IFL Programmable Retriggerable One Shot 31
Signetics AN–1 (6pp)

Latches and Flip-Flops with PLS153 32
(PLS153)
Signetics AN–14 (13pp)

PLD Programmable Retriggerable One-Shot 33
(PLS159)
Signetics AN–11 (4pp)

Schmitt Triggers and Multivibrators 34
(MONOCHIP)
Interdesign APN–13 (7pp)

1.3 Volt IC Flasher, Oscillator, Trigger, or Alarm
See listing under (Linear) Timers (National)

TTL, General

Advanced Schottky Family 35
Texas Instruments SDAA003A (40pp)

Advanced Schottky Load Management 36
Texas Instruments SDAA006 (30pp)

Digital Phase-Locked Loop Design Using SN54/74LS297 37
(SN74LS297, SN54LS297)
Texas Instruments AR-SCA–206A (28pp)

Metastable Characteristics 38
Texas Instruments SDAA004 (4pp)

© IC MASTER 1988

DIGITAL (Cont'd)

TTL, General (Cont'd)

Metastable Characteristics
Texas Instruments SDAA004 (4pp) — 1

Microprocessor—GPIB Interfacing with the 96LS488
(96LS488)
Fairchild Application Note 351 (24pp) — 2

TTL/MSI 9334 8-Bit Addressable Latch
(9334)
Fairchild Application Note 220 (8pp) — 3

MICROPROCESSOR

Applications

A Designer's Guide to the PSG507 1
(PSG507)
Texas Instruments SDPA003 (32pp)

A Dot Matrix Controller System Design Using 10938/10939 and R6500/1EB Microcomputer 2
Rockwell 2163

A Dual Processor System for Use in the EXORciser 3
Motorola AN–777 (13pp)

A Dual-Processor System Using Two MC6809E MPUs on a Common Bus 4
(MC6809E)
Motorola AN–892 (9pp)

A General Purpose Frequency Counter Using an M6805 HMOS/M146805 CMOS Family Microcomputer 5
(M6805, M146805)
Motorola Semiconductor AN885 (6pp)

A Low Component Count Video Data Terminal Using the DP8350 CRT Controller and the INS8080 CPU 6
(DP8350, INS8080A, INS8250)
National Interface Databook AN–199 (10pp)

A Low-Cost Regulator for Microprocessor Applications 7
(VN4000A)
Siliconix DA80–1 (11pp)

A Low-Cost Terminal Using the MC6801 8
(MC6801, MC6847, MC1372)
Motorola AN–798A (21pp)

A Radio Set Phase-Lock Loop (PLL) Using an MC6805T2()2 Single-Chip Microcomputer 9
(MC6805T2)
Motorola AN–883 (42pp)

A Zero-Crossing Application for the M6805 HMOS Family 10
(MC6805, MC68705U3)
Motorola Semiconductor AN 902 (16pp)

An Architectural Solution for High Performance Graphics 11
National Semiconductor AN–451 (8pp)

An Expanded MC146805F2/G2 Emulator Using the MC146805E2 Microprocessor Unit 12
(MC146805E2, MC146805F2, MC146805G2)
Motorola AN–884 (28pp)

An Interactive Graphic System Using the MC6809 13
(MC6809, MC6847, MC1372)
Motorola Semiconductor AN–825 (28pp)

An Introduction to Digital Spectrum Analysis including a High Speed FFT Processor Design 14
TRW/LSI A–11

Application Summary for the MC6805R2–1 Single-Chip Microcomputer 15
(MC6805R2-1)
Motorola Semiconductor AN–869 (50pp)

Bicycle Computer Using the CDP6805G2 Microcomputer 16
(CDP6805G2)
RCA ICAN–7198 (28pp)

Bicycle Computer Using the MC146805G2 Microcomputer 17
(MC146805G2)
Motorola Semiconductor AN–858 (28pp)

Bit-Slice Processor 8-Bit Family 18
(SN74AS888, SN74AS890)
Texas Instruments SDBA001 (60pp)

CDP68HC05C4 Monitor And Real-Time Controller 19
(CDP68HC05C4)
RCA ICAN–8601 (27pp)

CDP68HC05C4 Monitor and Real-Time Controller 20
(CDP68HC05C4)
RCA ICAN–8601 (27pp)

Cordless Telephone Sets 21
(PIC7000, ER5901, SP0256, SPR-32)
General Instrument AB–202 (2pp)

Correcting Errors Digitally in Data Acquisition and Control 22
(SDM856/857, MP20, MP21)
Burr-Brown Research AN–101 (6pp)

CRT Terminal Design Using the 8275 and 8279 23
(8275, 8279, 8224, 8080, 8257, 8228, 8212, 8251, 2708, 2714, 2716)
Intel AP–32 (57pp)

Data Acquisition Networks with NMOS and CMOS 24
(MC14433, MC6800)
Motorola AN–770 (11pp) MP000500

DCT11-Based Microcomputer System 25
(T11)
Digital Equipment Corp. (17pp)

Design Considerations using Quartz Crystals with Zilog's components 26
(Z8581)
Zilog ZIL280201 (4pp)

Designing with the Microprogram Sequencer GP502 27
(GP502)
RCA ICAN–7327 (28pp)

Direct Memory Access with the 8257 DMA Controller 28
(8257, 8080A, 8085A)
Intel AP–48 (4pp)

DSP Applications with the TMS320 Family 29
(TMS320)
Texas Instruments

Effects of NS32082 Memory Management Unit on Processor Throughput 30
(NS32082)
National Semiconductor AN–464 (4pp)

FD179X Application Notes 31
(FD179X)
Western Digital (16pp)

Feature Telephones 32
(PIC7000, AY-5-9400, SP0256, ER5901, SPR-16)
General Instrument AB–200 (2pp)

Function/Application of the LD122/LD121A ± 4 1/2 Digit A/D Converter Set in Measurement Systems 33
Siliconix AN80–8 (9pp)

Graphics Using the DP8350 Series of CRT Controllers 34
(DP8350)
National AN–212 (4pp)

Hardware Intefacing to the TMS320C25 35
(TMSA320C25)
Texas Instruments

High-Speed CMOS TTL-Compatible Number Crunching Elements For Fixed and Floating Point Arithmetic 36
(IDT39C10B, IDT72064, IDT2065, IDT72264, IDT2265)
Integrated Device Technology AN–04 (6pp)

© IC MASTER 1988

MICROPROCESSOR (Cont'd)

Applications (Cont'd)

High-Speed Data Communications Link Using an MC68121 IPC and MC6844 DMAC 1
(MC68121, MC6844)
Motorola Semiconductor AN–886 (8pp)

High-Speed Digital Servos for Motor Control Using the 2920/21 Signal Processor 2
(2920, 2921)
Intel AP–124 (36pp)

Horizontal Scrolling With The CRT 5037 VTAC 3
(CRT5037)
Standard Microsystems Corp. AN1–7 (2pp)

Implementing an 8-Bit Buffer in COPS 4
(COP440, COP444L)
National Semiconductor AN–329 (4pp)

Initializing the CIO 5
(Z8536, Z8036)
Zilog ZIL225601 (13pp)

Intelligent Display Controller Designers Notes 6
Rockwell 2175

Intelligent Fast Disk Controller Using AM29116 7
(AM29116)
Advanced Micro Devices (67pp)

Interconnecting the UNIX Microsystem CPU, MMU, and MAV Devices 8
(WE32100, WE32101, WE32106)
AT&T AP86–51MCP 10pp)

Interfacing M6800 Peripheral Devices to the MC68000 Asynchronously 9
(M6800, MC68000)
Motorola Semiconductor AN–808 (9pp)

Interfacing the BCRT to the 68000 16-Bit MPU 10
(UT1553B)
United Technologies Microelectronics Center MS2 (8pp)

Interfacing the WE32104 DMA Controller to the Motorola MC68020 Microprocessor 11
(WE-32104)
AT&T AP87–43MCP (12pp)

Interfacing the Z Bus Peripherals 12
Zilog ZIL539601 (5pp)

Interfacing the Z-BUS Peripherals to the V20/V30/8086/8088 13
(Z8030, Z8036, Z8038)
Zilog ZIL225501 (8pp)

Interfacing the Z8500 Peripherals to the 68000 14
(Z8500)
Zilog ZIL226701 (12pp)

Interfacing Z80 CPUs to the Z8500 Peripheral Family 15
(Z80A, Z80B, Z80H, Z8500)
Zilog ZIL229601 (20pp)

Keyboard Display Scanning with Intel's MCS–48 Microcomputers 16
(8035, 8039, 8048, 8049, 8021, 8022, 8748, 8041, 8741)
Intel AP–40 (24pp)

Keyless Entry System Using the CDP6805F2 8-Bit Microcomputer Unit 17
(CDP6805F2)
RCA ICAN–7197 (10pp)

Low Voltage Inhibit (LVI) Capability of the M6805 HMOS Microcomputer (MCU) Family 18
(M6805)
Motorola AN–892 (20pp)

MC68HC11 Floating-Point Package 19
(MC68HC11)
Motorola Semiconductor AN974 (42pp)

Memory Management With The Z80000 Microprocessor 20
(Z80000)
Zilog ZIL232401 (9pp)

Microprocessor Multiplication Accelerator 21
(NCR45CM16)
NCR Corporation M–1 (12pp)

Motor RPM Control: An INS8060 Multiprocessor Example 22
(INS8060)
National AN–201 (10pp)

Multimicroprocessor-Based Transistor Test Equipment 23
RCA ICAN–7020 (8pp)

Multiprocessing Capabilities of the MC68020 32-bit Microprocessor 24
(MC68020)
Motorola AR–220 (16pp)

Multiprocessor Controller Using the MC6809E and the MC68120 25
(MC6809E, MC68120)
Motorola AN–850 (20pp)

Programmable Industrial Controller 26
(Programmable Industrial Co)
Digital Equipment Corp. (4pp)

Programming the SharpScan EGA 27
(SharpScan)
Chips and Technologies (5pp)

SBP9989-SBP9966 Software Interrupt Simulation Application 28
(SBP9966, SBP9989)
Texas Instruments AN-SBP9989 (3pp)

Serial I/O and Math Utilities for the 8049 Microcomputer 29
(8049)
Intel AP–49 (22pp)

Simple Console Controller for the F9450 30
(F9450, MK38P70)
Fairchild MC–2 (11pp)

Simplify CRT Terminal Design with the DP8350 31
(DP8350)
National Interface Databook AN–198 (10pp)

Special Considerations in Using the MC6801 Interrupt Capabilities 32
(MC6801)
Motorola Semiconductor AN–807 (11pp)

Speech Recognition 33
(DCT11-AA)
Digital Equipment Corp. (3pp)

Text to Speech System 34
(SP0256-AL2, PIC7041)
General Instrument AB–197 (2pp)

The MM58274 Adds Reliable Real-Time Keeping to Any Microprocessor System 36
(MM58274)
National Semiconductor AN–365 (16pp)

The X2444 Serial NOVRAM Teams Up with the 8051 Microcontroller Family 37
(X2444)
Xicor DB7–17 (8pp)

MICROPROCESSOR (Cont'd)

Applications (Cont'd)

Theory and Implementation of a Splitband Modem Using the TMS32010 1
(TMS32010)
Texas Instruments

TMS34010 Applications Book 2
(TMS34010)
Texas Instruments

TMS7000 Bus Activity Tables 3
(TMS7000)
Texas Instruments SPNA002 (24pp)

TMS7000 Keyboard Interface 4
(TMS7000)
Texas Instruments SPNA003 (36pp)

Use of the NS32332 With the NS32082 and the NS32201 5
(NS32332)
National Semiconductor AB–27 (2pp)

Using the M79018DX–15 Dual Port RAM 6
(M79018DX-15)
AT&T TN86–06MMOS (14pp)

Using the 8202 Dynamic RAM Controller 7
(8202, 8085A, 8086)
Intel AP–45 (25pp)

Using the 8295 Printer Controller 8
(8295)
Intel AP–54 (31pp)

Using Z8581 Clock Stretches in Z80 CPU Applications 9
(Z8581)
Zilog ZIL280701 (10pp)

Variable Character Size With The CRT 9041 (VAC) 10
(CRT9041)
Standard Microsystems Corp. TN4–7 (4pp)

Versatile Thermostat Using CMOS MC146805E2 MPU 11
(MC146805E2)
Motorola Semiconductor AN–855 (20pp)

WE32104 DMA Controller as a Bridge Between a 32-Bit Microprocessor and an 8-Bit I/O 12
(WE32104)
AT&T AP87–42MCP (20pp)

10 MHz, No-Wait States NS32016 System 13
(NS32016)
National Semiconductor AN–404 (11pp)

16-Bit CMOS Slices—New Building Blocks Maintain Microcode Compatibility Yet Increase Performance 14
(IDT39C01, IDT3903A, IDT3910B, IDT39203)
Integrated Device Technology AN–06 (5pp)

279X Application Note No. 1 15
(WD279X)
Western Digital AN–1 (24pp)

279X Application Note No. 2 16
(WD279X)
Western Digital AN–2 (22pp)

279X Application Note No. 3 17
(WD279X)
Western Digital AN–3 (26pp)

8088 Microprocessor to R1212/R2424 Modem Interface 18
(R1212, R2424)
Rockwell 672

General

A Non-Volatile Microprocessor Memory Using 4K N-Channel MOS RAMS
See listing under (Memory) RAMS (Motorola)

A Study of the Crystal Oscillator for CMOS-COPS 19
National Semiconductor AN–400 (rpp)

A Users Guide to COPS Oscillator Operation 20
(COPS Series)
National Semiconductor AN–326 (4pp)

An Applications Guide to 64-Pin/50-Mil-Center Packaging 21
(F945X)
Fairchild MC–3 (6pp)

An Introduction to Microprocessors and the RCA COSMAC COS/MOS Microprocessor 22
(COSMAC)
RCA ICAN–6416 (8pp)

An Introduction to the Use of the General Processor Unit, GP001 23
(GP001)
RCA ICAN–7202 (10pp)

CDP1804 and CDP1805 Processors Improve System Performance and Lower Chip Count 24
(CDP1804AC, CDP1805AC)
RCA ICAN–6957 (6pp)

CDP6805 CMOS Family Emulators 25
(CDP6805)
RCA ICAN–7199 (8pp)

CDP6805 Micros: Converting Interrupts 26
(CDP6805E2, CDP6805E3)
RCA ICAN–7364 (4pp)

CMOS-SOS LSI Family Forms High-Performance Rad-Hard Processor 27
RCA ICAN–7319 (6pp)

Four-Bit Single-Chip Microcomputers: Their Nature and Applications 28
(MB8841)
Fujitsu Microelectronics AR–003 (10pp)

GAPP Memory Expansion 29
NCR AN–2 (6pp)

GTE CMOS Brings New Life to 6500-Series Microprocessors 30
(G65SC00)
GTE Microcircuits 3002–04–00 (16pp)

Keyless Entry System Using an MC146805F2 8-Bit Microcomputer Unit 31
(MC146805F2)
Motorola Semiconductor AN–863 (10pp)

Memory Mapping Using SN54/74LS610 through SN54/74LS613 32
(SN54LS610, SN54LS611, SN54LS612, SN54LS613, SN74LS610, SN74LS611, SN74LS612, SN74LS613)
Texas Instruments AR-SCA–205 (16pp)

Microprocessor Family Turns to Low-Power CMOS 33
(80C86)
Harris CMOS Military Applications p. 8 (7pp)

Monitor for the CDP6805G2 Microcomputer 34
(CDP6805G2)
RCA ICAN–7200 (16pp)

New CMOS CDP1800 Series Processors Enhance System Performance 35
RCA ICAN–6971 (6pp)

New Techniques for Modeling Microprocessors in Logic Simulation 36
Logic Automation Incorporated 07APN5001 (6pp)

© IC MASTER 1988

MICROPROCESSOR (Cont'd)

General (Cont'd)

Product Development for the MC68020 1
(MC68020)
Motorola Semiconductor AR227 (5pp)

Real-Time Interrupts Using the CDP1804A/5A/6A CMOS Microprocessors 2
(CDP1804A, CDP1805A, CDP1806A)
RCA ICAN–7144 (4pp)

RS–232C Compatible Data Encryption Unit Using the T7000A DEP and the T7001RNG 3
(T7000A, T7001)
AT&T AN–13 (36pp)

Self-Contained Self-Check Unit for M6805 Family Single-Chip Microcomputers 4
(M6805)
Motorola Semiconductor AN–910 (16pp)

Smart Models in Parallel: Simulating the Sequent S-Series 5
Logic Automation 07APN5002 (4pp)

Software Debug Techniques Using the MD68SC49B 6
(MD68SC49B)
Mitel MSAN–115 (6pp)

The MC6809/MC6809E Sync Instruction 7
(MC6809, MC6809E)
Motorola Semiconductor AN–865 (4pp)

User-Callable Self-Check Subroutines for the M6805 HMOS/M146805 CMOS Family of Microcomputers 8
(M6805, M146805)
Motorola Semiconductor AN–903 (36pp)

Using the M6805 Family On-Chip 8-Bit A/D Converter 9
(MC6805R2, MC6805S2)
Motorola Semiconductor AN900 (20pp)

Vectoring by Device Using Interrupt Sync Acknowledge with the MC6809/MC6809E 10
(MC6809, MC6809E)
Motorola Semiconductor AN–866 (6pp)

Z80 Designers Guide 11
(Z80-SIO, MK3805, MK3807)
Mostek Z80 Designers Guide (464pp) 10.00

16-Bit Operations in the CDP1802 Microprocessor 12
(CDP1802)
RCA ICAN–6842 (6pp)

I/O

A Standard Local Network for Industrial Use 13
(BUS-65101, BUS-66108, BUS-66106)
ILC Data Device Corp. AN B–8 (4pp)

A Terminal Interface, Printer Interface, and Background Printing for an MC68000-Based System Using the MC68681 DUART 14
(MC68681)
Motorola AN899 (35pp)

A 2.0 MHz MC68B09E System with Transparent Refresh of Dynamic RAM 15
(MC68B09E)
Motorola Semiconductor AN941 (24pp)

Add Serial Communication Capability to the 8086/8088 Family Using the Z80-SIO 16
(MK3884, MK3885, MK3887)
Mostek 1982/83 Z80 Designers Guide V–1 (5pp)

An IEEE–488 Bus Interface Using DMA 17
(MC6809, MC68488, MC6844)
Motorola Semiconductor AN–831 (22pp)

Application Prototype Board (APB) for MC6801/MC6803/MC68701 MCUs 18
(MC6801, MC6803, MC68701)
Motorola AN799A (12pp)

Asynchronous Communications for the MC68000 Using the MC6850 19
(MC68000, MC6850)
Motorola Semiconductor AN–817 (4pp)

Connecting an EF6800 Family Peripheral to the 8085 Bus 20
(EF6800)
Thomson CSF Components NA–017A (11pp)

Dual-Ported RAM for the MC68000 Microprocessor 21
(MC68000, MCM68B10)
Motorola Semiconductor AN–881 (9pp)

General Application Principles for EF4440 (ILA) and EF4442 (RTA) 22
(EF4440, EF4442)
Thomson CSF Components NA018-A (12pp)

Hardware Considerations for Direct Memory Access Using the MC6809 Microprocessor Unit and MC6844 DMA Controller 23
(MC6809, MC6844)
Motorola Semiconductor AN–820 (5pp)

How to Interface Mitel Components to Microprocessors 24
Mitel MSAN–119 (17pp)

Interfacing EF9365, EF9366, and EF9367 Graphic Display Processors to Z80A, 8085A, 6502 and 2650A–1 Microprocessors 25
(EF9365, EF9366, EF9367)
Thomson CSF Components NA–032A (13pp)

Interfacing Multiplexed Bus Peripherals with Non-Multiplexed MPUs 26
(MC6800, MC6809, MC146818, MC146823)
Motorola Semiconductor AN–864 (4pp)

Interfacing the DP8408/09 to Various Microprocessors 27
(DP8408, DP8409, Z80A, Z8000, MC68B09)
National Semiconductor AN–309 (16pp)

Interfacing the MC6108 to a Microprocessor 28
(MC6108)
Motorola Semiconductor AN963 (14pp)

Interfacing the Series 3200 CPUs to the Multibus 29
(3200)
National Semiconductor AN–406 (5pp)

Low-Cost CSMA/CD Using FIFO/8001 EDLC Interconnection 30
(8001, 8002, 8003)
SEEQ AN–7 (6pp)

Microprocessor Interface Methods for High-Speed Data Acquisition Systems 31
(HI5900, HI5712)
Harris Semiconductor AN–529 (3pp)

Microprocessor-Compatible DACs and the MC6890 32
(MC6890)
Motorola Semiconductor AN–842 (32pp)

Microprocessors—An Introduction 33
National AN–114 (4pp)

MM58167A Real Time Clock Design Guide 34
(MM58167A)
National Semiconductor AN353 (18pp)

NS8050U Microwire Plus Interface 35
(ANS8050, 8048)
National Semiconductor AN–358 (6pp)

MICROPROCESSOR (Cont'd)

I/O (Cont'd)

NS8050U Microwire Plus™ Interface 1
(NS8050)
National Semiconductor AN358 (5pp)

Prioritized Individually Vectored Interrupts for Multiple Peripheral Systems with the MC68000 2
(MC68000)
Motorola Semiconductor AN–819 (6pp)

SBP9989 Memory Interface to SMJ5517 16K CMOS SRAM 3
(SBP9989, SMJ5517)
Texas Instruments ANSP9989 (4pp)

Selecting Input/Output Options on COPS Microcontrollers 4
(COPS Series)
National Semiconductor AN–401 (10pp)

Standard SCSI Bus Facilitates Peripheral Control 5
(MC68230)
Motorola AR224 (9pp)

The MC68230 Parallel Interface/Timer Provides an Effective Printer Interface 6
(MC68230, MC68000)
Motorola Semiconductor AN–854 (6pp)

The Video Display Generator as a Color Television Interface 7
(MC6847, MC1372)
Motorola Semiconductor AN–822 (18pp)

TMP Dynamic RAM Interfacing 8
(TMP)
National Semiconductor AN355 (5pp)

TMS4500A/MC68000 Interface 9
(TMS4500A, MC68000)
Texas Instruments SMCA008 (16pp)

TMS4500A/6502 Interface 10
(4500A, 6502)
Texas Instruments SMCA004 (6pp)

TMS4500A/6809E Interface 11
(TMS4500A, 6809E)
Texas Instruments SMCA005 (8pp)

TMS4500A/8088 Interface 12
(TMS4500A, 8088)
Texas Instruments SMCA006 (8pp)

Understanding the CDP1851 Programmable I/O 13
(CDP1851)
RCA ICAN–7063 (6pp)

Use of the CDP1852 8-Bit I/O Port with RCA Microprocessor Evaluation Kit CDP18S020 14
(CDP1852)
RCA ICAN–6538 (4pp)

Use of the CDP1854 UART with RCA Microprocessor Evaluation Kit CDP18S020 or EK/Assembler-Editor Design Kit CDP18S024 15
(CDP1854)
RCA ICAN–6632 (6pp)

Using Dynamic RAM with Series 32000 CPUs 16
(3200)
National Semiconductor AN–405 (7pp)

Using High-Speed CMOS Logic for Microprocessor Interfacing 17
(MC54HC240, MC54HC241, MC54HC242, MC54HC243, MC54HC244, MC54HC245)
Motorola Semiconductor AN–868 (18pp)

Using Interface Circuits in Microprocessor Systems 18
(8T26A, 8T28, 8T95)
Signetics AN–200 (17pp)

Z80 Interfacing Techniques for Dynamic RAM 19
(MK4027, MK4116)
Mostek 1982/83 Z80 Designers Guide V–7 (16pp)

Z80 Interfacing Techniques for Dynamic RAM
(See listing under (Memory) RAMs. (Mostek)

Z8000 Memory Interfacing Techniques
(See listing under (Memory) RAMs. (Mostek)

Programming

A CP/M Program to Download Source Code to the ForthCard 20
(STD65F11)
HiTech Equipment AN–4 (7pp)

A CRT Emulator Running on CP/M for Use With the ForthCard 21
(STD65F11)
HiTech Equipment An–3 (5pp)

A Microprogrammed CPU Using AM29116 22
(AM29116)
Advanced Micro Devices MPR–919 (16pp)

A Primer on Microprogramming and Bit-Slice Architecture Exemplified in Systems Using Members of the EPIC (Emulation and Programmable IC) CMOS/SOS Family 23
(GP001, GP502)
RCA ICAN–7226 (10pp)

A Stand Alone Self-Test Program for the ForthCard 24
(STD65F11)
HiTech Equipment An–2 (6pp)

ADSP–2100 User's Manual 25
(ADSP-2100)
Analog Devices E971–10 (20pp)

An Introduction to Software Development on the CIM System 26
(CIM804)
National Semiconductor AN–403 (18pp)

AUTOBAUD - Automatic Baud Rate Initialization for the ForthCard 27
(STD65F11)
HiTech Equipment AN–14 (9pp)

CBUG05 Debug Monitor Program for MC146805E2 Microprocessor Unit 28
(MC146805E2, MCM65516)
Motorola Semiconductor AN–823A (42pp)

CBUG05 Debug Monitor Program for the CDP6805E2 Microprocessor Unit 29
(CDP6805E2)
RCA ICAN–7201 (40pp)

CDP1802 Microprocessor-Based Setback Thermostat 30
(CDP1802)
RCA ICAN–6901 (7pp)

COSMAC Software Development Program on GE Mark III Time Sharing System 31
(CDP 1802)
RCA ICAN–6656 (4pp)

CRT Emulator for the IBM PC Using LMI PC-forth with the ForthCard 32
(STD65F11)
HiTech Equipment AN–7 (3pp)

Download Source Code for the IBM PC Using PC-Forth with the ForthCard 33
(STD65F11)
HiTech Equipment AN–8 (5pp)

How To Use Fortran with Other Intel Languages 34
Intel AP–44 (22pp)

© IC MASTER 1988

MICROPROCESSOR (Cont'd)

Programming (Cont'd)

Inter-Intellec Communications 1
(Intellec Series II)
Intel AP-81 (30pp)

Interfacing PLM Code to CDOS System Functions 2
RCA ICAN-6928 (6pp)

Interfacing the ForthCard to a Parallel Interface Printer 3
(STD65F11)
HiTech Equipment An-5 (3pp)

Introduction to Software Complimenting Pre ST-BUS Family 4
Mitel MSDN-125 (18pp)

ISIS-II System Calls 5
Intel AP-80 (20pp)

Letting the MC68702 Program Itself 6
(MC68701)
Motorola Semiconductor AN-832 (8pp)

MCS-48 and UPI-41 Assembly Language Manual 7
(8041, 8048, 8741, 8748, MCS-48, UPI-41)
Intel 10.00 (192pp)

MC68705P3/R3/U3 8-Bit EPROM Microcomputer Programming Module 8
(MC68705P3, MC68705Rs, MC68705U3)
Motorola Semiconductor AN-857 (4pp)

Microprogram Design with the AM2900 Family 9
(AM2900)
Advanced Micro Devices (Naval Ocean Systems Center Technical Note 178) (10pp)

Microprogramming Handbook 10
(2911, 2909, 29811, 2922, 29803)
Advanced Micro Devices, 5.00 (44pp)

M6800 Microprocessor Programming Manual 11
(MC6800)
Motorola 10.00 (303pp)

Operating the ForthCard at 2 MHz 12
(STD65F11)
HiTech Equipment AN-9 (1pp)

Partitioning a Basic-M Source Program 13
(XDOS)
Motorola Semiconductor AN-813 (6pp)

PL/M-80 Programming Manual 14
(8080, PL/M-80)
Intel 10.00 (134pp)

Programming the MC1468705G2 Microcomputer EPROM 15
(MC1468705G2)
Motorola Semiconductor AN-907 (10pp)

Self-Programming the MC68701 and the MC68701U4 16
(MC68701, MC68701U4)
Motorola AN-906 (12pp)

Signetics Micro Assembler Reference Manual 17
(N3002, 8X02)
Signetics 4.00 (74pp)

Software Control of Microprocessor-Based Realtime Clock 18
(CDP1802)
RCA ICAN-6677 (9pp)

Storing the Dictionary in EEPROM 19
(STD65F11)
HiTech Equipment AN-6 (6pp)

Storing the Dictionary in Latched EEPROM 20
(STDG5F11)
HiTech Equipment AN-12 (3pp)

Storing the Dictionary in Non-Volatile RAM 21
(STD65F11)
HiTech Equipment An-15 (3pp)

S2000 Software Routines: Keyboard Entry, LED Display, Software Timing and Sound Generation 22
(S2000)
Gould AMI (8pp)

S2000/S2150 Single-Chip Microcomputer Positive BCD Integer Arithmetic Routines 23
(S2000/S2150)
Gould AMI (20pp)

Using EEPROMs on the ForthCard 24
(STD65F11)
HiTech Equipment AN-1 (5pp)

Using Latched EEPROMs on the ForthCard 25
(STD65F11)
HiTech Equipment AN-11 (7pp)

Using Non-Volatile RAM on the ForthCard 26
(STD65F11)
HiTech Equipment AN-10 (1p)

8080/8085 Assembly Language Programming Manual 27
(8080A, 8085A)
Intel 10.00 (210pp)

Systems

A CDP1800-Based CRT Controller 28
(CDP1800, CDP1809, CDP1870, CDP1876)
RCA ICAN-7038 (8pp)

A Data Communications System Using an MC6809 MPU, MC68652 MPCC, and/or the MC68661 EPCI 29
(MC68009, MC68652, MC68661)
Motorola Semiconductor AN-839 (12pp)

A Flexible Approach To Video Graphic Systems Using The CRT 9007 VPAC 30
(CRT9007)
Standard Microsystems Corp. TN4-6 (7pp)

A Guide to the Selection of Support Components for the Series 3000 Microprocessor 31
(N3001, N3002)
Signetics AM-1 (4pp)

A Microcomputer System Bus Technical Comparison 32
Motorola Semiconductor BR172 (64pp)

A PROM Programmer for the SC/MP LCDS
See listing under (Memory) PROMs (National)

A Simple High Speed Bipolar Microprocessor Illustrates System Design and Microprogram Techniques 33
(MC10801, MC10803)
Motorola AN-774 (12pp)

A Slave CDP1802 Serial Printer Buffer System 34
(CDP1802)
RCA ICAN-6991 (8pp)

A User's Guide to the Series 3000 Microprocessor Chip Set 35
(N3001, N3002)
Signetics AM-2 (14pp)

MICROPROCESSOR (Cont'd)

Systems (Cont'd)

A 16-bit Microprogrammable Bit-Slice Computer Design Using the GP001 CPU and GP502 Controller from the EPIC Family 1
(GP001, GP502)
RCA ICAN–7241 (17pp)

Add a Hardware Clock/Calendar To Your IBM PC 2
(MM58274)
National Semiconductor AN443 (21pp)

AM2914 Priority Interrupt Encoder 3
(AM2913, AM2914, AM2900, 9080A)
Advanced Micro Devices (33pp)

An M6800 Clock System That Handles DMA and Memory Refresh Cycle Stealing 4
(MC6800, MC6875)
Motorola AN–787 (6pp)

Application Memo to Control Store Sequencer 8X02 5
(8X02)
Signetics Bipolar Application Memo 3 (7pp)

Application Technique for the 2651 PCI 6
(2651)
Signetics M26 (2pp)

Applying the Z80 SIO in Asynchronous Data Communications 7
(MK3884)
Mostek 1982/83 Z80 Designers Guide V–23 (6pp)

Avoiding Bus Contention in Fast Access RAM Designs 8
(MC68000, MCM6164)
Motorola Semiconductor AN971 (4pp)

Basic Microprocessors and the 6800 9
(MC6800)
Motorola 12.90 (272pp)

Bit-Slice Microprocessor Design Takes a Giant Step Forward with'Schottky-Coupled-Logic ' Circuits 10
(IDM2900)
National Semiconductor AN–203 (12pp)

Breaking on 8-Bit or 16-Bit Maskable Values 11
(EM180B)
Applied Microsystems Corp EM–008 (3pp)

Breaking on 8-Bit or 16-Bit Maskable values Using Soft Shutdown 12
(EM189)
Applied Microsystems Corp. EM–007 (3pp)

Build Your Own Microprocessor-Based Data Distribution System 13
Micro Networks AN203 (6pp)

Building an Inexpensive but Powerful Color Terminal 14
(N5455)
National Semiconductor AN–374 (6pp)

Bus Error Display of ADDRESS and Status 15
(ES68000, ES68010)
Applied Microsystems Corp. ES–003 (2pp)

Cassette Tape I/O for COSMAC Microprocessor Systems 16
(CDP18S020, CDP18S024, CDP18S025, CDP18S005, CDP18S007, CDP18S691)
RCA ICAN–6934 (4pp)

CDP1800-Based Video Terminal Using the RCA Video Interface System, VIS 17
(CDP1800, CDP1869, CDP1870, CDP1876)
RCA ICAN–7032 (36pp)

CDP1800-Series Multiprocessing for Maximum Performance 18
(CDP1800)
RCA ICAN–7079 (10pp)

CDP1800-Series Peripherals—Building Blocks of a Complete Processor Family 19
(CDP1800)
RCA ICAN–7023 (8pp)

CDP1802-Based Designs Using the 8283 Programmable Counter/Timer 20
(CDP1802)
RCA ICAN–6693 (4pp)

CDP1804 and CDP1805 Processors Improve System Performance and Lower Chip Count 21
(CDP1804, CDP1805)
RCA ICAN–6957 (6pp)

CRT 90007 VPAC—A Next Generation CRT Controller 22
(CRT9007)
Standard Microsystems Corp. TN4–2 (12pp)

CRT 9006 Single Row Buffer Enhances Processor Through-Put 23
(CRT9006)
Standard Microsystems Corp. AN4–1 (11pp)

CRT9028 VTLC: A New Video Terminal Logic Controller 24
(CRT9028)
Standard Microsystems TN4–5 (6pp)

Data Acquisition System Interface to Computers
See listing under (Interface) Converters (National)

Debugging a 32032 Based System with an ISE/16 25
(32032)
National Semiconductor AN–396 (8pp)

Design Considerations for the Ethernet Node 26
(AmZ8001, Am7990, Am7991)
Advanced Micro Devices Analog and Communications Products Data Book (14pp)

Design of Clock Generators for Use with RCA COSMAC Microprocessor 27
(CDP1802)
RCA ICAN–6565

Designing Microcomputer Systems for Electrically Noisy Environments 28
Intel AP–125 (24pp)

Designing With The Microprogram Sequencer GP502 29
(GP502)
RCA ICAN–7327 (28pp)

Determining The Speed Of The Dynamic RAM Needed When Interfacing The DP8419–80 To Most Major Microprocessors 30
(DP8419-80)
National Semiconductor AN–411 (7pp)

Device Operation and System Implementation of the Asynchronous Communications Interface Adapter MC6850
See listing under (Interface) Data Transmission (Motorola)

DMA Interconnection to the 8003 EDLC 31
(8001, 8003)
SEEQ AN–6 (7pp)

Downloading and Uploading—Host Computer to and from the Emulator 32
(ES Emulators)
Applied Microsystems Corp. ES–001 (4pp)

DP8400/8409 Error Correcting Dynamic RAM Memory System for the Series 32000 33
(NS32016, DP8400, DP8409, DP8419)
National Semiconductor AN–387 (16pp)

DP8408A/09A Fastest DRAM Access Mode 34
(DP8408A, DP8409A)
National Semiconductor AB–9 (2pp)

© IC MASTER 1988

MICROPROCESSOR (Cont'd)

Systems (Cont'd)

DP8408A/09A/17/18/19/28/29 Application Hints 1
(DP8408A, DP8409A, DP8417, DP8418, DP8419, DP8428, DP8429)
National Semiconductor AB–1 (1pp)

EM Front Panel EPROM Socket Use Implementing Pause to Run, Step, or Run with Breakpoints 2
(EM-189)
Applied Microsystems Corp. EM–001 (9pp)

EM-PAC Installations 3
(EM149, EM180B, EM188, EM800)
Applied Microsystems Corp. EM–003 (4pp)

ES–1800/68000/08/10 ITR and PPT 4
(ES1800, 68000, 68008, 68010)
Applied Microsystems Corp. ES–008 (2pp)

Ethernet/Cheapernet Physical Layer Made Easy With DP8391/92 5
(DP8391, DP8392)
National Semiconductor AN442 (10pp)

FDC765A Circuit Recommendation 6
(FDC765A)
Standard Microsystems Corp. TN6–3 (3pp)

FDC9216 Floppy Disk Data Separator 7
(FDC9216)
Standard Microsystems TN6–1 (11pp)

Fine Tuning the ALU Carry Path 8
(DM74S182)
National AN–230 (7pp)

Floppy Disk Controller 9
(8X330)
Signetics

Floppy Disk Drive Controller Design Considerations Using the MB8876A/MB8877A 10
(MB8876A, MB8877A)
Fujitsu Microelectronics AN–002 (18pp)

GPIB–488 Talker/Listener Controller 11
(COM7210)
Standard Microsystems Corp. TN5–7 (90pp)

How to Simplify Design Integration of Microprocessor-Based Systems Using the Event Monitor System 12
(ES-SERIES)
Applied Microsystems Corp. (9pp)

How to Simplify Design Integration of Microprocessor Based Systems Using the Event Monitor System 13
(ES Emulators)
Applied Microsystems Corp. ES–004 (12pp)

How to Use the Applied Microsystems ES–1800 Stand-Alone Emulator to Determine the Duration of a Subroutine 14
(ES1800)
Applied Microsystems Corp. ES–006 (1p)

"I" Register Access on the EM–180B 15
(EM180B)
Applied Microsystems Corp. EM–005 (2pp)

Improved Functionality Simplifies Disk Controller Design 16
(HDC9224)
Standard Microsystems Corp. TN6–2 (9pp)

Intel Multibus Interfacing 17
Intel AP–28A (39pp)

Interface Techniques for the 2651 PCI 18
(2651)
Signetics M22 (8pp)

Interfacing Mostek's MDX-PIO to OPTO–22's PB24 19
(MDX-CPU2, MDX-PIO)
Mostek Applications Brief (8pp)

Interfacing the 8001/8003 EDLC to a 16-Bit Bus 20
(8001, 8002, 8003)
SEEQ AN–5 (7pp)

Introduction to Series 32000 Architecture 21
(NS32000)
National Semiconductor (31pp)

Low-Cost, High-Performance Token Pass LAN Controller 22
(COM9026)
Standard Microsystems TN5–6 (9pp)

Low-Power Techniques for Use with CMOS CDP1800-Based Systems 23
(CDP1800)
RCA ICAN–7029 (6pp)

MCS–51 Microcomputer User's Manual 24
(8051, 8751, 8031)
Intel (448pp) 7.50

MCS–85 User's Manual 25
(8085, MCS-85)
Intel 5.00 (273pp)

MC14500B Development System 26
(MC14500B)
Motorola AN–889 (8pp)

MC6801/03 Port Expansion 27
(SN74LS374, MC6821, SN74LS163, SN74LS154, SN74LS175, SN74LS377, SN74LS165)
Motorola AN–797 (8pp)

Memory Management Techniques Using the MC6829 28
(MC6829, MC6809)
Motorola Semiconductor AN–859 (48pp)

Microcoded Systems Application Brief 29
Cypress Semiconductor CMOS Data Book

Microcomputer Applications Handbook 30
Intel 7.50

MIL-STD–1553A and MIL-STD–1553B Overview 31
(COM1553, COM1553B)
Standard Microsystems TN5–3

MM58167A Real Time Clock Design Guide 32
(MM58167A)
National Semiconductor AN–353 (18pp)

MN1400 Series 4-Bit One-Chip Microcomputers User's Manual 33
(MN1400, MN1402, MN1498, MN1499)
Panasonic (65pp)

Mode 2 Interrupt Service Routines Located in Overlay Memory 34
(EM-180B)
Applied Microsystems Corp. EM–002 (4pp)

Monitor for the MC146805G2L1 Microcomputer 35
(MC146805G2L1)
Motorola Semiconductor AN–852 (16pp)

Multi-Processor Controller Using the MC6809E and the MC68120 36
(MC6809E, MC68120)
Motorola Semiconductor AN–850 (20pp)

M6800 Systems Utilizing the MC6875 Clock Generator/Drive 37
(MC6875)
Motorola AN–775 (20pp)

New CMOS CDP1800-Series Processors Enhance System Performance 38
(CDP1800)
RCA ICAN–6971 (6pp)

MICROPROCESSOR (Cont'd)

Systems (Cont'd)

New CMOS CDP1800-Series Processors Reduce Chip Count 1
(CDP1800, CDP1804)
RCA ICAN-6968 (4pp)

Next Generation CRT Systems 2
(CRT9007, CRT9006, CRT9212, CRT9021)
Standard Microsystems AN4-4 (23pp)

Optimizing Hardware/Software Trade-Offs in RCA CDP1802 Microprocessor Applications 3
(CDP1802)
RCA ICAN-6704 (10pp)

Optimizing the iRMX 86 Operating System Performance on System 86/310 and System 86/330 4
(iRMX 86, 86/310, 86/330)
Intel AP-174 (28pp)

PC/AT Compatible Systems: An Integrated Approach 5
(82A203, 82A204, 82A205)
Chips and Technologies, Inc. App-1 (20pp)

Peripheral Components for Microcomputers 6
(U250B, U265B, U427B, U180M, U327M, U328M, U338M, U340M, U3040M, U3042M, U3060M, U3070M, U3082M)
AEG-Telefunken SI 6.81 (3pp)

Power-On Reset/Run Circuits for the RCA CDP1802 COSMAC Microprocessor 7
(CDP1802)
RCA ICAN-6581 (2pp)

Principles of Digital Floppy Disk Data Separation Using FDC9216, FDC9229, or FDC9266 8
(FDC9216, FDC9229, FDC9266)
Standard Microsystems Corp. TN6-1 (11pp)

Product Capabilities Manual 9
(8X300)
Signetics

Production Test Uses for Emulation 10
(ES-Series)
Applied Microsystems Corp. ES-005 (7pp)

Programming and Interfacing to the CRT 9007 VPAC 11
(CRT9007)
Standard Microsystems AN4-5 (21pp)

Programming The FDC765A, FDC9266, and FDC9267 12
(FDC765A, FDC9266, FDC9267)
Standard Microsystems Corp. TN6-6 (36pp)

Programming The HDC9224 Universal Disk Controller 13
(HDC9224)
Standard Microsystems Corp. TN6-5 (52pp)

Register-Based Output Functions for RCA COSMAC Microprocessors 14
(CDP1802, CDP1852)
RCA ICAN-6562

Selectively Tracing Using the Breakpoint System and the ES-1800 15
(ES1800)
Applied Microsystems Corp. ES-007 (4pp)

Serial I/O, Timer, and Interface Capabilities of the MC68901 Multifunction Peripheral 16
(MC68901)
Motorola AN896 (10pp)

Single Chip Multiprocessor Arbiter 17
Signetics AN-007 (8pp)

Smooth Scrolling with the SCN2675 18
(SCN2674)
Signetics AN-404 (8pp)

Software Design for Microprocessors 19
(SBP0400, TMS1000, TMS5501, TMS8080, TMS9900)
Texas Instruments 12.50 (385pp)

System Design Considerations when Using Cypress CMOS Circuits 20
Cypress Semiconductor CMOS Data Book

System Reliability Considerations due to Bus Contention 21
Cypress Semiconductor CMOS Data Book

S9224 Universal Disk Controller (UDC) 22
(S9224)
Gould AMI (8pp)

The AM9511/12 Floating Point MPU 23
(AM9511, AM9512)
Advanced Micro Devices (21pp)

The Bisync Protocol and a Bisync Data Link Between Two MC68000 MPU Based Systems 24
(MC68000, MC68661, MC2661, MC68652, MC2652, MC68653, MC2653)
Motorola Semiconductor AN-882 (34pp)

The MM58174A Real Time Clock in Battery Backed-Up Design Provides Reliable Clock and Calendar Functions 25
(MM58174A)
National Semiconductor AN359 (80pp)

The M10800 MECL LSI Processor Family—Three Descriptive Articles 26
(MC10800, MC6800)
Motorola AN-776 (21pp)

Throughput Considerations in NS455 System Planning 27
(NS455)
National Semiconductor AB-14 (2pp)

TMP Extended Program Memory Application 28
(NS455)
National Semiconductor AN-399 (6pp)

Two New Commands: COM, DIA 30
(ES1800)
Applied Microsystems Corp. ES-002 (5pp)

Understanding and Using the CDP1855 Multiply/Divide Unit 31
(CDP1855)
RCA ICAN-6970 (11pp)

Use of CMOS RAM CDP1824 with RCA Microprocessor Evaluation Kit CDP18S020 32
(CDP1824)
RCA ICAN-6537 (4pp)

Use of CMOS ROMs CDP1831 and CDP1832 With the RCA Microprocessor Evaluation Kit CDP18S020 33
(CDP1831, CDP1832)
RCA ICAN-6536 (4pp)

Use of CMOS-SOS RAM CDP1822 with RCA Microprocessor Evaluation Kit CDP18S020 34
(CDP1822)
RCA ICAN-6539 (4pp)

Use of the CDP1856 and CDP1857 Buffer/Separator in CDP1802 Microprocessor Systems 35
(CDP1802, CDP1856, CDP1857)
RCA ICAN-6657 (4pp)

User Manual for the CDP1802 COSMAC Microprocessor 36
(CDP1802)
RCA MPM-201B 5.00 (115pp)

© IC MASTER 1988

MICROPROCESSOR (Cont'd)

Systems (Cont'd)	
User's Manual for 8X305 Controller (8X305) Signetics	1
Using Low-Cost 1 MHz Peripherals in a 2 MHz System with the MC68B09 and the MC68B09E (MC68B09, MC68B09E) Motorola Semiconductor AN–836 (7pp)	2
Using the COM8004 for High Data Integrity in Bit-Oriented Protocols (COM8004) Standard Microsystems TN5–1 (5pp)	3
Using the COM9026 Local Area Network Controller and the COM9032 Local Area Network Transceiver (COM9026, COM9032) Standard Microsystems TN5–2 (12pp)	4
Using the MK3807 VCU in a Microprocessor Environment (MK3807) Mostek 1982/83 Z80 Designers Guide V–29 (19pp)	5
Using the 2651 with BISYNC (2651) Signetics M24 (4pp)	6
VIS—A Commercially Competitive CRT Controller Chip Set (CDP1802, CDP1869, CDP1870, CDP1876) RCA ICAN–7067 (4pp)	7
VLSI Circuit Provides Complete Controller for Token-Pass Systems (COM9026) Standard Microsystems TN5–5 (7pp)	8
Z80 Interfacing Techniques for Dynamic RAM (Z80, MK4027, MK4116) Mostek	9
2670/71/72/73 CRT Set Application Briefs (2670, 2671, 2672, 2673) Signetics AN–403 (8pp)	10
82C82 Eases Mixed System Design (82C82) Harris TB–48 (3pp)	11

MICROCOMPUTER BOARDS

Applications

A Microcomputer Industrial Control Interface Using I/O Modules 1
(TM990)
Texas Instruments Application Report MP 716 (20pp)

AutoCAD Driver for HP Plotter with GPIB Using RG RS–232 to IEEE–488 Interface. 2
(RG RS232)
Connecticut Microcomputer AN602 (2pp)

Bolt-in Computer for OEM Automation 3
Micro/Sys ART08 (7pp)

Booting an 80286 Within a PC 4
(80286)
Edsun Laboratories

Cache Memory Reduces Swapping Time 6
(PDP11/45)
Minntronics Corp. AN2 (2pp)

Choosing Between an 8008 or a Z80 For Real-Time Control 7
Micro/Sys ART03 (10pp)

Converting the Personal Computer for System Development 8
Devtek Systems AN1 (4pp)

Designing Floppy Disk Systems (and a Sample CP/M Implementation) 9
(BLC-8221, BLC-8222)
National Semiconductor SA4–8221/22 (54pp)

Developing Embedded Systems 10
Micro/Sys ART06 (8pp)

Does Your STD Bus System Need an Operating System? Change? 11
Micro/Sys ART07 (7pp)

Embedded Control Using FORTH and the MA2000 Family of Macrocomponents 12
(MA2800, MA2232, MA2068, MA2700)
National Semiconductor AN–441 (8pp)

Grounding Techniques 13
Matrix Corp. AN85–1 (22pp)

How to Implement Control Systems With the PC But Install Industrial Strength Hardware 14
Micro/Sys ART01 (4pp)

Improving The Performance of a High Speed PBX Backplane 15
National Semiconductor AN–466 (5pp)

Integrated Computer Modules 16
National Semiconductor AN–461 (7pp)

Interfacing Techniques for the CDI PIO–48/64 17
(PIO48/64)
Computer Dynamics (18pp)

Introduction to CIM–75, CP/M Starter Kit 18
National Semiconductor AN–379 (25pp)

iSBC Applications Handbook 19
(iSBC80/40, iSBC80/10B, iSBC80/20-4, iSBC80/24, iSBC80/30, iSBC86/05, iSBC86/12A, iSBC86/14, iSBC86/25, iSBC86/40)
Intel 501315 (10.00)

Logically Integrating the IBM-PC Into STD Bus System Design 20
Micro/Sys ART02 (1p)

Max-Scan - A Fully Programmable Asynchronous Analog and Digital Sampling Module 21
Datacube DC WRO11–2 (8pp)

MaxVideo's Performance on the Abington Cross Benchmark 22
Datacube DC WRO11–1 (11pp)

PC Platform Simplifiers STD Bus Development 23
Micro/Sys ART11 (3pp)

Powerful Multiprocessor Scheme 24
Micro/Sys ART05 (5pp)

Quick Easy Software Development for STD Bus System 25
Micro/Sys ART09 (14pp)

Reentrant Programming 26
(TM990)
Texas Instruments (6pp)

Scout Naked Mini 4/04 27
Computer Automation (272pp)

SCSI Interface: Concepts and Conventions 28
Matrix Corp. AN85–2 (26pp)

Selecting the Right Memory for Your STD Bus System 29
Micro/Sys ART04 (8pp)

Software Development Using TM990/302 SDB and TIMBER 30
(TM990)
Texas Instruments Applications Report MP712 (92pp)

Systems Applications for the G65SC150 Communications Terminal Unit 31
(G65SC150)
GTE AN–3009–04–02 (20pp)

The EL286–88 and IBM PC DMA 32
(EL286-88)
Edsun Laboratories

The EL286–88 and IBM PC Memory 33
(EL286-88)
Edsun Laboratories

TM990 Analog Modules Applications Report 34
(TM990)
Texas Instruments Applications Report MP714 (54pp)

TM990 Microcomputer Handbook 35
(TM990)
Texas Instruments (207pp)

TM990/101M EIA Communications Link 36
(TM990)
Texas Instruments Applications Report MP705 (52pp)

Using a BUSSter 12-Bit Analog Output Module (E4G, E8G, E16G) with the HP85or HP86 37
(E4G, E8G, E16G)
Connecticut Microcomputer An604 (1p)

Using an RS–232 BUSSter Module with IBM PC 38
(BUSSter)
Connecticut Microcomputer An603 (1p)

Using the BUSSter GR with the HP85 or HP86 for RS–232 and RS–422 Communications. 39
(BUSSter/GR)
Connecticut Microcomputer AN605 (2pp)

Using the BUSSter RG4 to Connect an IBM PC Runnig Lotus 1–2–3 to an HP Plotter 40
(BUSSterRG4)
Connecticut Microcomputer AN601 (2pp)

Weigh Costs and Benefits Before Adding DOS to Your STD Bus System 41
Micro/Sys ART10 (11pp)

80286 Accelerator Boards 42
(80286)
Edsun Laboratories

© IC MASTER 1988

INTERFACE

Converters

A Cookbook Approach to High Speed Data Acquisition and Microprocessor Interfacing 1
Intersil A020 (20pp)

A/D Converter Microprocessor Interface 2
(TLC548)
Texas Instruments SLAA001 (46pp)

A/D Simulation Programs Predicts Signal-to-Noise Ratio 3
(ADC00403, THA05203)
ILC Data Device Corp. AN/L–12

A High-Speed Color-Pallette Memory for the TDC1034 'Graphics Ready' D/A Converter 4
(TDC1034)
TRW LSI TP–35 (7pp)

A Low Cost, Easy-to-Build Successive Approximation Analog-to-Digital Converter 5
(DAC-100, CMP-01)
Precision Monolithics AN–11 (8pp)

A Low Cost, High-Performance Tracking A/D Converter 6
(DAC-100, CMP-01)
Precision Monolithics AN–6 (8pp)

A Monolithic IC for 100MHz RMS-DC Conversion 7
(LT1088)
Linear Technology Corp. AN22 (16pp)

A Monolithic 16 Bit D/A Converter 8
(HI-DAC16)
Harris Semiconductor AN539 (5pp)

A Simple Approach To SI7135/8085 Interfacing 9
(SI7135)
Siliconix AN83–14 (6pp)

AD670 8-Bit A/D Converter Applications 10
(AD670)
Analog Devices E935a–5 (10pp)

AD7224 Provides Programmable Voltages over Varying Ranges 11
(AD7224)
Analog Devices AN-E910–15–5/85 (3pp)

AD7528 Dual 8-Bit CMOS DAC Application Note 12
(AD7528)
Analog Devices E757–15 (8pp)

Am6012 12-Bit High-Speed DAC 13
(AM6012)
Advanced Micro Devices LIC–165 (12pp)

Am6012 12-Bit High-Speed DAC 14
(AM6012)
Advanced Micro Devices Analog and Communications Products Data Book

An Analysis of the Price and Performance of the AD558 15
(AD558)
Analog Devices (3pp)

An Auto-Error Correction, Auto-Gain Ranging Analog Data Acquisition System 16
(ADC80)
National Semiconductor AN 360 (8pp)

An Evaluation Board for the RCA41051 and CA33188-Bit A/D Converter 17
(41051, CA3318)
RCA ICAN–7310 (13pp)

An Evaluation System for High-Speed A-D and D-A Converters 18
Motorola Semiconductor AN–848 (12pp)

An Introduction to the Sampling Theorem 19
National Semiconductor AN236 (12pp)

Analog Panning Circuit Provides Almost Constant Output Power 20
(AD7528, AD7537, AD7547, AD7549)
Analog Devices E1026–15 (4pp)

Analog-to-Digital Conversion Techniques with the M6800 Microprocessor System
See listing under (Microprocessor) Systems (Motorola)

Analog-to-Digital Conversion Using Voltage-to-Frequency Converters 21
(AD650)
Analog Devices E994–15 (8pp)

Applications for the 9400 Voltage to Frequency/ Frequency to Voltage Converter 22
(9400)
Teledyne Semiconductor AN–10 (8pp)

Applications of the MC1405/MC14435 in Digital Meters
See listing under (Linear) Instrumentation (Motorola)

Applications of the ZN425E 8-Bit A-D/D-A Converter 23
(ZN425)
Ferranti (31pp)

Applications of the 8700 Series A/D Converters 24
(8700)
Teledyne Semiconductor AN–9 (16pp)

Audio Applications for the DAC–86 Companding D/A Converter 26
(DAC-86)
Precision Monolithics Inc. AN–28 (In Linear Conversion Applications Handbook) (7pp)

Autoranging Digital Multimeter Using the MC14433 CMOS A/D Converter 27
(MC14433)
Motorola AN–769 (5pp)

Basic Applications Circuits for CMOS DACs Operated in the Conventional Current-Steering Mode 28
Analog Devices CMOS DAC Application Guide, Chapter 3 (6pp)

BCD DAC Makes Programming of Function Generator Simple 29
(DAC-08, DAC-20)
Precision Monolithics Inc. AN–47 (In Linear Conversion Applications Handbook) (4pp)

Bipolar Operation with the AD7572 30
(AD7572)
Analog Devices E1010–15 (4pp)

Build a Low Cost Data Acquisition System with Standard DIPs 31
(MN7130)
Micro Networks AN201 (6pp)

Circuit Applications for a 12-bit ECL DAC 32
(DAC63, MC10176, MC10176, MC10136, MC10101, MCM10149)
Burr-Brown Research AN–105 (6pp)

Circuit Applications of The AD7226 Quad CMOS DAC 33
(AD7226)
Analog Devices E873–15 (6pp)

CMOS A/D Converter Chips Easily Interface to 8080A Microprocessor Systems 34
(ADC3511, ADC3711, INS8080A)
National CMOS Databook AN–200 (9pp)

CMOS D/A Converter Circuits for Single + 5V Supplies 35
(AD7528, AD7545, AD7548)
Analog Devices AN-E828a–5–10/84 (4pp)

INTERFACE (Cont'd)

Converters (Cont'd)

CMOS DACs: Important Considerations Above 12 Bits
(HS3160)
Hybrid Systems AB–11 (11pp) 1

CMOS DACs—Important Considerations Above 12-Bits
(CDAC370, DAC377, DAC9331-16, DAC9377-16, HS3140, HS3160, HS3120, HS9338, DAC9356, DAC80)
Hybrid Systems (In Data Book) (10pp) 2

Companding Digital-to-Analog Converter
(DAC-86, DAC-87)
Precision Monolithics AN–39 (13pp) 3

Considerations for Successive Approximation A-D Converters
Linear Technology Corp. AN17 (8pp) 4

Cross-Plot Generator Allows Quick A/D Conversion Evaluation
(PM-7545)
Precision Monolithics Inc. AN–101 (In Linear Conversion Applications Handbook) (4pp) 5

Current-Steering Chip Upgrades Performance of D/A Converter
Teledyne Philbrick AN–17 (6pp) 6

D/A Converter Generates Hyperbolic Functions
(DAC-20)
Precision Monolithics AN–23 (3pp) 7

DAC–08 Applications Collection
(DAC-08)
Precision Monolithics AN–17 (12pp) 8

DAC–08 Control of A 555 Timer IC
(DAC-08)
Precision Monolithics AN–36 (3pp) 9

Data Acquisition and Conversion Handbook
Datel-Intersil 4.95 (250pp) 10

Data Acquisition Networks with NMOS and CMOS
See listing under (Microprocessors) Applications (Motorola)

Data Conversion Interfacing with the 8080 Microprocessor
(8080)
Precision Monolithics, Inc. AN–30 (12pp) 11

Data Conversion with Companding DAC Devices
(AmDAC-08, Am6072, Am6070, Am6071)
Advanced Micro Devices Analog and Communications Products Data Book (35pp) 12

Data Conversion with Companding DAC Devices
Advanced Micro Devices (36pp) 13

Data Converter Test Methods for Digital Audio Applications
(PCM50, PCM52, PCM53, PCM75)
Burr-Brown AN–113 (6pp) 14

Deglitched DACs Improve Vector-Stroke Displays
(DAC02310)
ILC Data Device Corp. AN/L–13 15

Designing High Speed Data Acquisition Systems
Teledyne Philbrick AN–21 (12pp) 16

Designs for High Frequency Voltage-to-Frequency Converters
Linear Technology Corp. AN14 (20pp) 17

Differential and Multiplying Digital-to-Analog Converter Applications
(DAC-08)
Precision Monolithics AN–19 (8pp) 18

Differential Gain and Phase Characterization of Video DACs
(Bt102)
Brooktree AN–5 (4pp) 19

Digital to Analog Converter: High Speed ADC Applications
Harris Semiconductor AN–524 (3pp) 20

Digital to Analog Converter High Speed DAC Family
(HI562, HI5608, HI5610)
Harris Semiconductor AN–523 (4pp) 21

Digital to Analog Converter Terminology
Harris Semiconductor AN–522 (3pp) 22

Digital to Analog Converters Definitions
Brooktree AN–4 (7pp) 23

Digital Voltmeters and the MM5330
(MM5330)
National MOS/LSI Databook AN–155 (8pp) 24

Digital-to-Analog Conversion Using the RCA CD4007A COS/MOS IC
(CD4007A)
RCA ICAN–6080 (6pp) 25

Digitizing Dynamic Signals
(HS9474)
Hybrid Systems (In Data Book) (8pp) 26

Direct Bus Interfacing using the ZN427/ZN428
(ZN427, ZN428)
Ferranti Application Report 14 (9pp) 27

Do's and Don'ts of Applying A/D Converters
Intersil A018 (2pp) 28

Dynamic Resolution Switching on the 1S74 Resolver-to-Digital Converter
(1S74)
Analog Devices 29

Exploring the AD667 12-Bit Analog Output Port
(AD667)
Analog Devices AN-E875–15–11/84 (8pp) 30

Exponential Digitally Controlled Oscillator Using DAC–86
(DAC-86)
Precision Monolithics AN–20 (3pp) 31

Extending the Capabilities of the MC10315/10317 Flash A/D Converters
(MC10315, MC10317)
Motorola Semiconductor AN–844 (6pp) 32

Fast Fourier Transform Speed Signal to Noise Analysis for A/D Converters
(ADC00300)
ILC Data Device Corp. AN/L–14 33

Flash Analog to Digital Converters: Optimizing Performance
Comlinear AN–103–1 (3pp) 34

Flyback Converter
(LAS6320)
Lambda Semiconductors Applications Handbook II (16pp) 35

Function and Application of 3 1/2 Digit A/D Converter Set
(LD110, LD111)
Siliconix AN74–1 (12pp) 36

Function/Application of the LD120/LD121A 4 1/4-Digit A/D Converter Set in Measurement Systems
(LD120, LD121A)
Siliconix AN77–1 (10pp) 37

Function/Application of the LD122/LD121A 4 1/2 Digit A/D Converter Set in Measurement Systems
(LD122, LS121A)
Siliconix AN80–8 (8pp) 38

© IC MASTER 1988

INTERFACE (Cont'd)

Converters (Cont'd)

Gain Error and Gain Temperature Coefficient of CMOS Multiplying DACs 1
(AD7542, AD7527)
Analog Devices (4pp)

Generate Non-Linear Transfer Functions with Flash A/D Converters 2
(TDC1019)
TRW LSI TP-19 (4pp)

Generate 4-Channels of Analog Output Using AD7542 12-Bit D/A Converters and Control the Lot With Only Two Wires 3
(AD7542)
Analog Devices E909-15 (6pp)

Getting the Best Performance from Video D/A Converters 4
Brooktree AN-1 (4pp)

High Resolution A/D Works Better with Track-Hold 5
(ADC00403, THA50203)
ILC Data Device Corp. AN/L-8

High Speed Digital-to-Analog and Analog-to-Digital Techniques 6
Motorola AN-702 (14pp)

High-Performance Frequency-to-Voltage Converter Using the XR-2211 7
(XR2211)
Exar AN-23 (2pp)

How to Obtain the Best Performance from the AD7572 8
(AD7572)
Analog Devices E1038-15 (4pp)

How to Specify and Test Voltage-to-Frequency and Frequency-to-Voltage Converters 9
Teledyne Philbrick AN-22 (4pp)

Interfacing Bipolar Technology D/A Converters with CMOS Logic 10
(DAC-01, DAC-02, DAC-03, DAC-05, DAC-06, DAC-08, DAC-20, DAC-100)
Precision Monolithics Inc. AN-14 (In Linear Conversion Applications Handbook) (4pp)

Interfacing Precision Monolithics Digital-to-Analog Converters with CMOS Logic 11
(DAC-100, DAC-01)
Precision Monolithics AN-14 (4pp)

Interfacing the AD2036 6 Channel Digital Scanning Thermometer with the ANP-9 Thermal Printer. 12
(AD2036)
Analog Devices

Interfacing the AD558 Dacport to Microprocessors 13
(AD558)
Analog Devices (6pp)

Interfacing The AD7549 to the MCS-48 and MCS-51 Microcomputer Families 14
(AD7549)
Analog Devices E941-15 (4pp)

Interfacing The AD7572 To High Speed DSP Processors 15
(AD7572)
Analog Devices E986-15 (4pp)

Interfacing the AN447/8/9 A-D Converters to the Z80 μ P via a Z800 PIO 16
Ferranti Electric AR-20 (22pp)

Interfacing the ZN439 with the 6500 Family of Microprocessors 17
(ZN439)
Ferranti Electric AR-21 (24pp)

Introduction to Quantized Feedback 18
(LD111A, LD120, LD122, LD130, LD110, LD121A, LD114)
Siliconix AN81-2 (10pp)

Low Cost, High Speed Analog-to-Digital Conversion with the DAC-08 19
(DAC-08)
Precision Monolithics AN-16 (7pp)

Magnitude-Plus-Sign ADC Using a V-F Converter 20
(4701, 4703, 4705)
Teledyne Philbrick AN-6 (1pp)

Mend Flash-Converter Flaws with a Track/Hold Cure 21
(TH8530)
ILC Data Device Corp. AN/L-10

Methods for Generating Complex Waveforms and Vectors Using Multiplying D/A Converters 22
(AD7544)
Analog Devices (6pp)

Microprocessor Interface Techniques as Applied to the Siliconix A/D Converter Family 23
(L121A, LD130)
Siliconix AN81-1 (4pp)

Microprocessor Interfacing Using the ZN427/ZN428 Data Converters 24
(ZN427, ZN428)
Ferranti Application Notes 10, 11 and 12 (28pp)

Microprocessor Interfacing Using the ZN432 10-Bit ADC 25
(ZN432)
Ferranti Electric AR-16 (9pp)

Modeling Analysis and Compensation of the Current Mode Converter 26
(UC1846)
Unitrode U-97 (6pp)

Modular DC Output Power Supply Parameter Definition and Measurement 27
Teledyne Philbrick AN-26 (3pp)

Modular VFs and FVs: Simple Solutions to Everyday Conversion Problems 28
Teledyne Philbrick AN-32 (7pp)

MP7684EB/Kit - Design Aid 29
(MP7684EB)
Micro Power Systems (12pp)

Need a 1 kHz Full-Scale V-F? 30
(4701, 4703, 4705, 4709)
Teledyne Philbrick AN-2 (1pp)

Numerical-Integration Techniques Speed Dual-Slope A/D Conversion 31
(TSC7109)
Teledyne Semiconductor AN27 (8pp)

Operation Applications of the AD654 IC V-to-F Converter 32
(AD654)
Analog Devices AN-E923-25 (28pp)

Optimizing D/A Converter Performance 33
(ADH-030IT)
ILC Data Device Corp. AN/L-7

Principles and Applications of the ICL7660 CMOS Voltage Converter 34
(ICL7660)
Intersil A051 (8pp)

Quick Selection Guide for DC/DC Converter Design Equations 35
Lambda Semiconductors Applications Handbook IV (10pp)

RC4151/52/53 Voltage-to-Frequency Converters 36
(RC4151, RC4152, RC4153)
Raytheon Semiconductor AN-25 (32pp)

Ready-to-Use DC/DC Converter Circuit Collection 37
(LAS6320, LAS6300, LAS1612)
Lambda Semiconductors Applications Handbook III (14pp)

INTERFACE (Cont'd)

Converters (Cont'd)

Remote Control Dual Range A/D Converter Using the 7106 (7106) Teledyne Semiconductor AN–13 (1pp) 1

Repetitive Mode Operation for Models 4109/4111 Integrating A/D Converters (4109, 4111) Teledyne Philbrick AN–28 (2pp) 2

Resolver-to-Digital Conversion—A Simple and Cost-Effective Alternative to Optical Shaft Encoders (1S60) Analog Devices AN-E903–10 (4pp) 3

Selecting A/D Converters Intersil A016 (6pp) 4

Serial Data Transmission Using the AD7571 (AD7571) Analog Devices E964–20 (4pp) 5

Simple Interface between D/A Converter and Microcomputer Leads to Programmable Sine-Wave Oscillator (AD7542) Analog Devices AN-E889–15–2/85 (6pp) 6

Simplify A/D Converter Interface with Software (TSC7135) Teledyne Semiconductor AN–17 (4pp) 7

SI8021 Digital-to-Analog Converter Interface for Microprocessor Systems (SI8021) Siliconix AN83–16 (6pp) 8

Software Combines with CMOS LSI to Form 3 3/4-Digit DVM (TSC7211A, TSC7109) Teledyne Semiconductor AN–22 (4pp) 9

Solve Sensor Offset Problems with the TSC7106 (TSC7106) Teledyne Semiconductor APB–7 (1pp) 10

Solve Your Measurement Problems Teledyne Philbrick AN–20 (6pp) 11

Specifying and Testing Analog-to-Digital Converters Teledyne Philbrick AN–24 (7pp) 12

Specifying and Testing Digital-to-Analog Converters Teledyne Philbrick AN–25 (7pp) 13

Static and Dynamic Testing of Digital-to-Analog Converters Burr-Brown AN–99 (6pp) 14

Step-Down Converter (LAS6300) Lambda Semiconductors Applications Handbook I (30pp) 15

Strobing the DAC–08 Under Logic Control (DAC-08) Precision Monolithics AB–1 (1pp) 16

Temperature Measurement System to 10-Bit Resolution Using the AD7571 and The AD594/595 (AD7571, AD594, AD595) Analog Devices E922–15 (3pp) 17

The AD7574 Analog to Microprocessor Interface (AD7574) Analog Devices (5pp) 18

The ICL7104—A Binary Output A/D Converter for Microprocessors (ICL7104, ICL8052, ICL8068) Intersil A030 (14pp) 19

The Integrating A/D Converter Intersil A017 (4pp) 20

The OP–17, OP–16, OP–15 as Output Amplifiers for High Speed D/A Converters (DAC-08, DAC-20, DAC-76, OP-15, OP-16, OP-17) Precision Monolithics AN–24 (3pp) 21

Theory and Applications of The SI7660 and SI7661 Voltage Converters (SI7660, SI7661) Siliconix AN84–2 (10pp) 22

Three-Phase Sine-Wave Generation Using the AD7226 Quad DAC (AD7226) Analog Devices AN-E924–15–7/85 (3pp) 23

Tips for Using Single-Chip 3 1/2 Digit A/D Converters (ICL7106, ICL7116, ICL7107, ICL7117, ICL7126) Intersil A052 (8pp) 24

TSC7109 Records Remote Data Automatically (TSC7109) Teledyne Semiconductor AN–24 (2pp) 25

TSC7135 to 6502/6522 Microprocessor Measurement System (TSC7135) Teledyne Semiconductor AN16 26

TSC7660 Powers RS–232 Data Loop (TSC7660) Teledyne Semiconductor APB–8 (1pp) 27

TSC800 Wide Dynamic Range Eliminates System Components (TSC800) Teledyne Semiconductor AN23 (16pp) 28

Two-Digit Serial Input LED Display Driver using TSC9404 (TSC9404) Teledyne Semiconductor AN–20 (2pp) 29

Understanding Flash A/D Converters Technology TRW LSI TP–30 (12pp) 30

Understanding LOGDACs (AD7100 Series) Analog Devices E797–10 (4pp) 31

Understanding the Auto-Zero and Common-Mode Performance of the ICL7106/7107/7109 Family (ICL7106, ICL7107, ICL7109) Intersil Application Bulletin A032 (8pp) 32

Universal Synchro to Digital Converters—Models SDC1700521 and Others (SDC1700 series) Analog Devices E404–7.5 (1pp) 33

Using the Overlay Palettes of Brooktree RAMDACs Brooktree AN–7 (1p) 34

Using the TDC1018 and TDC1034 in a TTL Environment (TDC1018, TDC1034) TRW LSI TP–33 (3pp) 35

Using the 4130 ADC Series, 4855 Sample-Hold, and 4550 Multiplexer in High Speed Data Acquisition Systems (4130, 4855, 4550) Teledyne Philbrick AN–19 (7pp) 36

VF's as Long-Term Integrators (4701, 4703, 4705) Teledyne Philbrick AN–9 (2pp) 37

VFs, FVs, and Audio Tape Recorders (4701, 4702) Teledyne Philbrick AN–11 (3pp) 38

© IC MASTER 1988

INTERFACE (Cont'd)

Converters (Cont'd)

Video DAC Essentials 1
(Bt103, Bt444, Bt101, Bt102, Bt106, Bt452)
Brooktree AN–2 (8pp)

Wafer Level Trim of Monolithic Digital-to-Analog Converters 2
(ADH030II)
ILC Data Device Corp. AN/L–16 (4pp)

Watch for Superposition Errors in Data Converter Applications 3
(DAC8528)
ILC Data Device Corp. AN/L–11

Why the Velocity Output on the 1S74 and 1S64 Series Converters is Continuous and Step Free Down to Zero Speed 4
(1S64, 1S74)
Analog Devices AN-E893–15 (1p)

ZN433 Monolithic 10-Bit Tracking ADC 5
(ZN433)
Ferranti Electric AR–18 (20pp)

12-Bit Analog I/O Port Uses AD7549 and 8051 Microcomputer 6
(AD7549)
Analog Devices E967–20 (4pp)

14-Bit DACs Maintain High Performance Over Extended Temperature Range 7
(AD7534, AD7535)
Analog Devices E987–15 (6pp)

2-Step Conversion Increases ADC Speed 8
(ADC00300)
ILC Data Device Corp. AN/L–15 (4pp)

200 kHz Current-Mode Converter Provides 500W 9
Unitrode U–101 (9pp)

3 IC 8-Bit Binary Digital to Process Current Converter with 4–20 mA Output 10
(REF-01, DAC-08, OP-14)
Precision Monolithics AN–21 (2pp)

4–20 mA Digital to Process Current Transmitter 11
(OP-14, DAC-08, REF-01)
Precision Monolithics Inc. AN–21 (In Linear Conversion Applications Handbook) (2pp)

Data Acquisition Systems

A Data Acquisition and Conversion System with less than ± LSB Offset Error 12
(HI-5900, HI-5901, HI-5712)
Harris Semiconductor AN–530 (2pp)

Analog Processing For Data Acquisition 13
Hybrid Systems (In Data Book) (6pp)

Design Considerations for a Data Acquisition System (DAS) 14
Harris Semiconductor AN–535 (7pp)

Linear and Interface Applications Set - Volume III: Peripheral Drivers, Data Acquisitions Systems, Hall-Effect Devices 15
Texas Instruments SLYA003 (200pp)

PGA's Give Your DAS Designs Autoranging, Wide Dynamic Range 16
Micro Networks AN204 (5pp)

Quad S/H Solves Acquisition Problems 17
(HS9704, HS9705)
Hybrid Systems (In Data Book) (6pp)

SI520 Data Acquisition System Interfaces for I/O or Memory Mapped Operation 18
(SI520)
Siliconix AN83–13 (6pp)

Data Transmission

A COS/MOS PCM Telemetry and Remote Data Acquisition Design
See listing under (Digital) CMOS (RCA)

A Typical Data-Gathering and Processing System Using CD4000A-Series COS/MOS Parts
See listing under (Digital) CMOS (RCA)

A 20-Mbaud Full Duplex Fiber Optic Data Link Using Fiber Optic Active Components 19
(SN74LS40B, MF0D4-02F, MC1733, MC75107)
Motorola AN–794 (28pp)

Advanced Schottky Family of Bus Transceivers 20
(SN54/74ALS245, SN54/74'AS245, SN54/74'ALS620A, SN54/74'AS620-'623, SN54/74'ALS638-9A, SN54/74'AS638-9, SN54/74'AS640-645A)
Texas Instruments SDAA005 (19pp)

Asynchronous Receiver/Transmitter 21
(TR1602, TR1865)
Western Digital Application Report 1 (12pp)

Avoiding Pitfalls in MIL-STD–1553 Transceivers 22
(BUS63105)
ILC Data Device Corp. AN/B–7

Binary Synchronous Communications 23
(2661, 2653)
Signetics TB–4001 (3pp)

Bipolar Violation/Loss of Carrier (RVLL) Signal Separation 24
Rockwell 321

Building a Complete FSK Modem Using XR–2211 and XR–2206 25
(XR2206, XR2211)
Exar AN–20 (4pp)

Bussing with MECL 10,000 Integrated Circuits 26
(MC10111, MC10123)
Motorola AN–726 (6pp)

CMOS DUART 27
(XR88C681)
Exar Corporation AN34 (6pp)

Configuring the T7100 X.25 Protocol Controller (XPC–8) 28
(T7100)
AT&T An–15 (20pp)

Data Comm Async and Sync Transmission 29
(2661, 2652, 2681)
Signetics TB–4004 (3pp)

Data Comm Error Control 30
(2652, 2653, 2661)
Signetics TB–4003 (3pp)

Data Comm Protocols 31
(2652, 2653, 2661)
Signetics TB–4000 (2pp)

Designing a Remote Terminal to Talk with a MIL-STD–1553 Network 32
(BUS65112)
ILC Data Device Corp. AN/B–1

Device Operation and System Implementation of the Asynchronous Communications Interface Adapter 33
(MC6850)
Motorola AN–754 (11pp)

Digital Data Comm Message Protocol 34
(2652, 2661, 2653)
Signetics TB–4005 (3pp)

INTERFACE (Cont'd)

Data Transmission (Cont'd)

DMA Mode Operation of the T7111 Sychronous Packet Data Formatter (T7111)
AT&T An–18 (46pp) 1

Eight Channel Codec Demonstrator
Precision Monolithics AN–37 (8pp) 2

Four-Channel Shared Codec (DAC-86, DAC-87)
Precision Monolithics AN–38 (6pp) 3

Generate 4-Channels of Analog Output Using AD 7542 12-Bit D/A Converters and Control the Lot with Only Two Wires (AD7542)
Analog Devices AN-E909–15 4

Hardware and Software Interface for the MC68605 X.25 Protocol Controller (MC68605)
Motorola Semiconductor AN970 (10pp) 5

Hybrid Trio Takes Charge of the BUS-To-CPU Interface in Military Avionics Gear (BUS66300)
ILC Data Device Corp. AN/B–6 6

Integrated Circuits for Digital Data Transmission (DS7820, DS7830, DS8820, DS8830)
National Special Functions Databook AN–22 (16pp) 7

Interfacing the T7110 SPYDER-S to a DS1 Signal (T7110)
AT&T TN87–10SMOS (3pp) 8

Low Cost Implementation of the SAE-AE9-RTU Production Test Plan (BUS68005)
ILC Data Device Corp. AN/B–11 (4pp) 9

Low Power RS–232C Driver and Receiver in CMOS (DS14C88, DS14C89A)
National Semiconductor AN438 (4pp) 10

Low Speed Modem Fundamentals (MC6860)
Motorola AN–731 (15pp) 11

Low Speed Modem System Design Using the MC6860 (MC6860)
Motorola AN–747 (13pp) 12

LSI Modem Integration: The Communication Link for the 1980s (MC6860, MC14412, AMD7910, TMS99532, CH1810, CH1812)
Cermetek (17pp) 13

MIL-STD–1553 Bus Monitor (BUS65101)
ILC Data Device Corp. AN/B–5 14

MIL-STD–1553B: Military Standard for Avionics Integration (BUS65122)
ILC Data Device Corp. AN/B–3 15

Monitoring and Controlling the Synchronization State
Rockwell 320 16

Monolithic Bipolar Circuits for Video Speed Data Conversion (TDC1007J, TDC1016J)
TRW/LSI A–5 17

Monolithic/Superhybrids Support 1553 Interfaces (BUS65112, BUS65600)
ILC Data Device Corp. AN/B–10 18

PABX Circuit Line Using the AMS2002 (AMS2002)
Aptek Microsystems (3pp) 19

Polled and Interrupt Mode Operations of the T7111 Synchronous Packet Data Formatter (T7111)
AT&T AN–16 (40pp) 20

Revised Data Interface Standards (MC1489, MC1488, MC3487, MC3488, MC3486, AM26LS31, AM26LS32, SN75172, SN75174, SN75173, SN75175)
Motorola AN781A (96pp) 21

SCSI Logic Interface Circuit (ZN1011Q)
Ferranti Electric (26pp) 22

Stable FSK Modems Featuring the XR–2207, XR–2206, and XR–2211 (XR2206, XR2207, XR2211)
Exar AN–01 (5pp) 23

Successive Approximation Register Design for Multi-Channel Codec's
Precision Monolithics AN–31 (4pp) 24

Synchronous Data Link Control (SDLC) (2652)
Signetics TB–4002 (4pp) 25

S408/410 Operation at High Data Rates (S408, S410)
Siltronics (1pp) 26

Test Whether a Noise Source is Gaussian (BUS68015)
ILC Data Device Corp. AN/B–12 27

TOPAZ Interface to Mitsui Data Probe
HiLevel Technology (6pp) 28

TP3200 MC-SLIC Application Guide (TP3200, TP3202, TP3204)
National Semiconductor AN439 (10pp) 29

Transmission and Multiplexing of Analog or Digital Signals Utilizing the CD4016A Quad Bilateral Switch (CD4016A)
RCA ICAN–6601 (12pp) 30

Transmission Line Drivers and Receivers for RS–422 and RS–423 (9636A, 9637A, 9638)
Fairchild Application Note 354 (16pp) 31

Tri-State FSK Modem Design Using XR2206/XR2211 (XR2206, XR2211)
Exar AN–05 (6pp) 32

Use of the AM26LS29, 30, 31, and 32 Quad Driver/Receiver Family in EIA RS–422 and 423 Applications (AM26LS29, AM26LS30, AM26LS31, AM26LS32)
Advanced Micro Devices (12pp) 33

Using the HS–3273 MIL-STD–1553B Bus Interface Circuit (HS3273)
Harns Semiconductor AN–403 (8pp) 34

Using the HS–3282 ARINC Bus Interface Circuit (HS3182, HS3282)
Harris Semiconductor AN–400 (6pp) 35

Using the 2653 Polynomial Generator and Checker (2653)
Signetics AN–400 (16pp) 36

Using the 2670/71/72/73 CRT Terminal Chip Set (2670/71/72/73)
Signetics AN–401 (16pp) 37

Which Mode For Data Transmission?
Rockwell 319 38

© IC MASTER 1988

INTERFACE (Cont'd)

Data Transmission (Cont'd)

229GB Framer Functions for DMI Applications 1
(229GB)
AT&T TN86–07SMOS (5pp)

2661 Operating Mode Switching Procedures 2
(2661)
Signetics AN–402 (1pp)

Drivers

A New Driver Circuit for Displays 3
(U1096B)
AEG-Telefunken SI 5.81 (9pp)

A Novel Process for VF Display Drivers 4
National Semiconductor AN–378 (6pp)

A Single IC Digital Thermocouple Thermometer Using the 7106 5
(7106)
Teledyne Semiconductor AN–12 (2pp)

An IC Driver for a PM Bifilar Stepping Motor 6
(UCN-4202A)
Sprague TP80–4 (2pp)

Applications of the MOC3031 and MOC3041 Zero-Crossing Triac Drivers 7
(MOC3031, MOC3041)
Motorola AN916 (7pp)

Basics of EL Panel Drive Techniques 8
(HV04, HV03, HV05, HV06)
Supertex Inc. AN–5 (4pp)

BCD Analog-to-Digital Converter Interface to Dot Matrix LEDs 9
(TSC14433)
Teledyne Semiconductor AN–19 (2pp)

BiMOS II High-Speed Interface ICs for Peripheral and Power Driver Applications 10
(UDN-5800, UDN-5810, UDN-5820)
Sprague Electric WR–203 (12pp)

CMOS Line Drivers 11
National AN–158 (4pp)

CMOS Vacuum Flourescent Drivers To Control Dot Matrix VF Display 12
(MM58341, MM58438)
National Semiconductor AN–440 (10pp)

Design Background 13
(PBL 3717)
RIFA I–01 (7pp)

Designing an LCD Dot Matrix Display Interface 14
(MM58201)
National Semiconductor AN–350 (19pp)

Hermetic BiMOS ICs 15
(UCS-4401H, UCS-4801H, UCS-4807H, UCS-4808H, UCS-4810H, UCS-4815H, UCS-4820H)
Sprague WR–198 (6pp)

HI–8010 CMOS High Voltage Display Driver 16
(HI8010)
Holt Integrated Circuits (4pp)

HI–8010 Functional Description 17
(HI8010)
Holt Int4egrated Circuits (6pp)

High Speed, Low Skew RS–422 Drivers and Receivers Solve Critical System Timing Problems 18
(DS8921, DS8922, DS8923)
National Semiconductor AN457 (4pp)

High-Voltage Interface Power Drivers 19
(UDN-6116A-1 to 7186A, UHP-500, UHP-533, UCN-5823, UCN-5910A, ULN-7001, ULN-7074B)
Sprague Electric Company WR–207 (12pp)

Interface Considerations for Numeric Display Systems 20
(MC14511, MC14543)
Motorola AN–741 (25pp)

LC/LD549 High Power Drivers 21
(LC549, LD549)
Gennum Corp. 500–60–3 (6pp)

Line Driver and Receiver Considerations 22
(MC1488, MC1489, MC3486, MC3487, MC3488, MC10194, MC75107, MC75110)
Motorola AN–708A (18pp)

Line Drivers and Receivers: SN55107 Series 23
(SN55107)
Texas Instruments CA–130 (33pp)

Linear and Interface Applications Set - Volume II: Line Circuits, Display Drivers 24
Texas Insturments SLYA002 (150pp)

MOSPOWER in Motor Drivers 25
(VNT001)
Siliconix AN86–2

New Power-Interface ICs 26
(UDN-2585A, UDN-2595A, UDN-6514A, UDN-2541B)
Sprague TP83–10 (8pp)

PIN Diode Drivers 27
See listing under (Interface) Switches. (National)

Power Integrated Circuits for Motor-Drive Applications 28
(UDN-2953, UDN2953, UDN-2878W, UDN-2879W, UDN-2965W, UDN-2993B, UCN-5800A, UCN-5801A, UCN-5813B, UCN-5814B, ULN-2074B, UDN-2941B, UDN-2952B, UDN-2952W, UDN-2935Z, UDN-2950Z, UDN-2933B, UDN-2934B)
Sprague Electric WR–202 (16pp)

Reliability of Series ULN–2000A and ULN–2800A High-Current Darlington Drivers 29
(ULN-2000A, ULN-2800A)
Sprague EB–29304.6 (4pp)

Reliability of UDN–6100A High-Voltage Display Drivers 30
(UDN-6100A)
Sprague EB–29313.2 (4pp)

Self-Scanned Cascade Readout of the LS7060 and LS7061 31
(LS7060, LS7061)
LSI Computer Systems (3pp)

Series ULN–2000A Darlington Transistor Arrays 32
(ULN-2000A, ULN-2800A)
Sprague Electric Data Book WR–503 (7pp)

Solving the Stepper Motor Interface Problem 33
(SI7250)
Siliconix AN82–1 (4pp)

The MM58348/342/341/248/242/241 Directly Drive Vacuum Fluorescent Displays 34
(MM58348, MM58342, MM58341, MM58248, MM58242, MM58241)
National Semiconductor AN–371 (12pp)

Trends in IC Interface for Electronic Displays
(UDN-2980, UDN-6116A, UDN-2580A, ULN-2804A, UCN-4810A, UCN-4815A)
Sprague Electric Data Book WR–503 (11pp)

INTERFACE (Cont'd)

Drivers (Cont'd)

TSC429 Universal Power MOSFET Interface IC 1
(TSC429)
Teledyne Semiconductor AN28 (12pp)

TSC700A Drives LED Display for TSC14433 ADC 2
(TSC14433, TSC700A)
Teledyne Semiconductor AN–21

TSC7211AM/TSC7212AM Display Driver Interface 3
(TSC7211AM, TSC7212AM)
Teledyne Semiconductor AN–18 (4pp)

Two-Digit Serial Input LED Display Driver Using TSC9404 4
(TSC9404)
Teledyne Semiconductor AN–20 (2pp)

UC1637/2637/3637 Switched Mode Controller for DC Motor Drive 5
(UC1637, UC2637, UC3637)
Unitrode U–102 (11pp)

Using the MM5704 Keyboard Interface in Keyboard Systems 6
See listing under (Digital) Encoders (National)

What is the HI–8010
(HI8010)
Holt Integrated Circuit5s 010985 (4pp)

5C121 as a Three and One-Half Digit Driver 7
(5C121)
Intel APB–9 (4pp)

7106/7107 Digital Meter Applications 8
(7106, 7107)
Teledyne Semiconductor AN–11 (6pp)

Encoders

A Single Channel Codec Integrated Circuit 9
(ZNPCM1)
Ferranti (15pp)

AY5–3600 Keyboard Encoder Operation 10
(AY5-3600)
General Instrument Bulletin 1402 (3pp)

Cascading Encoder-Decoder 11
(ED5, ED9, ED11, ED15, DC-7)
Supertex AN–4 (4pp)

Control Circuits for LED Scales with Linear and Logarithmic Behavior 12
(U237B, U247B, U257B, U267B)
AEG-Telefunken Halbleiter Informationsdienst 8.78 (3pp)

ED Family of Remote Control Encoder/Decoders 13
(ED-5, ED-9, ED-11, ED-15)
Supertex 1 (9pp)

Keyboard Encoder and PROM/EPROM Application 14
(AY5-3600)
General Instrument Bulletin 1401 (4pp)

Manchester Coding Data Bus 15
(BUS65500)
ILC Data Device Corp. AN/B–2

The CDP1871A Keyboard Encoder 16
(CDP1871A)
RCA ICAN 7374 (9pp)

60 Key Keyboard Encoder Applications Note 17
Signetics AN–002 (8pp)

Error Correction and Detection

DP8400s in 64-Bit Expansion 19
(DP8400)
National Semiconductor AN–308 (8pp)

Error Detection and Correction Using SN54/74ALS632 through SN54/74ALS635 20
(SN54ALS632, SN74ALS632, SN54ALS633, SN74ALS633, SN54ALS634, SN74ALS634, SN54ALS635, SN74ALS635)
Texas Instruments SDAA001B (8pp)

Error Detection and Correction Using SN54/74LS630 and SN54/74LS631 21
(SN54LS630, SN74LS630, SN54LS631, SN74LS631)
Texas Instruments SDLA003 (19pp)

Expanding The Versatility of the DP8400 22
(DP8400)
National Semiconductor AN–306 (12pp)

Trust Your Data With A High-Speed CMOS 16-, 32- or 64-Bit EDC 23
(IDT39C60, IDT49C460)
Integrated Device Technology AN–03 (8pp)

MOS/Bipolar

Applications of the RCA CD4093B COS/MOS Schmitt Trigger
See listing under (Digital) CMOS (RCA)

COS/MOS Interfacing Simplified 24
(CD4000 Series)
RCA ICAN–6315 (7pp)

Interfacing COS/MOS with Other Logic Families
See listing under (Digital) CMOS (RCA)

41LG Line Driver and 41LF Line Receiver Terminations 25
(41LG, 41LF)
AT&T AP86–35DBIP (2pp)

Multiplexers

A System Solution to HP-IL Equipment Interface 26
(SI7135)
Siliconix AN83–6 (6pp)

New Multiplexers Simplify System Design 27
(HI-506L, HI-507L)
Harris AN–545 (8pp)

Single Supply Operation of PMI Multiplexers 28
(MUX-08, MUX-16, MUX-24, MUX-28, MUX-88)
Precision Monolithics AN–32 (2pp)

Specifying and Testing Multiplexers 29
Teledyne Philbrick AN–31 (4pp)

Understanding Crosstalk in Analog Multiplexers 30
Precision Monolithics AN–35 (8pp)

Switches

A High Performance Video Switch Using The SD5002 31
(SD5002)
Siliconix AN83–15 (5pp)

A High-Quality Audio Crosspoint Switch 32
(SD5002)
Siliconix AN83–7 (3pp)

A Microprocessor Compatible Analog Switch Makes Interfacing Easy 33
(DG221)
Siliconix AN83–3 (6pp)

© IC MASTER 1988

INTERFACE (Cont'd)

Switches (Cont'd)

A New J-FET Structure—the VARAFET
(IT401, IT401A)
Intersil Application Bulletin AO22 (4pp) 1

Additional Information on the HI–300 series
(HI-300 series)
Harris Semiconductor AN–534 (5pp) 2

Analog Switch Applications in A/D Data Conversion Systems
(HI-200, HI-201, HI-300, HI-5900, HI-5901)
Harris Semiconductor AN–531 (4pp) 3

Analog Switches in Sample and Hold Circuits
Siliconix AN74–2 (4pp) 4

Analog-Signal Commutation
(MM450, MM451, MM454, MM550, MM551, MM552)
National Special Functions Handbook AN–33 (6pp) 5

Application of the MC3416 Crosspoint Switch
(MC3416)
Motorola AN–760 (15pp) 6

Applications of the MT8804A 8x4 Analog Switch Array
(MT8804A)
Mitel Semiconductor MSAN–101 (14pp) 7

CMOS Analog Switches—A Powerful Design Tool
Siliconix AN75–1 (16pp) 8

Common Questions Concerning CMOS Analog Switches
(HI-50XX)
Harris Semiconductor AN–532 (4pp) 9

Designing with Monolithic FET Switches
Siliconix TA73–2 (4pp) 10

DG300 Series Analog Switch Applications
(DG300, DG301, DG302, DG303, DG304, DG305, DG306, DG307)
Siliconix AN76–6 (14pp) 11

Driver Circuits for the JFET Analog Switch
Siliconix AN73–5 (12pp) 12

Electronic Switches in NMOS - Silicon Gate Technology
(U353M, U354M)
AEG-Telefunken Halbleiter Informationsdienst 11.78 (6pp) 13

Features and Applications of RCA IC Zero-Voltage Switches
(CA3058, CA3059, CA3079)
RCA ICAN–6182 (6pp) 14

FETs as Analog Switches
Siliconix AN72–2 (12pp) 15

Guide to Analog CMOS Switches and Multiplexers
Analog Devices (8pp) 16

IC Multiplexer Increases Analog Switching Speeds
(DG506, DG181)
Siliconix AN73–2 (5pp) 17

Interface ICs for Current-Sourcing Applications
(UDN-2580A, UDN-2956A, UDN-2980A, UDN-6100A)
Sprague WR–189 (10pp) 18

New High Speed Switch Offers Sub 50 ns Switching Times
(HI-201HS)
Harris Semiconductor AN–543 (7pp) 19

Some Applications of Programmable Power Switch/Amplifier
See listing under (Linear) Power Control (RCA)

Switching High-Frequency Signals with FET Integrated Circuits
(DG133, DG171, DG181, DG200)
Siliconix AN73–3 (16pp) 20

The DG308 Digitally Switches Analog Signals
(DG308)
Siliconix AN83–1 (8pp) 21

The IH5009 Series of Low Cost Analog Switches
(IH5009 Series)
Intersil Application Bulletin A0004 (8pp) 22

The Versatile DG308 Supercedes 74C901/CD4066 Combination in New Analog Switch Designs
(DG308)
Siliconix DA81–1 (1p) 23

LINEAR

Active Filters

Active Filter Design with IC OP Amps 1
(XR3403, XR4136, XR4202, XR4558)
Exar AN–03 (8pp)

Applications for a DC Accurate Low-Pass Switched-Capacitor Filter 2
(LTC1062)
Linear Technology Corp. AN20 (12pp)

Band-Pass Active Filter with Easy Trim for Center Frequency 3
(1421)
Teledyne Philbrick AN–4 (2pp)

The HF–10 Universal Active Filter (UAF) 4
(HF-10)
Harris Corp AN 578 (41pp)

Amplifiers, Instrumentation

Application for SI1000 JFET Amplifier 5
(SI1000)
Siliconix AN84–1

Applications for a Switched-Capacitor Instrumentation Building Block 6
(LTC1043)
Linear Technology Corp. AN3 (16pp)

Applications of Wide-Band Buffer Amplifiers 7
National Semiconductor AN227 (16pp)

Designing Linear Circuits for 5V Operation 8
Linear Technology Corp. AN11 (16pp)

Instrumentation Amplifiers—Versatile Differential Input Gain Blocks 9
(3660)
Burr-Brown AN–75 (6pp)

OP–10 Instrumentation Amplifier CMRR Versus Frequency Improvement 10
(OP-10)
Precision Monolithics AB–2 (1pp)

Some Techniques for Direct Digitization of Transducer Outputs 11
Linear Technology Corp. AN7 (16pp)

Testing of Analog-to-Digital Converters 12
Burr-Brown Research An–100 (6pp)

The Instrumentation Amp VS the Op Amp—Which, When, & How to Use Them 13
(741)
Teledyne Philbrick AN–29 (5pp)

Theory and Applications of Logarithmic Amplifiers 14
(LM331A, LM329)
National Semiconductor AN–311 (6pp)

Thermal Techniques in Measurement and Control Circuity 15
Linear Technology Corp. AN5 (8pp)

Amplifiers, Isolation

The Key to Understanding Sources of Error in the ISO100 Isolation Amplifier 16
(ISO100)
Burr-Brown AN–126 (8pp)

Amplifiers, Operational

A Collection of Op Amp Applications 17
(OP-10, OP-22, OP-27, OP-37, OP-41, OP-43, OP-50, OP-77, OP-420)
Precision Monolithics Inc. AN–106 (In Linear Conversion Applications Handbook) (17pp)

A New Approach To Op Amp Design 18
Comlinear AN 300–1 (4pp)

A Simple Comparator Using the HA–2620 19
(HA-2620)
Harris Semiconductor AN–509 (1pp)

A Simple Square-Triangle Waveform Generator 20
(HA-2510, HA-2600, HA-2620)
Harris Semiconductor AN–510 (2pp)

A 150W IC Op Amp Simplifies Design Of Power Circuits 21
(LM12)
National Semiconductor AN–446 (14pp)

A 40 MHz Programmable Video Op Amp 22
(LH4101)
National Semiconductor AN–480 (7pp)

An IC Amplifier User's Guide to Decoupling, Grounding, and Making Things go Right for a Change 23
Analog Devices (8pp)

An IC Operational-Transconductance-Amplifier (OTA) with Power Capability 24
(CA3094)
RCA ICAN–6077 (12pp)

Analysis and Design of the Op/Amp Current Source 25
Motorola AN–587 (7pp)

Application Considerations and Circuits for a New Chopper-Stabilized Op Amp 26
Linear Technology Corp. AN9 (20pp)

Applications of a Monolithic Sample-and-Hold/Gated Operational Amplifier 27
(HA-2420, HA-2425)
Harris Semiconductor AN–517 (8pp)

Applications of High Performance BIFET Op Amps 28
(AD542, AD547, AD642, AD647)
Analog Devices E727–15 (8pp)

Applications of New Precision Op Amps 29
(LT1001, LT1002)
Linear Technology Corp. AN6 (8pp)

Applications of the Gated Linear Amplifier ZN424 30
(ZN424)
Ferranti (46pp)

Applications of the RCA CA3048 Integrated Circuit Amplifier Array 31
(CA3048)
RCA ICAN–4072 (8pp)

Applying a New Precision Op Amp 32
(LM11)
National Semiconductor AN242 (16pp)

Applying Dual and Quad FET Op Amps 33
(LF347, LF353)
National Semiconductor AN–262 (7pp)

Boost of Amp Power with MOSFETs 34
(VNT001)
Siliconix AN83–5

Combine Two Op Amps to Avoid the Speed Accuracy Compromise 35
(3521)
Burr-Brown AN–64 (2pp)

Compensation Techniques for Use with the NE/SE5539 36
(NE5539, SE5539)
Signetics AN–140 (8pp)

© IC MASTER 1988

LINEAR (Cont'd)

Amplifiers, Operational (Cont'd)

Considerations for Low-Noise Applications
(MA-106, MA-333)
Analog Systems AN-1004 (1pp)

Current Limiting the MA-329
(MA329)
Analog Systems AN-1005 (1p)

D.C. Servo Motor Systems Using the ICH8510
See listing under (Linear) Amplifiers, Power (Intersil)

Designers' Guide For 200 Series Op Amps
(CLC200, CLC210, CLC220)
Comlinear AN 200-1 (8pp)

Designing Femtoampere Circuits Requires Special Considerations
(1702)
Teledyne Philbrick AN-3 (4pp)

Designing Photodiode Amplifier Circuits with OPA128
(OPA128)
Burr-Brown AN-151 (2pp)

Digital Nulling of OP-05 and SSS725
(DAC-08, OP-05, SSS725)
Precision Monolithics AB-3 (1pp)

Diode-Connected FET Protects Op Amps
(BB3528CM)
Burr-Brown AN-106 (1pp)

Fast Settling Operational Amplifier
(HA-5190, HA-5195)
Harris Application Note 525 (4pp)

HA-5170 Precision Low Noise J-FET Input Operational Amplifier
(HA-5170)
Harris Semiconductor AN540 (4pp)

High-Frequency Oscillations and Analog ICs
Analog Systems AN-1001 (1pp)

High-Performance Audio Applications of the LM833
(LM833)
National Semiconductor AN-346 (9pp)

How to Select Operational Amplifiers
Analog Devices Application Notes, Vol. 1, 21-3 (6pp)

How to Test Basic Operational Amplifier Parameters
Analog Devices (3 pp)

IC Power Op Amps (Revised)
(MUA759, MUA791)
Fairchild AN347 (8pp)

Linear Power Operational Amplifiers
(ULN-3751, 3753, 3755)
Sprague Electric W-206 (7pp)

Linearity and the MA-332
(MA-332)
Analog Systems AN-1002 (1pp)

L144 Programmable Micro-Power Triple Op Amp
(L144)
Siliconix AN73-6 (6pp)

Measurement of Burst (Popcorn) Noise in Linear Integrated Circuits
RCA ICAN 6732 (8pp)

Micropower Op Amp Family
(HA-5141, RC4132, OP-20, LM10C, LM741)
Harris AN-544 (6pp)

Minimization of Noise in Operational Amplifier Applications
(OP-07)
Precision Monolithics AN-15 (11pp)

Monolithic Sample/Hold Combines Speed and Precision
(HA-5320)
Harris Semiconductor AN-538 (7pp)

Operational Amplifier Noise Prediction
Harris Semiconductor AN-519 (10pp)

Operational Amplifier Parameter Definition and Measurement Guide
Teledyne Philbrick AN-23 (8pp)

Operational Amplifier Stability: Input Capacitance Considerations
(HA-2600, HA-2605)
Harris Semiconductor AN-515 (2pp)

Power Operational Amplifiers
(ULN3750 Series)
Sprague Electric AN27118.99 (15pp)

Power Operational Amplifiers—General Operating Considerations
Apex Microtechnology AN-1 (1p)

Power Operational Amplifiers—Optoelectronic Position Control
(PA-07)
Apex Microtechnology AN-2 (2pp)

Precision Digital Gain Set Applications
(LF13006, LF13007)
National Semiconductor AN-344 (6pp)

Precision Magnetic Deflection
Apex Microtechnology (4pp)

Precision Op Amp on a Semicustom Chip
(MONOCHIP)
Interdesign APN-9 (10pp)

Precisional Operational Amplifier
(MUA714)
Fairchild AN348 (10pp)

Preserving and Verifying the LF400's Fast Settling Time
(LF400)
National Semiconductor AN-428 (5pp)

Protecting Inputs and Outputs
Analog Systems AN-1006 (1pp)

Protection Schemes for BI-FET Amplifiers and Switches
(LF411, LF441, LF356, LF400)
National Semiconductor AN447 (3pp)

Simple Precision Millivolt Reference Uses No Zeners
(OP-05)
Precision Monolithics AN-10 (1pp)

Straight Facts About Purchasing Op Amps
Analog Devices G1034-15 (14pp)

Test Procedures for Operational Amplifiers
Harris Semiconductor AN-508 (2pp)

The HA-2400 PRAM Four Channel Operational Amplifier
(HA-2400, HA-2405)
Harris Semiconductor AN-514 (8pp)

The ICL7650: A New Era in Glitch-Free Chopper Stabilized Amplifiers
Intersil A053 (16 pp)

LINEAR (Cont'd)

Amplifiers, Operational (Cont'd)

The OP–07 Ultra-Low Offset Voltage Op Amp—A Bipolar Op Amp that Challenges Choppers, Eliminates Nulling 1
(OP-07)
Precision Monolithics AN–13 (12pp)

The 8007—A High Performance FET-Input Operational Amplifier 2
(ICL8007)
Intersil Application Bulletin A005 (6pp)

Typical Operational Amplifier Applications for Modelling, Measuring, Manipulating, and Much Else 3
Teledyne Philbrick AN–7 (1pp)

Understanding and Using the CA3130, 3130A, and 3130B BiMOS Operational Amplifiers 4
(CA3130, CA3130A, CA3130B)
RCA ICAN–6386 (5pp)

Unique IC Buffer Enhances Op Amp Designs, Tames Fast Amplifiers 5
(LT1010)
Linear Technology Corp. AN16 (24pp)

Using HA–2539 Very High Slew-Rate Wideband Operational Amplifier 6
(HA-2539)
Harris Semiconductor AN541 (4pp)

Using the HA–2541 7
(HA-2541)
Harris AN–550 (6pp)

Using the HA–2542 8
(HA-2542)
Harris AN–552 (5pp)

Using the IT500 Family to Improve the Input Bias Current of BIFET Op Amps 9
(IT500)
Intersil A050 (1 p)

Very Low Noise Operational Amplifier 10
(MAT-02)
Precision Monolithics Inc. AN–102 (In Linear Conversion Applications Handbook) (3pp)

Working with High Impedance Op Amps 11
National Semiconductor AN241 (6pp)

Amplifiers, Power

Applications for a New Power Buffer 12
(LT1010)
Linear Technology Corp. AN4 (8pp)

D.C. Servo Motor Systems Using the ICH8510 13
(ICH8510)
Intersil Application Bulletin A026 (4pp)

Frequency Response Analysis of MOSFET Source 14
(VN1200A)
Siliconix AN83–8

Power Gain Stages for Monolithic Amplifiers 15
Linear Technology Corp. AN18 (16pp)

TBA810S/AS Thermally Protected Power Amplifier 16
(TBA810)
SGS-ATES Technical Note 120 (16pp)

TBA820 Two-Watt Monolithic Audio Amplifier 17
(TBA820)
SGS-ATES Technical Note 114 (11pp)

TCA830S-Thermally Protected Audio Power Amplifier 18
(TCA830S)
SGS-ATES Technical Note 126 (15pp)

TCA940 Fully Protected Audio Amplifier 19
(TCA940)
SGS-ATES Technical Note 119 (15pp)

TDA2020/TDA2010 HI-FI Monolithic Amplifiers 20
(TDA2020, TDA2010)
SGS-ATES Technical Note 130 (12pp)

Amplifiers, Preamplifier

Audio Handbook
See listing under (Linear) Consumer, Audio (National)

Audio Preamplifiers 21
(MONOCHIP)
Interdesign APN–11 (6pp)

DC Coupled Tape Head Pre-amplifiers 22
(LM1897, 1837)
National Semiconductor AN–407 (7pp)

Amplifiers, RF

A High Gain Integrated Circuit RF-IF Amplifier with Wide Range AGC 23
(MC1590G)
Motorola AN–513 (10pp)

A Two-Stage 1kW Solid-State Linear Amplifier 24
Motorola AN–758 (16pp)

Application of the RCA CA3028A and CA3028B Integrated-Circuit RF Amplifiers in the HF and VHF Ranges 25
(CA3028A, CA3028B)
RCA ICAN–5337 (10pp)

Designing with Super Tight, Dynamic Ring Double Balanced Mixer 26
(SI8901)
Siliconix AN85–2

Logarithmic IF Strips Using Monolithic Integrated Circuits 27
(SL521)
Plessey Semiconductor Technical Communication (3pp)

Logging IF Strip 28
(SL1521)
Plessey Semiconductor (2pp)

Amplifiers, Special Purpose

A Buffer Amplifier Applications Collection 29
Precision Monolithics Inc. AN–40 (In Linear Conversion Applications Handbook) (3pp)

A New Current Limiter Extends Protection to 240V 30
(JR135V, JR170V, JR200V, JR220V, JR240V)
Siliconix AN83–9

Applications for Models 4350/4351 and 4362/4363 Logarithmic Amplifiers 31
(4350, 4351, 4362, 4363)
Teledyne Philbrick AN–14 (4pp)

Applications of Monolithic Sample and Hold Amplifiers 32
(HA-2420, HA-2425, HA-5320, HA-5330)
Harris AN–517 (6pp)

Applying IC Sample-Hold Amplifiers 33
Analog Devices E931–20 (8pp)

Class B Amplifier Using 547/548 34
(LD547, LD548)
Gennum Corp. 50019R (8pp)

Composite Amplifiers 35
Linear Technology Corp. AN21 (12pp)

© IC MASTER 1988

LINEAR (Cont'd)

Amplifiers, Special Purpose (Cont'd)

Designer's Guide to Logarithmic Amplifiers 1
(4351)
Teledyne Philbrick AN-12 (10pp)

How to Specify Parameters of Nonlinear Circuits 2
(4351)
Teledyne Philbrick AN-15 (5pp)

LC505 in Ear Amplifier 3
(LC505)
Gennum Corp. 500-17-4 (8pp)

LC505 Micro Amp Circuits 4
(LC505)
Gennum Corp. 500-7-2 (10pp)

LC551 High Power Class B 5
(LC551)
Gennum Corp. 500-97 (1p)

LD501 Compression Preamp 6
(LD501)
Gennum Corp. 500-27 (8pp)

LD502 AGC-O Compression 7
(LD502)
Gennum Corp. 500-89 (5pp)

LD512 Understanding the Compression Amp. 8
(LD512)
Gennum Corp. 500-99 (14pp)

Logarithmic Amplifiers and Operators Parameter Definition and Measurement 9
(4350, 4351, 4362, 4363)
Teledyne Philbrick AN-27 (3pp)

Low-Cost, Two Chip Voltage-Controlled Amplifier and Video Switch 10
(AD539, AD5539)
Analog Devices E957-20 (6pp)

LP508 Minimum Ports ITE/Canal Aid Amp. 11
(LP508)
Gennum Corp. 500-83 (4pp)

LR/LS505 Amplifiers 12
(LR505, LS505)
Gennum Corp. 500-21-2 (6pp)

LT505 Class A Amplifier 13
(LT505)
Gennum Corp. 500-65-1 (6pp)

Selecting and Using High-Speed Track and Hold Amplifiers 14
Comlinear TH-05 (5pp)

Specifying and Testing Sample-Hold Amplifiers 15
Teledyne Philbrick AN-30 (5pp)

The LD511 as an Input Compression Amplifier System 16
(LD511)
Gennum Corp. 500-59-1 (7pp)

Track and Hold Amplifiers Improve Flash A/D Accuracy 17
Comlinear TH-06 (3pp)

Using the 8048/8049 Monolithic Log-Antilog Amplifier 18
(ICL8048, ICL8049)
Intersil A007

506/549 Amplifiers 19
(LD506, LD549)
Gennum Corp. 500-29-1 (8pp)

Amplifiers, Video

Gated Video Amplifier Applications Using the MC1545 20
(MC1545)
Motorola Semiconductor AN-491 (16pp)

Television Video IF Amplifier Using Integrated Circuits
See listing under (Linear) Consumer, TV (Motorola)

The SG1401 Video Amplifier 21
(SG1401, SG3401)
Silicon General AN-SG1401 (2pp)

Video Applications 22
(HA-5190, HA-5195)
Harris AN526 (5pp)

Arrays

Application of the RCA CA3018 Integrated Circuit Transistor Array 23
(CA3018)
RCA ICAN-5296 (5pp)

Application of the RCA CA3019 Integrated-Circuit Diode Array 24
(CA3019)
RCA ICAN-5299 (6pp)

Super-Matched Differential Pair 25
(MONOCHIP)
Interdesign APN-20 (5pp)

Using the SL362C Low Noise Transistor Pair 26
(SL362)
Plessey Semiconductor Technical Communication (4pp)

Communications

A CB Audio Compression System 27
(MONOCHIP)
Interdesign APN-10 (7pp)

A Digital Voice/Data Telephone Set 28
(MC145422, MC145426, MC14403, MC145413)
Motorola Semiconductor AN968 (8pp)

A Four-Wire Full Duplex 1200 Baud Modem Implementation Using the MC145450 and the MC145415 29
(MC145450, MC145415)
Motorola AN-904 (4pp)

A Manchester-Coded Fiber-Optic Serial Data Link Interfacing Parallel Data Buses at Data Rates to 200 kbytes/sec 30
(FOE300B, FOR361B, DP8342, DP8343)
National Semiconductor AN-323 (8pp)

A Monolithic Subscriber Line Interface Circuit 31
(HC-5502A, HC5504)
Harris Semiconductor AN-533 (6pp)

A Ripple Power Supplied DTMF Tone Generator with Redial 32
(UM9169)
United Microelectronics Corp. (8pp)

A 1kHz, OdBmO Standard, Signal Generator 33
(DAC-88, DAC-89)
Precision Monolithics Inc. AN-42 (In Linear Conversion Applications Handbook) (2pp)

Alarm Handling with the R8070 34
(R8070)
Rockwell 333

An Introduction to Mitel DTMF Receivers 35
(MT8865, MT8870, MH88210, MH88305)
Mitel Semiconductor MSAN-106 (7pp)

LINEAR (Cont'd)

Communications (Cont'd)

An Off Line Framer for the R8070 (R8070) Rockwell 334 — 1

An R6500/11-R2424 Intelligent Modem Design (R6500) Rockwell 669 — 2

Applications of The MT3530 (MT3530) Mitel MSAN–117 (25pp) — 3

Applications of the MT8870 Integrated DTMF Receiver (MT8870) Mitel MSAN–108 (26pp) — 4

Applying 240V MOSFET to Electronic Circuits (VN2410) Siliconix AN83–2 — 5

Approaches to Digital Line Card Design (MT8952, MT8972) Mitel MSDN–122 (14pp) — 6

CMOS 300 Baud Modem (MM74HC942) National Semiconductor AN–349 (6pp) — 7

Current Sources (MK50992) Mostek Applications Brief (2pp) — 8

Cycle Stealing Interface for the UT1553B BCRT (UT1553B) United Technologies Microelectronics Center MS1 (8pp) — 9

Data Conversion, Switching, and Transmission using the Intel 2910A/11A Codec and 2912 PCM Filter (2910A/2911A, 2912) Intel AP–64 (40pp) — 10

Data-Over-Voice (DOV) Multiplexer Circuits Add Data to Standard Phone Lines Teltone Corporation AB18 (6pp) — 11

Delta Modulation for Voice Transmission Harris Semiconductor AN–607 (6pp) — 12

Designing Digital Repeaters with ICs (RPT-82, RPT-83) Precision Monolithics Inc. AN–48 (In Linear Conversion Applications Handbook) (6pp) — 13

Designing Second-Generation Digital Telephony Systems Using the Intel 2913/14 Codec/Filter Combochip (2913, 2914) Intel AP–142 (18pp) — 14

Digital Telephony and the Integrated Circuit CODEC (TP3000, TP3001) National AN–215 (16pp) — 15

DNIC Application Circuits (MT8972) Mitel MSDN–124 (6pp) — 16

DNIC Questions and Answers (MT8972) Mitel Corp. MSAS–42 (6pp) — 17

DTMF Dialing for R24MFX, R48MFX, R24BKJ, R48BKJ (R24MFX) Rockwell 813 — 18

DTMF Dialing Using the R96MD Modem Rockwell 816 — 19

DTMF Receiver System (MK5102, MK5103) Mostek Applications Brief (2pp) — 20

Dual Tone Decoding (XR567, XR2567) Exar AN–08 (2pp) — 21

D4/ESF Conversion Using the R8070 (R8070) Rockwell 326 — 22

EX-C277 Low-Voltage PCM Repeater IC (XR-C277) Exar An–04 (6pp) — 23

Finding the F-Bit Rockwell 324 — 24

Full-Duplex 1200 bps/300 bps Modem System (XR2120, XR2123, XR14412) Exar AN–25 (3pp) — 25

Gain Measurements in a CODEC System (TP3000) National AN–219 (4pp) — 26

Generating Idle Code in the R8070 (R8070) Rockwell 332 — 27

Glossary of Digital Telecommunications Terms Mitel Semiconductor MSAN–102 (7pp) — 28

HC–5512C PCM Filter Cleans Up CVSD CODEC Signals (HC5512C) Harris AN–576 (4pp) — 29

HC–55516/32 CVSD Concept and Operations (HC55516, HC55532) Harris Semiconductor (5pp) — 30

High Performance PCM Repeater Using XR-C262 (XR-C262) Exar AN–10 (8pp) — 31

High Speed Modems Filter Characteristics Rockwell 658 — 32

High-Frequency FSK Modem Design (XR-2206, XR210) Exar AN–26 (6pp) — 33

Implementing an ISDN Architecture Using the ST-BUS Mitel Corp. MSAN–128 (11pp) — 34

Improved Shared-Channel Design with PMI's Companding DACs (DAC-88, DAC-89) Precision Monolithics Inc. AN–41 (In Linear Conversion Applications Handbook) (8pp) — 35

Independent Channel Control for the R8070 (R8070) Rockwell 331 — 36

Interfacing Rockwell Signal Processor-Based Modems to and Apple IIe Computer Rockwell 673 — 37

Large Switching Arrays Using MT8980s Mitel Corp. MSAS–32 (2pp) — 38

Logarithmic Units of Measure in Telecommunications RCA ICAN–7037 (4pp) — 39

Long Haul PCM Line Receiver and Clock Recovery Circuit Using the XR-T5650 (XRT5650) Exar Corporation AN33 (12pp) — 40

© IC MASTER 1988

LINEAR (Cont'd)

Communications (Cont'd)

Loop Extender Circuit for the MT8972 DNIC 1
(MT8972)
Mitel Corp. MSAS–46 (3pp)

Loopback Testing with the R8070 2
(R8070)
Rockwell 327

Manchester Encoding and Decoding for Local Area Networks 3
(8002)
SEEQ (16pp)

Metering Pulse Receivers 4
(AMS3050, AMS3051)
Aptek Microsystems (4pp)

Microcontroller Implementation of an Intelligent, Full Duplex, 300 Baud Modem 5
(COP2440)
National Semiconductor AN–324 (6pp)

MK5380 Typical Telephone Application 6
(MK5380)
Mostek Applications Brief (4pp)

Modem Modules: The Complete Data Communications Solution 7
(CH1765)
Cermetek AN–72 (5pp)

Modems
See listings under (Interface) Data Transmission

Monolithic Dual-Tone Multi-Frequency Receiver 8
(SSI201)
Silicon Systems (8pp)

Monolithic Modem Chip Eases Phone Access 9
(MM74HC943)
National Semiconductor AN–394 (12pp)

MT8880 DTMF Transceiver Applications 10
(MT8880)
Mitel MSAN–120 (30pp)

One-Chip Telephone 11
(PBL 3780)
RIFA PBL 3780 (12pp)

Optimum Hybrid Design 12
National Semiconductor AN–397 (15pp)

PABX Line Circuit using 2002/2006 Subscriber Line Interface Circuit 13
(AMS2002, 2006)
Aptek Microsystems (4pp)

PCM Line Interface 14
(XR-T5680)
Exar AN–31 (5pp)

Producing AMI Code From TPOS and TNEG 15
Rockwell 322

Pulse Dialer Comparison 16
(MK5098, MK5099, MK50981, MK50982, MK50992)
Mostek Applications Brief (6pp)

Quality of Received Data for Signal Processor-Based Modems 17
Rockwell 671

Rate Adaptation, Switching and Transmission of RS–232 signals 18
(MT8950)
Mitel MSAN–118 (24pp)

Receiver Synchronization in the R8070 19
(R8070)
Rockwell 329

Reporting Error Conditions in the R8070 20
(R8070)
Rockwell 328

Reverse Line Interface Circuits 21
(AMS2039, AMS2040, AMS2041, AMS2042)
Aptek Microsystems (5pp)

R2424 and R1212 Modems Auto Dial and Tone Detection 22
(R1212, R2424)
Rockwell 676

R96F Modem Recommended Receive Sequence for Group 2 Fascimile 23
Rockwell 655

R96F Modem Tone Detector Filter Tuning 24
Rockwell 668

Signalling Freeze in the R8070 25
(R8070)
Rockwell 335

Silicon Systems K-Series Modem Design Guide 26
Silicon Systems Inc.

Single Chip Modem Provides Low Cost Data Communication 27
(MM74HC942)
National Semiconductor AN444 (16pp)

SL560 Low Noise Amplifier Owner's Manual 28
(SL560)
Plessey Semiconductor (9pp)

SL600 Series—Integrated Circuits for Radio Communications 29
(SL600 Series)
Plessey Semiconductor Applications Manual (92pp)

Speakerphone Design Using XR-T6420–1 and XR-T6421 30
(XR-T6420-1, XR-T6421)
Exar AN–30 (4pp)

ST-BUS Generic Device Specification 31
Mitel Corp. MSAN–126 (7pp)

Telephone Dialing Techniques Using the MC6805 32
(MC6805)
Motorola Semiconductor AN–940 (18pp)

The CMOS Bit Rate Generator 33
(HD4702)
Harris TB–40 (4pp)

The HC–550X Telephone Subscriber Line Interface Circuits 34
(HC-550X)
Harris AN–549 (19pp)

The HC–550X Telephone Subscriber Line Interface Circuits (SLIC) 35
(HC-5502A, HC-5504)
Harris Analog Products AN–549 (20pp)

The MT8980 and the MT8981 Digital Crosspoint Switches 36
(MT8980, MT8981)
Mitel MSDN–123 (10pp)

The Subscriber Line Card in a Distributed Control Switching System 37
(TP3110, TP3120)
National Semiconductor AN–316 (6pp)

The Use of the AMS3101, 3103, 3104 Multi-Frequency (MF) Tone Receivers 38
(AMS3101, AMS3103, AMS3104)
Aptek Microsystems AN–1 (17pp)

Time Space Switching of 8, 16 or 32k bps Channels Using the MT8980 39
(MT8980)
Mitel Corp. MSAN–129 (3pp)

LINEAR (Cont'd)

Communications (Cont'd)

T1/DS1 Digital Trunk Interface Solutions Using The MT8975/MH89750 1
(MT8795, MH89750)
Mitel MSAN-112 (31pp)

UDLT Evaluation Board 2
(MC145422, MC145426)
Motorola AN-943 (10pp)

Understanding CODEC Timing 3
(HC5510, 5511)
Harris AN-570 (8pp)

Understanding PCM Coding 4
Harris AN-574 (6pp)

Understanding Telephone Key Systems 5
Motorola Semiconductor AN893 (7pp)

Using Integrated Detector/Preamplifiers in Fiber Optic Systems 6
(MC75452, MFOE102F)
Motorola AN-814 (4pp)

Using The AMS20XX Reverse Line Interface Circuit 7
(AMS20XX)
Aptek Microsystems (6pp)

Using the AT&T T7010 Switched Capacitor Modem 8
(T7010)
AT&T An-17 (27pp)

Using the S3525A/B DTMF Bandsplit Filter 9
(S3525A/B)
American Microsystems (26pp)

Using the XR-103BC-A Business Card Sized Bell 103 Compatible Modem System 10
(XR103BC)
Exar Corporation AN36 (8pp)

XR-C240 Monolithic PCM Repeater 11
(XR-C240)
Exar AN-02 (6pp)

XR-212ACS Performance Testing 12
(XR-212ACS)
Exar AN-29 (2pp)

XR-212AS Modem System 13
(XR-212AS)
Exar AN-28 (2pp)

ZB1Q Line Code Tutorial 14
Mitel Corp. MSAN-127 (5pp)

Zero Suppression Methods (B7, B8ZS, and HDB3) 15
Rockwell 323

1200 BPS Modem Performance 16
(S35212A, S35213)
Gould AMI MODPB586 (14pp)

2400 bps DPSK Modem System Using the MC6172/6173 17
(MC6172, MC6173)
Motorola Semiconductor AN-870 (14pp)

2400/1200/300 bps International Modem Design 18
Rockwell 690

Comparators

A Simple Comparator Using the HA2620
See listing under (Linear) Amplifiers, Operational (Harris)

AM685/AM686/AM687: Designing with High-Speed Comparators 19
(AM685, AM686, AM687)
Advanced Micro Devices Analog and Communications Products Data Book (10pp)

Application of Programmable Micropower Comparators 20
(L161)
Siliconix AN76-7

Applying the OP-06 Op Amp as a High Precision Comparator 21
(OP-06)
Precision Monolithics Inc. AN-25 (In Linear Conversion Applications Handbook) (4pp)

High Speed Comparator Techniques 22
Linear Technology Corp. AN13 (32pp)

High-Speed Comparator Applications 23
(SP9750, SP9685, SP9687)
Plessey (50pp)

Radiation Testing of Linear Microcircuits
Includes the 702. See listing under (Linear) General. (Fairchild).

RC4805 High Speed Precision Latching Comparator 24
(RC4805)
Raytheon Semiconductor AN27 (16pp)

Consumer, AM/FM

AM and FM Integrated Circuits for Electronically Tuned Radios 25
(LM1865, LM1863)
National Semiconductor AN-382 (14pp)

AM/SSB Transceivers and Noise Blanking Using SL1600 Series Circuits 26
(SL1623, SL1626, SL1640, SL1641)
Plessey Semiconductor (10pp)

AM-FM Radio Designs Using the ULN-2242A, ULN-2241A and ULN-2240A Integrated Circuits 27
(ULN-2242A, ULN-2241A, ULN-2240A)
Sprague AN27121.63 (14pp)

An AM Radio IC for Electronically Tuned Radios 28
(LM1863)
National Semiconductor AN-381 (14pp)

An AM Receiver Using the Plessey SL1600 Series 30
(SL1600 Series)
Plessey Semiconductor (7pp)

An SSB Transceiver for Citizens' Band Using Plessey SL1600 Integrated Circuits 31
(SL1600 Series)
Plessey Semiconductor (4pp)

Application of the CA3089E FM-IF Subsystem 32
(CA3089)
RCA ICAN-6257 (8pp)

Applications of the One-Chip-Radio Integrated Circuit Family 33
(TDA1083, U410B, U411B, U416B, U417B, U418B)
AEG-Telefunken SI 2.81 (8pp)

Binary Synthesizers Users Guide 34
Plessey Semiconductor (13pp)

Designing FM Tuners with TDA1062 and TDA1093 Integrated Circuits 35
(TDA1062, TDA1093)
AEG-Telefunken (46pp)

© IC MASTER 1988

LINEAR (Cont'd)

Consumer, AM/FM (Cont'd)

Development of High-Quality Receivers for AM Stereo 1
(ULN-2241A, ULN-2249A)
Sprague TP80-5 (5pp)

Frequency Selective AM Detection Using Monolithic Phase-Locked Loops 2
(XR2228, XR215, XR2212)
Exar AN-13 (4pp)

IF Amplifier/Detectors for FM Receivers 3
(SL6600, SL6640, SL6650, SL6690)
Plessey (32pp)

Integrated Circuits for FM Broadcast Receivers 4
(CA3005, CA3011, CA3012, CA3013, CA3014)
RCA ICAN-5269 (7pp)

Manual and Automatic FM Tuning System Using Economega I 5
(Economega, AY3-8203, ER1400, MEM4956)
General Instrument Bulletin 0414 (4pp)

Radio Receiver Frequency Counter/Clock 6
General Instrument Bulletin 0411 (3pp)

Scanning Logic for RF Scanner-Receivers Using CMOS Integrated Circuits
See listing under (Digital) CMOS (Motorola)

SL1600 Series Transceiver Applications 7
(SL1600 Series)
Plessey Semiconductor (32pp)

TDA1083—Integrated Circuit for AM/FM Receivers 8
(TDA1083)
AEG-Telefunken Halbleiter Informationsdienst 2.78 (11pp)

TDA1200 FM-IF System for High Performance Radio Receivers 9
(TDA1200)
SGS-ATES Technical Note 117 (12pp)

The Design of Programmable Dividers for UHF and VHF Synthesizers 10
(SP8000 Series)
Plessey AN2 (24pp)

ULN-2204A AM/FM Receiver System 11
(ULN-2204)
Sprague AN-27121.51 (12pp)

VHF Synthesizer 12
(SP1648, SL1521, SP8690, SP8790, SP8760)
Plessey (3pp)

Consumer, Audio

A Non-Complementary Audio Noise Reduction System 13
(LM1894)
National Semiconductor AN-386 (10pp)

An AGC Building Block
See (Linear) Consumer, TV (Interdesign)

An Electronic Music Synthesizer Using the XR2207 and the XR2240 14
(XR2207, XR2240)
Exar AN-15 (2pp)

Application of Audio Amplifier - Transistor Array ICs 15
(LM389)
National Semiconductor AN-264 (5pp)

Audio Amplifiers 16
RCA APA-551 (104pp) 5.00

Audio Noise Reduction and Masking 17
(LM1894)
National Semiconductor AN-384 (6pp)

Build a Simple Comb-Filter or Flanger with a Bucket Brigade Delay Line 18
(SAD1024A)
Reticon AN-113 (4pp)

Cassette Tape Players using TDA7270 19
(TDA7270)
SGS-ATES DN347 (8pp)

Component Selection in Hearing Aids 20
Gennum Corp. 500-57 (7pp)

DC Coupled Tape Head Pre-amplifiers 21
(LM1897, LM1837)
National Semiconductor AN-407 (8pp)

Designing with the LMC835 Digital-Controlled Graphic Equalizer 22
(LMC835)
National Semiconductor AN-435 (8pp)

DNR Applications of the LM1894 23
(LM1894, LM832)
National Semiconductor AN-390 (9pp)

E² POT Digitally Controlled Potentiometer Brings Microprocessor Control to Audio Systems - Adds Features 24
Xicor DB7-25 (12pp)

LC552 - Designing a Series of High O/P Body Hearing Aids 25
(LC552)
Gennum Corp. 500-54-3 (13pp)

LD502 Hearing Aid Application 26
(LD502)
Gennum Corp. 500-87 (11pp)

M252 and M253 Rhythm Generators for Electronic Organs 27
(M252, M253)
SGS-ATES Technical Note 131 (21pp)

TCA600/900 and TCA610/910 Integrated Motor Speed Regulators
See listing under (Linear) Industrial Control (SGS-ATES)

TDA105M—Cassette Recorder Preamplifier with ALC 28
(TDA1054M)
SGS-ATES Technical Note 124 (24pp)

The Use of Floating Point Arithmetic in Digital Filters and Equalizers 29
TRW LSI Products TP-29

UM5100 Application Note 30
(UM5100)
United Microelectronics Corp. (10pp)

Use of Analog Delay Lines for Audio Speed Change without Pitch Changes 31
(SAD1024A)
Reticon AN-112 (4pp)

WC535 - Complete Body Hearing Aid 32
(WC535)
Gennum Corp. 500-40 (24pp)

Writing Music for the AY3-1350 Tunes Synthesizer 33
(AY3-1350)
General Instrument Bulletin 0502 (4pp)

Consumer, TV

A 1-Watt Flyback Converter Using SI9100 34
(SI9100)
Siliconix AN87-1

An AGC Building Block 35
(MONOCHIP)
Interdesign APN-17 (6pp)

LINEAR (Cont'd)

Consumer, TV (Cont'd)

Application of the CA3126Q Chroma-Processing IC Using Sample-and-Hold Circuit Techniques 1
(CA3126Q)
RCA ICAN–6247 (8pp)

Application of the MC1374 TV Modulator 2
(MC1374)
Motorola Semiconductor AN–829 (12pp)

Application of the MC1377 Color Encoder 3
(MC1377)
Motorola Semiconductor AN–932 (12pp)

Applications of the CA3134 Sound IF and Output Subsystem in Television Receivers 4
(CA3134)
RCA ICAN–6728

CA3210 Horizontal, Vertical and Regulator Control IC 5
(CA3210)
RCA ICAN–7164 (5pp)

Description and Use of the Vertical Deflection IC TEA 2015A 6
(TEA 2015A)
Thomson CSF Components NA–013A (15pp)

DIDON Demodulator General Operating Principles 7
(TEA2585, TEA2586)
Thomson CSF Components NA–021A (22pp)

EF9365, EF9367 External Synchronization 8
(EF9365, EF9367)
Thomson CSF Components NA–016R1A (9pp)

External Effects of Video Operational Amplifier Dynamics 9
Third Domain AN11 (2pp)

Integrated NTSC Chrominance/Luminance Processor 10
(CA3217)
RCA ICAN–7175 (11pp)

Monomax—Application of the MC13001 Monochrome Television Integrated Circuit 11
(MC13001)
Motorola AN–879 (12pp)

Obtaining Stripped Video with the RSS–102 12
(RSS102)
Third Domain AN5 (2pp)

Programmable TV Timer/Time-Channel Display 13
(MM53107, MM53100, MM5840)
National Semiconductor AN–196 (10pp)

TEA 2020, A Vertical Deflection IC for 110° Large-Screen Colour TV Sets 14
(TEA2020)
Thomson CSF Components NA–012A (36pp)

TEA2017 Horizontal and Vertical Scanning Integrated Circuit for Black-White TV and Display Applications 15
(TEA2017)
Thomson CSF Components NA–037A (17pp)

Television Video IF Amplifier Using Integrated Circuits 16
(MC1350, MC1352, MC1353, MC1330)
Motorola Semiconductor AN–545A (12pp)

The LM 1823: A High Quality TV Video I.F. Amplifier and Synchronous Detector for Cable Receivers 17
(LM1823)
National Semiconductor AN–391 (16pp)

TV Tuner/Channel Display 18
(AY8930)
General Instrument AB–201 (2pp)

Video Game FM Sound Generator 19
General Instrument Bulletin 0405 (2pp)

Displays

Basic Routines for EF9365 and EF9366 Graphic Display Processors 20
(EF9365, EF9366)
Thomson CSF Components NA–028A (39pp)

BiMOS ICs for Electroluminescent Displays 21
(UCN5851, UCN5852, UCN5853, UCN5854)
Sprague Electric Company TP85–4 (12pp)

EF9367 Graphic Display Processor Application Principles 22
(EF9367)
Thomson CSF Components NA–036A (28pp)

Semi-Graphic Display Unit Using EF9340 and EF9341 23
(EF9340, EF9341)
Thomson CSF Components NA–006A (22pp)

Use of the Extended Character Generator with the EF9340 and EF9341 Display Circuits 24
(EF9340, EF9341)
Thomson CSF Components NA–029A (19pp)

Using the EF9364 Clock Inhibition Signal 25
(EF9364)
Thomson CSF Components NA–002A (7pp)

25 by 80 Character Display Unit Using the EF9340 and EF9341 26
(EF9340, EF9341)
Thomson CSF Components NA–022A (21pp)

Followers

Monolithic Operational Amplifiers—The Universal Linear Component 9
See (Linear) Amplifiers, Operational (National)

General

A Cookbook Approach to High Speed Data Acquisition and Microprocessor Interfacing 27
Intersil Application Bulletin A020 (20pp)

A Variable-Frequency, Clock-Recovery Circuit Using The RPT–82 or RPT–83 28
(RPT-82, RPT-83)
Precision Monolithics Inc. AN–50 (In Linear Conversion Applications Handbook) (3pp)

Analog Data Manual 29
Signetics 7.00 (448pp)

Applications Data Book 30
Exar (80pp)

Bipolar Semi-Custom ICs in Non Entertainment Consumer Applications 31
(Monochips)
Interdesign APN–24 (12pp)

Bridge Circuit Drives 32
(PA12)
Apex Microtechnology Corp. AN–3 (2pp)

Bucket-Brigade Devices 33
EG&G Reticon AN–107 (18pp)

Building Blocks for the Linear I.C. Designer 34
Analog Devices (29pp)

Circuit Diagram of P.N.R.S. 35
Gennum Corp. 500–96 (7pp)

Circuit Techniques for Clock Sources 36
Linear Technology Corp. AN12 (8pp)

© IC MASTER 1988

LINEAR (Cont'd)

General (Cont'd)

CMOS Linear Applications
See listing under (Digital) CMOS (National)

Computer Analysis of Linear Semicustom IC's 1
(MONOCHIP)
Interdesign APN–12 (6pp)

Constant Current LED
See listing under (Linear) Regulators (National)

Criteria for Choosing Resins and Evaluation Tests for Discrete and Integrated Power Devices in Plastic Packages 2
SGS-ATES Technical Note 132 (15pp)

Custom IC Design Using I²L Technology
See (Digital) I²L (Exar)

Electronic Combination Lock 3
(PLS157)
Signetics AN–17 (3pp)

Failure Avoidance 4
Apex Microtechnology Corp. AN–4 (2pp)

How to Measure KT and KV Without Measuring Torque or Angular Velocity 5
Unitrode U–105

IC Crystal Oscillators 6
(MONOCHIP)
Interdesign APN–4 (3pp)

Integrated High Speed Operational Amplifier 7
(MONOCHIP)
Interdesign APN–7 (7pp)

Linear and Interface Applications Set - Volume I: Amplifiers, Comparators,Timers, Voltage Regulators 9
Texas Instruments SLYX001 (150pp)

Linear Application of The CD54/74HCU04 QMOS Hex Inverter 10
(CD54HCU04, CD74HCU04)
RCA ICAN–7367 (12pp)

Linear Circuits Applications 11
Texas Instruments SLNA001 (150pp)

Linear Low Power I.C.'s Cut System Power Consumption 12
National Semiconductor AN–462 (7pp)

Non-Linear Circuits Handbook 13
Analog Devices 5.95 (535pp)

Polarity Programmable Peak Detector 14
Precision Monolithics AN–27 (2pp)

Radiation Effects of Linear Integrated Circuits 15
Precision Monolithics Inc. AN–104 (In Linear Conversion Applications Handbook) (5pp)

Rectifier Circuits for Linear IC's 16
(MONOCHIP)
Interdesign APN–6 (7pp)

Simplified Design of Astable RC Oscillators Using the CD4060B or Two CMOS Inverters 17
(CD4060B)
RCA ICAN–6883 (2pp)

Single MOSFET Crystal Oscillator Design for Integrated Circuits 18
Interdesign APN–29 (17pp)

Solid-State Devices Manual 19
RCA SC–16 5.00 (750pp)

Solid-State Potentiometer 20
Xicor DB7–122 (2pp)

Summary of Electrical Characteristics of Some Well Known Digital Interface Standards 21
National AN–216 (15pp)

The Handbook of Linear IC Applications 22
Burr-Brown (280pp)

Thermal Resistance—A Reliability Consideration 23
Sprague TP80–2 (9pp)

Transformer Design for Two Wire Receiver Using Gennum Push-Pull Amplifier IC 24
Gennum Corp. 500–55 (4pp)

501 Input/Output 25
(LD501)
Gennum Corp. 500–24 (11pp)

Industrial Control

A Modern Infrared Remote Control System 26
(U143M, U327M, U328M, U3034M, U3036M, U3037M, U3038M, U3043M, U250B, U427B, U3870, U4013, U4051, U4052)
AEG-Telefunken SI 4.81 (21pp)

A ROM-Digital Approach to PWM-Type Speed Control of AC Motors 27
Motorola AN–733 (12pp)

A Variable Frequency Control for 3 Phase Induction Motors 28
Motorola AN–766 (10pp)

An Electronic Lamp Monitor 29
(ULN-2435A)
Sprague TP81–7 (5pp)

Applications of the CNY70 and K170P Reflective Optocouplers 30
(CNY70, K170P)
AEG-Telefunken SI 7.81 (14pp)

Cascading STI's Numerically Controlled Oscillators ST–1172A and STI–2172 for Higher Resolution 31
(ST1172A, STI2172)
Stanford Telecommunications Inc. AN001 (2pp)

How Do Numerically Controlled Oscillators Work? 32
(ST1172A, STI2172)
Stanford Telecommunications Inc. AN002 (4pp)

Improving the Spur Levels in the ST–1172A Numerically Controlled Oscillator 33
(ST1172A)
Stanford Telecommunications Inc.

Pulsed IR Light Barrier 34
(TDA4180P, U113B)
AEG-Telefunken Halbleiter Informationsdienst 1/77 (5pp)

Simplifying High-Efficiency Motor Drive Systems with a New Family of PWM Integrated Circuits 35
(SG1731, SG2731, SG3731)
Silicon General (6pp)

TC900 and TC910 Integrated Motor Speed Regulators 36
(TCA900, TCA910)
SGS-ATES Technical Note 113 (10pp)

Temperature Measurement Method Based on Matched Transistor Pair Requires No Reference 37
(MAT-01, OP-10)
Precision Monolithics AN–12 (8pp)

μA7392 Motor Speed Controller 38
(μA7392)
Fairchild AN–343 (20pp)

LINEAR (Cont'd)

Industrial Control (Cont'd)

Variable Speed Control System for Induction Motors 1
(MC673, MC688)
Motorola AN–575A (5pp)

Instrumentation

A Complete Function Generator System Using the XR2206 2
(XR2206)
Exar AN–14 (4pp)

A Square Wave to Sine Wave Converter Using the XR–1015 3
(XR1015)
Exar Corporation AN35 (4pp)

A Universal Sinewave Converter Using the XR2208 and XR2211 4
(XR2208, XR2211)
Exar AN–11 (4pp)

Building a Battery Operated Auto Ranging DVM with the ICL7106 5
(ICL7106)
Intersil Application Bulletin A046 (4pp)

Design Aid of the LD110/LD111 3 1/2-Digit DVM Demonstrator Board 6
(LD110, LD111)
Siliconix DA74–1 (4pp)

Everything You Always Wanted to Know About the 8038 7
(ICL8038)
Intersil A013 (4pp)

Implementation of a Scanning Spectrum Analyzer Using the 2920 Signal Processor 8
(2920)
Intel AP–29 (23pp)

Instrumentation Amplifiers—They're Great Problem Solvers When Correctly Applied 9
(MN2200)
Micro Networks AN202 (4pp)

LD120/LD121 4 1/2 Digit DVM 10
(LD120, LD121)
Siliconix DA77–2 (4pp)

Low Cost Digital Panel Meter Designs 11
(ICL7106, ICL7107)
Intersil A023 (6pp)

The Integrating A/D Converter
See (Interface) Converters (Intersil)

Thermometer for Albacore Fishing 12
(MONOCHIP)
Interdesign APN–21 (3pp)

Waveform Generator 13
(MONOCHIP)
Interdesign APN–8 (10pp)

Modulators

Application of the CA1524 Series Pulse-Width Modulator ICs 14
(CA1524, CA2524, CA3524)
RCA ICAN–6915 (19pp)

Deadband Control with the SG1524 Regulating Pulse Width Modulator Circuit 15
(SG1524, SG2524, SG3524)
Silicon General Linear Brief 6 (1pp)

Designing with the SG1525/1527 Series of Pulsewidth Modulators 16
(SG1525, SG1527)
Silicon General ANSG1525/1527 (7pp)

Simplifying Converter Design with a New Integrated Regulating Pulse Width Modulator 17
(SG1524, SG2524, SG3524)
Silicon General (7pp)

The CA1524E Pulse-Width Modulator-Driver for an Electronic Scale 18
(CA1524E)
RCA ICAN–7174 (2pp)

The RCA CA1524E Pulse-Width Modulator-Driver for an Electronic Scale 19
(CA1524E)
RCA ICAN–7174 (2pp)

Motor Control

A High Precision PWM Transconductance Amplifier for Microstepping Using Unitrode's UC3637 20
(UC3637)
Unitrode U–112

Brushless DC Motors Get a Controller IC That Replaces Complex Circuits 21
Unitrode U–106

Design Notes on Precision Phase Locked Speed Control For DC Motors 22
Unitrode U–113

Motor Control 23
(LAS6300, LAS8500)
Lambda Semiconductors Applications Handbook VI (12pp)

Moving Toward Monolithic Circuits in Small Motors 24
Sprague TP–82.3 (6pp)

New Pulse Width Modulator Chip Controls 1 MHz Switchers 25
Unitrode U–107

Use Motor-Drive IC to Solve Tricky Design Problems 26
Silicon General AN-SG3635 (6pp)

Using the HV–1000 Induction Motor Energy Saver 27
(HV-1000)
Harris Semiconductor AN–542 (9pp)

Multipliers

Analog Multiplier 28
(RC4200)
Raytheon (23pp)

Log/Lin Multiplier 29
(MONOCHIP)
Interdesign APN–3 (11pp)

Wideband Amplifier/Multiplier 30
(SG1402)
Silicon General Linear IC Product Guide (4pp)

Phase Locked Loops

A Medium Cost PLL Varactor Tuning System Utilizing Off-the-Shelf Logic
See listing under (Linear) Consumer, TV (Motorola)

A New Generation of Integrated Avionic Synthesizers 31
Motorola AN–553 (9pp)

A Phase-Locked Loop Tuning System for Television
See listing under (Linear) Consumer, TV (Motorola)

A Wide Tracking Range Precision PLL System Using the XR2212 and XR4151 32
(XR2212, XR4151)
Exar AN–12 (3pp)

© IC MASTER 1988

LINEAR (Cont'd)

Phase Locked Loops (Cont'd)

Applications of the COS/MOS CD4059A Programmable Divide-by-N Counter: Digital Frequency Synthesis for FM Tuners and CB Transceivers
(CD4059)
RCA ICAN-6374 (12pp) 1

Clock Recovery System
(XR2212, XR320)
Exar AN-19 (4pp) 2

Crystal Switching Methods for MC12060/MC12061 Oscillators
(MC12060, MC12061)
Motorola AN-756 (5pp) 3

Designing Wide Tracking Phase-Locked Loop Systems
(XR2212, XR320, XR084)
Exar AN-18 (4pp) 4

Digitally Programmable Phase-Locked Loop
(XR-215, XR-9201)
Exar AN-24 (3pp) 5

Low-Power Digital Frequency Synthesizers Utilizing COS/MOS ICs
(CD4000 Series)
RCA ICAN-6716 (15pp) 6

Operation of the MC145159 PLL Frequency Synthesizer with Analog Phase Detector
(MC145159)
Motorola Semiconductor AN969 (12pp) 7

Phase-Locked Loop Design Fundamentals
(MC4016, MC4024, MC4044, MC4316, MC4324, MC4344)
Motorola AN-535 (11pp) 8

Precision Narrow-Band Tone Detector
(XR2213, XR2208)
Exar AN-21 (4pp) 9

Precision PLL System Using the XR2207 and the SR2208
(XR2207, XR2208)
Exar AN-06 (6pp) 10

SL650 Phase-Locked Loop Applications
(SL650, SL651)
Plessey Semiconductor SL650 Applications (32pp) 11

The RCA COS/MOS Phase-Locked-Loop: A Versatile Building Block for Micro-Power Digital and Analog Applications
(CD4046A)
RCA ICAN-6101 (4pp) 12

The Solid State Scientific Phase-Locked Loop
(SCL4046B, SCL4446B)
SSS AN-112 (15pp) 13

The Technique of Direct Programming by Using a Two-Modulus Prescaler
(MC12009, MC12011, MC12013)
Motorola Semiconductor AN-827 (6pp) 14

XR-210/XR-215/XR-S200 Phase Locked Loops
(XR210, XR215, XRS200)
Exar AN-22 (12pp) 15

Photosensitive Devices

A Precision Light-Sensing Integrated Circuit
(ULN-3310Y)
Sprague TP-82.7 (11pp) 16

Applications of Reticon Photodiode Arrays in Electron and X-Ray Detectors
(RL Series)
Reticon AN-101 (4pp) 17

CCD Output Signal Processing
(TC101)
Texas Insturmentsx SOCA001 (16pp) 18

Depth of Field Characteristics Using Reticon Image Sensing Arrays and Cameras
Reticon AN127 (11pp) 19

Linear CCD Operations at 10 MHz
Texas Instruments SOCA002 (10pp) 20

Optical Calculation Worksheet
Reticon AN126 (4pp) 21

Optoelectronics and Image Sensor Data Book
Texas Instruments SOYD002 (350pp) 22

Small-Area CCD Imager Evaluation
Texas Instruments SOCA003 (12pp) 23

Spectral Response of Reticon Linear Photodiode Arrays
EG&G Reticon AN-121 (15pp) 24

Power Control

A Conceptually New Quad Power Fault Monitor
(SG1548)
Silicon General AN-SG1548 (8pp) 25

A New High Performance Current-Mode Controller Teams Up With Current Sensing Power MOSFETs
(MC34129)
Motorola Semiconductor AN976 26

A Review of Transients and Their Means of Suppression
Motorola AN-843 (12pp) 27

Applications of the MOC3031 and MOC3041 Zero-Crossing Triac Drivers
(MOC3031, MOC3041)
Motorola AN-916 (8pp) 28

Custom Power Hybrids
(PWR82310)
ILC Data Device Corp. An/H2 29

Features and Applications of RCA IC Zero-Voltage Switches
See listing under (Interface) Switches. (RCA)

Hybrids Take on Power
(PWR82300)
ILC Data Device Corp. AN/H-1 30

ICs for Phase and Burst Control of SCR of Triac
(L120, L121)
SGS-ATES Technical Note 116 (12pp) 31

Motor Speed Applications Using the TDA1085A
(TDA1085A)
Plessey Semiconductor (20pp) 32

Phase Control of AC Power with the SL440
(SL440)
Plessey Semiconductor (38pp) 33

Phase Control U111B
(U111B)
AEG-Telefunken Halbleiter Informationsdienst 10.78 (16pp.) 34

Power Supply Control Subsystem
(AM6300)
Advanced Micro Devices Analog and Communications Products Data Book (8pp) 35

Some Applications of a Programmable Power Switch/Amplifier
(CA3094)
RCA ICAN-6048 (12pp) 36

LINEAR (Cont'd)

Power Control (Cont'd)

Testing of Feed Forward Control (AM6301)
Advanced Micro Devices Analog and Communications Products Data Book (2pp) — 1

Triac Phase Control Circuits (MONOCHIP)
Interdesign APN–15 (7pp) — 2

Two-Point Driver to Temperature Controlling of Inductive Loads with U106BS (U106BS)
AEG-Telefunken Halbleiter Informationsdienst 4.77 (4pp) — 3

Zero-Voltage Switch U217B is Two-Step Temperature Controller with Superimposed Proportional Behavior (U217B)
AEG-Telefunken Halbleiter Informationsdienst 12.78 (2pp.) — 4

5 Volt 100 Watt Line Operated Supply with Auxiliary = 15V Output (Am6301)
Advanced Micro Devices Analog and Communications Products Data Book (4pp) — 5

Power Supplies

A Dynamically Balanced 5V, 55A Line-Operated Switching Power Supply (LAS3840, LAS8101, LAS723B)
Lambda Semiconductors AN 2–2 (20pp) — 6

A Flyback Switch Mode Power Supply Using the UAA4006-DP (UAA4006)
Thomson CSF Components NA–027R1A (14pp) — 7

A New Feedback System for Isolated Closed Loop Control (UC1901)
Unitrode (8pp) — 8

A New IC Optimizes High Speed Power MOSFET Drive For Switching Power Supplies (UC1706)
Unitrode U–98 (12pp) — 9

A New Integrated Circuit for Current Mode Control (UC1846)
Unitrode (7pp) — 10

A Second-Generation IC Switch Mode Controller Optimized for High-Frequency Power MOSFET Drive (U1525A, U1527A)
Unitrode U–89 (11pp) — 11

Adequate Switching Transistor Drive Produces Fast Transistor Switching (LAS8100)
Lambda Semiconductors AN 3–1 (6pp) — 12

Applying the UC1840 to Provide Total Control for Low-Cost, Primary-Referenced Switching Power Systems (UC1840)
Unitrode U–91 (10pp) — 13

DC-to-DC Converter Noise Reduction
Burr-Brown AN–162 (3pp) — 14

Design Considerations for Power MOSFET Gate Drive Circuitry
Unitrode U–88 (16pp) — 15

Designing an Efficient and Economic "Flyback" Switch Mode Power Supply with TEA 1001 SP and UAA 4001-DP (TEA1001, UAA4001)
Thomson CSF Components NA–011A (19pp) — 16

Detecting Impending Core Saturation in Switched-Mode Power Converters
Unitrode U–81 (8pp) — 17

Efficient ISDN Power Converter Using SI9100 (SI9100)
Siliconix AN87–2 — 18

Hybrid Circuits for Low Voltage Switched-Mode Converters
Unitrode U–82 (9pp) — 19

LAS3840 Eliminates Transformer Unbalance in Double-Ended Switching Converters (LAS3840)
Lambda Semiconductors AN 2–1 (12pp) — 20

Line-Operated Switching Power Supplies (LAS3840)
Lambda Semiconductors Applications Handbook V (26pp) — 21

Optimum Base Drive and Protection of Switching Transistors Using the UAA4002 (UAA4002)
Thomson CSF Components NA–031A (38pp) — 22

Output Supervisory Circuits: A New Family of Power Supply Control Devices (SG1543)
Silicon General AN1542, 1543, 1544, 3523 (8pp) — 23

Power Supply Building blocks (MONOCHIP)
Interdesign APN–18 (5pp) — 24

Power Supply Circuits Head for Simplicity by Integration
Silicon General (10pp) — 25

Power Supply Design Using the ICL8211 and ICL8212 (ICL8211, ICL8212)
Intersil A027 (8pp) — 26

Power Switch Drivers: New IC Interface Building Blocks for Switched-Mode Converters (SG1627, SG1629)
Silicon General (8pp) — 27

Practical Considerations in Current Mode Power Supplies
Unitrode U–111 — 28

Protect Your Switchers with Digital Current Limiting (SG1549)
Silicon General ANSG1549 (4pp) — 29

RC4193/4391 Switching Regulators (RC4193, RC4391)
Raytheon (23pp) — 30

RS–232 Line Driver Power Supply (LM1578)
National Semiconductor AB30 (2pp) — 31

Simplified Design of a 220V, 100W Flyback Switch Mode Power Supply Using the TEA 1001-SP (TEA1001)
Thomson CSF Components NA–014A (9pp) — 32

Simplified Design of a 220V, 100W Flyback Switch Mode Power Supply Using the UAA4001-DP (UAA4001)
Thomson CSF Components NA–019A (9pp) — 33

Single CS–3842A Provides Control for 500W/200kHz Current-Mode Power Supply (CS3842A)
Cherry Semiconductor (11pp) — 34

© IC MASTER 1988

LINEAR (Cont'd)

Power Supplies (Cont'd)

The Integration of Switching Power Supply Circuitry 1
(SG1525/1527, SG1526)
Silicon General (9pp)

The Output Supervisory Circuit: A New Analog LSI Circuit For Power Supply Control 2
(SG1543, SG2543, SG3543)
Silicon General (7pp)

The UC1524A Integrated PWN Control Circuit Provides New Performance Levels for an Old Standard 3
(UC1524A)
Unitrode U–90 (12pp)

Theory and Application of SI7660 Voltage Converter 4
(SI7660, SI7661)
Siliconix AN84–2

UC3842 Provides Low-Cost Current-Mode Control 5
(UC3842)
Unitrode U–100 (14pp)

1.5 MHz Current Mode IC Controlled 50 Watt Power Supply 6
Unitrode U–110

Rectifiers

Design Guide—Power Schottky Rectifiers in a Switching Regulator 7
Unitrode U–85 (15pp)

Regulators

A New Approach to Switching Regulators 8
Motorola AN–719 (11pp)

A New, Versatile PWM Control Circuit for Switching Power Supplies 9
(SG1524B)
Silicon General AN-SG1524B (8pp)

A Unique Converter Configuration Provides Step-Up/Down Functions 10
(MC34063)
Motorola AN954 (4pp)

A 25 Watt Off-Line Flyback Switching Regulator 11
(UFN833, UC1842)
Unitrode U–96 (6pp)

Applications of the CA3085 Series Monolithic IC Voltage Regulators 12
(CA3085)
RCA ICAN–6157 (11pp)

Circuitry for Single Cell Operation 13
Linear Technology Corp. AN15 (8pp)

Designing Around the L200 Variable Voltage/Current Regulator IC 14
(L200)
SGS-ATES DN318 (7pp)

Designing Switching Voltage Regulators with TL497A 15
(TL497A)
Texas Instruments SLVA001 (26pp)

Flyback and Boost Switching Regulator Design Guide 16
Unitrode U–76 (9pp)

Hybrid Switching Regulators High Reliability Types (4-Lead TO–66) 17
(SM600 Series)
Silicon General Specification HRT600–1

Hybrid Switching Regulators High Reliability Types (3-Lead TO–3) 18
(SM600 Series)
Silicon General Specification HRT600–2

Hybrid Voltage Regulators 19
(LAS2105, LAS7205, LAS1505, LAS1805)
Lambda Semiconductors Applications Handbook VIII (14pp)

Improved Charging Methods For Lead-Acid Batteries Using The UC3906 20
(UC3906)
Unitrode AN U–104 (11pp)

LAS6300 DC Motor Switching Control Applications 21
(LAS6300)
Lambda Semiconductors AN 1–4 (7pp)

LAS6300 Inverting and Step-Up Applications 22
(LAS6300)
Lambda Semiconductors AN 1–3 (8pp)

LAS6300 Series Applications Information 23
(LAS6300)
Lambda Semiconductors AN 1 (21pp)

LH1605 Switching Regulator 24
(LH1605)
National Semiconductor AN–343 (10pp)

Linear Voltage Regulators 25
(Monochip)
Interdesign APN–27 (16pp)

Linear Voltage Regulators 26
(LAS3905, LAS1912, LAS1905)
Lambda Semiconductors Applications Handbook VII (18pp)

LT1070 Design Manual 27
(LT1070)
Linear Technoogy Corp. AN19 (72pp)

L200 1A/15V Switch Mode Regulator 28
(L200)
SGS-ATES DN319 (8pp)

MOE 6047 Building Block 29
(MONOCHIP)
Interdesign APN–19 (5pp)

Performance Enchacement Techniques for 3-Terminal Regulators 30
Linear Technology Corp. AN2 (8pp)

Power Conditioning Techniques for Batteries 31
Linear Technology Corp. AN8 (12pp)

Protect your Switchers with Digital Current Limiting: A New Current Sense Latch IC Provides Pulse-by-Pulse Control 32
(SG1524)
Silicon General SG1524 (4pp)

Resolving the Problems of Switching Mode Power Supplies with the ZN1066 33
(ZN1066)
Ferranti (20pp)

The UC1901 Simplified The Problem of Isolated Feedback in Switching Regulators 34
(UC1901)
Unitrode AN U–94 (12pp)

Theory and Applications of the MC34063 and μA78S40 Switching Regulator Control Circuits 35
(MC34063, μA78S40)
Motorola AN–920 (36pp)

μA78S40 Switching Voltage Regulator 36
(μA78S40)
Fairchild 370 (12pp)

Understanding and Applying the LT1005 Multfunction Regulator 37
(LT1005)
Linear Technology Corp. AN1 (8pp)

LINEAR (Cont'd)

Regulators (Cont'd)

Using a Dual-Polarity, Tracking Voltage Regulator 1
(SG1501, SG2501, SG3501)
Silicon General Applications Bulletin 1 (6pp)

Using an Integrated Controller In The Design of Mag-Amp Output Regulators 2
Unitrode U–109

Versatile UC1834 Optimizes Linear Regulator Efficiency 3
(UC1834)
Unitrode U–95 (23pp)

Voltage Regulator Handbook 4
(LM109, LM117, LM120, LM123, LM125, LM129, LM136, LM137, LM150, LM199, LM320, LM340, LM341, LM7800, LM78L00)
National Voltage Regulator Handbook, 7.00 (139pp)

5-Volt Regulator Circuit for Bit-Slice Devices 5
(LM317)
Texas Instruments SDBA002 (6pp)

Telecommunications

A Standard Local Network for Industrial Use 6
(BUS65500)
ILC Data Device Corp. AN/B–8

Device Design Manual–300/1200 bps Full Duplex Modem 7
(MP212A)
Micro Power Systems (70pp)

High-Frequency TTL-Compatible Output from the XR–215 8
Exar AN–27 (3pp)

Interfacing the Speakerphone to the MC34010/11/13 Speech Networks 9
(MC34018)
Motorola AN957 (12pp)

Low Speed Modems 10
Holt Integrated Circuits 051185 (2pp)

MC14412/MC145440 Chip Set Sets New Standard in 300 Baud Modem Designs 11
(MC14412, MC145440)
Motorola AN–891 (10pp)

TCM2303 & TCM2222 T1 System Application 12
(TCM2303, TCM2222)
Texas Instruments SCTA002 (12pp)

Telecommunications Circuits Data Book 13
Texas Instruments SCTD001 (300pp)

Understanding 300 Baud Modem Specifications 14
National Semiconductor AN–392 (11pp)

3044–3045 DTMF Group Filters 15
(ITT3044, ITT3045)
Aptek Microsystems (2pp)

Thermal Considerations

A Simple Thermal Analysis Program for Integrated Circuits 16
(MONOCHIP)
Interdesign APN–16 (7pp)

Transient Thermal Resistance—General Data and Its Use 17
Motorola AN–569 (15pp)

Timers

Precision Timer 18
(ZN1034E)
Ferranti Electric (19pp)

Single-Chip Frequency Synthesizer Employing the XR2240 19
(XR2240)
Exar AN–07 (3pp)

Using the MC–116 20
(MC-116)
Analog Systems AN–1003 (1pp)

Transducers

Accuracies of the AD590 21
(AD590)
Analog Devices (4pp)

Micropower Circuits for Signal Conditioning 22
Linear Technology Corp. AN23 (24pp)

REF–02 Temperature Controller 23
(CMP-02, REF-02)
Precision Monolithics AB–4 (1pp)

Temperature Compensation, Calibration and Applications of Motorola's X-ducer Pressure Sensor 24
Motorola AN–922 (6pp)

Temperature Compensation Methods for the Motorola X-ducer Pressure Sensor Element 25
Motorola Semiconductor AN–840 (20pp)

Thermometer Application of the REF–02 26
(REF-02)
Precision Monolithics AN–18 (4pp)

Transducer Fluid Filled Option 27
National TB–8 (2pp)

Transducer Interfacing Handbook 28
Analog Devices 14.50 (254pp)

Transducers in Fluid Flow Applications 29
(LX1602A)
National AN–93 (8pp)

Use of The AD590 Temperature Transducer in a Remote Sensing Application 30
(AD590)
Analog Devices E920–15 (4pp)

Video

Comparison of NTSC,PAL and SECAM Video Levels 31
(Bt101)
Brooktree AN–3 (3pp)

External Synchronization System on EF9364 Display Circuit 32
(EF9364)
Thomson CSF Components NA–010A (3pp)

Input/Output of Real Time Video Data using the NCR45CT6 33
(NCR45CT6)
NCR Corporation GAPP Application Note 1

Synchronizing the EF9340 for Incrustation 34
(EF9340, EF9341)
Thomson CSF Components NA–020R1A (10pp)

TMP Row and Attribute Table Lookup Operation 35
National Semiconductor AN–354 (8pp)

© IC MASTER 1988

LINEAR (Cont'd)

Voltage References

Analog Products: Features and Applications
(See listing under (Linear) Amplifiers, Operational (PrecisionMonolithics Inc.)

Crystal Oven Controller and Precision Voltage Reference
See listing under (Linear) Transducers (National)

Precision Voltage References for the MC10315/MC10317 Flash A-D Converters 1
(MC10315, MC10317)
Motorola Semiconductor AN–877 (10pp)

MEMORY

Analog

A Programmable Binary-Analog Correlator (BAC-32) Reticon AN–106 (14pp) 1

A Tapped Analog Delay for Sampled Data Signal Processing Reticon AN–105 (11pp) 2

A Time Base Compressor for Low-Frequency Chirp-Z Transforms (R5601) Reticon AN–115 (18pp) 3

Acoustic Applications of Serial Analog Delay Devices (SAD1024) Reticon AN–104A (8pp) 4

Analog Analog Correlator/Convolver Reticon AN–116 (4pp) 5

Charge Transfer Devices for Sampled-Data Processing Reticon AN–114 (11pp) 6

Serial Operation of Clocked Analog Delay Lines to Obtain Long Delay (SAD1024A) Reticon AN–109 (8pp) 7

Character Generators

The Systems Approach to Character Generators See listing under (Memory) ROMs. (National)

Controllers

Memory Timing Controller Using SN54/74ALS2967, SN54/74ALS2968 (SN54ALS2967, SN74ALS2967) Texas Instruments SDVA001 (16pp) 8

The TMS4500A in an Asynchronous Bus System (TMS4500A) Texas Instruments DRC–1 9

TMS4500A Clock Synchronization (TMS4500A) Texas Instruments DRC–2 10

TMS4500A Dynamic RAM Controller Users Manual (TMS4500A) Texas Instruments SCG690 11

74LS764/65 Dynamic RAM Dual-Port Controller (74LS674, 74LS765) Signetics AN–211 (5pp) 12

EAROMs

A Voltage Switching Circuit for the ER2810 (ER2810) General Instrument Bulletin 1219 (1pp) 13

Data Retention Testing of ER3400 (ER3400) General Instrument Bulletin 1210 (1pp) 14

EAROM—The Electrically Word Alterable Memory for Permanent Storage General Instrument Bulletin 1215 (2pp) 15

EAROMs Replace Mechanical Switches (ER1400) General Instrument Bulletin 1209 (3pp) 16

Generating EAROM Programming Voltages from a 5-Volt Supply General Instrument Bulletin 1220 (1pp) 17

Interfacing the ER3400 to an Eight Bit Microcomputer (ER3400) General Instrument Bulletin 1218 (3pp) 18

Measuring Data Retention of the ER0082 (ER0082) General Instrument Bulletin 1222 (1pp) 19

Microprocessor Interfaces to the ER1400 EAROM (ER1400) General Instrument Bulletin 1207B (5pp) 20

N Channel EEPROMs Offer Increased Speed and Density General Instrument Bulletin 1216 (4pp) 21

The ER3400: An Easy to Use 4K EAROM (ER3400) General Instrument Bulletin 1217 (3pp) 22

The Role of Non-Volatile Memories in Consumer Electronics General Instrument Bulletin 1202 (3pp) 23

E²PROMs

Avoiding Problems Caused by Capacitive Coupling Between Input Signal Lines on 21-Volt EEPROMs (NMC2816) National Semiconductor AB–13 (2pp) 24

Designing with serial EEPROMs NCR MD–209 (7pp) 25

Designing with the NMC9306/COP494—A Simple to Use E²PROM (NMC9306/COP494) National Semiconductor AN–338 (8pp) 26

Designing With The NMC9817, A 2nd Generation E²PROM (NMC9817) National Semiconductor AN 342 (4pp) 27

E-Squared Reliability Report (5213) Seeq AN–1 (5pp) 28

EEPROM Application Note; Vpp Generation on Board (NMC2816, NMC9716) National Semiconductor AN–328 (6pp) 29

EEPROM Stores High Scores in Video Games General Instrument AB–199 (2pp) 30

EPROMs for Modern Times (WS27CXX, WS57CXX) Waferscale Integration AN001 (4pp) 31

E² PROM Provides the Solution to Field Alterable Software Xicor DB7–62 (4pp) 32

E²PROMs: The Competitive Edge Against Bubble Memories Xicor DB7–70 (4pp) 33

E²ROM Interfacing (52B33) SEEQ AN–8 (17pp) 34

Fourteen Common E² PROM Questions Answered Xicor DB7–42 (4pp) 35

High-Density EEPROM Design Considerations (52832/64) NCR Corp. MD–204 (7pp) 36

Latchup Immunity of the HVCMOS EPROM Family Texas Instruments (4pp) 37

Low-Density Byte-Wide EEPROM Applications (NCR53001, NCR53002, NCR53004) NCR Corp. MD–207 (4pp) 38

© IC MASTER 1988

MEMORY (Cont'd)

E²PROMs (Cont'd)

MCM2833 Functional Description 1
(MCM2833)
Motorola AN–909 (5pp)

MC68HC805C4 8-Bit E²PROM Microcomputer Programming Module 2
(MC68HC805C4)
Motorola AN–966 (5pp)

Memory Margining Byte-Wide EEPROMs 3
(NCR 52832, 52864)
NCR MD–215 (10pp)

Memory Margining Serial I/O EEPROMs 4
(NCR 52801)
NCR MD–213 (7pp)

Memory Margining Serial I/O EEPROMs 5
(NCR 59308)
NCR MD–214 (6pp)

Microprocessor Interface to the NCR Bytewide 6
(NCR52832, NCR52864)
NCR MD–208 (6pp)

Microprocessor Interface to the NCR Bytewide E²PROMs 7
(NCR52832, NCR52864)
NCR MD–208 (6pp)

Microprocessor Interfacing with the 52B13 Latched 16K EEROM 8
(52B13)
SEEQ (9pp)

Nonvolatile Data Integrity: Inadvertent Write/Store Elimination 9
Xicor DB7–46 (4pp)

Page-Alterable EEPROMs 10
(NCR52832, NCR52864)
NCR Corp. MD–202 (6pp)

Power-Up/Down with Seeq's 52BXX E²ROM Family 11
(52B13, 52B23, 52B33)
SEEQ AN–10 (4pp)

Protecting Data in NMC9306/COP494 and NMC9346/COP495 Serial EEPROMs 12
(NMC9346/COP495, NMC9306/COP494)
National Semiconductor AB–15 (2pp)

Reliability Issues for the MCM2833 13
(MCM2833)
Motorola AN–908 (2pp)

Serial EEPROMs 15
(NCR59308)
NCR Corp. MD–206 (5pp)

SNOS Non-Volatile Memory Reliability 16
NCR MD–210 (16pp)

"tDV" - What Is It? 17
Xicor DB7–74 (4pp)

The Quick-Pulse Programming Algorithm 18
(27C256, 27010, 27011, 27210)
Intel AP–277 (6pp)

Thin Oxide Beats Thin Film in Building Big EEPROMs 19
Xicor DB7–118 (4pp)

Understand Your Application in Choosing NOVRAM, EEPROM 20
Xicor DB7–84 (12pp)

Using DATA Polling in an Interrupt Driven Environment 21
Xicor DB7–58 (4pp)

Using E²PROMs With ROMless Single Chip Microcontroller 22
(NMC9817)
National Semiconductor AB–17 (2pp)

Using Page - Addressed EPROMs 23
(27513)
Intel AP–284 (30pp)

Using the Hyundai HY93C46 CMOS Serial EEPROM 24
(HY93C46)
Hyundai (4pp)

Xicor E²PROMs vs. Battery Backed-Up CMOS RAMs Nonvolatile Memory Systems 25
Xicor DB7–66 (4pp)

X2816A Design Allows Upgrade to X2864A and Beyond 26
(X2816A, X2864A)
Xicor DB7–50 (4pp)

5-Volt Only EE-PROM Mimics Static-RAM 27
Xicor DB7–78 (6pp)

FIFOs/LIFOs

Interfacing to the FIFOs 28
Cypress Semiconductor CMOS Data Book

SN54/74LS222–228 29
(SN54/74LS222-228)
Texas Instruments SDLA002A (2pp)

Understanding FIFOs 30
Cypress Semiconductor CMOS Data Book

Understanding the IDT/7201/7202 FIFO 31
(IDT7201, IDT7202)
Integrated Device Technology (8pp)

General

An Evaluation Tool for the MC68451 MMU 32
(MC68451)
Motorola AN–880 (6pp)

Basic Binary Number System 33
Vitelic Corp. AB–2 (5pp)

Designing Synchronous/Asynchronous-Compatible Memory Systems 34
Harris TB–58 (3pp)

Disk Interface Design Guide And Users Manual 35
National Semiconductor AN 413 (155pp)

Error Detection and Correction Using SN54/74LS630 or SN54/74LS631 36
(SN54LS630, SN54LS631, SN74LS630, SN74LS631)
Texas Instruments CA–201 (18pp)

Memory Designers Guide 37
(MK4564, MK4116, MK4027, MK4801A, MK4802)
Mostek Memory Designers Guide (425pp) 10.00

Memory Management Applications Handbook 38
(SN74ALS2967, SN74ALS2968)
Texas Instruments SDVA002 (70pp)

Memory Margining for the SNOS Process 39
NCR Corp. MD–205 (5pp)

Power Characteristics of Cypress Products 40
Cypress Semiconductor CMOS Data Book

Precautions to Take When Driving Memories 41
National Semiconductor AN–305 (4pp)

MEMORY (Cont'd)

General (Cont'd)

Printed Circuit Board Layout for BYTEWIDE
Mostek 1982/83 Memory Designers Guide IV–1 (6pp) 1

Reading and Writing in Floppy Disk Systems Using Motorola Integrated Circuits
Motorola AN–917 (16pp) 2

System Considerations for Using Memories in Leadless Chip Carriers
Mostek 1982/83 Memory Designers Guide VI–3 (9pp) 3

Using Slower Memories with the VIS Display System
(CDP1869, CDP1870)
RCA ICAN–6889 (4pp) 4

Microprogramming

ER2055 Benchtop Programmer
(ER2055)
General Instrument Bulletin 1221 (4pp) 5

How to Design with the 8X02 Control Store Sequencer
See listing under (Microprocessor) Systems (Signetics)

MC68704P2 8-Bit EPROM Microcomputer Programming Module
Motorola AN942 (21pp) 6

Signetics Micro Assembler Reference Manual
See listing under (Microprocessor) Programming (Signetics)

Tri-State Logic in High Speed Memories of Microprogrammed Computers
See listing under (Digital) TTL, General (National)

PROMs

A CMOS 64K EPROM Using N-Well Technology
(MBM27C64)
Fujitsu AR–002 (4pp) 7

A PROM Programmer for the SC/MP LCDs
(MM4204, MM5204)
National Memory Applications Handbook AN–189 (23pp) 8

CMOS EPROM and SRAM Output Circuit Characteristics
National Semiconductor AB–31 (2pp) 9

CMOS PROM Power Advantages
Harris TB–57 (3pp) 10

Fujitsu EPROMs: Designing in the Upward Compatible Pin Site
(MBM2716, 2732A, 2764, 27C64, 27128)
Fujitsu Microelectronics AN–004 (9pp) 11

Fujitsu EPROMs: Programming Erasing, and Data Retention
(MBM2716, 2732, 2732A, 2764, 27C64, 27128, 27C128)
Fujitsu Microelectronics AN–006 (8pp) 12

Fujitsu Registered PROMs Offer a New Tool for the Logic Designer
Fujitsu AN–008 (5pp) 13

Harris HH–6616 Compatibility with the 2716 EPROM
(HM6616)
Harris TB–56 (2pp) 14

Implementation of Redundant Bit Programming for PROM Users
(29000)
Raytheon Semiconductor AN29000 Series (8pp) 15

Programming National UV EPROMs
(NMC27C16)
National Semiconductor AN–472 (4pp) 16

PROM Power Switching Alternatives
National Semiconductor AN229 (6pp) 17

Understanding and Using the CDP18U42 EPROM
(CDP18U42)
RCA ICAN–6925 (8pp) 18

32K EPROM Programming Hardware
(MBM2732, 2732A)
Fujitsu Microelectronics TB–002 (2pp) 19

RAMs

A CMOS Keyboard Data Entry System for Bus Oriented Memory Systems
(MC14419)
Motorola Application Note AN–759 (4pp) 20

A High Speed FIFO Memory Using the MECL MC10143 Register File
See listing under (Digital) High Speed Logic (Motorola)

A Memory Design for an 8080A-Based Microprocessor System
(INS8080A, MM5290)
National Memory Applications Handbook (8pp) 21

A Testing Philosophy for 16K Dynamic Memories
(MK4116)
Mostek 1982/83 Memory Designers Guide III–103 (12pp) 22

Addressing Considerations When Testing the MB8264 and MB8265 64K Dynamic RAMs
(MB8264, MC8265)
Fujitsu TB–001 (4pp) 23

Addressing Considerations When Testing the MK4116
(MK4116)
Mostek 1982/83 Memory Designers Guide III–83 (7pp) 24

An In-Depth Look at the MK4027
(MK4027)
Mostek 1982/873 Memory Designers Guide III–121 (13pp) 25

An Introduction to Cache Memory Systems and the TMS2150
(TMS2150)
Texas Instruments SR–1 (8pp) 26

Avoiding Data Errors with Fast Static RAMs
(MCM6164)
Motorola Semiconductor AN973 (3pp) 27

Cache Tag RAM Chips Smiplify Cache Memory Design
(IDT7174)
Integrated Device Technology AN–07 (9pp) 28

Cascading Dual-Port RAMs
(V61C32)
Vitelic COrp. AB–6 (3pp) 29

Charge Pump Driver for 7001 RAMs
(SN54508)
Texas Instruments Application Report CA–178 (6pp) 30

CMOS MK3805 Provides Real Time Clock/Calendar to a Z80 Bus
(MK3805)
Mostek 1982/83 Z80 Designers Guide V–105 (30pp) 31

Comparison of Power Dissipations of Various RAMs
(V51C64L-12)
Vitelic Corp. (12pp) 32

Description Application Examples of the HM–65261 RAM
(HM65261)
Matra-Harris Semiconductor 1024 (10pp) 33

Designing Minimum/Nonvolatile Memory Systems with CMOS Static RAMs
(CDP1800)
RCA ICAN–6943 (25pp) 34

© IC MASTER 1988

MEMORY (Cont'd)

RAMs (Cont'd)

Designing with 16K and 64K Dynamic RAMs 1
(NMC4164, NMC5295)
National AN228 (16pp)

Dual-Port RAMs Simplify Communication in Computer Systems 2
(IDT7130/32/40/42)
Integrated Device Technology AN-02 (10pp)

Dynamic Memory Refresh Considerations 3
(MCM6664A)
Motorola AN-887

Dynamic MOS RAMs 4
Mostek 1982/83 Memory Designers Guide III-59 (6pp)

Guidelines For the use of a 400 MHz Registered RAM 5
(12G014)
GigaBit Logic An-5

Hamming Code Error Detection and Correction 6
Vitelic Corp. AB-8 (4pp)

High Speed TTL Interfacing for 7001 Static RAMs 7
(SN75261, SN75365)
Texas Instruments Application Report CA-179 (8pp)

High-Speed Memory System Design Using 2147H 8
(2147H)
Intel 1985 Memory Components Handbook AP-74 (21pp)

HM-6516: Low-Power Synchronous CMOS RAM 9
(HM-6516)
Harris TB-54 (1pp)

Improved Performance with the AM9124 10
(AM9124)
Advanced Micro Devices (6pp)

Interfacing Static R/W Memories to the 8080A 11
(INS8080A)
National Memory Applications Handbook (4pp)

Leakage and Continuity Test Considerations Using Fujitsu Microelectronics' Single Supply DRAMs 12
Fujitsu Microelectronics TB-003 (2pp)

MB8266A Nibble Mode 13
(MB8266A)
Fujitsu Microelectronics TB-005 (4pp)

Megabit DRAM Topology 14
Texas Instruments SMGA001 (7pp)

Memory Margining Byte-Wide NVRAMs 15
(NCR 52001, 52002, 52004)
NCR MD-212 (8pp)

Memory Margining Nibble-Wide NVRAMs 16
(NCR 52210, 52211, 52212)
NCR MD-211 (8pp)

Memory Systems Characteristics and Applications for the CD4061A 17
(CD4061A)
RCA ICAN-6445

MK4801A/MK4802 for High Speed Applications 18
(MK4801A, MK4802)
Mostek 1982/83 Memory Designers Guide IV-17 (13pp)

Multiport Memory Made Easy 19
(V61C32, V61C35)
Vitelic Corp. AB-5 (4pp)

NMOS RAM Offers Non-Volatility with DATASAVE 20
Mostek 1982/83 Memory Designers Guide IV-7 (9pp)

Non-volatile Memories Keep Appliances Out of the Dark 21
Xicor DB7-96 (6pp)

Nonvolatile Memory Gives New Life to Old Designs 22
Xicor DB7-102 (8pp)

Nonvolatile RAM Applications 23
(NCR52001, NCR52002, NCR52004, NCR52210, NCR52211, NCR52212)
NCR Corp. MD-203 (5pp)

Operation of the V61C35 Non-Simultaneous Access Dual-Ported RAM 24
(V61C35)
Vitelic Corp. AB-9 (1p)

Optimized Testing of 16K RAMs 25
(MK4116)
Mostek 1982/83 Memory Designers Guide III-99 (4pp)

Printed Circuit Board Layouts for the Compatible Dynamic RAM Family 26
(MK4116, MK4332, MK4516, MK4528, MK4564)
Mostek 1982/83 Memory Designers Guide III-17 (8pp)

RAM Input and Output Characteristics 27
Cypress Semiconductor CMOS Data Book

Random Access Memory Operation 28
Vitelic Corp. AB-3 (4pp)

Replacing DIP Switches with Nonvolatile Memories 29
Xicor DB7-54 (4pp)

Ripplemode Operation 30
Vitelic Corp. AB-1 (4pp)

Save Volatile Data During Power Loss 31
Xicor DB7-110 (8pp)

Separate I/O RAMs Increase Speed and Reduce Part Count 32
(IDT6167, IDT71682, IDT7187, IDT71982)
Integrated Device Technology AN-05 (5pp)

Single-Chip, 2-Port RAM Controller Saves Board Space 33
(HMC6207)
Matra-Harris Semiconductor 1033 (6pp)

Software Refresh Memory Board for an MC6809 System 34
(MCM4116, MCM4027, MCM6664)
Motorola Semiconductor AN-833 (5pp)

Software Refreshed Memory Card for the MC68000 35
(MC68000, MCM4116, MCM6664)
Motorola Semiconductor AN-816 (6pp)

Some Practical Thoughts About the Value of Dual-Ported RAM 36
(V61C32)
Vitelic Corp. AB-10 (3pp)

System Solutions For Static Column Decode 37
(SN74ALS6300, SN4ALS6301, SN74ALS6310)
Texas Instruments SDVA004 (24pp)

Test Implications of Higher Speed 16K RAMs 38
Mostek 1982/83 Memory Designers Guide III-115 (6pp)

The Nine Most Frequent NOVRAM Questions 39
Xicor DB7-37 (4pp)

The Nonvolatile RAM for Microprocessor Applications 40
(M193, M120)
SGS-ATES DN317 (15pp)

The 5-Volt, 64K Dynamic RAM is Here, So is The 32K, So is The 16K 41

TMS4256/TMS4257 Topology 42
(TMS4256, 4257)
Texas Instruments SMQA002A (5pp)

MEMORY (Cont'd)

RAMs (Cont'd)

TMS4464 Topology (TMS4464) Texas Instruments SMBA641 (8pp) — 1

TMS4500A DRAM Controller Configured for the TMS99000 Series 16-Bit Microprocessors (TMS4500A) Texas Instruments SMCA003 (11pp) — 2

Transparent Refresh Using SN74LS600AN and SN74LS601AN (SN74LS600A, SN74LS601A) Texas Instruments AR-SDLA001 (4pp) — 3

Turbomode Dual-Ported RAM with Semaphores (V61C32) Vitelic Corp. AB–7 (3pp) — 4

Use of CMOS RAM CDP1824 with RCA Microprocessor Evaluation Kit 18S020 (CDP1824) RCA ICAN–6537 (4pp) — 5

Use of CMOS-SOS RAM CDP1822 with RCA Microprocessor Evaluation Kit CDP18S020 (CDP1822) RCA ICAN–6539 (4pp) — 6

Using Dynamic RAMs (MK4027, MK4116) Mostek 1982/83 Memory Designers Guide III–65 (15pp) — 7

Using Radiation Hardened Synchronous Static CMOS 4K RAMs (HS6504RH, HS6514RH) Harris Semiconductor AN–402 (11pp) — 8

Using the M79018DX–15 Dual Port RAM (M79018DX-15) AT&T TN86–06MMOS (14pp) — 9

Using 64 Kbit Dynamic RAMs with EF9365, EF9366, EF9367 Graphic Display Processor (EF9365, EF9366, EF9367) Thomson CSF Components NA–035A (22pp) — 10

Video Memory: Technology and Applications (TMS4161) Texas Instruments SMVY002 (9pp) — 11

Which Way for 16K? Intel Application Note AP–22 (7pp) — 12

Xicor NOVRAMs - Easier Than Ever to Use Xicor DB7–1 (8pp) — 13

Xicor Replaces DIP Switches and Trimmers with NOVRAM Memories Xicor DB7–9 (8pp) — 14

Z80 Interfacing Techniques for Dynamic RAM (MK4027, MK4116) Mostek 1982/83 Memory Designers Guide III–43 (16pp) — 15

Z8000 Memory Interfacing Techniques (MK4564) Mostek 1982/83 Memory Designers Guide III–37 (5pp) — 16

64k Dynamic RAM Memory Board with Transparent Refresh (MCM4116, MC3242, MC3480) Motorola Semiconductor AN–835 (7pp) — 17

74F189 Application Brief (74F189) Cypress Semiconductor CMOS Data Book — 18

ROMs

Designing With Signetics MOS ROM Family Signetics (50pp) — 19

Fast Multipliers Using TTL Read Only Memories (SN74182, SN74H183, SN74283, SN74284, SN74285) Texas Instruments Application Report CA–172 (11pp) — 20

MOS Goes Bipolar See listing under (Memory) Shift Registers (National)

Use of CMOS ROMs CDP1831 and CDP1832 with the RCA Microprocessor Evaluation Kit CDP18S020 (CDP1831, CDP1832) RCA ICAN–6536 (4pp) — 21

Use of CMOS ROMs CDP1833 and CDP1834 with the RCA Microprocessor Evaluation Kit CDP18S020 and the EK/Assembler-Editor Design Kit CDP18S024 (CDP1833, CDP1834) RCA ICAN–6635 (4pp) — 22

Shift Registers

A Random Pattern Generator for Testing Digital Delay Elements Advanced Micro Devices (3pp) — 23

COS/MOS MSI Counter and Register Design and Applications See listing under (Digital) CMOS (RCA)

The Logical Design of Shift Counters See listing under (Digital) Counters. (Motorola)

Using Shift Registers as Pulse Delay Networks See listing under (Digital) High Speed Logic (Motorola) Microprocessors.

© IC MASTER 1988

ASIC/CUSTOM

Gate Arrays

A Design Guide for Oscillators Using M.H.S. Gate Arrays — Matra-Harris Semiconductor 1023 (10pp) — 1

A Printer Buffer Conroller — Xilinx, Inc. The Programmable Gate Array Design Handbook (3–29) — 2

A Seven-Segment Display Driver — Xilinx, Inc. The Programmable Gate Array Design Handbook — 3

A T1 Communications Interface — Xilinx, Inc. The Programmable Gate Array Design Handbook) — 4

A UART Design Example — Xilinx, Inc. The Programmable Gate Array Design Handbook — 6

A UART Design Example — Xilinx, Inc. The Programmable Gate Array Design Handbook (3–1) — 7

Analog Capabilities on Metal Gate CMOS Arrays — Interdesign APN–32 (7pp) — 8

Binary Addition/Subtraction and Binary/BCD Addition Utilizing Motorola's MCA2500ECL Macrocell Array (MCA2500ECL) — Motorola Semiconductor AN953 (16pp) — 9

Controlling Electrostatic Discharge on CMOS Gate Arrays — Fairchild GA–2 (4pp) — 10

Controlling Skew on ECL Gate Arrays — Fairchild GA–3 (12pp) — 11

Designing Macrocell Arrays Using Engineering Work Stations — Motorola AN928 (4pp) — 12

Designing with an LSI Bipolar Configurable Gate Array — Raytheon Semiconductor AN28 (24pp) — 13

Determining Gate Count For ASICs (GA Series, GB Seres) — Gould AMI DGCAN486 (10pp) — 14

Field Hardware/Software Updates Made Cost Effective — Xilinx, Inc. The Programmable Gate Array Design Handbook (3–49) — 15

FTDL Example Programs for D.C., Function, and Delay Tests — Fujitsu AN–007 (8pp) — 16

HE2000 Gate Array: Packaging and Thermal Considerations (HE2000) — Honeywell HE2000 AN–2 (4pp) — 17

HE2000 Gate Array: Understanding CML Logic (HE2000) — Honeywell HE2000 AN–1 (2pp) — 18

HT5000 Gate Array: System Cost Analysis (HT5000) — Honeywell HT5000 AN–4 (4pp) — 19

HT5000 Gate Array: System Partitioning Guidelines (HT5000) — Honeywell HT5000 AN–3 (4pp) — 20

HT5000 Gate Array: Understanding CML Logic (HE5000) — Honeywell HT5000 AN–1 (2pp) — 21

HT5000 Gate Array: Understanding Design Automation (HT5000) — Honeywell HT5000 AN–5 (4pp) — 22

JEDEC Standard Macrocell Benchmark — Honeywell AN B–102 (10pp) — 23

LSI TTL Gate Arrays — Ferranti Interdesign APN–26 (8pp) — 24

MB Gate Array Series - Advanced Concepts on Regular Silicon Architecture (MB5000) — Matra-Harris Semiconductor 2012 (7pp) — 25

Native Fault Testing — Honeywell AN B2–103 (4pp) — 26

One Megarad CMOS Gate Array — Fairchild (8pp) — 27

Precision Analog Monochips Host Low-Power, High-Speed Digital — Ferranti Interdesign APN–30 (7pp) — 28

Providing a 3.3 Volt Supply for Honeywell Gate Arrays (HE2000) — Honeywell AN B2–104 (3pp) — 29

SCX microCMOS Gate Array Family Application Guide — National Semiconductor (22pp) — 30

Software Toolkit — Honeywell AN B–101 (7pp) — 31

The Advantages of Large Bipolar Semi-Custom Arrays in Linear Systems (MOA, MOB, MOE, MOF, MOG, MOH, MOJ, MOL, MOM, MON) — Ferranti Interdesign APN–34 (12pp) — 32

The Design of ISO3/5 Output Drivers and Buffers (ISO3, ISO5) — Universal Semiconductor AN1 (4pp) — 33

The Impact of Semi-Custom ICs on Automotive Applications (MOA, MOB, MOC, MOD, MOE, MOF, MOG, MOH, MOJ, MOL) — Ferranti Interdesign APN–22 (8pp) — 34

The Use of Bipolar Semiconductor Junctions in Linear Circuit Design — Ferranti Interdesign APN–33 (21pp) — 35

Third Generation ECL Macrocell Arrays (MCA10000ECL) — Motorola Semiconductor AN977 (4pp) — 36

Using the HE2000 in ECL 100K Systems (HE2000) — Honeywell AN B2–103 (2pp) — 37

Utility Gate Array Logic Simulation with a Personal Computer — Siliconix AN83–12 (8pp) — 38

General

AIDA Breaks the Design Verfication Bottleneck — AIDA UR–2 (4pp) — 39

AIDA Enhancements to the Mentor Environment — AIDA UR–3 (4pp) — 40

AIDA Support for VLSI CMOS Testability — AIDA UR–4 (4pp) — 41

Breaking the Simulation Log Jam with AIDA — AIDA UR–1 (2pp) — 42

Extraction of Interconnect Delays From Computer-Generated Layouts — RCA ICAN–7276 (3pp) — 43

Feasibility Studies for CMOS Semi-Custom Circuits — National Semiconductor AN–385 (15pp) — 44

Functional Testing of Pipeline-Type Designs — RCA ICAN–8605 (6pp) — 45

Gate Propagation Delays vs Vcc Variations in CMOS Logic Circuits — RCA ICAN–7350 (2pp) — 46

ASIC/CUSTOM (Cont'd)

General (Cont'd)

Introduction to the AIDA Design System
AIDA (66pp) — 1

Macro-Based Approach to ASIC Design
RCA ICAN-8619 (5pp) — 2

MIMIC Fault Sensitization Analysis During Good-Logic Simulation in ASICs
RCA ICAN-8626 (1p) — 3

Minimizing Errors In ASIC Design With The RCA Electrical Rule Checking Kit
RCA ICAN-8607 (5pp) — 4

Scaling MIMIC Delays To Simulate Variations In Processing, Layout, and Operating Conditions
(MIMIC)
RCA ICAN-7349 (6pp) — 5

Simulation Patterns Translation Using TWINS: Transparent Workstation Interface System
(TWINS)
RCA ICAN-7352 (4pp) — 6

Test System Timing Considerations
RCA ICAN-7360 (8pp) — 7

TOPAZ and LSSD (Level Sensitive Scan Design) Verification
HiLevel Technology (8pp) — 8

TOPAZ to Wafer Probe Interface
HiLevel Technology (8pp) — 9

Linear and Linear/Digital Arrays

Analog MOS on Semicustom Integrated Circuits
(Monochip)
Ferranti Interdesign APN-23 — 10

Designing Low Frequency Filters on the CMOS Monochip
(Monochip)
Ferranti Interdesign APN-28 (24pp) — 11

Low Voltage Bipolar Circuits
(Monochip)
Ferranti Interdesign APN-25 (16pp) — 12

VJ800 Family User's Guide
(VJ800)
VTC VJ800 User's Guide (35pp) — 13

Programmable Logic

A Study of the Fastest PAL (15 ns Max.) in the Industry—National's PAL 20B Series
(PAL 20B Series)
National Semiconductor AN-388 (4pp) — 14

Applying the 5C121 Architecture
(5C121)
Intel Ap-271 (11pp) — 15

Atypical Latch/Register Construction in EPLDs
Intel Ab-16 (6pp) — 16

Configuring the 5CBIC for Your Design
(5CBIC)
Intel AB-17 (4pp) — 17

Converting PAL Designs to EP320 EPLD
Altera AB43 — 18

Copying PAL Patterns into GAL Devices
(GAL16V8, GAL20V8, GAL39V8, ispGAL16Z8)
Lattice Semiconductor Corp. AB101 (6pp) — 19

Counter Design Using the EP1200
Altera AB10 — 20

Creating Macros for EPLD Designs
Intel Ap-312 (9pp) — 21

Design Boundaries of the EP1200
Altera AB13 — 22

Designing a Mailbox Memory for Two 80C31 Microcontrollers Using EPLDs
(80C31)
Intel AB-12 (4pp) — 23

Designing Asynchronous Latches with EPLDs
Altera AB9 — 24

Designing with Macrofunctions
Altera AB34 — 25

DRAM Address Interface with the 5CBIC
(5CBIC)
Intel Ap-309 (4pp) — 26

Dual-Port Memory Control Using the 5CBIC
(5CBIC)
Intel AP-305 (6pp) — 27

Efficient Counter Design With Toggle Flip-Flops
Altera AB8 — 28

EPLD Simulation
Altera AN4 — 29

EPLD Technology
Altera AN8 — 30

EPLDs, PLAs and TTL Comparing the "Hidden Costs" in Production
Intel Ap-307 (21pp) — 31

EP1800 as a Bar Code Decoder
Altera AB27 — 32

EP1800 X-Y Position Controller
Altera AB20 — 33

FASTPLA 16P8 Used As 8-Bit Fixed Identity Comparator
(FASTPLA 16P8)
Fairchild MHSL-6 (2pp) — 34

Field Programmable Logic
Texas Instruments SDPA001 (18pp) — 35

Field Programmable Logic Arrays—An Application Manual
Signetics (116pp) — 36

Functional Simulation of EPLD Designs Using PLFSIM
Altera AB24 — 37

GAL Device Power Considerations
(GAL16V8, GAL20V8, GAL39V8, ispGAL16Z8)
Lattice Semiconductor Corp. AB104 (6pp) — 38

GAL Device Quality and Reliability
(GASL16V8, GAL20V8, GAL39V8, ispGAL16Z8)
Lattice Semiconductor Corp. AB106 (8pp) — 39

Generic Architecture - Anything Everytime
(GAL16V8, GAL20V8, GAL39V8, ispGAL16Z8)
Lattice Semiconductor Corp. AB102 (10pp) — 40

Hidden Costs in PLD Usage
(GAL16V8, GAL20V8, GAL39V8, ispGAL16Z8)
Lattice Semiconductor Corp. AB105 — 41

High Speed UART
Altera AN6 — 42

© IC MASTER 1988

ASIC/CUSTOM (Cont'd)

Programmable Logic (Cont'd)

How Programmable Flip-Flops Work in EPLDs — Altera AB28 — 1

HPL–16LCB Programmable Output Polarity (HPL16LC8) — Harris TB–60 (3pp) — 2

Implementing a CMOS Bus Arbiter/Controller in the 5C060 EPLD (5C060) — Intel Ap–276 (9pp) — 3

Implementing Asynchronous Set Using Async Clear — Altera AB39 — 4

Implementing Cascaded Logic in the 5C121 (5C121) — Intel Corp APB–8 (4pp) — 5

Introduction to EPLDs — Altera AN1 — 6

Low Power EPLD Design Guidelines — Altera AB52 — 7

Manchester Encoder/Decoder — Altera AB3 — 8

Manual Design Method Using FASTPLA 16P8B (FASTPLA 16P8B) — Fairchild MHSL–7 (6pp) — 9

Manual Design Method Using FPLAs (932458 FPLA, 932459 FPLA) — Fairchild MHSL–13 (7pp) — 10

Memory Interfacing With EPLDs — Altera AN3 — 11

Metastability Characteristics of EPLDs — Altera AN9 — 12

Monostable, RC & XTAL Oscillator Designs in EPLDs — Altera AB15 — 13

Multiplier Circuits in EPLDs — Altera AB23 — 14

PAL Design Techniques solving PAL Design Problems — National Semiconductor AN–445 (6pp) — 15

PAL Functional Testing — National Semiconductor AN–351 (20pp) — 16

PALC16R6GCR Encoder/Decoder (PALC16R6) — Cypress Semiconductor CMOS Data Book — 17

Partitioning State Machines — Altera AB18 — 18

Power Supply Sequencing For EPLDs — Altera AB40 — 19

Programmable Array Logic (PAL) Design Techniques — Overview — National Semiconductor AN–429 (10pp) — 20

Programmable Logic Device Applications Brief — Cypress Semiconductor CMOS Data Book — 21

Programmable PROM Memory Expansion (82S102, 82S103) — Signetics AB–005 (4pp) — 22

Rad-Hard CMOS/SOS Interrupt Controller GP517 Meets MIL-STD–1750A InterruptRequirements (GP517) — RCA ICAN–7366 (9pp) — 23

Replacing 20-Pin PALs — Altera AN2 — 24

Schmitt Trigger Inputs in EPLDs — Altera AB19 — 25

Selecting Sockets for Altera J-Leaded Package — Altera AB46 — 26

Serial Data F1FO Design in the EP1800 — Altera AB26 — 27

Simulation of EPLD Timing (5C032, 5C060) — Intel AP–304 (13pp) — 28

Single Chip Multiprocessor Arbiter — Signetics AN–007 (4pp) — 29

Single Chip Signature Analyzer — Altera AB5 — 30

Square Pegs in Round Holes - A Fitting Tutorial for the 5C121 (5C121) — Intel AB–10 (11pp) — 31

State Machine Design Entry — Altera AB14 — 32

State Machine Design Guidelines — Altera AB17 — 33

Successive Approximation Register Design Using the EP600 — Altera AB25 — 34

Testability Advantages of GAL Devices (GAL16V8, GAL20V8, GAL39V8, ispGAL16Z8) — Lattice Semiconductor Corp. AB103 (4pp) — 35

Testing Plastic OTP EPLDs — Altera AB45 — 36

The Altera Macro Function Library — Altera AB44 — 37

The Multiplexed Bus Interface with the 5CBIC (5CBIC) — Intel AP–308 (9pp) — 38

The 5C060 Unification of a CHMOS System (5C060) — Intel AP–272 (10pp) — 39

The 93Z459 FPLA Interfaces Multiplexed 4-Digit Counter to Microprocessor (93Z459) — Fairchild MHSL–2 (2pp) — 40

Total Dose Gamma Radiation Hardness of Altera EPLDs — Altera AB51 — 41

T1 Serial Transmitter — Altera AB4 — 42

Ultra-High Speed (15ns Max.) PAL Solves Speed Problem (PAL16L8B, PAL16R4B, PAL16R6B, PAL16R8B) — National Semiconductor AN–398 (18pp) — 43

Understanding Texas Instruments Programmable Array Logic Specifications (TIBPAL16L8-15) — Texas Instruments SDPA002 (6pp) — 44

Using Macros in EPLD Designs — Intel Ap–311 (11pp) — 45

Using the 93Z459 FPLA as a Phase/Frequency Detector (93Z459) — Fairchild MHSL–1 (4pp) — 46

ASIC/CUSTOM (Cont'd)

Programmable Logic (Cont'd)

16-Bit Binary Counter Implementation Using the 5C060 EPLD 1
(5C060)
Intel AB-11 (8pp)

16-Bit Up/Down Counter with Left/Right Shift Register 2
Altera AB11

1987 Databook Changes 3
Altera AB53

5C121 as a Three and One Half Digit Display Driver 4
(5C121)
Intel APB-9 (4pp)

93Z459 FPLA and R-S Latch Form Pulse Synchronizer 5
(93Z459, 74279)
Fairchild MHSL-4 (2pp)

93Z459 FPLA Makes Versatile 12-Bit Address Comparator 6
(93Z459)
Fairchild MHSL-5 (4pp)

Standard Cells

SCL MicroCMOS Standard Cell Family Application Guide 7
National Semiconductor (18pp)

Select Macrocell Array Circuits With a Computer Program 8
Motorola Semiconductor AN-927 (12pp)

Standard Cell Libraries Simplify GaAs Design 9
GigaBit Logic AR-13

VJ900 User's Guide 10
(VJ900)
VTC Incorporated VJ900 User's Guide

VL1000 User's Guide 11
(VL1000)
VL1000 User's Guide (123pp)

VL2000 User's Guide 12
(VL2000)
VL2000 User's Guide

VL3000 User's Guide 13
(VL3000)
VTC Incorporated VL3000 User's Guide

VL5000 User's Guide 14
(VL5000)
VTC Incorporated VL5000 User's Guide

© IC MASTER 1988

PACKAGING

General

A Basic Guide to Surface Mounting of Electronic Components 1
National Semiconductor (35pp)

Bipolar/LSI Family of Programmable Array Logic (PAL)/PROM in Plastic Leaded Chip Carriers (PLCC) 2
National Semiconductor (8pp)

Electrostatic Discharge Control: A Guide to Handling Integrated Circuits 3
Harris TB-52 (5pp)

ESD Prevention Manual 4
Analog Devices AN-E826-5-3/84 (35pp)

High-Density Leadless Chip Carrier Packages Increase Reliability, Save Weight 5
(80C86)
Harris CMOS Military Applications p. 15 (7pp)

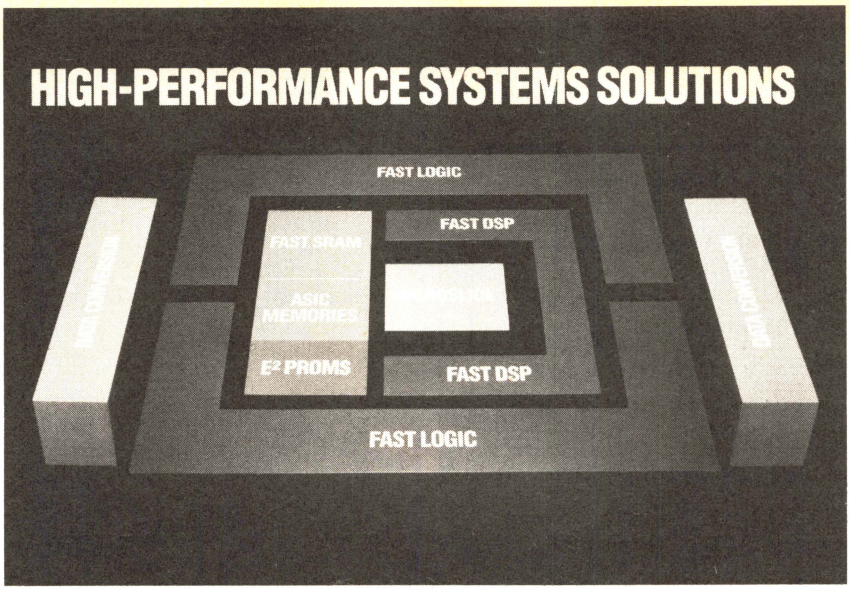
Key Issues of Surface Mounted ICs 6
Texas Instruments SMFY002 (7pp)

Plastic Chip Carrier (PCC) Technology 7
National Semiconductor (8pp)

Reliability Report Update—Plastic Chip Carrier (PCC) Package 8
National Semiconductor (6pp)

Reliability Report Update—Small Outline (SO) Package 9
National Semiconductor (9pp)

SO Package Tape and Reel 10
Signetics AN-210 (4pp)



IDT Military Products

A major revolution is taking place in the semiconductor industry. High-speed CMOS technology is rapidly displacing older NMOS and bipolar processes as the work horse of the 80's and beyond. Integrated Device Technology, a company totally predicated on and dedicated to implementing high-performance CMOS products, is on the leading edge of this dramatic change.

Over the past five years, IDT has grown into a company with multiple divisions producing a wide range of high-speed CMOS circuits that are, in almost every case, the fastest products of their type available in the industry today. These advanced products are produced with IDT's proprietary CEMOS™ technology, a twin-well, dry-etched, stepper-aligned process utilizing progressively smaller dimensions.

From inception, our product strategy has been to apply the advantages of our CEMOS technology to produce integrated circuit elements required to implement high-performance digital systems. Many of our innovative product designs offer high levels of integration, advanced architectures, higher density packaging and system enhancement features that are establishing tomorrow's industry standards.

IDT is the leading U.S. supplier of high-speed CMOS static RAMs. High-performance logic, digital signal processing (DSP) circuits, MICROSLICE™ bit-slice microprocessor products, data conversion devices and modular subsystem assemblies complement these RAMs to provide high-speed CMOS solutions to a broad range of applications and systems.

IDT offers a full line of high performance, militarized CMOS products which are MIL-STD-883 compliant. In addition, for stringent military environments, IDT has process, manufacturing, and test capabilities to supply both radiation hardened and Class-S processed products.

IDT's goal is to provide cost-effective circuits to create systems which are far superior to previous generations in performance, reliability, weight and size. We are dedicated to maintaining our leadership position as a state-of-the-art IC manufacturer, and will continue to hone our technological edge as well as develop an ever broader range of high-yield, high-performance products. Through these superior products and creative solutions to customer needs, IDT will play an increasingly important role as a major manufacturer in the era of high-speed CMOS.

CEMOS is a trademark of Integrated Device Technology, Inc.

∫dt

Integrated Device Technology, Inc.

3236 Scott Boulevard ▪ P.O. Box 58015 ▪ Santa Clara, CA 95052-8015 ▪ 1-800-IDT-CMOS ▪ TWX: 910-338-2070

MILITARY PARTS DIRECTORY

This section is divided into three parts: a table of those manufacturers willing to perform MIL-STD-883 screening, a three-way commercial/M38510/DESC drawing cross reference index, and the Qualified Parts List broken down into functions. It not only shows what devices are on the list and which manufacturers supply them, but it also decodes the military slash numbers into manufacturers device numbers.

The Military Device Testing table on the following page shows the manufacturers who screen devices to MIL-STD-883, perform other environmental screening or test radiation hardness. The table also indicates which companies are currently qualified to supply devices on the QPL list. The Military Parts Index provides convenient cross equivalents; DESC drawing numbers; plus indication of which devices are listed in the latest QPL.

The heart of this section is the Military Parts Directory, which is a functional QPL parts list. It is based on the latest Defense Electronics Supply Center Qualified Products List (QPL-38510-XX) at the time of publication. The revision and date of this list are indicated at the bottom of each page. The devices are identified by major functions; within each function the devices are arranged in alphanumeric order.

A complete military part number indicates a three letter suffix signifying the device class and packaging. The definitions of these letters are given in the Part Number Guide under "JAN Nomenclature". The package styles and lead finishes that each manufacturer is qualified to supply can be determined by consulting the official QPL or by contacting the individual manufacturers. Once you have found the names of the companies you need to contact, you can reach them by using the information in the Manufacturers and Distributors Directory.

MANUFACTURER	MIL-M-38510 QPL				MIL-STD-883 SCREENING		OTHER SCREENING		RADIATION HARDENED
	Linear	TTL	Other Bipolar	CMOS	Class B	Class S	Military	Industrial	
Advanced Linear Devices					X		X	X	
Advanced Micro Devices	X	X	X		X	X	X	X	
Altera					X		X	X	
Analog Devices	X		X	X	X		X	X	
Analog Systems					X		X	X	
Apex Microtechnology					X		X	X	
Brooktree					X			X	
Burr-Brown					X	X	X	X	
California Devices					X	limited	X	X	
Cherry Semiconductor							X	X	
Circuit Technology Inc.					X	X	X	X	
Comlinear					X	limited	X	X	
Cybernetic Micro Systems					X				
Cypress Semiconductor				X	X		X		
DATEL					X	limited	X	X	
Dense Pac									X
Dumont Alphatron				X	X		X	X	
EG&G Reticon					X		X	X	
Elantec					X	X	X	X	X
Exar					X	limited	X	X	
EXEL Microelectronics					X	limited	X	X	
Fairchild Semiconductor	X	X	X		X	X	X	X	
Ferranti Electric							X	X	X
Ferranti Interdesign					X		X	X	
Fujitsu Microelectronics					X		X	X	
GE Solid State (Intersil)	X		Analog Switches		X	X	X	X	
GE Solid State (GE/RCA)				X	X	X	X	X	X
General Instrument Micro electronics					X		X	X	
Gigabit Logic							X	X	X
Gold Star									X
Gould Semiconductor Div.					X	limited	X	X	
Harris Semiconductor	X			X	X	X	X	X	X
Holt Integrated Circuits					X	X	X	X	
Honeywell Signal Processing Technologies	X		X	X	X		X	X	
Hughes Aircraft					X	X	X	X	
Hybrid Systems					X	X	X	X	
Hycomp					X	X	X	X	
ILC-Data Device					X	X	X	X	
Inmos					X		X	X	X
Inova Microelectronics					X		X	X	
Intech					X	X	X	X	X
Integrated Device Technology					X	X	X	X	X
Integrated Logic Systems Inc.					X		X	X	
Integrated Power Semiconductors					X	X	X	X	
Intel			μP		X		X	X	
International Microcircuits					X	limited	X	X	
International Microelectronic Products					X		X	X	
Intronics					X		X	X	
Linear Technology Corp.	X				X	X	X	X	
LSI Computer Systems					X	X	X	X	
LSI Logic					X	X	X	X	X

© IC MASTER 1988

MANUFACTURER	MIL-M-38510 QPL				MIL-STD-883 SCREENING		OTHER SCREENING		RADIATION HARDENED
	Linear	TTL	Other Bipolar	CMOS	Class B	Class S	Military	Industrial	
Marconi Electronic Devices					X	X	X	X	X
Matra Harris Semiconductor				X	X		X	X	
Maxim Integrated Products							X	X	
Micrel					X		X	X	X
Micro Networks					X	X	X	X	
Micropac					X		X	X	
Micro Linear	X	X	X		X		X	X	X
Micro Power Systems					X	X	X	X	
Micron Technology					X		X		
Monolithic Memories		X	PROM		X	X	X	X	
Motorola Semiconductor	X	X	ECL, UP	X	X	X	X	X	
National Semiconductor	X	X	X	X	X	X	X	X	X
NCM Corporation				X	X		X	X	X
NCR Microelectronics					X		X	X	
NEC Electronics					X			X	
OEI	X		X		X		X	X	
Plessey Solid State					X	X			
Precision Monolithics Inc.	X		DAC	X	X	X	X	X	X
Raytheon Semiconductor	X	X	X	X	X	X	X	X	X
Rockwell					X		X	X	
Seeq					X		X	X	
SGS Semiconductor					X		X	X	
Signetics	X	X	PROM		X	X	X	X	
Silicon General					X	X	X	X	
Siliconix			Analog Switches		X	X	X	X	
Solitron					X	X	X	X	
Sprague Electric	X			X	X		X	X	
Standard Microsystems Corp.					X	X	X	X	
Supertex					X		X	X	
Technitrol					X		X	X	
Teledyne Crystalonics					X	X	X	X	
Teledyne Philbrick					X	X	X	X	
Teledyne Semiconductor					X			X	
Texas Instruments	X	X	RAM		X	X	X	X	
Thomson-Mostek					X		X	X	
TLSI					X		X	X	
TRW LSI					X		X	X	
United Silicon STructures				X	X		X	X	
Unitrode Corp.	X		X		X	X	X	X	
Universal Semiconductor					X		X	X	
UTMC	X			X	X		X		X
Waterscale Integration					X		X	X	
Weitek					X	X	X	X	
Xicor					X		X	X	
Xilinx					X		X	X	
Zilog					X		X	X	

EXPLANATION:

The "MIL-M-38510" section indicates the IC manufacturers currently providing Q.P.L. ICs. More detailed information on the specific devices is given in the Qualified Products lists which follow.

The "MIL-STD-883 Screening" section lists those manufacturers who are both set up and actively want to screen devices to the levels indicated.

"Other Screening" shows those who report that they want business calling for special military and industrial environmental screening procedures.

©IC MASTER 1988

MILITARY PARTS—Commercial to M38510/ CROSS REFERENCE

Device	M38510/	DESC Drawing
ADC0801	14501	
ADC0820BD	14601	
ADC0820CD	14602	
AD558T	14401	
AD560	13803	
AD561	13301	
AD562	12101	8100801
AD563	12102	8100802
AD567		5962-8780101
AD570		5962-8680201
AD571	13401	
AD573	13201	
AD574ATD	14002	5962-8512702
AD574AUD	14001	5962-8512701
AD584S	12801	
AD584T	12802	
AD585		5962-8754001
AD637	14701	
AD7226		5962-8780201
AD7820TQ	14602	
AD7820UQ	14601	
AM26LS30		5962-8672101
AM26LS31	70X01	7802301
AM26LS32	70X01	7802001
AM26LS33	70X01	7802002
AM2932	44X01	
AM686	70X01	
AM687	70X02	
AM91L30ADM	23708	
AM91L30AF	23706	
AM91L30AFM	23708	
AM91L30CDM	23707	
AM91L30CF	23705	
AM91L30CFM	23707	
AM91L40ADM	23716	
AM91L40AFC	23714	
AM91L40AFM	23716	
AM91L40CDM	23715	
AM91L40CFC	23713	
AM91L40CFM	23715	
AM9128-12	2XX03	
AM9128-20	2XX04	
AM9128-90	2XX02	
AM9130ADM	23704	
AM9130AFC	23702	
AM9130CDM	23703	
AM9130CFC	23701	
AM9130CFM	23703	
AM9140ADM	23712	
AM9140AFC	23710	
AM9140AFM	23712	
AM9140CDM	23711	
AM9140CFC	23709	
AM9140CFM	23711	
AM9256	2XX01	
AM9310AFM	23704	
AM99C641	29201	
BUS-63105	XXX01	5962-8604901
CA3130B	70X01	7703301
CT50002		7801301
DAC08	11301	
DAC08A	11302	
DAC87	13701	
DAC87	13702	
DAC87	13703	
DAC87 (HYB)		8300201
DAC87 (MONO)		8300301
DG129	13X01	7801401
DG181A	11101	
DG182A	11102	
DG184A	11103	
DG185A	11104	
DG187A	11105	
DG188A	11106	
DG190A	11107	
DG191A	11108	
DG200	12301	
DG201	12302	7705301
DG300	11601	
DG301A	11602	
DG302	11603	
DG303A	11604	
DG304A	11605	
DG305A	11606	
DG306A	11607	
DG307A	11608	
DG508A	19007	7705201
DM2864-250	22802	
DM2864-350	22803	
DM2864H-250	22805	
DM5564-250	22806	
DS0026	03501	
DS0056H	03X03	
DS0056J	03X02	
D51256	2XX01	
ER2810	22501	
F1600	29201	
HA12420-8	70X01	
HA2600	12202	
HA2640-8		7800302
HD15530-8	50X01	
HI200	12301	
HI201	12302	
HI201HS		5962-8671601
HI508	19007	7705201
HI508A	19005	7705202
HI574ATD	14004	5962-8512704
HI574AUD	14003	5962-8512703
HM1000R	59901	
HPROM512	20101	
HTC0300	14201	
IDT7187	29201	
IH5116	19002	
IH5208	19006	
IH5216	19004	
IH6108	19007	7705201
IMS1600	29201	
IMS2800	2XX01	
IM5603A	20201	
IM5623	20202	
IM6654	21901	
LF147	11906	
LF151	11904	
LF153	11905	
LF155	11401	
LF155A	11404	
LF156	11402	
LF156A	11405	
LF157	11403	
LF157A	11406	
LF198	12501	
LH0002		7801301
LH0021	70X01	8508801
LH0032		8001301
LH0033	70X01	8001401
LH0041	70X01	8508701
LH0070-0		5962-8688201
LH0070-1		5962-8688202
LH0070-2		5962-8688203
LH0101	70X02	8508902
LH0101A	70X01	8508901
LH2101A	10105	
LH2108A	10106	
LH2110	10603	
LH2111	10305	
LM101A	10103	
LM102	10601	
LM103	70X01	
LM103H-1.8		7702801
LM103H-2.0		7702802
LM103H-2.2		7702803
LM103H-2.4	7702804	
LM103H-2.7		7702805
LM103H-3.0		7702806
LM103H-3.3		7702807
LM103H-3.6		7702808
LM103H-3.9		7702809
LM103H-4.3		7702810
LM103H-4.7		7702811
LM103H-5.1		7702812
LM103H-5.6		7702813
LM106	10303	8003701
LM108A	10104	
LM109	10701	
LM110	10602	
LM111	10304	
LM113	70X01	5962-8671101
LM113-1	70X02	5862-8671102
LM113-2	70X03	5962-8671103
LM117H	11703	7703401XX
LM117HV	70X01	
LM117HVK		7703402YX
LM117K	11704	7703401YX
LM118	10107	
LM119	10307	8601401
LM119A	10306	8601402
LM120H-05	11501	
LM120H-12	11502	7704003XX
LM120H-15	11503	7704004XX
LM120H-24	11504	7704005XX
LM120H-5.0	11501	7704001XX
LM120K-05	11505	
LM120K-12	11506	7704003YX
LM120K-15	11507	7704004YX
LM120K-24	11508	7704005YX
LM120K-5.0	11505	7704001YX
LM124	11005	7704301
LM129A	12402	
LM129B	12406	
LM131		5962-8760701
LM136A	70X01	
LM136A-2.5		8418001
LM136A-5.0		8418002
LM137H	11803	7703403XX
LM137HV	70X01	
LM137HVH		7703404XX
LM137HVK		7703404YX
LM137K	11804	7703403YX
LM138K	11706	
LM139	11201	7700801
LM140K-05	10706	
LM140K-12	10707	
LM140K-15	10708	
LM140K-24	10709	
LM143	70X03	7800303YX
LM143F		7800303ZX
LM143H		7800303XX
LM144	70X01	
LM144D		7800301CX
LM144F		7800301GX
LM144H		7800301HX
LM148	11001	
LM149	11002	
LM150K	11705	
LM161		5962-8757203
LM185		5962-8759401
LM193	11202	
LM199	12404	
LM199A	12401	
LM199A-20	12405	
LM2864-250	22802	
LM2864-350	22803	
LM2864H-250	22805	
LM4250	70X01	7703901
LM709	70X01	
LM723	10201	
LM741A	10101	
LM747A	10102	
MCM5303	20101	
MCM5304	20102	
MCM6256	2XX01	
MCM6604A	23604	
MCM6604A	23602	
MCM6605	23603	
MCM6605	23601	
MC1709U	70X01	
MC3101	15501	
MC3106	15502	
MC3111	15503	
MC6821	40101	
MD82C82	XXX01	
MH0026	03501	
MH0056	03X01	
MKB4096	23604	
MKB4096	23602	
MKB4501-80	25002	
MKB4501-81	25001	
MKB4501-88	25003	
MK34000	40301	
MK4801	2XX01	
MM5280	23506	
MM5280	23505	
MM7280	23505	
MM7280	23506	
MPY008HC2V	50004	
MPY012HC1V	50005	
MPY012HC1V	50006	
MT1257-12	24601	
MT1257-15	24602	
MT1259-12	24603	
MT1259-15	24604	
M7681P-8	2XX01	
M80186	XXX01	
M80186	XXX02	
M80286-6	53501	
M80286-8	53502	
NC7810LC	22501	
NMC2816	22601	
NM51256	2XX01	
NSC800	XXX01	
NSC800-4	XXX02	
NSC800 (2.5 MHz)		8301301
NSC800 (4 MHz)		8301302
OP07	13502	8203602
OP07A	13501	8203601

© IC MASTER 1988

MILITARY PARTS—Commercial to M38510/ CROSS REFERENCE (Cont'd)

Device	M38510/	DESC Drawing
OP227A	13504	5962-8688701
OP27A	13503	
OP37A	13505	
PAL10H8	50301	8103501
PAL10L8	50306	8103506
PAL12H6	50302	8103502
PAL12L6	50307	8103507
PAL14H4	50303	8103503
PAL14L4	50308	8103508
PAL16A4	50406	8103606
PAL16C1	50305	8103505
PAL16H2	50304	8103504
PAL16L2	50309	8103509
PAL16L8	50401	8103601
PAL16L8-20	50601	
PAL16L8-30	50605	
PAL16L8A	50401	8103607
PAL16L8A-2	50407	8103611
PAL16L8A-4		8506501
PAL16L8B	506XX	5962-8515501
PAL16L8B-2	506XX	5962-8515505
PAL16R4	50404	8103604
PAL16R4-20	50604	
PAL16R4-30	50608	
PAL16R4A	50404	8103610
PAL16R4A-2	50410	8103614
PAL16R4A-4		8506504
PAL16R4B	506XX	5962-8515504
PAL16R4B-2	506XX	5962-8515508
PAL16R6	50403	8103603
PAL16R6-20	50603	
PAL16R6-30	50607	
PAL16R6A	50403	8103609
PAL16R6A-2	50409	8103613
PAL16R6A-4		8506503
PAL16R6B	506XX	5962-8515503
PAL16R6B-2	506XX	5962-8515507
PAL16R8	50402	8103602
PAL16R8-20	50602	
PAL16R8-30	50606	
PAL16R8A	50402	8103608
PAL16R8A-2	50408	8103612
PAL16R8A-4		8506504
PAL16R8B	506XX	5962-8515502
PAL16R8B-2	506XX	5962-8515506
PAL16X4	50405	8103605
PAL20L10A	50X01	8412905
PAL20L8A	50501	8412901
PAL20R4A	50504	8412904
PAL20R6A	50503	8412903
PAL20R8A	50502	8412902
PAL20X10A		8412907
PAL20X4A		8412908
PAL20X8A	50X02	8412906
PAL32R16	50X01	
PWM125	12602	
PWM127	12604	
REF02A	70X01	8551401
REF10	12403	
RM4194		7705401
R675B-3	13602	
R675B-4	13601	
SBP9900A	46001	
SBP9989	46501	
SBR9000	46901	
SE5537	12502	
SG1524	12601	7802801
SG1526	12603	8551501
SMJ32010	XXX01	
SMJ4256-15	2XX01	
SMJ4256-20	SMJ4256-20	
SPE	62001	
S6831B	40301	
TBD	22801	
TBD	22804	
TBD	24801	
TBD	60001	
TBD	60002	
TBD	60501	
TBD	60502	
TDC1008JM	50001	
TDC1009JM	50002	
TDC1010JM	50003	
TL061	11901	8102301
TL062	11902	8102302
TL064	11903	8102303
TL071	11904	8102304
TL072	11905	8102305
TL074	11906	8102306
TL431	14801	8410901
TL494M	14X01	
TL497M	14X02	
TL514		5962-8687801
TMS4050	23504	
TMS4050	23502	
TMS4060	23503	
TMS4060	23501	
TP0032		8001301
TP0033		8001401
TVB382	61601	
UHC508	70X01	
UHD508	70X01	
UH508		8550001
UT1553B	55501	
VFC32	13801	
VFC320	13802	
XR2211	70X01	7705011
X2816-30	22703	
X2816A-25	22703	
X2816A-35	22702	
X2816A-45	22701	
X2864A-25	228XX	5962-8683006
X2864A-35	228XX	5962-8683007
Z8	4XX01	
Z80 CPU	48002	
Z80 CTC	48302	
Z80 DMA	48202	
Z80 PIO	48402	
Z80 SIO/2	48102	
Z80A CPU	48001	
Z80A CTC	48301	
Z80A DMA	48201	
Z80A PIO	48401	
Z80A SIO/2	48101	
Z80B CPU	48003	
Z8001	52001	8000301
Z8001A	52003	8000303
Z8001B	52X01	8000304
Z8002	52002	8000302
Z8002A	52004	
Z8002B	52X02	8000305
Z8030	XXX02	5962-8551802
Z8030A	XXX01	5962-8551801
Z8036	XXX02	8551702
Z8036A	XXX01	8551701
Z8420	48X02	8418602
Z8420A	48X01	8418601
Z8430	48X02	8301602
Z8430A	48X01	8301601
Z8442	48X02	8301502
Z8442A	48X01	8301501
Z8530		5962-8752702
Z8530A		5962-8752701
Z8536	XXX01	8300101
Z8536A	XXX02	
Z8581		5962-8752601
Z8581-10		5962-8752602
0002	70X01	
0026	03501	
0026H		7800802
0032	70X01	
0056H		7800801
0056J		7800801
05203	14201	
074	11906	
1HC34	61501	
10H503		5962-8756501
10H513		5962-8755801
10H531		5962-8756101
10H536		5962-8700101
10H560		5962-8756201
1020	12705	
10501	06001	
10502	06002	
10504	06201	
10505	06003	
10506	06004	
10507	06005	
10509	06006	
10516	70X01	7800901
10524	06301	
10525	06302	
10531	06101	
10535	06104	
10576	06103	
10597	06202	
10631	06102	
10800	4XX01	
1218	12707	
1220	12706	
14021B	05X54	
14049UB	05X53	
14557B	1XX02	
14584	17X01	
14585	1XX02	
1525A	12602	
1526	12603	
1527A	12604	
1536	70X04	7800304
1545		5962-8671201
15530-8		7802901
1558	10108	
1802	47001	
1821	47101	
1822	47102	
1823		7901801
1832	47201	
1842	70X01	5962-8670401
1846		5962-8680601
1852	47301	
1853	47401	7901901
1854	47501	7901701
1856	47601	
1857	47602	
2001	14101	
2002	14102	
2003	14103	
2004	14104	
2005	14105	
2011A	28101	
2114	23802	
2114A	23804	
2117	24003	
2117 (200 ns)	24001	
2117 (250 ns)	24002	
2118	2XX01	8101501
21256	2XX01	
2141	2XX03	
2147	23801	
2147H	23803	
2147H-2	23807	
2147H-3	23805	
2148H	23806	
2164	24403	
2164 (1 ms ref)	24401	
2164 (2 ms ref)	24402	
2168-45		5962-8608105
2168-55	2XX01	5962-8608101
2168-70	2XX02	5962-8608102
2169-40		5962-8608106
2169-50	2XX03	5962-8608103
2169-70	2XX04	5962-8608104
22V10		5962-8605302
22V10A		5962-8605301
2316E	40301	
2420		8001601
25LS09	36X01	5962-8670801
25LS174	33106	
25LS175	33107	
25LS2513		5962-8754201
25LS2518	36X01	5962-8671901
25LS2519	4XX01	5962-8670201
25LS2521	30X01	5962-8671301
25LS2569		5962-8754401
25LS299	36X02	
25LS399	36X01	5962-8670801
25S09		5962-8672801
25S10		5962-8671801
25S18	44201	5962-8671501
25S240		5962-8671240
25S241		5962-8672501
25S244		5962-8753601
2500	12204	
2510	12205	
2516	22101	7802201
2516 (350 ns)		7802203
2516 (450 ns)	22101	7802201
2520	12206	
2532	22201	8001202
26LS34		5962-8759601
26S10		5962-8672001
26S12		5962-8753401
26S12A		5962-8753402
2616	40301	
2620	12203	
2640	70X02	
27C256-20		5962-8606301
27C256-25		5962-8606302
27C256-30		5962-8606303
27C64-20	2XX03	
27C64-25	2XX01	
27C64-35	2XX02	
27C64 (200 ns)		8510203
27C64 (250 ns)		8510201
27C64 (350 ns)		8510202
27LS00	2XX01	8602001

MILITARY PARTS—Commercial to M38510/ CROSS REFERENCE (Cont'd)

Device	M38510/	DESC Drawing
27LS00A	2XX02	8602002
27LS01	2XX03	8602003
27LS01A	2XX04	8602004
27LS02	2XX03	865103
27LS03	2XX06	8605106
27LS07	2XX04	7801504
27PS191	2XX01	5962-8552601
27PS191A	2XX02	
27PS291	2XX03	
27PS291A	2XX04	5962-8552602
27PS291B		5962-8552603
27S02	2XX01	8605101
27S02A	2XX02	8605102
27S03	2XX04	8605104
27S03A	2XX05	8605105
27S07	2XX03	7801503
27S07A	2XX01	7801501
27S180	20903	
27S181	20904	
27S19	2XX01	5962-8670301
27S19A	2XX02	5962-8670302
27S31	2XX01	7801601
27S35	2XX01	5962-8670601
27S35A	2XX02	5962-8670602
27S37	2XX03	5962-8670603
27S37A	2XX04	5962-8670604
27S45	2XX01	5962-8552701
27S45A	2XX02	5962-8552702
27S47	2XX03	5962-8552703
27S47A	2XX04	5962-8552704
27S49	21X01	8200901
27S49A		8200902
2700	13601	
2700S	13601	8503001
2700U	13601	8503002
2702	13602	
2702S	13602	8503003
2702U	13602	8503004
2708	22001	
27128-20		8202508
27128-25		8202502
27128-30		8202509
27128-45		8202501
27128A	2XX01	
27128A-11		8202507
27128A-15		8202506
27128A-20		8202503
27128A-25		8202505
27128A-30		8202504
2716	22101	7802201
2716 (350 ns)		7802203
2716 (450 ns)	22101	7802201
27256-170	22403	
27256-200	22402	
27256-250	22401	
27256-35	2XX01	
27256 (170 ns)	224	8411104
27256 (250 ns)	22401	8411102
27256 (350 ns)	224XX	8411101
2732	22202	8001201
27512-25	27X01	
27512-30	27X03	
27512-35	27X02	
27512-45	27X04	
27512 (250 ns)	270XX	5962-8513501
27512 (300 ns)	270XX	5962-8513503
27512 (350 ns)	270XX	5962-8513502
27512 (450 ns)	270XX	5962-8513504
2764-25	2XX02	
2764-45	2XX01	
2764 (250 ns)	223XX	8200502
2764 (450 ns)	223XX	8200501
2764A-20	2XX05	
2764A-25	2XX04	
2764A-35	2XX03	
2764A (200 ns)		8200505
2764A (250 ns)		8200504
2764A (350 ns)		8200503
28S166A	21002	
28S166A	21004	
2801	14106	
2802	14107	
2803	14108	5962-8605801
2804	14109	
2805	14110	
2864-25	228XX	5962-8683001
2864-30		5962-8683003
2864-35	228XX	5962-8683002
2864A-25		5962-8683008
2864A-30		5962-8683009
2864A-35		5962-8683010
2864H-25		5962-8683005
29LS13		5962-8754201
29LS18	36X01	5962-8671901
2901A	44001	7700701
2901B	44001	7700701
2901C	44001	8405701
2903	44X01	
2904	4XX01	8601701
2905	44101	
2906	44102	
2907	44103	
2909	44301	
2909A	44301	8602701
2910	44X01	7801701
2910A		7801702
2911A	44X01	8602801
29116		5962-8686301
2914	44401	8602901
2915A	44104	
2916A	44105	
2917A	44106	5962-8671401
2918	44201	5962-8671501
2919	4XX01	5962-8670201
2920	13X01	
2930		5962-875301
2932		8605001
2940	44X01	8603001
2942	44X01	5962-8680101
2947		5962-8672301
29611	20402	
29621	20805	
29631	20904	
29633		7902401
29633DMB	2XX02	
2964B		5962-8757401
2965	44X01	5962-8670701
29651	20902	
29651	20908	
2966	44X02	5962-8670702
29671	21103	8200801
29681	21002	
29705A	2XX01	8602501
3018A	10801	
3045	10802	
32C016	XXX01	
32C032	XXX01	
32C081	XXX01	
32C201	XXX01	
32010		8405301
32016	XXX01	
32032	XXX01	
32081	XXX01	
32201	XXX01	
3516F	40301	
3636	21002	
376H	14201	
3856	4XX01	
3870	4XX01	
4C1024	24902	
40L45	2XX01	
4000A	05201	
4000B	05251	
4001A	05202	
4001B	05252	
4002A	05203	
4002B	05253	
4006A	05701	
4006B	05751	
4007A	05301	
4007UB	05351	
4008A	05401	
4008B	05451	
40085	1XX04	
4009A	05501	
4009UB	05551	
4010A	05502	
4010B	05552	
40100B	17902	
40102B	18101	
40103B	18102	
40104B	17903	
40105B	17904	
40106B	17702	5962-85501
40107B	17402	
40108B	17905	
40109B	17404	
4011A	05001	
4011B	05051	
4012A	05002	
4012B	05052	
4013A	05101	
4013B	05151	7901101
4014A	05702	
4014B	05752	
4015A	05703	
4015B	05753	
4016A	05801	
4016B	05851	
4017A	05601	
4017B	05651	
40174B	17505	8202201
4018A	05602	
4018B	05652	
4019A	05302	
4019B	05352	
40192B	18103	
40193B	18104	
40194B	17906	
4020A	05603	
4020B	05653	
40208B	17907	
4021A	05704	
4021B	05754	7901201
4022A	05604	
4022B	05654	
4023A	05003	
4023B	05053	7901301
4024A	05605	
4024B	05655	
4025A	05204	
4025B	05254	
40257B	17803	
4027A	05102	
4027B	05152	
4028A	05901	
4028B	05951	
4029B	18X01	8101601
4030A	05303	
4030B	05353	
4031A	05705	
4031B	05755	
4034A	05706	
4034B	05756	
4035		8101701
4035B	18X01	
4040B	1XX01	7705801
4041A	05505	
4041UB	05555	
4042B	18X01	8101901
4043A	05103	
4043B	05153	
4044	2XX02	
4044A	05X01	
4044B		7702601
4047B	1XX01	8102001
4048A	05304	
4048B	05354	
4049A	05503	
4049B	05553	
4049UB	05553	7901401
4050A	05504	
4050B	05554	
4052B	1XX01	7901501
4053B	1XX01	8101801
4060A	05X01	7703101
4066A	05802	
4066B	05852	
4067B	17801	
4069B	17401	7702701
4069UB	17401	
4070B	17203	
4071B	17101	
4072B	17102	7706001
4073B	17003	7705101
4075B	17103	
4076B	17501	
4077B	17204	
4078B	1XX01	
4081B	17001	7702401
4082B	17002	7705901
4085B	17201	
4086B	17202	
4093B	17701	7704601
4094B	17901	7702501
4095B	17502	
4096B	17503	
4097B	17802	
4098B	17504	7705501
4099B	17601	
41H68-825		5962-8670501
41H68-835		5962-8670503
4104	70X01	
411024	24901	
4116	24001	
4116	24402	

© IC MASTER 1988

MILITARY PARTS—Commercial to M38510/ CROSS REFERENCE (Cont'd)

Device	M38510/	DESC Drawing
4116	24003	
4116 (200 ns)	24001	
4116 (250 ns)	24002	
41256N-12	24603	
41256N-15	24604	
41256P-12	24601	
41256P-15	24602	
4136	11004	
4145	10506	8100614
4156	11003	
4164-12	2XX01	8201008
4164-15	2XX01	8201006
4164-20	2XX01	8201007
4167	2XX01	
4167 (100 ns)		8200701
4167 (55 ns)		8200703
4167 (70 ns)		8200702
4213	13904	
4256-12	24602	8515203
4256-20	2XX01	
4256 (150 ns)	24602	8515201
4256 (200 ns)		8515202
4264C-15		8201004
4264C-20		8201005
4502B	17403	7702001
4508B	17602	
4510B	18105	
4514B	17301	7703501
4515B	17302	7703201
4516	2XX02	8101502
4516B	18106	
4518B	18107	
4520B	18108	7702301
4528B	1XX01	7704501
4532B	17303	
4555B	17304	7704701
4556	24603	
4556	24604	
4556B	17305	7704801
4557B	1XX01	7901601
4564	24403	
4564 (1 ms ref)	24401	
4564 (150 ns)	24401	8201001
4564 (150 ns)	24402	8201002
4564 (2 ms ref)	24402	
4564 (200 ns)	2403	8201003
4584		5962-8550102
4585B	1XX01	77003701
4741	11003	
4802 (120 ns)		8103902
4802 (200 ns)		8103903
4802 (90 ns)		8103901
4860	14201	
5040	10501	8100601
5040	10501	8100609
5041	10502	8100602
5041	10502	8100610
5042	10503	8100603
5042	10503	8100611
5043	10504	8100604
5043	10504	8100612
5044	10505	8100605
5044	10505	8100613
5045	10506	8100606
5045	10506	8100614
5046	10507	8100607
5046	10507	8100615
5046	10507	8100615
5046	10507	8100623
5046A		8100617
5046A		8100625
5047	10508	8100608
5047	10508	8100616
5047	10508	8100616
5047	10508	8100624
5047A		8100618
5047A		8100626
5048		8100619
5048		8100627
5049		8100620
5049		8100628
5050		8100621
5050		8100629
5051		8100622
5051		8100630
506	19001	
506A	19002	5692-8513101
507	19003	
507A	19004	5962-8513102
508	19007	
508A	19005	
509	19008	
509A	19006	5962-8513103
51C67	29103	
51C67	29106	8413202
51C68-35		5962-8670503
51C68-45		5962-8670505
51C68-55		5962-8670507
51C68-70		5962-8670509
5108	19005	7705203
511000	24903	
5116	19002	5962-8513104
5140	10501	8100609
5140	10501	8100617
5141	10502	8100610
5141	10502	8100618
5142	10503	8100611
5142	10503	8100619
5143	10504	8100612
5143	10504	8100620
5144	10505	8100613
5144	10505	8100621
5145	10506	8100622
52B33H-25		5962-8683004
5200	12001	
5201	12003	
5202	12005	
5203	12002	
5204	12004	
5205	12006	
5206	12007	
5207	12008	
5208	19006	5962-8513106
521		5962-8751601
5210	12009	
5211	12011	
52116	40301	
5212	12013	
5213	12010	
5214	12012	
5215	12014	
5216	12015	5962-8513105
5217	12016	
524S	14301	
527		5962-8757201
5280	23401	
529		5962-8757202
53S1680	21001	
53S1681	21002	
53S3281	21102	82008B101
53S3281A	211XX	8200802
53S440	20601	
53S441	20602	
53S840	20907	
53S841	20908	
53S841	20902	
5300-1	20301	
5301-1	20302	
5305-1	20401	
5306-1	20402	
532S	13903	
5330	20701	
5331	20702	
534S	13902	
534T	13901	
5340-1	20801	
5341-1	20802	7801601
5348-1	20804	
5349-1	20805	
54ACT138	75852	5962-8755401
54ACT373	75453	5962-8755601
54AC00	75001	5962-8754901
54AC02	75101	5962-8761201
54AC04	75701	5962-8760901
54AC08	75203	5962-8761501
54AC10	75002	5962-8761001
54AC11	75204	5962-8761101
54AC11000	75021	5962-8754902
54AC11020		5962-8761302
54AC11240	75723	5962-8755002
54AC11244		5962-8755202
54AC14	75702	5962-8762401
54AC153	76202	5962-8762501
54AC174	75303	5962-8762601
54AC20	75003	5962-8761301
54AC240	75703	5962-8755001
54AC241	75704	5962-8755101
54AC244	75705	5962-8755201
54AC373	75403	5962-8755501
54ALS00	37001	
54ALS02	37301	
54ALS04	37006	
54ALS08	37401	
54ALS09	38X01	8414201
54ALS10	37002	
54ALS1000	38401	8405901
54ALS1002	38402	
54ALS1003	38403	
54ALS1004	38409	8406101
54ALS1005	38410	
54ALS1008	38404	
54ALS1008A	38404	8409701
54ALS1010	38405	8406001
54ALS1011	38406	
54ALS1020	38407	
54ALS1032	38408	
54ALS1034	38411	8403101
54ALS1035	38412	
54ALS109	37102	8400001
54ALS11	37402	
54ALS112A	37103	8400002
54ALS133	37005	
54ALS138	37701	
54ALS15		5962-8686901
54ALS151	38X01	8414101
54ALS153	38X01	8413401
54ALS157		5962-8686901
54ALS160	38101	
54ALS161B	38001	8302201
54ALS162	38102	8407901
54ALS163B	38002	8302202
54ALS168	38103	
54ALS169B	38003	8302501
54ALS174	37201	8301901
54ALS175	37202	8301902
54ALS191	38X01	5962-8684001
54ALS20	37003	
54ALS21	38X01	8414301
54ALS240A	38301	
54ALS241A	38302	
54ALS242B	38506	8401301
54ALS243A	38507	8401302
54ALS244A	38303	
54ALS245	38X01	
54ALS245A		8403001
54ALS251	38X01	8413501
54ALS253	38X01	8509601
54ALS257	38X01	8509701
54ALS27	37302	
54ALS273	38X01	8413601
54ALS28	38402	
54ALS299B	37601	8302101
54ALS30	37004	
54ALS32	37501	
54ALS323	37602	8302102
54ALS37	38401	
54ALS373	37203	8302001
54ALS374	37204	8302002
54ALS38		5962-8687101
54ALS40	38407	
54ALS560	38104	
54ALS561A	38004	8302203
54ALS568	38105	
54ALS569A	38005	8302502
54ALS573	38201	8401201
54ALS574	37104	8400101
54ALS576	37105	8400102
54ALS580	38202	8401202
54ALS640	38501	
54ALS641	38502	
54ALS642	38503	
54ALS643	38504	
54ALS645A	38505	8403301
54ALS74	37101	8401101
54ALS832	38X01	8414501
54ALS857	37901	5962-8753301
54ALS873	38203	8403201
54ALS874	37106	8401001
54ALS876	37107	8401002
54ALS880	38204	8403202
54AS21		5962-8780401
54C04	17401	7702701
54C08	1XX01	7703601
54C85	1XX03	7703701
54C906	1XX01	7705601
54C922		5962-8752101
54C929	23901	
54C930	23902	
54F00	33001	
54F02	33301	
54F04	33002	
54F08	34001	
54F10	33003	
54F109	34102	
54F11	34002	
54F112	34103	

MILITARY PARTS—Commercial to M38510/ CROSS REFERENCE (Cont'd)

Device	M38510/	DESC Drawing
54F113	35X01	
54F138	33701	
54F139	33702	
54F151A	33901	
54F153	33902	
54F157A	33903	
54F158	33904	
54F160A	34401	
54F161A	34301	
54F162A	34402	
54F163A	34302	
54F164		5962-8607101
54F169		5962-8607201
54F174	34101	
54F174	34107	
54F175	34104	
54F181	33801	
54F182	33802	
54F190	34403	
54F191	34303	
54F192	34404	
54F193	34304	
54F194	33601	5962-8685001
54F20	33004	
54F240	33201	
54F241	33202	5962-8687401
54F242	34801	
54F243	34802	5962-8683401
54F244	33203	
54F245	34803	8551101
54F251A	33905	
54F253	33908	
54F257A	33906	
54F258A	33907	
54F280	34901	
54F283	34201	
54F32	33501	
54F352	33909	
54F353	33910	
54F373	34601	
54F374	34105	
54F378	34108	
54F379	34109	
54F381	33803	5962-8671001
54F382	33804	
54F398	35001	
54F399	35002	
54F521	34701	
54F533	34602	
54F534	34106	
54F563	34603	
54F573	34604	
54F64	33401	
54F85	35X01	5962-8606901
54F86	34501	
54HCT00		5962-8683101
54HCT04	65751	
54HCT08		5962-8688301
54HCT138	65852	8550401
54HCT139	65853	
54HCT14	65752	5962-8689001
54HCT154	6XX01	5962-8670101
54HCT161		5962-8685401
54HCT165		5962-8685501
54HCT240	65753	8550501
54HCT241	65754	
54HCT244	65755	8513001
54HCT245	65553	8550601
54HCT32	6XX01	5962-8685201
54HCT373	65453	5962-8686701
54HCT374	65652	8550701
54HCT540	65760	
54HCT541	65761	
54HCT573		5962-8685601
54HCT688		54HCT688
54HCT74	6XX01	5962-8685301
54HCU04	6XX01	8601001
54HC00	65001	8403701
54HC02	65101	840401
54HC04	65701	8409801
54HC08	65203	8404701
54HC10	65002	8403801
54HC107	65303	5962-8515401
54HC109	65304	8415001
54HC11	65204	8404801
54HC112	65305	8408801
54HC123	65901	5962-8684701
54HC123A		5962-8684702
54HC126		5962-8684801
54HC132	65005	
54HC138	65802	8406201
54HC139	65803	8409201
54HC14	65702	8409101
54HC147	66001	8406401
54HC148	66002	
54HC151	66201	8412801
54HC153	66202	8409301
54HC154	65804	5962-8682201
54HC157	66203	5962-8606101
54HC158	66204	5962-8682301
54HC160	66301	5962-8682401
54HC161	66302	8407501
54HC162	66303	8409401
54HC163	66304	8607601
54HC164	66501	
54HC165	66502	8409501
54HC166	66503	
54HC173	65306	5962-8682501
54HC174	65307	8407301
54HC175	65308	8408901
54HC191	66305	5962-8689101
54HC192	66306	5962-8780801
54HC193	66307	
54HC194	66504	5962-8682601
54HC195	66505	5962-8682701
54HC20	65003	8403901
54HC221	65902	5962-8780501
54HC221A		5962-8780502
54HC238	6XX01	5962-8688401
54HC240	65703	8407401
54HC241	65704	
54HC242	65501	
54HC243	65502	8409001
54HC244	65705	8409601
54HC245	65503	8408501
54HC251	66205	8512501
54HC253	66206	
54HC257	66207	8512401
54HC259	65402	8551901
54HC266	65103	8404301
54HC27	65102	8404201
54HC273	65601	8409901
54HC280	66801	8607701
54HC283	66701	
54HC299	66506	5962-8780601
54HC30	65004	8404001
54HC32	65201	8404501
54HC354	66208	
54HC356	66209	
54HC365	65706	8500101
54HC366	65707	5962-8682801
54HC367	65708	8500201
54HC368	65709	5962-8681201
54HC374	65602	8407101
54HC377	65603	5962-8780701
54HC390	66308	8600901
54HC393	66309	8410001
54HC4002	65104	8404401
54HC4017	66310	8601101
54HC4020	66311	8500301
54HC4024	66312	8601201
54HC4040	66313	8500401
54HC4049	65712	5962-8681901
54HC4050	65713	5962-8682001
54HC42	65801	5962-8682101
54HC4520	66X01	
54HC4538		5962-8688601
54HC533	65404	5962-8681301
54HC534	65605	5962-8681401
54HC540	65710	
54HC541	65711	
54HC563	65405	5962-8606201
54HC564	65606	5962-8681501
54HC573	65406	8512801
54HC574	65604	
54HC590	66401	
54HC592	66402	
54HC593	66403	
54HC595	66507	5962-8681601
54HC597	66508	5962-8681701
54HC620	65504	
54HC623	65505	
54HC640	65506	5962-8780901
54HC643	65507	
54HC646	65508	5962-8688501
54HC648	65509	
54HC670	66601	
54HC682	66102	
54HC684	66103	
54HC686	66104	
54HC688	66105	5962-8681801
54HC7266	65105	
54HC73	65301	5962-8515301
54HC74	65302	8405601
54HC75	65401	8407001
54HC85	66101	8601301
54HC86	65202	8404601
54H00	02304	
54H01	02306	
54H04	02305	
54H08	15501	
54H08	23602	
54H10	02303	
54H101	02205	
54H103	02206	
54H11	15502	
54H20	02302	
54H21	15503	
54H22	02307	
54H30	02301	
54H40	02401	
54H50	04001	
54H51	04002	
54H53	04003	
54H54	04004	
54H55	04005	
54H72	02201	
54H73	02202	
54H74	02203	
54H76	02204	
54LS00	30001	
54LS02	30301	
54LS03	30002	
54LS04	30003	
54LS05	30004	
54LS08	31004	
54LS09	31005	8001901
54LS10	30005	
54LS107	30108	
54LS109	30109	
54LS11	31001	
54LS112	30103	
54LS113	30104	
54LS114	30105	
54LS12	30006	
54LS122	31403	7600301
54LS123	31401	7603901
54LS124	31701	7704101
54LS125A	32301	
54LS126	32302	
54LS13	31301	
54LS132	31303	7600401
54LS138	30701	7600501
54LS139	30702	7600701
54LS14	31302	
54LS145	36X01	8508401
54LS148	36001	7802701
54LS15	31002	
54LS151	30901	7601001
54LS153	30902	7601101
54LS154	36X01	
54LS155	32601	
54LS156	32602	
54LS157	30903	7600201
54LS158	30904	
54LS160A	31503	7700901
54LS161A	31504	7600801
54LS162A	31511	
54LS163A	31512	7603401
54LS164	30605	
54LS165A	30608	7700601
54LS166	30609	8001701
54LS168	31505	8001801
54LS169B	31506	8001802
54LS170	31902	8002501
54LS173A	36101	
54LS174	30106	
54LS175	30107	
54LS181	30801	
54LS190	31513	7603501
54LS191	31509	7600901
54LS192	31507	7603601
54LS193	31508	7600601
54LS194A	30601	
54LS195A	30602	
54LS195B	30603	
54LS196	32001	7701001
54LS197	32002	7601501
54LS20	30007	
54LS21	31003	
54LS22	30008	
54LS221	31402	7604201
54LS240	32401	7801201
54LS241	32402	
54LS242	32801	8002001
54LS243	32802	8002002

© IC MASTER 1988

MILITARY PARTS—Commercial to M38510/ CROSS REFERENCE (Cont'd)

Device	M38510/	DESC Drawing
54LS244	32403	7705701
54LS245	32803	8002101
54LS251	30905	7601601
54LS253	30908	7601701
54LS257	30906	7603701
54LS258	30907	7603801
54LS259	31603	
54LS259B	31605	
54LS26	32102	7602001
54LS261	31801	8002601
54LS266	30303	
54LS27	30302	
54LS273	32501	7801001
54LS279	31602	7601801
54LS28	30204	
54LS280	32901	
54LS283	31202	7604301
54LS290	32003	
54LS293	32004	
54LS295B	30606	
54LS298	30909	7601901
54LS299	36X01	7802401
54LS30	30009	
54LS32	30501	
54LS33	36X01	8512601
54LS348	36002	
54LS353	36X01	8550801
54LS363	32505	
54LS365	32201	
54LS366	32202	
54LS367	32203	
54LS368	32204	
54LS37	30202	
54LS373	32502	
54LS374	32503	7801101
54LS375	31604	
54LS377	32504	
54LS38	30203	
54LS390	32701	7802601
54LS393	32702	
54LS395B	30607	
54LS399	36X01	8415401
54LS40	30201	
54LS42	30703	7603101
54LS47	30704	7604501
54LS490	32703	
54LS51	30401	
54LS54	30402	
54LS540	32404	8415501
54LS541	32405	8415601
54LS629	36X01	8102101
54LS640	32X01	
54LS641	32805	
54LS642	32806	
54LS645	32807	
54LS646	32804	
54LS648	32805	
54LS668		5962-86876
54LS670	31901	7704201
54LS682		8415101
54LS684	36X02	8415201
54LS688	36X03	8415301
54LS73	30101	
54LS74	30102	
54LS75	31601	7601201
54LS76	30110	7601301
54LS83A	31201	7601401
54LS85	31101	
54LS86	30502	
54LS90	31501	7603201
54LS92	31510	
54LS93	31502	7700101
54LS95		5962-8671701
54LS96	30604	
54L00	02004	
54L01	02006	
54L02	02701	
54L03	02006	
54L04	02005	
54L10	02003	
54L121	04201	
54L122	04202	
54L154		8301701
54L164	02802	
54L193	02503	
54L20	02002	
54L30	02001	
54L42	02901	
54L43	02902	
54L44	02903	
54L46	02904	
54L47	02905	
54L51	04101	
54L54	04102	
54L55	04103	
54L71	02101	
54L72	02102	
54L73	02103	
54L74	02105	
54L78	02104	
54L86	02601	
54L90	02501	
54L93	02502	
54L95	02801	
54S00	07001	
54S02	07301	
54S03	07002	
54S04	07003	
54S05	07004	
54S08	08003	
54S09	08004	
54S10	07005	
54S11	08001	
54S112	07102	
54S113	07103	
54S114	07104	
54S133	07009	
54S134	07010	
54S135	07502	
54S138	07701	7604101
54S139	07702	7700401
54S140	08101	
54S15	08002	
54S151	07901	
54S153	07902	
54S157	07903	
54S158	07904	
54S174	07105	
54S175	07106	
54S181	07801	
54S182	07802	
54S189	2XX02	7801502
54S194	07601	7604001
54S195	07602	
54S20	07006	
54S22	07007	
54S251	07905	8002201
54S253	07908	
54S257	07906	
54S258	07907	8002301
54S287	20302	
54S288	20702	
54S30	07008	
54S40	07201	
54S412	42101	
54S472	20805	
54S473	20804	
54S474	20802	
54S475	20801	
54S51	07401	
54S570	20401	
54S571	20402	
54S572	20601	
54S573	20602	
54S64	07402	
54S65	07403	
54S74	07101	
54S85	08201	
54S86	07501	
5400	00104	
5401	00107	
5402	00401	
5403	00109	
5404	00105	
5405	00108	
5406	00801	
5407	00803	
5408	01601	
5409	01602	
5410	00103	
54107	00203	
54116	01503	
5412	00106	
54121	01201	
54123	01203	
54125	15301	
54126	15302	
5413	15101	
54132	15103	
5414	15102	
54145	01005	
54147	15601	
54148	15602	
54150	01401	
54151	01406	
54153	01403	
54154	15201	
54155	15202	
54156	15203	
54157	01405	
5416	00802	
54160	01303	
54161	01306	
54162	01305	
54163	01304	
54164	00903	
54165	00904	
5417	00804	
54170	01801	
54174	01701	
54175	01702	
54180	01901	
54181	01101	
54182	01102	
54183	01403	
54185A	01X01	7703001
54192	01308	
54193	01309	
54194	00905	
54195	00906	
5420	00102	
5423	00402	
5425	00403	
5426	00805	
5427	00404	
5428	16201	
5430	00101	
5432	16101	
54365	16301	
54366	16302	
54367	16303	
54368	16304	
5437	00302	
5438	00303	
5440	00301	
5442	01001	
5443	01002	
5444	01003	
5445	01004	
5446	01006	
5447	01007	
5448	01008	
5449	01009	
5450	00501	
5451	00502	
5453	00503	
5454	00504	
5470	00206	
5472	00201	
5473	00202	
5474	00205	
5475	01501	
5476	00204	
5477	01502	
5479	00207	
5480	00604	
5482	00601	
5483	00602	
5485	15001	
5486	00701	
5490	01307	
5492	01301	
5493	01302	
5495	00901	
5496	00902	
55107	10401	
55108	10402	
55113	10405	
55114	10403	
55115	10404	
55182	70X01	7900801
55183	70X01	7900901
5532A	13102	
55325	13001	
55326	13002	
55327	13003	
5534A	13101	
5539	70X01	5962-8606401
55450	12901	
55451	12902	
55452	12903	7704901
55453	12904	
55454	12905	
55460	12906	
55461	12907	
55462	12908	

MILITARY PARTS—Commercial to M38510/ CROSS REFERENCE (Cont'd)

Device	M38510/	DESC Drawing
55463	12909	
55464	12910	
555	10901	
55500	70X01	8601801
55501	70X02	8601802
556	10902	
558	10903	
5604	20501	
562	12101	
562 (2 uA)	12101	
562 (5 uA)	12102	
5624	20502	
563	12102	
565	12103	
566	12104	
567		5962-8700301
574AT	14002	
574AT	14004	
574AU	14001	
574AU	14003	
6N134	XXX01	7705201
6N140A	XXX01	8302401
6108	19007	
6116	19001	
6116	29101	
6116	29104	
6116	29105	
6164-55	2XX05	5962-8552505
6164-70	2XX04	5962-8552505
6168LA25		5962-8552505
6168LA35		5962-8670504
6168LA45		5962-8670506
6168LA55		5962-8670508
6168LA70		5962-8670510
6168SA25		5962-8670501
6168SA35		5962-8670503
6168SA45		5962-8670505
6168SA55		5962-8670507
6168SA70		5962-8670509
6208	19008	
6216	19003	
6268-35		5962-8670503
6268-45		5962-8670505
6268-55		5962-8670507
6268-70		5962-8670509
6364	2XX01	
6504	24501	8102401
6508	23901	
6514	24502	8102402
6516	29102	
6516-1	61001	
6516-2	61002	
6516-3	61003	
6516-8	29102	8403601
65162	29101	
65162	29104	
65162	29105	
65162-8	29104	8403602
65162C-8		8403603
6518	23902	
65262	29103	8413201
6665	24403	
6665 (1 ms ref)	24401	
6665 (2 ms ref)	24402	
674AT	14006	
674AU	14005	
68A316E	40301	
6800	40001	
68000-10	54003	
68000-6	54001	
68000-8	54002	
68000 (10 MHz)	54003	8202103
68000 (6 MHz)	54001	8202101
68000 (8 MHz)	54002	8202102
6801	4XX01	
6802	40X01	
68020-12		5962-8603201
68020-16		5962-8603202
6810	40201	
6840	40X01	
6844	40X01	
6845	40X01	
6846	40X01	
685	70X01	8600801
685	70X01	8600802
685D		8600802
6850	40X01	
6852	40X01	
6854	40X01	
6856	40X01	
686		7801801
6860	40X01	
6862	40X01	
687		7801901
6875	40X01	
6882	40X02	
68881-12		5962-8602101
68881-16		5962-8602102
7C147	28901	
7C147	28903	
7C148	28902	
7C148	28904	
7C412-10	25002	
7C412-12	25001	
7C412-80	25003	
710	10301	
711	10302	
7110-1	28001	
714	13502	
7164S55	2XX05	5962-8552505
7164S70	2XX04	5962-8552504
7181	01101	
733	70X01	8418501
7520	12702	
7521	12703	
7523	12701	
7541	12704	
7555	14901	
7556	14902	
76L42A	02906	
76L70	02805	
7602	20701	
7603	20702	
7610	20301	
7611	20302	
76160	21001	
76165	21005	
7620	20401	
7621	20402	
76321	21101	8200801
7640	20801	
7641	20802	7801601
7642	20601	
7643	20602	
7644	20603	
76641	21X01	8200901
7680	20903	
7681	20904	
7681P	209XX	7902401
7684	20901	
7685	20902	
77S180	20903	
77S181	20904	
77S184	20901	
77S185	20902	
77S190	21001	
77S191	21002	
771	11904	
772	11905	
774	11906	
78G	11702	
78MG	11701	
78M05	10702	
78M12	10703	
78M15	10704	
78M24	10705	
7805	10706	
7812	10707	
7815	10708	
7820	70X01	
7824	10709	
7830		7900901
7831	10406	8004101
7832	10407	8004102
79G	11802	
79MG	11801	
79M05	11501BXX	
		7704001XX
79M12	11502BXX	
		7704003XX
79M15	11503BXX	
		7704004XX
79M24	11504BXX	
		7704005XX
7905	11505	
7905K	11505BYX	
		7704001YX
7912	11506	
7912K	11506BYX	
		7704003YX
7915	11507	
7915K	11507BYX	
		7704004YX
7924	11508	
7924K	11508BYX	
		7704005YX
8X305	XXX01	8550201
8X305-10		8550202
8X320	XXX01	5962-8550301
8X350	2XX01	5962-8605201
80C31	XXX01	8506401
80C51	XXX02	8506402
80C86	XXX01	8405201
80186-6		8501002
80186-8		8501001
80286-6	53101	5962-8514802
80286-8	53502	5962-8514801
80287-10	XXX01	5962-8513301
80287-6	XXX03	5962-8513303
80287-8	XXX02	5962-8513302
8035L	49002	
8048	49001	
8080A	42001	7200201
8085A	4XX01	7901001
8086	53001	
8096	XXX01	
8097	XXX01	8506301
82C38	XXX01	
82C52	XXX01	8501501
82C54	XXX01	8406501
82C55A	XXX01	8406602
82C55A-5		8406601
82C55B	XXX01	
82C59	XXX02	
82C59-5	XXX01	
82C59A (5 MHz)		5962-8501601
82C59A (8 MHz)		5962-8501602
82C82		8406701
82C83H		8406702
82C84A	XXX01	8406801
82C86		5962-8757701
82C87		5962-8757702
82C88		8406901
82C89	XXX01	5962-8552801
82HS195	21005	
82HS641	21202	
82HS641A		8200901
82HS641A		8220902
82S10	23101	
82S10 (45 ns)	23107	
82S100	50202	
82S101	50201	
82S105	5XX01	5962-8670901
82S11	23102	
82S11 (45 ns)	23108	
82S115	20803	
82S123A	20702	
82S123A	20704	
82S126A	20301	
82S126A	20303	
82S129A	20302	
82S129A	20304	
82S130	20401	
82S130A	20403	
82S131	20402	
82S131A	20404	
82S136	20601	
82S137A	20602	
82S137A	20604	
82S140	20801	
82S141	20802	5962-8670901
82S16	2XX01	8602301
82S180	20903	
82S181A	20904	
82S181A	20904	
82S184	20901	
82S185A	20902	
82S185A	20910	
82S190	21001	
82S191	21002	
82S191A	21002	
82S191A	21004	
82S23A	20701	
82S23A	20703	
82S2708	20905	
82S62		5962-8754301
8212	42101	
8216	42X01	
8224	42201	
8226	42X01	
8228	42301	
82288-6	XXX01	5962-8514901
82288-8	XXX02	5962-8514902
8238	42X01	
8250	15204	
8251	15205	
8252	15206	

© IC MASTER 1988

MILITARY PARTS—Commercial to M38510/ CROSS REFERENCE (Cont'd)

Device	M38510/	DESC Drawing
8253	42X01	5962-8652001
8253-5		5962-8752003
8253B		5962-8752002
8255	42X01	
8257	42X01	
8259	42X01	
8259A		5962-8751801
8264	24403	
8264 (1 ms ref)	24401	
8264 (2 ms ref)	24402	
82720	XXX01	5962-8608801
8282	53X01	8417901
8283	53X02	8417902
8284	53X01	
8285	53X01	
8286		5962-8686801
8287	53X02	5962-8686802
8288	53X01	
8397	XXX01	8552001
8536A		8300102
8751H-8	XXX01	8419001
9064-15	24401	8201001
9064-15	24402	8201002
9064-15	2XX01	8201009
9064-20	24403	8201003
9064-20	2XX01	8201007
9064-20	2XX01	8201010
9085A	4XX02	
9093	03304	
9128-12		8103907
9128-20		8103908
9128-90		8103906
9150-25		8759201
9150-35		8759202
9150-45		8759203
9218	40301	
93L00	02804	
93L01	02907	
93L08	04502	
93L09	04601	
93L10	02504	
93L12	04602	
93L14	04501	
93L16	02505	
93L18	04301	
93L22	04603	
93L24	04401	
93L28	02803	
93L412 (75 ns)	23111	
93L415 (70 ns)	23103	
93L420	23004	
93L422	23112	
93L422A	23115	
93L425	23104	
93L425A (50 ns)	23113	
93S19		5962-8672701
93S48		5962-8672601
93Z450	20903	
93Z451	20904	
93Z451	20909	
93Z460	20906	
93Z461	20905	
93Z510	21003	
93Z511	21004	
93Z511	21002	
93Z565	21201	8200901
93Z565A		8200902
930	03001	
9300	15901	
9301	15206	
9304	00603	
9308	01503	
9309	01404	
9311	15201	
9312	01402	
9314	01504	
9315A		5962-8552301
9317	15802	
9318	15603	
932	03101	
9321	15801	
9322	01405	
9324	15002	
9328	15902	
933	03105	
9334	16001	
9338	15701	
9341	01101	
93410	23001	
93411	23003	
93412 (60 ns)	23109	
93415	23101	
93415	23105	
93415 (45 ns)	23107	
93415 (60 ns)	23105	
93417	20301	
93419	23201	
9342	01102	
93421	23002	
93422 (60 ns)	23110	
93422A (45 ns)	23114	
93425	23106	
93425 (60 ns)	23102	
93425A (45 ns)	23108	
93427	20302	
93436	20401	
93438	20801	
93446	20402	
93448	20802	7801601
93452	20601	
93453	20602	
93458	50201	
93459	50202	
93470	23301	
93471	23302	
93481	2XX01	
935	03002	
936	03003	
9380	00604	
9382	00601	
9383	00602	
940	03002	
944	03102	
9440	4XX01	
945	03301	
9450	XXX01	
9450-15	550XX	8416901
9451	XXX01	
9452	XXX01	
946	03004	
948	03302	
950	03303	
951	03201	
9511	42X01	
9513A	XXX01	
9517	42X02	
9519	42X02	
9519A		5962-8759701
957	03103	
958	03104	
9601	01204	
9602	01205	
9614	10403	
9615	10404	
962	03005	
9622		5962-8752201
99CL68-45		5962-8670506
99CL68-55		5962-8670508
99CL68-70		5962-8670510
99C68-45		5962-8670505
99C68-55		5962-8670507
99C68-70		5962-8670509
99C88-10	2XX03	5962-8552503
99C88-12	2XX02	5962-8552502
99C88-15	2XX01	5962-8552501
99C88-70	2XX04	5962-8552504

MILITARY PARTS—M38510/ to Commercial CROSS REFERENCE

M38510/	Device	DESC Drawing
XXX01	BUS-63105	5962-8604901
XXX01	MD82C82	
XXX01	M80186	
XXX01	NSC800	
XXX01	SMJ32010	
XXX01	Z8030A	5962-8551801
XXX01	Z8036A	8551701
XXX01	Z8536	8300101
XXX01	32C016	
XXX01	32C032	
XXX01	32C081	
XXX01	32C201	
XXX01	32016	
XXX01	32032	
XXX01	32081	
XXX01	32201	
XXX01	6N134	7705201
XXX01	6N140A	8302401
XXX01	8X305	8550201
XXX01	8X320	5962-8550301
XXX01	80C31	8506401
XXX01	80C86	8405201
XXX01	80287-10	5962-8513301
XXX01	8096	
XXX01	8097	8506301
XXX01	82C38	
XXX01	82C52	8501501
XXX01	82C54	8406501
XXX01	82C55A	8406602
XXX01	82C55B	
XXX01	82C59-5	
XXX01	82C84A	8406801
XXX01	82C89	5962-8552801
XXX01	82288-6	5962-8514901
XXX01	82720	5962-8608801
XXX01	8397	8552001
XXX01	8751H-8	8419001
XXX01	9450	
XXX01	9451	
XXX01	9452	
XXX01	9513A	
XXX02	M80186	
XXX02	NSC800-4	
XXX02	Z8030	5962-8551802
XXX02	Z8036	8551702
XXX02	Z8536A	
XXX02	80C51	8506402
XXX02	80287-8	5962-8513302
XXX02	82C59	
XXX02	82288-8	5962-8514902
XXX03	80287-6	5962-8513303
00101	5430	
00102	5420	
00103	5410	
00104	5400	
00105	5404	
00106	5412	
00107	5401	
00108	5405	
00109	5403	
00201	5472	
00202	5473	
00203	54107	
00204	5476	
00205	5474	
00206	5470	
00207	5479	
00301	5440	
00302	5437	
00303	5438	
00401	5402	
00402	5423	
00403	5425	
00404	5427	
00501	5450	
00502	5451	
00503	5453	
00504	5454	
00601	5482	
00601	9382	
00602	5483	
00602	9383	
00603	9304	
00604	5480	
00604	9380	
00701	5486	
00801	5406	
00802	5416	
00803	5407	
00804	5417	
00805	5426	
00901	5495	
00902	5496	
00903	54164	
00904	54165	
00905	54194	
00906	54195	
01X01	54185A	7703001
01001	5442	
01002	5443	
01003	5444	
01004	5445	
01005	54145	
01006	5446	
01007	5447	
01008	5448	
01009	5449	
01101	54181	
01101	7181	
01101	9341	
01102	54182	
01102	9342	
01201	54121	
01203	54123	
01204	9601	
01205	9602	
01301	5492	
01302	5493	
01303	54160	
01304	54163	
01305	54162	
01306	54161	
01307	5490	
01308	54192	
01309	54193	
01401	54150	
01402	9312	
01403	54153	
01403	54183	
01404	9309	
01405	54157	
01405	9322	
01406	54151	
01501	5475	
01502	5477	
01503	54116	
01503	9308	
01504	9314	
01601	5408	
01602	5409	
01701	54174	
01702	54175	
01801	54170	
01901	54180	
02001	54L30	
02002	54L20	
02003	54L10	
02004	54L00	
02005	54L04	
02006	54L01	
02006	54L03	
02101	54L71	
02102	54L72	
02103	54L73	
02104	54L78	
02105	54L74	
02201	54H72	
02202	54H73	
02203	54H74	
02204	54H76	
02205	54H101	
02206	54H103	
02301	54H30	
02302	54H20	
02303	54H10	
02304	54H00	
02305	54H04	
02306	54H01	
02307	54H22	
02401	54H40	
02501	54L90	
02502	54L93	
02503	54L193	
02504	93L10	
02505	93L16	
02601	54L86	
02701	54L02	
02801	54L95	
02802	54L164	
02803	93L28	
02804	93L00	
02805	76L70	
02901	54L42	
02902	54L43	
02903	54L44	
02904	54L46	
02905	54L47	
02906	76L42A	
02907	93L01	
03X01	MH0056	
03X02	DS0056J	
03X03	DS0056H	
03001	930	
03002	935	
03002	940	
03003	936	
03004	946	
03005	962	
03101	932	
03102	944	
03103	957	
03104	958	
03105	933	
03201	951	
03301	945	
03302	948	
03303	950	
03304	9093	
03501	DS0026	
03501	MH0026	
03501	0026	
04001	54H50	
04002	54H51	
04003	54H53	
04004	54H54	
04005	54H55	
04101	54L51	
04102	54L54	
04103	54L55	
04201	54L121	
04202	54L122	
04301	93L18	
04401	93L24	
04501	93L14	
04502	93L08	
04601	93L09	
04602	93L12	
04603	93L22	
05X01	4044A	
05X01	4060A	7703101
05X53	14049UB	
05X54	14021B	
05001	4011A	
05002	4012A	
05003	4023A	
05051	4011B	
05052	4012B	
05053	4023B	7901301
05101	4013A	
05102	4027A	
05103	4043A	
05151	4013B	7901101
05152	4027B	
05153	4043B	
05201	4000A	
05202	4001A	
05203	4002A	
05204	4025A	
05251	4000B	
05252	4001B	
05253	4002B	
05254	4025B	
05301	4007A	
05302	4019A	
05303	4030A	
05304	4048A	
05351	4007UB	
05352	4019B	
05353	4030B	
05354	4048B	
05401	4008A	
05451	4008B	
05501	4009A	
05502	4010A	
05503	4049A	
05504	4050A	
05505	4041A	
05551	4009UB	
05552	4010B	
05553	4049B	
05553	4049UB	7901401
05554	4050B	
05555	4041UB	
05601	4017A	

© IC MASTER 1988

MILITARY PARTS—M38510/ to Commercial CROSS REFERENCE (Cont'd)

M38510/	Device	DESC Drawing
05602	4018A	
05603	4020A	D
05604	4022A	
05605	4024A	
05651	4017B	
05652	4018B	
05653	4020B	
05654	4022B	
05655	4024B	
05701	4006A	
05702	4014A	
05703	4015A	
05704	4021A	
05705	4031A	
05706	4034A	
05751	4006B	
05752	4014B	
05753	4015B	
05754	4021B	7901201
05755	4031B	
05756	4034B	
05801	4016A	
05802	4066A	
05851	4016B	
05852	4066B	
05901	4028A	
05951	4028B	
06001	10501	
06002	10502	
06003	10505	
06004	10506	
06005	10507	
06006	10509	
06101	10531	
06102	10631	
06103	10576	
06104	10535	
06201	10504	
06202	10597	
06301	10524	
06302	10525	
07001	54S00	
07002	54S03	
07003	54S04	
07004	54S05	
07005	54S10	
07006	54S20	
07007	54S22	
07008	54S30	
07009	54S133	
07010	54S134	
07101	54S74	
07102	54S112	
07103	54S113	
07104	54S114	
07105	54S174	
07106	54S175	
07201	54S40	
07301	54S02	
07401	54S51	
07402	54S64	
07403	54S65	
07501	54S86	
07502	54S135	
07601	54S194	7604001
07602	54S195	
07701	54S138	7604101
07702	54S139	7700401
07801	54S181	
07802	54S182	
07901	54S151	
07902	54S153	
07903	54S157	
07904	54S158	
07905	54S251	8002201
07906	54S257	
07907	54S258	8002301
07908	54S253	
08001	54S11	
08002	54S15	
08003	54S08	
08004	54S09	
08101	54S140	
08201	54S85	
1XX01	4040B	7705801
1XX01	4047B	8102001
1XX01	4052B	7901501
1XX01	4053B	8101801
1XX01	4078B	
1XX01	4528B	7704501
1XX01	4557B	7901601
1XX01	4585B	77003701
1XX01	54C08	7703601
1XX01	54C906	7705601
1XX02	14557B	
1XX02	14585	
1XX03	54C85	7703701
1XX04	40085	
10101	LM741A	
10102	LM747A	
10103	LM101A	
10104	LM108A	
10105	LH2101A	
10106	LH2108A	
10107	LM118	
10108	1558	
10201	LM723	
10301	710	
10302	711	
10303	LM106	8003701
10304	LM111	
10305	LH2111	
10306	LM119A	8601402
10307	LM119	8601401
10401	55107	
10402	55108	
10403	55114	
10403	9614	
10404	55115	
10404	9615	
10405	55113	
10406	7831	8004101
10407	7832	8004102
10501	5040	8100601
10501	5040	8100609
10501	5140	8100609
10501	5140	8100617
10502	5041	8100602
10502	5041	8100610
10502	5141	8100610
10502	5141	8100618
10503	5042	8100603
10503	5042	8100611
10503	5142	8100611
10503	5142	8100619
10504	5043	8100604
10504	5043	8100612
10504	5143	8100612
10504	5143	8100620
10505	5044	8100605
10505	5044	8100613
10505	5144	8100613
10505	5144	8100621
10506	4145	8100614
10506	5045	8100606
10506	5045	8100614
10506	5145	8100622
10507	5046	8100607
10507	5046	8100615
10507	5046	8100615
10507	5046	8100623
10508	5047	8100608
10508	5047	8100616
10508	5047	8100616
10508	5047	8100624
10601	LM102	
10602	LM110	
10603	LH2110	
10701	LM109	
10702	78M05	
10703	78M12	
10704	78M15	
10705	78M24	
10706	LM140K-05	
10706	7805	
10707	LM140K-12	
10707	7812	
10708	LM140K-15	
10708	7815	
10709	LM140K-24	
10709	7824	
10801	3018A	
10802	3045	
10901	555	
10902	556	
10903	558	
11001	LM148	
11002	LM149	
11003	4156	
11003	4741	
11004	4136	
11005	LM124	7704301
11101	DG181A	
11102	DG182A	
11103	DG184A	
11104	DG185A	
11105	DG187A	
11106	DG188A	
11107	DG190A	
11108	DG191A	
11201	LM139	7700801
11202	LM193	
11301	DAC08	
11302	DAC08A	
11401	LF155	
11402	LF156	
11403	LF157	
11404	LF155A	
11405	LF156A	
11406	LF157A	
11501	LM120H-05	
11501	LM120H-5.0	7704001XX
11501BXX	79M05	7704001XX
11502	LM120H-12	7704003XX
11502BXX	79M12	7704003XX
11503	LM120H-15	7704004XX
11503BXX	79M15	7704004XX
11504	LM120H-24	7704005XX
11504BXX	79M24	7704005XX
11505	LM120K-05	
11505	LM120K-5.0	7704001YX
11505	7905	
11505BYX	7905K	7704001YX
11506	LM120K-12	7704003YX
11506	7912	
11506BYX	7912K	7704003YX
11507	LM120K-15	7704004YX
11507	7915	
11507BYX	7915K	7704004YX
11508	LM120K-24	7704005YX
11508	7924	
11508BYX	7924K	7704005YX
11601	DG300	
11602	DG301A	
11603	DG302	
11604	DG303A	
11605	DG304A	
11606	DG305A	
11607	DG306A	
11608	DG307A	
11701	78MG	
11702	78G	
11703	LM117H	7703401XX
11704	LM117K	7703401YX
11705	LM150K	
11706	LM138K	
11801	79MG	
11802	79G	
11803	LM137H	7703403XX
11804	LM137K	7703403YX
11901	TL061	8102301
11902	TL062	8102302
11903	TL064	8102303
11904	LF151	
11904	TL071	8102304
11904	771	
11905	LF153	
11905	TL072	8102305
11905	772	
11906	LF147	
11906	TL074	8102306
11906	074	
11906	774	
12001	5200	
12002	5203	
12003	5201	
12004	5204	
12005	5202	
12006	5205	
12007	5206	
12008	5207	
12009	5210	
12010	5213	
12011	5211	
12012	5214	
12013	5212	
12014	5215	
12015	5216	5962-8513105

MILITARY PARTS—M38510/ to Commercial CROSS REFERENCE (Cont'd)

M38510/	Device	DESC Drawing
12016	5217	
12101	AD562	8100801
12101	562	
12101	562 (2 uA)	
12102	AD563	8100802
12102	562 (5 uA)	
12102	563	
12103	565	
12104	566	
12202	HA2600	
12203	2620	
12204	2500	
12205	2510	
12206	2520	
12301	DG200	
12301	HI200	
12302	DG201	7705301
12302	HI201	
12401	LM199A	
12402	LM129A	
12403	REF10	
12404	LM199	
12405	LM199A-20	
12406	LM129B	
12501	LF198	
12502	SE5537	
12601	SG1524	7802801
12602	PWM125	
12602	1525A	
12603	SG1526	8551501
12603	1526	
12604	PWM127	
12604	1527A	
12701	7523	
12702	7520	
12703	7521	
12704	7541	
12705	1020	
12706	1220	
12707	1218	
12801	AD584S	
12802	AD584T	
12901	55450	
12902	55451	
12903	55452	7704901
12904	55453	
12905	55454	
12906	55460	
12907	55461	
12908	55462	
12909	55463	
12910	55464	
13X01	DG129	7801401
13X01	2920	
13001	55325	
13002	55326	
13003	55327	
13101	5534A	
13102	5532A	
13201	AD573	
13301	AD561	
13401	AD571	
13501	OP07A	8203601
13502	OP07	8203602
13502	714	
13503	OP27A	
13504	OP227A	5962-8688701
13505	OP37A	
13601	R675B-4	
13601	2700	
13601	2700S	8503001
13601	2700U	8503002
13602	R675B-3	
13602	2702	
13602	2702S	8503003
13602	2702U	8503004
13701	DAC87	
13702	DAC87	
13703	DAC87	
13801	VFC32	
13802	VFC320	
13803	AD560	
13901	534T	
13902	534S	
13903	532S	
13904	4213	
14X01	TL494M	
14X02	TL497M	
14001	AD574AUD	5962-8512701
14001	574AU	
14002	AD574ATD	5962-8512702
14002	574AT	
14003	HI574AUD	5962-8512703
14003	574AU	
14004	HI574ATD	5962-8512704
14004	574AT	
14005	674AU	
14006	674AT	
14101	2001	
14102	2002	
14103	2003	
14104	2004	
14105	2005	
14106	2801	
14107	2802	
14108	2803	5962-8605801
14109	2804	
14110	2805	
14201	HTC0300	
14201	05203	
14201	376H	
14201	4860	
14301	524S	
14401	AD558T	
14501	ADC0801	
14601	ADC0820BD	
14601	AD7820UQ	
14602	ADC0820CD	
14602	AD7820TQ	
14701	AD637	
14801	TL431	8410901
14901	7555	
14902	7556	
15001	5485	
15002	9324	
15101	5413	
15102	5414	
15103	54132	
15201	54154	
15201	9311	
15202	54155	
15203	54156	
15204	8250	
15205	8251	
15206	8252	
15206	9301	
15301	54125	
15302	54126	
15501	MC3101	
15501	54H08	
15502	MC3106	
15502	54H11	
15503	MC3111	
15503	54H21	
15601	54147	
15602	54148	
15603	9318	
15701	9338	
15801	9321	
15802	9317	
15901	9300	
15902	9328	
16001	9334	
16101	5432	
16201	5428	
16301	54365	
16302	54366	
16303	54367	
16304	54368	
17X01	14584	
17001	4081B	7702401
17002	4082B	7705901
17003	4073B	7705101
17101	4071B	
17102	4072B	7706001
17103	4075B	
17201	4085B	
17202	4086B	
17203	4070B	
17204	4077B	
17301	4514B	7703501
17302	4515B	7703201
17303	4532B	
17304	4555B	7704701
17305	4556B	7704801
17401	4069B	7702701
17401	4069UB	
17401	54C04	7702701
17402	40107B	
17403	4502B	7702001
17404	40109B	
17501	4076B	
17502	4095B	
17503	4096B	
17504	4098B	7705501
17505	40174B	8202201
17601	4099B	
17602	4508B	
17701	4093B	7704601
17702	40106B	5962-85501
17801	4067B	
17802	4097B	
17803	40257B	
17901	4094B	7702501
17902	40100B	
17903	40104B	
17904	40105B	
17905	40108B	
17906	40194B	
17907	40208B	
18X01	4029B	8101601
18X01	4035B	
18X01	4042B	8101901
18101	40102B	
18102	40103B	
18103	40192B	
18104	40193B	
18105	4510B	
18106	4516B	
18107	4518B	
18108	4520B	7702301
19001	506	
19001	6116	
19002	IH5116	
19002	506A	5692-8513101
19002	5116	5962-8513104
19003	507	
19003	6216	
19004	IH5216	
19004	507A	5962-8513102
19005	HI508A	7705202
19005	508A	
19005	5108	7705203
19006	IH5208	
19006	509A	5962-8513103
19006	5208	5962-8513106
19007	DG508A	7705201
19007	HI508	7705201
19007	IH6108	7705201
19007	508	
19007	6108	
19008	509	
19008	6208	
2XX01	AM9256	
2XX01	D51256	
2XX01	IMS2800	
2XX01	MCM6256	
2XX01	MK4801	
2XX01	M7681P-8	
2XX01	NM51256	
2XX01	SMJ4256-15	
2XX01	2118	8101501
2XX01	21256	
2XX01	2168-55	5962-8608101
2XX01	27C64-25	
2XX01	27LS00	8602001
2XX01	27PS191	5962-8552601
2XX01	27S02	8605101
2XX01	27S07A	7801501
2XX01	27S19	5962-8670301
2XX01	27S31	7801601
2XX01	27S35	5962-8670601
2XX01	27S45	5962-8552701
2XX01	27128A	
2XX01	27256-35	
2XX01	2764-45	
2XX01	29705A	8602501
2XX01	40L45	
2XX01	4164-12	8201008
2XX01	4164-15	8201006
2XX01	4164-20	8201007
2XX01	4167	
2XX01	4256-20	
2XX01	6364	
2XX01	8X350	5962-8605201
2XX01	82S16	8602301
2XX01	9064-15	8201009
2XX01	9064-20	8201007
2XX01	9064-20	8201010
2XX01	93481	
2XX01	99C88-15	5962-8552501
2XX02	AM9128-90	
2XX02	2168-70	5962-8608102
2XX02	27C64-35	
2XX02	27LS00A	8602002
2XX02	27PS191A	

© IC MASTER 1988

MILITARY PARTS—M38510/ to Commercial CROSS REFERENCE (Cont'd)

M38510/	Device	DESC Drawing
2XX02	27S02A	8605102
2XX02	27S19A	5962-8670302
2XX02	27S35A	5962-8670602
2XX02	27S45A	5962-8552702
2XX02	2764-25	
2XX02	29633DMB	
2XX02	4044	
2XX02	4516	8101502
2XX02	54S189	7801502
2XX02	99C88-12	5962-8552502
2XX03	AM9128-12	
2XX03	2141	
2XX03	2169-50	5962-8608103
2XX03	27C64-20	
2XX03	27LS01	8602003
2XX03	27LS02	865103
2XX03	27PS291	
2XX03	27S07	7801503
2XX03	27S37	5962-8670603
2XX03	27S47	5962-8552703
2XX03	2764A-35	
2XX03	99C88-10	5962-8552503
2XX04	AM9128-20	
2XX04	2169-70	5962-8608104
2XX04	27LS01A	8602004
2XX04	27LS07	7801504
2XX04	27PS291A	5962-8552602
2XX04	27S03	8605104
2XX04	27S37A	5962-8670604
2XX04	27S47A	5962-8552704
2XX04	2764A-25	
2XX04	6164-70	5962-8552505
2XX04	7164S70	5962-8552504
2XX04	99C88-70	5962-8552504
2XX05	27S03A	8605105
2XX05	2764A-20	
2XX05	6164-55	5962-8552505
2XX05	7164S55	5962-8552505
2XX06	27LS03	8605106
20101	HPROM512	
20101	MCM5303	
20102	MCM5304	
20201	IM5603A	
20202	IM5623	
20301	5300-1	
20301	7610	
20301	82S126A	
20301	93417	
20302	5301-1	
20302	54S287	
20302	7611	
20302	82S129A	
20302	93427	
20303	82S126A	
20304	82S129A	
20401	5305-1	
20401	54S570	
20401	7620	
20401	82S130	
20401	93436	
20402	29611	
20402	5306-1	
20402	54S571	
20402	7621	
20402	82S131	
20402	93446	
20403	82S130A	
20404	82S131A	
20501	5604	
20502	5624	
20601	53S440	
20601	54S572	
20601	7642	
20601	82S136	
20601	93452	
20602	53S441	
20602	54S573	
20602	7643	
20602	82S137A	
20602	93453	
20603	7644	
20604	82S137A	
20701	5330	
20701	7602	
20701	82S23A	
20702	5331	
20702	54S288	
20702	7603	
20702	82S123A	
20703	82S23A	
20704	82S123A	
20801	5340-1	
20801	54S475	
20801	7640	
20801	82S140	
20801	93438	
20802	5341-1	7801601
20802	54S474	
20802	7641	7801601
20802	82S141	5962-8670901
20802	93448	7801601
20803	82S115	
20804	5348-1	
20804	54S473	
20805	29621	
20805	5349-1	
20805	54S472	
209XX	7681P	7902401
20901	7684	
20901	77S184	
20901	82S184	
20902	29651	
20902	53S841	
20902	7685	
20902	77S185	
20902	82S185A	
20903	27S180	
20903	7680	
20903	77S180	
20903	82S180	
20903	93Z450	
20904	27S181	
20904	29631	
20904	7681	
20904	77S181	
20904	82S181A	
20904	82S181A	
20904	93Z451	
20905	82S2708	
20905	93Z461	
20906	93Z460	
20907	53S840	
20908	29651	
20908	53S841	
20909	93Z451	
20910	82S185A	
21X01	27S49	8200901
21X01	76641	8200901
21001	53S1680	
21001	76160	
21001	77S190	
21001	82S190	
21002	28S166A	
21002	29681	
21002	3636	
21002	53S1681	
21002	77S191	
21002	82S191	
21002	82S191A	
21002	93Z511	
21003	93Z510	
21004	28S166A	
21004	82S191A	
21004	93Z511	
21005	76165	
21005	82HS195	
211XX	53S3281A	8200802
21101	76321	8200801
21102	53S3281	82008B101
21103	29671	8200801
21201	93Z565	8200901
21202	82HS641	
21901	IM6654	
22001	2708	
22101	2516	7802201
22101	2516 (450 ns)	7802201
22101	2716	7802201
22101	2716 (450 ns)	7802201
22201	2532	8001202
22202	2732	8001201
223XX	2764 (250 ns)	8200502
223XX	2764 (450 ns)	8200501
224XX	27256 (350 ns)	8411101
22401	27256-250	
22401	27256 (250 ns)	8411102
22402	27256-200	
22403	27256 (170 ns)	8411104
22403	27256-170	
22501	ER2810	
22501	NC7810LC	
22601	NMC2816	
22701	X2816A-45	
22702	X2816A-35	
22703	X2816-30	
22703	X2816A-25	
228XX	X2864A-25	5962-8683006
228XX	X2864A-35	5962-8683007
228XX	2864-25	5962-8683001
228XX	2864-35	5962-8683002
22801	TBD	
22802	DM2864-250	
22802	LM2864-250	
22803	DM2864-350	
22803	LM2864-350	
22804	TBD	
22805	DM2864H-250	
22805	LM2864H-250	
22806	DM5564-250	
23001	93410	
23002	93421	
23003	93411	
23004	93L420	
23101	82S10	
23101	93415	
23102	82S11	
23102	93425 (60 ns)	
23103	93L415 (70 ns)	
23104	93L425	
23105	93415	
23105	93415 (60 ns)	
23106	93425	
23107	82S10 (45 ns)	
23107	93415 (45 ns)	
23108	82S11 (45 ns)	
23108	93425A (45 ns)	
23109	93412 (60 ns)	
23110	93422 (60 ns)	
23111	93L412 (75 ns)	
23112	93L422	
23113	93L425A (50 ns)	
23114	93422A (45 ns)	
23115	93L422A	
23201	93419	
23301	93470	
23302	93471	
23401	5280	
23501	TMS4060	
23502	TMS4050	
23503	TMS4060	
23504	TMS4050	
23505	MM5280	
23505	MM7280	
23506	MM5280	
23506	MM7280	
23601	MCM6605	
23602	MCM6604A	
23602	MKB4096	
23602	54H08	
23603	MCM6605	
23604	MCM6604A	
23604	MKB4096	
23701	AM9130CFC	
23702	AM9130AFC	
23703	AM9130CDM	
23703	AM9130CFM	
23704	AM9130ADM	
23704	AM9310AFM	
23705	AM91L30CF	
23706	AM91L30AF	
23707	AM91L30CDM	
23707	AM91L30CFM	
23708	AM91L30ADM	
23708	AM91L30AFM	
23709	AM9140CFC	
23710	AM9140AFC	
23711	AM9140CDM	
23711	AM9140CFM	
23712	AM9140ADM	
23712	AM9140AFM	
23713	AM91L40CFC	
23714	AM91L40AFC	
23715	AM91L40CDM	
23715	AM91L40CFM	
23716	AM91L40ADM	
23716	AM91L40AFM	
23801	2147	
23802	2114	
23803	2147H	
23804	2114A	
23805	2147H-3	
23806	2148H	
23807	2147H-2	
23901	54C929	
23901	6508	
23902	54C930	
23902	6518	

MILITARY PARTS—M38510/ to Commercial CROSS REFERENCE (Cont'd)

M38510/	Device	DESC Drawing
24001	2117 (200 ns)	
24001	4116	
24001	4116 (200 ns)	
24002	2117 (250 ns)	
24002	4116 (250 ns)	
24003	2117	
24003	4116	
24401	2164 (1 ms ref)	
24401	4564 (1 ms ref)	
24401	4564 (150 ns)	8201001
24401	6665 (1 ms ref)	
24401	8264 (1 ms ref)	
24401	9064-15	8201001
24402	2164 (2 ms ref)	
24402	4116	
24402	4564 (150 ns)	8201002
24402	4564 (2 ms ref)	
24402	6665 (2 ms ref)	
24402	8264 (2 ms ref)	
24402	9064-15	8201002
24403	2164	
24403	4564	
24403	4564 (200 ns)	8201003
24403	6665	
24403	8264	
24403	9064-20	8201003
24501	6504	8102401
24502	6514	8102402
24601	MT1257-12	
24601	41256P-12	
24602	MT1257-15	
24602	41256P-15	
24602	4256-12	8515203
24602	4256 (150 ns)	8515201
24603	MT1259-12	
24603	41256N-12	
24603	4556	
24604	MT1259-15	
24604	41256N-15	
24604	4556	
24801	TBD	
24901	411024	
24902	4C1024	
24903	511000	
25001	MKB4501-81	
25001	7C412-12	
25002	MKB4501-80	
25002	7C412-10	
25003	MKB4501-88	
25003	7C412-80	
27X01	27512-25	
27X02	27512-35	
27X03	27512-30	
27X04	27512-45	
270XX	27512 (250 ns)	5962-8513501
270XX	27512 (300 ns)	5962-8513503
270XX	27512 (350 ns)	5962-8513502
270XX	27512 (450 ns)	5962-8513504
28001	7110-1	
28101	2011A	
28901	7C147	
28902	7C148	
28903	7C147	
28904	7C148	
29101	6116	
29101	65162	
29102	6516	
29102	6516-8	8403601
29103	51C67	
29103	65262	8413201
29104	6116	
29104	65162	
29104	65162-8	8403602
29105	6116	
29105	65162	
29106	51C67	8413202
29201	AM99C641	
29201	F1600	
29201	IDT7187	
29201	IMS1600	
30X01	25LS2521	5962-8671301
30001	54LS00	
30002	54LS03	
30003	54LS04	
30004	54LS05	
30005	54LS10	
30006	54LS12	
30007	54LS20	
30008	54LS22	
30009	54LS30	
30101	54LS73	
30102	54LS74	
30103	54LS112	
30104	54LS113	
30105	54LS114	
30106	54LS174	
30107	54LS175	
30108	54LS107	
30109	54LS109	
30110	54LS76	7601301
30201	54LS40	
30202	54LS37	
30203	54LS38	
30204	54LS28	
30301	54LS02	
30302	54LS27	
30303	54LS266	
30401	54LS51	
30402	54LS54	
30501	54LS32	
30502	54LS86	
30601	54LS194A	
30602	54LS195A	
30603	54LS195B	
30604	54LS96	
30605	54LS164	
30606	54LS295B	
30607	54LS395B	
30608	54LS165A	7700601
30609	54LS166	8001701
30701	54LS138	7600501
30702	54LS139	7600701
30703	54LS42	7603101
30704	54LS47	7604501
30801	54LS181	
30901	54LS151	7601001
30902	54LS153	7601101
30903	54LS157	7600201
30904	54LS158	
30905	54LS251	7601601
30906	54LS257	7603701
30907	54LS258	7603801
30908	54LS253	7601701
30909	54LS298	7601901
31001	54LS11	
31002	54LS15	
31003	54LS21	
31004	54LS08	
31005	54LS09	8001901
31101	54LS85	
31201	54LS83A	7601401
31202	54LS283	7604301
31301	54LS13	
31302	54LS14	
31303	54LS132	7600401
31401	54LS123	7603901
31402	54LS221	7604201
31403	54LS122	7600301
31501	54LS90	7603201
31502	54LS93	7700101
31503	54LS160A	7700901
31504	54LS161A	7600801
31505	54LS168	8001801
31506	54LS169B	8001802
31507	54LS192	7603601
31508	54LS193	7600601
31509	54LS191	7600901
31510	54LS92	
31511	54LS162A	
31512	54LS163A	7603401
31513	54LS190	7603501
31601	54LS75	7601201
31602	54LS279	7601801
31603	54LS259	
31604	54LS375	
31605	54LS259B	
31701	54LS124	7704101
31801	54LS261	8002601
31901	54LS670	7704201
31902	54LS170	8002501
32X01	54LS640	
32001	54LS196	7701001
32002	54LS197	7601501
32003	54LS290	
32004	54LS293	
32102	54LS26	7602001
32201	54LS365	
32202	54LS366	
32203	54LS367	
32204	54LS368	
32301	54LS125A	
32302	54LS126	
32401	54LS240	7801201
32402	54LS241	
32403	54LS244	7705701
32404	54LS540	8415501
32405	54LS541	8415601
32501	54LS273	7801001
32502	54LS373	
32503	54LS374	7801101
32504	54LS377	
32505	54LS363	
32601	54LS155	
32602	54LS156	
32701	54LS390	7802601
32702	54LS393	
32703	54LS490	
32801	54LS242	8002001
32802	54LS243	8002002
32803	54LS245	8002101
32804	54LS646	
32805	54LS641	
32805	54LS648	
32806	54LS642	
32807	54LS645	
32901	54LS280	
33001	54F00	
33002	54F04	
33003	54F10	
33004	54F20	
33106	25LS174	
33107	25LS175	
33201	54F240	
33202	54F241	5962-8687401
33203	54F244	
33301	54F02	
33401	54F64	
33501	54F32	
33601	54F194	5962-8685001
33701	54F138	
33702	54F139	
33801	54F181	
33802	54F182	
33803	54F381	5962-8671001
33804	54F382	
33901	54F151A	
33902	54F153	
33903	54F157A	
33904	54F158	
33905	54F251A	
33906	54F257A	
33907	54F258A	
33908	54F253	
33909	54F352	
33910	54F353	
34001	54F08	
34002	54F11	
34101	54F174	
34102	54F109	
34103	54F112	
34104	54F175	
34105	54F374	
34106	54F534	
34107	54F174	
34108	54F378	
34109	54F379	
34201	54F283	
34301	54F161A	
34302	54F163A	
34303	54F191	
34304	54F193	
34401	54F160A	
34402	54F162A	
34403	54F190	
34404	54F192	
34501	54F86	
34601	54F373	
34602	54F533	
34603	54F563	
34604	54F573	
34701	54F521	
34801	54F242	
34802	54F243	5962-8683401
34803	54F245	8551101
34901	54F280	
35X01	54F113	
35X01	54F85	5962-8606901
35001	54F398	
35002	54F399	
36X01	25LS09	5962-8670801
36X01	25LS2518	5962-8671901
36X01	25LS399	5962-8670801
36X01	29LS18	5962-8671901
36X01	54LS145	8508401
36X01	54LS154	
36X01	54LS299	7802401

© IC MASTER 1988

MILITARY PARTS—M38510/ to Commercial CROSS REFERENCE (Cont'd)

M38510/	Device	DESC Drawing
36X01	54LS33	8512601
36X01	54LS353	8550801
36X01	54LS399	8415401
36X01	54LS629	8102101
36X02	25LS299	
36X02	54LS684	8415201
36X03	54LS688	8415301
36001	54LS148	7802701
36002	54LS348	
36101	54LS173A	
37001	54ALS00	
37002	54ALS10	
37003	54ALS20	
37004	54ALS30	
37005	54ALS133	
37006	54ALS04	
37101	54ALS74	8401101
37102	54ALS109	8400001
37103	54ALS112A	8400002
37104	54ALS574	8400101
37105	54ALS576	8400102
37106	54ALS874	8401001
37107	54ALS876	8401002
37201	54ALS174	8301901
37202	54ALS175	8301902
37203	54ALS373	8302001
37204	54ALS374	8302002
37301	54ALS02	
37302	54ALS27	
37401	54ALS08	
37402	54ALS11	
37501	54ALS32	
37601	54ALS299B	8302101
37602	54ALS323	8302102
37701	54ALS138	
37901	54ALS857	5962-8753301
38X01	54ALS09	8414201
38X01	54ALS151	8414101
38X01	54ALS153	8413401
38X01	54ALS191	5962-8684001
38X01	54ALS21	8414301
38X01	54ALS245	
38X01	54ALS251	8413501
38X01	54ALS253	8509601
38X01	54ALS257	8509701
38X01	54ALS273	8413601
38X01	54ALS832	8414501
38001	54ALS161B	8302201
38002	54ALS163B	8302202
38003	54ALS169B	8302501
38004	54ALS561A	8302203
38005	54ALS569A	8302502
38101	54ALS160	
38102	54ALS162	8407901
38103	54ALS168	
38104	54ALS560	
38105	54ALS568	
38201	54ALS573	8401201
38202	54ALS580	8401202
38203	54ALS873	8403201
38204	54ALS880	8403202
38301	54ALS240A	
38302	54ALS241A	
38303	54ALS244A	
38401	54ALS1000	8405901
38401	54ALS37	
38402	54ALS1002	
38402	54ALS28	
38403	54ALS1003	
38404	54ALS1008	
38404	54ALS1008A	8409701
38405	54ALS1010	8406001
38406	54ALS1011	
38407	54ALS1020	
38407	54ALS40	
38408	54ALS1032	
38409	54ALS1004	8406101
38410	54ALS1005	
38411	54ALS1034	8403101
38412	54ALS1035	
38501	54ALS640	
38502	54ALS641	
38503	54ALS642	
38504	54ALS643	
38505	54ALS645A	8403301
38506	54ALS242B	8401301
38507	54ALS243A	8401302
4XX01	Z8	
4XX01	10800	
4XX01	25LS2519	5962-8670201
4XX01	2904	8601701
4XX01	2919	5962-8670201
4XX01	3856	
4XX01	3870	
4XX01	6801	
4XX01	8085A	7901001
4XX01	9440	
4XX02	9085A	
40X01	6802	
40X01	6840	
40X01	6844	
40X01	6845	
40X01	6846	
40X01	6850	
40X01	6852	
40X01	6854	
40X01	6856	
40X01	6860	
40X01	6862	
40X01	6875	
40X02	6882	
40001	6800	
40101	MC6821	
40201	6810	
40301	MK34000	
40301	S6831B	
40301	2316E	
40301	2616	
40301	3516F	
40301	52116	
40301	68A316E	
40301	9218	
42X01	8216	
42X01	8226	
42X01	8238	
42X01	8253	5962-8652001
42X01	8255	
42X01	8257	
42X01	8259	
42X01	9511	
42X02	9517	
42X02	9519	
42001	8080A	7200201
42101	54S412	
42101	8212	
42201	8224	
42301	8228	
44X01	AM2932	
44X01	2903	
44X01	2910	7801701
44X01	2911A	8602801
44X01	2940	8603001
44X01	2942	5962-8680101
44X01	2965	5962-8670701
44X02	2966	5962-8670702
44001	2901A	7700701
44001	2901B	7700701
44001	2901C	8405701
44101	2905	
44102	2906	
44103	2907	
44104	2915A	
44105	2916A	
44106	2917A	5962-8671401
44201	25S18	5962-8671501
44201	2918	5962-8671501
44301	2909	
44301	2909A	8602701
44401	2914	8602901
46001	SBP9900A	
46501	SBP9989	
46901	SBR9000	
47001	1802	
47101	1821	
47102	1822	
47201	1832	
47301	1852	
47401	1853	7901901
47501	1854	7901701
47601	1856	
47602	1857	
48X01	Z8420A	8418601
48X01	Z8430A	8301601
48X01	Z8442A	8301501
48X02	Z8420	8418602
48X02	Z8430	8301602
48X02	Z8442	8301502
48001	Z80A CPU	
48002	Z80 CPU	
48003	Z80B CPU	
48101	Z80A SIO/2	
48102	Z80 SIO/2	
48201	Z80A DMA	
48202	Z80 DMA	
48301	Z80A CTC	
48302	Z80 CTC	
48401	Z80A PIO	
48402	Z80 PIO	
49001	8048	
49002	8035L	
5XX01	82S105	5962-8670901
50X01	HD15530-8	
50X01	PAL20L10A	8412905
50X01	PAL32R16	
50X02	PAL20X8A	8412906
50001	TDC1008JM	
50002	TDC1009JM	
50003	TDC1010JM	
50004	MPY008HC2V	
50005	MPY012HC1V	
50006	MPY012HC1V	
50201	82S101	
50201	93458	
50202	82S100	
50202	93459	
50301	PAL10H8	8103501
50302	PAL12H6	8103502
50303	PAL14H4	8103503
50304	PAL16H2	8103504
50305	PAL16C1	8103505
50306	PAL10L8	8103506
50307	PAL12L6	8103507
50308	PAL14L4	8103508
50309	PAL16L2	8103509
50401	PAL16L8	8103601
50401	PAL16L8A	8103607
50402	PAL16R8	8103602
50402	PAL16R8A	8103608
50403	PAL16R6	8103603
50403	PAL16R6A	8103609
50404	PAL16R4	8103604
50404	PAL16R4A	8103610
50405	PAL16X4	8103605
50406	PAL16A4	8103606
50407	PAL16L8A-2	8103611
50408	PAL16R8A-2	8103612
50409	PAL16R6A-2	8103613
50410	PAL16R4A-2	8103614
50501	PAL20L8A	8412901
50502	PAL20R8A	8412902
50503	PAL20R6A	8412903
50504	PAL20R4A	8412904
506XX	PAL16L8B	5962-8515501
506XX	PAL16L8B-2	5962-8515505
506XX	PAL16R4B	5962-8515504
506XX	PAL16R4B-2	5962-8515508
506XX	PAL16R6B	5962-8515503
506XX	PAL16R6B-2	5962-8515507
506XX	PAL16R8B	5962-8515502
506XX	PAL16R8B-2	5962-8515506
50601	PAL16L8-20	
50602	PAL16R8-20	
50603	PAL16R6-20	
50604	PAL16R4-20	
50605	PAL16L8-30	
50606	PAL16R8-30	
50607	PAL16R6-30	
50608	PAL16R4-30	
52X01	Z8001B	8000304
52X02	Z8002B	8000305
52001	Z8001	8000301
52002	Z8002	8000302
52003	Z8001A	8000303
52004	Z8002A	
53X01	8282	8417901
53X01	8284	
53X01	8285	
53X01	8288	
53X02	8283	8417902
53X02	8287	5962-8686802
53001	8086	
53101	80286-6	5962-8514802
53501	M80286-6	
53502	M80286-8	
53502	80286-8	5962-8514801
54001	68000-6	
54001	68000 (6 MHz)	8202101
54002	68000-8	
54002	68000 (8 MHz)	8202102
54003	68000-10	
54003	68000 (10 MHz)	8202103
550XX	9450-15	8416901
55501	UT1553B	
59901	HM1000R	
6XX01	54HCT154	5962-8670101
6XX01	54HCT32	5962-8685201

MILITARY PARTS—M38510/ to Commercial CROSS REFERENCE (Cont'd)

M38510/	Device	DESC Drawing
6XX01	54HCT74	5962-8685301
6XX01	54HCU04	8601001
6XX01	54HC238	5962-8688401
60001	TBD	
60002	TBD	
60501	TBD	
60502	TBD	
61001	6516-1	
61002	6516-2	
61003	6516-3	
61501	1HC34	
61601	TVB382	
62001	SPE	
65001	54HC00	8403701
65002	54HC10	8403801
65003	54HC20	8403901
65004	54HC30	8404001
65005	54HC132	
65101	54HC02	840401
65102	54HC27	8404201
65103	54HC266	8404301
65104	54HC4002	8404401
65105	54HC7266	
65201	54HC32	8404501
65202	54HC86	8404601
65203	54HC08	8404701
65204	54HC11	8404801
65301	54HC73	5962-8515301
65302	54HC74	8405601
65303	54HC107	5962-8515401
65304	54HC109	8415001
65305	54HC112	8408801
65306	54HC173	5962-8682501
65307	54HC174	8407301
65308	54HC175	8408901
65401	54HC75	8407001
65402	54HC259	8551901
65404	54HC533	5962-8681301
65405	54HC563	5962-8606201
65406	54HC573	8512801
65453	54HCT373	5962-8686701
65501	54HC242	
65502	54HC243	8409001
65503	54HC245	8408501
65504	54HC620	
65505	54HC623	
65506	54HC640	5962-8780901
65507	54HC643	
65508	54HC646	5962-8688501
65509	54HC648	
65553	54HCT245	8550601
65601	54HC273	8409901
65602	54HC374	8407101
65603	54HC377	5962-8780701
65604	54HC574	
65605	54HC534	5962-8681401
65606	54HC564	5962-8681501
65652	54HCT374	8550701
65701	54HC04	8409801
65702	54HC14	8409101
65703	54HC240	8407401
65704	54HC241	
65705	54HC244	8409601
65706	54HC365	8500101
65707	54HC366	5962-8682801
65708	54HC367	8500201
65709	54HC368	5962-8681201
65710	54HC540	
65711	54HC541	
65712	54HC4049	5962-8681901
65713	54HC4050	5962-8682001
65751	54HCT04	
65752	54HCT14	5962-8689001
65753	54HCT240	8550501
65754	54HCT241	
65755	54HCT244	8513001
65760	54HCT540	
65761	54HCT541	
65801	54HC42	5962-8682101
65802	54HC138	8406201
65803	54HC139	8409201
65804	54HC154	5962-8682201
65852	54HCT138	8550401
65853	54HCT139	
65901	54HC123	5962-8684701
65902	54HC221	5962-8780501
66X01	54HC4520	
66001	54HC147	8406401
66002	54HC148	
66101	54HC85	8601301
66102	54HC682	
66103	54HC684	
66104	54HC686	
66105	54HC688	5962-8681801
66201	54HC151	8412801
66202	54HC153	8409301
66203	54HC157	5962-8606101
66204	54HC158	5962-8682301
66205	54HC251	8512501
66206	54HC253	
66207	54HC257	8512401
66208	54HC354	
66209	54HC356	
66301	54HC160	5962-8682401
66302	54HC161	8407501
66303	54HC162	8409401
66304	54HC163	8607601
66305	54HC191	5962-8689101
66306	54HC192	5962-8780801
66307	54HC193	
66308	54HC390	8600901
66309	54HC393	8410001
66310	54HC4017	8601101
66311	54HC4020	8500301
66312	54HC4024	8601201
66313	54HC4040	8500401
66401	54HC590	
66402	54HC592	
66403	54HC593	
66501	54HC164	
66502	54HC165	8409501
66503	54HC166	
66504	54HC194	5962-8682601
66505	54HC195	5962-8682701
66506	54HC299	5962-8780601
66507	54HC595	5962-8681601
66508	54HC597	5962-8681701
66601	54HC670	
66701	54HC283	
66801	54HC280	8607701
70X01	AM26LS31	7802301
70X01	AM26LS32	7802001
70X01	AM26LS33	7802002
70X01	AM686	
70X01	CA3130B	7703301
70X01	HA12420-8	
70X01	LH0021	8508801
70X01	LH0033	8001401
70X01	LH0041	8508701
70X01	LH0101A	8508901
70X01	LM103	
70X01	LM113	5962-8671101
70X01	LM117HV	
70X01	LM136A	
70X01	LM137HV	
70X01	LM144	
70X01	LM4250	7703901
70X01	LM709	
70X01	MC1709U	
70X01	REF02A	8551401
70X01	UHC508	
70X01	UHD508	
70X01	XR2211	7705011
70X01	0002	
70X01	0032	
70X01	LM103H-2.4	77028
70X01	10516	7800901
70X01	1842	5962-8670401
70X01	4104	
70X01	55182	7900801
70X01	55183	7900901
70X01	5539	5962-8606401
70X01	55500	8601801
70X01	685	8600801
70X01	685	8600802
70X01	733	8418501
70X01	7820	
70X02	AM687	
70X02	LH0101	8508902
70X02	LM113-1	5862-8671102
70X02	2640	
70X02	55501	8601802
70X03	LM113-2	5962-8671103
70X03	LM143	7800303YX
70X04	1536	7800304
75001	54AC00	5962-8754901
75002	54AC10	5962-8761001
75003	54AC20	5962-8761301
75021	54AC11000	5962-8754902
75101	54AC02	5962-8761201
75203	54AC08	5962-8761501
75204	54AC11	5962-8761101
75303	54AC174	5962-8762601
75403	54AC373	5962-8755501
75453	54ACT373	5962-8755601
75701	54AC04	5962-8760901
75702	54AC14	5962-8762401
75703	54AC240	5962-8755001
75704	54AC241	5962-8755101
75705	54AC244	5962-8755201
75723	54AC11240	5962-8755002
75852	54ACT138	5962-8755401
76202	54AC153	5962-8762501

© IC MASTER 1988

MILITARY PARTS—DESC Drawing to M38510/ CROSS REFERENCE

DESC Drawing	M38510/	Device
5692-8513101	19002	506A
5862-8671102	70X02	LM113-1
5962-8512701	14001	AD574AUD
5962-8512702	14002	AD574ATD
5962-8512703	14003	HI574AUD
5962-8512704	14004	HI574ATD
5962-8513102	19004	507A
5962-8513103	19006	509A
5962-8513104	19002	5116
5962-8513105	12015	5216
5962-8513106	19006	5208
5962-8513301	XXX01	80287-10
5962-8513302	XXX02	80287-8
5962-8513303	XXX03	80287-6
5962-8513501	270XX	27512 (250 ns)
5962-8513502	270XX	27512 (350 ns)
5962-8513503	270XX	27512 (300 ns)
5962-8513504	270XX	27512 (450 ns)
5962-8514801	53502	80286-8
5962-8514802	53101	80286-6
5962-8514901	XXX01	82288-6
5962-8514902	XXX02	82288-8
5962-8515301	65301	54HC73
5962-8515401	65303	54HC107
5962-8515501	506XX	PAL16L8B
5962-8515502	506XX	PAL16R8B
5962-8515503	506XX	PAL16R6B
5962-8515504	506XX	PAL16R4B
5962-8515505	506XX	PAL16L8B-2
5962-8515506	506XX	PAL16R8B-2
5962-8515507	506XX	PAL16R6B-2
5962-8515508	506XX	PAL16R4B-2
5962-85501	17702	40106B
5962-8550301	XXX01	8X320
5962-8551801	XXX01	Z8030A
5962-8551802	XXX02	Z8030
5962-8552501	2XX01	99C88-15
5962-8552502	2XX02	99C88-12
5962-8552503	2XX03	99C88-10
5962-8552504	2XX04	7164S70
5962-8552504	2XX04	99C88-70
5962-8552505	2XX04	6164-70
5962-8552505	2XX05	6164-55
5962-8552505	2XX05	7164S55
5962-8552601	2XX01	27PS191
5962-8552602	2XX04	27PS291A
5962-8552701	2XX01	27S45
5962-8552702	2XX02	27S45A
5962-8552703	2XX03	27S47
5962-8552704	2XX04	27S47A
5962-8552801	XXX01	82C89
5962-8604901	XXX01	BUS-63105
5962-8605201	2XX01	8X350
5962-8605801	14108	2803
5962-8606101	66203	54HC157
5962-8606201	65405	54HC563
5962-8606401	70X01	5539
5962-8606901	35X01	54F85
5962-8608101	2XX01	2168-55
5962-8608102	2XX02	2168-70
5962-8608103	2XX03	2169-50
5962-8608104	2XX04	2169-70
5962-8608801	XXX01	82720
5962-8652001	42X01	8253
5962-8670101	6XX01	54HCT154
5962-8670201	4XX01	25LS2519
5962-8670201	4XX01	2919
5962-8670301	2XX01	27S19
5962-8670302	2XX02	27S19A
5962-8670401	70X01	1842
5962-8670601	2XX01	27S35
5962-8670602	2XX02	27S35A
5962-8670603	2XX03	27S37
5962-8670604	2XX04	27S37A
5962-8670701	44X01	2965
5962-8670702	44X02	2966
5962-8670801	36X01	25LS09
5962-8670801	36X01	25LS399
5962-8670901	20802	82S141
5962-8670901	5XX01	82S105
5962-8671001	33803	54F381
5962-8671101	70X01	LM113
5962-8671103	70X03	LM113-2
5962-8671301	30X01	25LS2521
5962-8671401	44106	2917A
5962-8671501	44201	25S18
5962-8671501	44201	2918
5962-8671901	36X01	25LS2518
5962-8671901	36X01	29LS18
5962-8680101	44X01	2942
5962-8681201	65709	54HC368
5962-8681301	65404	54HC533
5962-8681401	65605	54HC534
5962-8681501	65606	54HC564
5962-8681601	66507	54HC595
5962-8681701	66508	54HC597
5962-8681801	66105	54HC688
5962-8681901	65712	54HC4049
5962-8682001	65713	54HC4050
5962-8682101	65801	54HC42
5962-8682201	65804	54HC154
5962-8682301	66204	54HC158
5962-8682401	66301	54HC160
5962-8682501	65306	54HC173
5962-8682601	66504	54HC194
5962-8682701	66505	54HC195
5962-8682801	65707	54HC366
5962-8683001	228XX	2864-25
5962-8683002	228XX	2864-35
5962-8683006	228XX	X2864A-25
5962-8683007	228XX	X2864A-35
5962-8683401	34802	54F243
5962-8684001	38X01	54ALS191
5962-8684701	65901	54HC123
5962-8685001	33601	54F194
5962-8685201	6XX01	54HCT32
5962-8685301	6XX01	54HCT74
5962-8686701	65453	54HCT373
5962-8686802	53X02	8287
5962-8687401	33202	54F241
5962-8688401	6XX01	54HC238
5962-8688501	65508	54HC646
5962-8688701	13504	OP227A
5962-8689001	65752	54HCT14
5962-8689101	66305	54HC191
5962-8753301	37901	54ALS857
5962-8754901	75001	54AC00
5962-8754902	75021	54AC11000
5962-8755001	75703	54AC240
5962-8755002	75723	54AC11240
5962-8755101	75704	54AC241
5962-8755201	75705	54AC244
5962-8755401	75852	54ACT138
5962-8755501	75403	54AC373
5962-8755601	75453	54ACT373
5962-8760901	75701	54AC04
5962-8761001	75002	54AC10
5962-8761101	75204	54AC11
5962-8761201	75101	54AC02
5962-8761301	75003	54AC20
5962-8761501	75203	54AC08
5962-8762401	75702	54AC14
5962-8762501	76202	54AC153
5962-8762601	75303	54AC174
5962-8780501	65902	54HC221
5962-8780601	66506	54HC299
5962-8780701	65603	54HC377
5962-8780801	66306	54HC192
5962-8780901	65506	54HC640
7200201	42001	8080A
7600201	30903	54LS157
7600301	31403	54LS122
7600401	31303	54LS132
7600501	30701	54LS138
7600601	31508	54LS193
7600701	30702	54LS139
7600801	31504	54LS161A
7600901	31509	54LS191
7601001	30901	54LS151
7601101	30902	54LS153
7601201	31601	54LS75
7601301	30110	54LS76
7601401	31201	54LS83A
7601501	32002	54LS197
7601601	30905	54LS251
7601701	30908	54LS253
7601801	31602	54LS279
7601901	30909	54LS298
7602001	32102	54LS26
7603101	30703	54LS42
7603201	31501	54LS90
7603401	31512	54LS163A
7603501	31513	54LS190
7603601	31507	54LS192
7603701	30906	54LS257
7603801	30907	54LS258
7603901	31401	54LS123
7604001	07601	54S194
7604101	07701	54S138
7604201	31402	54LS221
7604301	31202	54LS283
7604501	30704	54LS47
7700101	31502	54LS93
77003701	1XX01	4585B
7700401	07702	54S139
7700601	30608	54LS165A
7700701	44001	2901A
7700701	44001	2901B
7700801	11201	LM139
7700901	31503	54LS160A
7701001	32001	54LS196
7702001	17403	4502B
7702301	18108	4520B
7702401	17001	4081B
7702501	17901	4094B
7702701	17401	4069B
7702701	17401	54C04
7703001	01X01	54185A
7703101	05X01	4060A
7703201	17302	4515B
7703301	70X01	CA3130B
7703401XX	11703	LM117H
7703401YX	11704	LM117K
7703403XX	11803	LM137H
7703403YX	11804	LM137K
7703501	17301	4514B
7703601	1XX01	54C08
7703701	1XX03	54C85
7703901	70X01	LM4250
7704001XX	11501	LM120H-5.0
7704001XX	11501BXX	79M05
7704001YX	11505	LM120K-5.0
7704001YX	11505BYX	7905K
7704003XX	11502	LM120H-12
7704003XX	11502BXX	79M12
7704003YX	11506	LM120K-12
7704003YX	11506BYX	7912K
7704004XX	11503	LM120H-15
7704004XX	11503BXX	79M15
7704004YX	11507	LM120K-15
7704004YX	11507BYX	7915K
7704005XX	11504	LM120H-24
7704005XX	11504BXX	79M24
7704005YX	11508	LM120K-24
7704005YX	11508BYX	7924K
7704101	31701	54LS124
7704201	31901	54LS670
7704301	11005	LM124
7704501	1XX01	4528B
7704601	17701	4093B
7704701	17304	4555B
7704801	17305	4556B
7704901	12903	55452
7705011	70X01	XR2211
7705101	17003	4073B
7705201	XXX01	6N134
7705201	19007	DG508A
7705201	19007	HI508
7705201	19007	IH6108
7705202	19005	HI508A
7705203	19005	5108
7705301	12302	DG201
7705501	17504	4098B
7705601	1XX01	54C906
7705701	32403	54LS244
7705801	1XX01	4040B
7705901	17002	4082B
7706001	17102	4072B
7800303YX	70X03	LM143
7800304	70X04	1536
7800901	70X01	10516
7801001	32501	54LS273
7801101	32503	54LS374
7801201	32401	54LS240
7801401	13X01	DG129
7801501	2XX01	27S07A
7801502	2XX02	54S189
7801503	2XX03	27S07
7801504	2XX04	27LS07
7801601	2XX01	27S31
7801601	20802	5341-1
7801601	20802	7641
7801601	20802	93448
7801701	44X01	2910
7802001	70X01	AM26LS32

MILITARY PARTS—DESC Drawing to M38510/ CROSS REFERENCE (Cont'd)

DESC Drawing	M38510/	Device
7802002	70X01	AM26LS33
7802201	22101	2516
7802201	22101	2516 (450 ns)
7802201	22101	2716
7802201	22101	2716 (450 ns)
7802301	70X01	AM26LS31
7802401	36X01	54LS299
7802601	32701	54LS390
7802701	36001	54LS148
7802801	12601	SG1524
7900801	70X01	55182
7900901	70X01	55183
7901001	4XX01	8085A
7901101	05151	4013B
7901201	05754	4021B
7901301	05053	4023B
7901401	05553	4049UB
7901501	1XX01	4052B
7901601	1XX01	4557B
7901701	47501	1854
7901901	47401	1853
7902401	209XX	7681P
8000301	52001	Z8001
8000302	52002	Z8002
8000303	52003	Z8001A
8000304	52X01	Z8001B
8000305	52X02	Z8002B
8001201	22202	2732
8001202	22201	2532
8001401	70X01	LH0033
8001701	30609	54LS166
8001801	31505	54LS168
8001802	31506	54LS169B
8001901	31005	54LS09
8002001	32801	54LS242
8002002	32802	54LS243
8002101	32803	54LS245
8002201	07905	54S251
8002301	07907	54S258
8002501	31902	54LS170
8002601	31801	54LS261
8003701	10303	LM106
8004101	10406	7831
8004102	10407	7832
8100601	10501	5040
8100602	10502	5041
8100603	10503	5042
8100604	10504	5043
8100605	10505	5044
8100606	10506	5045
8100607	10507	5046
8100608	10508	5047
8100609	10501	5040
8100609	10501	5140
8100610	10502	5041
8100610	10502	5141
8100611	10503	5042
8100611	10503	5142
8100612	10504	5043
8100612	10504	5143
8100613	10505	5044
8100613	10505	5144
8100614	10506	4145
8100614	10506	5045
8100615	10507	5046
8100615	10507	5046
8100616	10508	5047
8100616	10508	5047
8100617	10501	5140
8100618	10502	5141
8100619	10503	5142
8100620	10504	5143
8100621	10505	5144
8100622	10506	5145
8100623	10507	5046
8100624	10508	5047
8100801	12101	AD562
8100802	12102	AD563
8101501	2XX01	2118
8101502	2XX02	4516
8101601	18X01	4029B
8101801	1XX01	4053B
8101901	18X01	4042B
8102001	1XX01	4047B
8102101	36X01	54LS629
8102301	11901	TL061
8102302	11902	TL062
8102303	11903	TL064
8102304	11904	TL071
8102305	11905	TL072
8102306	11906	TL074
8102401	24501	6504
8102402	24502	6514
8103501	50301	PAL10H8
8103502	50302	PAL12H6
8103503	50303	PAL14H4
8103504	50304	PAL16H2
8103505	50305	PAL16C1
8103506	50306	PAL10L8
8103507	50307	PAL12L6
8103508	50308	PAL14L4
8103509	50309	PAL16L2
8103601	50401	PAL16L8
8103602	50402	PAL16R8
8103603	50403	PAL16R6
8103604	50404	PAL16R4
8103605	50405	PAL16X4
8103606	50406	PAL16A4
8103607	50401	PAL16L8A
8103608	50402	PAL16R8A
8103609	50403	PAL16R6A
8103610	50404	PAL16R4A
8103611	50407	PAL16L8A-2
8103612	50408	PAL16R8A-2
8103613	50409	PAL16R6A-2
8103614	50410	PAL16R4A-2
8200501	223XX	2764 (450 ns)
8200502	223XX	2764 (250 ns)
82008B101	21102	53S3281
8200801	21101	76321
8200801	21103	29671
8200802	211XX	53S3281A
8200901	21X01	27S49
8200901	21X01	76641
8200901	21201	93Z565
8201001	24401	4564 (150 ns)
8201001	24401	9064-15
8201002	24402	4564 (150 ns)
8201002	24402	9064-15
8201003	24403	4564 (200 ns)
8201003	24403	9064-20
8201006	2XX01	4164-15
8201007	2XX01	4164-20
8201007	2XX01	9064-20
8201008	2XX01	4164-12
8201009	2XX01	9064-15
8201010	2XX01	9064-20
8202101	54001	68000 (6 MHz)
8202102	54002	68000 (8 MHz)
8202103	54003	68000 (10 MHz)
8202201	17505	40174B
8203601	13501	OP07A
8203602	13502	OP07
8300101	XXX01	Z8536
8301501	48X01	Z8442A
8301502	48X02	Z8442
8301601	48X01	Z8430A
8301602	48X02	Z8430
8301901	37201	54ALS174
8301902	37202	54ALS175
8302001	37203	54ALS373
8302002	37204	54ALS374
8302101	37601	54ALS299B
8302102	37602	54ALS323
8302201	38001	54ALS161B
8302202	38002	54ALS163B
8302203	38004	54ALS561A
8302401	XXX01	6N140A
8302501	38003	54ALS169B
8302502	38005	54ALS569A
8400001	37102	54ALS109
8400002	37103	54ALS112A
8400101	37104	54ALS574
8400102	37105	54ALS576
8401001	37106	54ALS874
8401002	37107	54ALS876
8401101	37101	54ALS74
8401201	38201	54ALS573
8401202	38202	54ALS580
8401301	38506	54ALS242B
8401302	38507	54ALS243A
8403101	38411	54ALS1034
8403201	38203	54ALS873
8403202	38204	54ALS880
8403301	38505	54ALS645A
8403601	29102	6516-8
8403602	29104	65162-8
8403701	65001	54HC00
8403801	65002	54HC10
8403901	65003	54HC20
8404001	65004	54HC30
840401	65101	54HC02
8404201	65102	54HC27
8404301	65103	54HC266
8404401	65104	54HC4002
8404501	65201	54HC32
8404601	65202	54HC86
8404701	65203	54HC08
8404801	65204	54HC11
8405201	XXX01	80C86
8405601	65302	54HC74
8405701	44001	2901C
8405901	38401	54ALS1000
8406001	38405	54ALS1010
8406101	38409	54ALS1004
8406201	65802	54HC138
8406401	66001	54HC147
8406501	XXX01	82C54
8406602	XXX01	82C55A
8406801	XXX01	82C84A
8407001	65401	54HC75
8407101	65602	54HC374
8407301	65307	54HC174
8407401	65703	54HC240
8407501	66302	54HC161
8407901	38102	54ALS162
8408501	65503	54HC245
8408801	65305	54HC112
8408901	65308	54HC175
8409001	65502	54HC243
8409101	65702	54HC14
8409201	65803	54HC139
8409301	66202	54HC153
8409401	66303	54HC162
8409501	66502	54HC165
8409601	65705	54HC244
8409701	38404	54ALS1008A
8409801	65701	54HC04
8409901	65601	54HC273
8410001	66309	54HC393
8410901	14801	TL431
8411101	224XX	27256 (350 ns)
8411102	22401	27256 (250 ns)
8411104	22403	27256 (170 ns)
8412801	66201	54HC151
8412901	50501	PAL20L8A
8412902	50502	PAL20R8A
8412903	50503	PAL20R6A
8412904	50504	PAL20R4A
8412905	50X01	PAL20L10A
8412906	50X02	PAL20X8A
8413201	29103	65262
8413202	29106	51C67
8413401	38X01	54ALS153
8413501	38X01	54ALS251
8413601	38X01	54ALS273
8414101	38X01	54ALS151
8414201	38X01	54ALS09
8414301	38X01	54ALS21
8414501	38X01	54ALS832
8415001	65304	54HC109
8415201	36X02	54LS684
8415301	36X03	54LS688
8415401	36X01	54LS399
8415501	32404	54LS540
8415601	32405	54LS541
8416901	550XX	9450-15
8417901	53X01	8282
8417902	53X02	8283
8418501	70X01	733
8418601	48X01	Z8420A
8418602	48X02	Z8420
8419001	XXX01	8751H-8
8500101	65706	54HC365
8500201	65708	54HC367
8500301	66311	54HC4020
8500401	66313	54HC4040
8501501	XXX01	82C52
8503001	13601	2700S
8503002	13601	2700U
8503003	13602	2702S
8503004	13602	2702U
8506301	XXX01	8097
8506401	XXX01	80C31
8506402	XXX02	80C51
8508401	36X01	54LS145
8508701	70X01	LH0041
8508801	70X01	LH0021
8508901	70X01	LH0101A
8508902	70X02	LH0101
8509601	38X01	54ALS253
8509701	38X01	54ALS257
8512401	66207	54HC257
8512501	66205	54HC251
8512601	36X01	54LS33
8512801	65406	54HC573

© IC MASTER 1988

MILITARY PARTS—DESC Drawing to M38510/ CROSS REFERENCE (Cont'd)

DESC Drawing	M38510/	Device
8513001	65755	54HCT244
8515201	24602	4256 (150 ns)
8515203	24602	4256-12
8550201	XXX01	8X305
8550401	65852	54HCT138
8550501	65753	54HCT240
8550601	65553	54HCT245
8550701	65652	54HCT374
8550801	36X01	54LS353
8551101	34803	54F245
8551401	70X01	REF02A
8551501	12603	SG1526
8551701	XXX01	Z8036A
8551702	XXX02	Z8036
8551901	65402	54HC259
8552001	XXX01	8397
8600801	70X01	685
8600802	70X01	685
8600901	66308	54HC390
8601001	6XX01	54HCU04
8601101	66310	54HC4017
8601201	66312	54HC4024
8601301	66101	54HC85
8601401	10307	LM119
8601402	10306	LM119A
8601701	4XX01	2904
8601801	70X01	55500
8601802	70X02	55501
8602001	2XX01	27LS00
8602002	2XX02	27LS00A
8602003	2XX03	27LS01
8602004	2XX04	27LS01A
8602301	2XX01	82S16
8602501	2XX01	29705A
8602701	44301	2909A
8602801	44X01	2911A
8602901	44401	2914
8603001	44X01	2940
8605101	2XX01	27S02
8605102	2XX02	27S02A
8605104	2XX04	27S03
8605105	2XX05	27S03A
8605106	2XX06	27LS03
8607601	66304	54HC163
8607701	66801	54HC280
8605103	2XX03	27LS02

© IC MASTER 1988

MILITARY PARTS—QPL Selection Guide

DIGITAL

Arithmetic Functions

Description	M38510/	Device	Source
ALU/Function Generator	07801	54S181	Signetics
Arithmetic Logic/Function Generator	01101	54181	National
	30801	54LS181	Motorola
Decoder/Demultiplexer	07801	54S181	National
Look-Ahead Carry Generator	01102	54182	Motorola
	07802	54S182	TI
4-Bit Full Adder	R05451	4008B	GE/RCA
	05401	4008A	Sprague
4-Bit Magnitude Comparator	08201	54S85	Signetics
		54S85	TI
	15001	5485	National
		5485	Signetics
	31101	54LS85	Fairchild
		54LS85	Motorola
		54LS85	National
		54LS85	Signetics
		54LS85	TI
4-Bit Binary Full Adder	31201	54LS83A	Fairchild
		54LS83A	Motorola
		54LS83A	TI
	31202	54LS283	Fairchild
		54LS283	Motorola
		54LS283	National
		54LS283	TI
4-Bit Binary Full Adder (Look-Ahead Carry)	00602	5483	Fairchild
		5483	National
		5483	Signetics
		5483	TI
	34201	54F283	◊ Fairchild

Buffers/Inverters

Description	M38510/	Device	Source
Dual Complementary Pair plus Inverter	05301	4007A	GE/RCA
		4007A	National
		4007A	Sprague
Dual 4-Input Buffer NAND Gate	38407	54ALS40	TI
Dual 4-Input NAND Buffer	00301	5440	Fairchild
		5440	National
		5440	TI
	02401	54H40	TI
	07201	54S40	Signetics
	30201	54LS40	Motorola
		54LS40	National
		54LS40	TI
Quad Gated Buffer, TS	15302	54126	Signetics
	32301	54LS125	Motorola
		54LS125	Signetics
		54LS125	TI
	32302	54LS126	Motorola
		54LS126	TI
Quad True/Complement Buffer	R05555	4041UB	GE/RCA
Quad 2-Input Buffer NAND Gate	38401	54ALS37	TI
Quad 2-Input NAND Buffer	00302	5437	Fairchild
		5437	National
		5437	TI
	30202	54LS37	Motorola
		54LS37	National
		54LS37	Signetics
		54LS37	TI
Quad 2-Input NAND Buffer, O/C	00303	5438	National
		5438	TI
Quad 2-Input NOR Buffer	30204	54LS28	Motorola
	38402	54ALS28	TI
Hex Buffer/Converter, Inverting	R05503	4049A	GE/RCA
	05501	4009A	Sprague
	05503	4049A	National
		4049A	Sprague
	05553	4049UB	Sprague
Hex Buffer/Converter, Non-Inverting	H05554	4050B	GE/RCA
	R05504	4050A	GE/RCA
	05502	4010A	Sprague
	05504	4050A	National
		4050A	Sprague
	05554	5040B	National
		4050B	Sprague
Hex Buffer, TS	16301	54365	Signetics
	32201	54LS365	Fairchild
		54LS365	Motorola
		54LS365	National
		54LS365	Signetics
		54LS365	TI
	32203	54LS367	Fairchild
		54LS367	Motorola
		54LS367	National
		54LS367	Signetics
		54LS367	TI
	38411	54ALS1034	TI
Hex Buffer, Three State	16303	54367	Signetics
Hex Inverter	R17401	4069UB	GE/RCA
	00105	5404	Fairchild
		5404	Motorola
		5404	National
		5404	Signetics
		5404	TI
	02005	54L04	National
	03003	936	Fairchild
	07003	54S04	National
		54S04	Signetics
		54S04	TI
	17401	4069UB	Sprague
	30003	54LS04	Fairchild
		54LS04	Motorola
		54LS04	National
		54LS04	Signetics
		54LS04	TI

(Continued)

Description	M38510/	Device	Source
Hex Inverter (Cont'd)	33002	54F04	◊ Fairchild
		54F04	Motorola
		54F04	Signetics
	37006	54ALS04	TI
Hex Inverter/Buffer	R17403	4502B	GE/RCA
Hex Inverter, O/C	00108	5405	National
		5405	TI
	07004	54S05	TI
	30004	54LS05	Fairchild
		54LS05	Motorola
		54LS05	National
		54LS05	TI
Hex Inverter Schmitt Trigger	66702	54HC14	National
Hex Inverter, TS	16304	54368	Signetics
	32202	54LS366	Fairchild
		54LS366	Motorola
		54LS366	National
		54LS366	TI
	32204	54LS368	Fairchild
		54LS368	Motorola
		54LS368	National
		54LS368	Signetics
		54LS368	TI
Hex Inverter, Unbuffered Outputs	R05553	4049UB	GE/RCA

Counters

Description	M38510/	Device	Source
Divide-by-8 Counter	H05654	4022B	GE/RCA
Divide-by-8 Counter/Divider, Decoded	H05604	4022A	GE/RCA
Divide-by-8 Counter/Divider, Decoded Output	H05604	4022A	GE/RCA
	05604	4022A	National
		4022A	Sprague
Divide-by-12 Counter	31510	54LS92	Motorola
		54LS92	TI
Fully Synchronous Decade Counter	01305	54162	National
	31511	54LS162	Motorola
		54LS162	TI
Fully Synchronous 4-Bit Binary Counter	01304	54163	National
		54163	Signetics
	31512	54LS163	Motorola
		54LS163	Signetics
		54LS163	TI
	34302	54F163A	◊ Fairchild
	38002	54ALS163	TI
Presettable Divide-by-N Counter	R05652	4018B	GE/RCA
	05602	4018A	National
		4018A	Sprague
	05652	4018B	National
Synchronous, Preset Input, Mode Control, Look-Ahead Carry, Counter	31506	54LS169A	National

Based on QPL-38510-72, 17 July 1987

© IC MASTER 1988

DIGITAL

Counters (Cont'd)

Description M38510/	Device	Source
Synchronous Binary Up/Down Counter		
31509	54LS191	Motorola
	54LS191	National
	54LS191	Signetics
	54LS191	TI
Synchronous Decade Counter		
01303	54160	National
31503	54LS160	Motorola
	54LS160	TI
Synchronous Decade Up/Down Counter		
31513	54LS190	Motorola
	54LS190	TI
Synchronous 4-Bit Binary Counter		
01306	54161	National
	54161	Signetics
	54161	TI
31504	54LS161	Motorola
	54LS161A	National
	54LS161	Signetics
	54LS161	TI
34301	54F161A	◊ Fairchild
38001	54ALS161	TI
Binary Up Counter		
32002	54LS197	National
	54LS197	Signetics
Binary Up/Down Counter		
31508	54LS193	Fairchild
	54LS193	Motorola
	54LS193	National
	54LS193	Signetics
	54LS193	TI
34304	54F193	◊ Fairchild
38003	54ALS169	TI
Dual Decade Counter, Ripple		
32701	54LS390	TI
32703	54LS490	TI
Dual 4-Bit Binary Counter, Ripple		
32702	54LS393	Motorola
	54LS393	National
	54LS393	TI
Dual 4-Bit Binary Up Counter, Ripple		
32702	54LS393	Signetics
Decade Count Up/Down, Synchronous, Preset Input		
34404	54F192	◊ Fairchild
Decade Counter		
31501	54LS90	Motorola
	54LS90	TI
Decade Counter, Divide-by-2 and 5		
32003	54LS290	Motorola
	54LS290	TI
Decade Counter/Divider, Decoded Output		
R05651	4017B	GE/RCA
05601	4017A	GE/RCA
	4017A	National
	4017A	Sprague
05651	4017B	Sprague
Decade Counter, Ripple		
01307	5490	National
02501	54L90	National
Decade Counter, Synchronous, Preset Input		
34401	54F160A	◊ Fairchild
34402	54F162A	◊ Fairchild
Decade Up/Down		
01309	54193	Signetics
Decade Up/Down Counter		
31507	54LS192	Motorola
	54LS192	National
	54LS192	TI
4-Bit Binary Counter		
01302	5493	National
	5493	Signetics
02502	54L93	National
31502	54LS93	Motorola
	54LS93	National
	54LS93	TI
4-Bit Binary Counter, Ripple		
32004	54LS293	Motorola
	54LS293	TI
7-Bit Binary Counter		
05605	4024A	GE/RCA
	4024A	National
	4024A	Sprague
7-Stage Counter		
R05655	4024B	GE/RCA
05655	4024B	Sprague
14-Bit Binary Counter		
H05653	4020B	GE/RCA
05603	4020A	GE/RCA
	4020A	National

Decoders

Description M38510/	Device	Source
BCD to Decimal Decoder		
30703	54LS42	Fairchild
	54LS42	Motorola
	54LS42	National
	54LS42	TI
BCD to 7-Segment Decoder		
30704	54LS47	Motorola
	54LS47	TI
BCD-to-Decimal Decoder		
R05951	4028B	GE/RCA
01001	5442	Fairchild
	5442	National
05901	4028A	Sprague
05951	4028B	Sprague
BCD-to-Decimal Decoder/Driver, 15V Output		
01007	5447	National
BCD-to-Decimal Decoder/Driver, 30V Output		
01006	5446	National
Dual 2-Line to 4-Line Decoder/Demultiplexer		
30702	54LS139	Fairchild
	54LS139	Motorola
	54LS139	National
	54LS139	TI
33702	54F139	◊ Fairchild
	54F139	Motorola
	54F139	Signetics
Dual 2-to-4 Line Decoder/Demultiplexer		
32601	54LS155	Motorola
	54LS155	TI
32602	54LS156	Motorola
	54LS156	TI
3- to 8-Line Decoder/Demultiplexer		
33701	54F138	◊ Fairchild
	54F138	Motorola
	54F138	Signetics
3-Line to 8-Line Decoder/Multiplexer		
37701	54ALS138	TI
3-to-8-Line Decoder/Demultiplexer		
07701	54S138	National
	54S138	Signetics
	54S138	TI
30701	54LS138	Fairchild
	54LS138	Motorola
	54LS138	National
	54LS138	Signetics
	54LS138	TI
8-Input Priority Encoder		
36001	54LS148	TI
36002	54LS348	TI

Drivers

Description M38510/	Device	Source
Quad 2-Input NAND Buffer/Driver, O/C		
00805	5426	National
Hex Buffer/Driver, O/C High Voltage Output		
00803	5407	National
	5407	TI
00804	5417	National
	5417	TI
Hex Inverter Buffer/Driver, O/C High Voltage Output		
00801	5406	National
	5406	TI
00802	5416	National
	5416	TI

Flip-Flops

Description M38510/	Device	Source
Hex Edge-Triggered Flip-Flop with Clear		
34107	54F174	Motorola
Hex Edged-Triggered Flip-Flop with Clear		
34101	54F174	Motorola
J-K Master Slave Flip-Flop (AND Inputs)		
00201	5472	National
	5472	TI
J-K Master-Slave Flip-Flop (AND Inputs)		
02102	54L72	National
J-K Master-Slave Flip-Flop (AND-OR Inputs)		
02101	54L71	National
J-K Negative Edge-Triggered Flip-Flop (AND-OR Inputs)		
02205	54H101	Motorola
J-K Positive Edge-Triggered Flip-Flop		
00206	5470	TI
Dual "D" Flip-Flop with Set/Reset		
R05101	4013A	GE/RCA
R05151	4013B	GE/RCA
05101	4013A	National
	4013A	Sprague
Dual D-Type Edge-Triggered Flip-Flop		
00205	5474	Fairchild
	5474	National
	5474	TI
02105	54L74	National
34001	54F74	Signetics
Dual D-Type Flip-Flop		
05151	4013B	National
	4013B	Sprague
Dual D-Type Positive Edge-Triggered Flip-Flop with Preset and Clear		
30102	54LS74	Fairchild
	54LS74	Motorola
	54LS74	National

(Continued)

Based on QPL-38510-72, 17 July 1987

MILITARY PARTS—QPL Selection Guide (Cont'd)

DIGITAL

Flip-Flops (Cont'd)

Description M38510/	Device	Source
Dual D-Type Positive Edge-Triggered Flip-Flop with Preset and Clear		
30102		(Cont'd)
	54LS74	Signetics
	54LS74	TI
37101	54ALS74	TI
65302	54HC74	TI
Dual D" Master Slave Flip-Flop		
06101	10531	Motorola
06102	10631	Motorola
Dual Flip-Flop		
07101	54S74	◊ Signetics
	54S74	TI
Dual J-K Flip-Flop		
02204	54H76	TI
65304	54HC109	TI
Dual J-K Flip-Flop, Negative Edge-Triggered with Preset and Clear		
65305	54HC112	TI
Dual J-K Master Slave		
00202	5473	National
	5473	TI
Dual J-K Master Slave Flip-Flop		
00203	54107	National
	54107	TI
30101	54LS73	Motorola
	54LS73	Signetics
	54LS73	TI
Dual J-K Master Slave Flip-Flop with Preset and Clear		
00204	5476	National
	5476	TI
Dual J-K Master-Slave Flip-Flop		
R05152	4027B	GE/RCA
02103	54L73	National
02104	54L78	National
05102	4027A	GE/RCA
	4027A	National
	4027A	Sprague
05152	4027B	Sprague
06104	10535	Motorola
Dual J-K Negative Edge-Triggered Flip-Flop		
07102	54S112	National
	54S112	Signetics
	54S112	TI
Dual J-K Negative Edge-Triggered Flip-Flop Separate Preset and Clock (no clear)		
07103	54S113	National
	54S113	Signetics
Dual J-K Negative Edge-Triggered Flip-Flop with Preset and Clear		
30103	54LS112	Fairchild
	54LS112	Motorola
	54LS112	Signetics
	54LS112	TI
30104	54LS113	Fairchild
	54LS113	Motorola
	54LS113	TI
30105	54LS114	Fairchild
	54LS114	Motorola
	54LS114	TI
37103	54ALS112A	TI
Dual J-K Positive Edge-Triggered Flip-Flop with Preset and Clear		
30109	54LS109	Fairchild
	54LS109	Motorola
	54LS109	National
	54LS109	Signetics
	54LS109	TI
34102	54F109	◊ Fairchild
	54F109	Motorola
	54F109	Signetics
Dual J-K Type Positive Edge-Triggered Flip-Flop with Preset and Clear		
37102	54ALS109	TI
Dual J-K-Master Slave Flip-Flop with Preset and Clear		
30110	54LS76	Motorola
	54LS76	TI
Dual Master Slave Flip-Flop		
30108	54LS107	Motorola
	54LS107	TI
Quad D-Type Edge-Triggered Flip-Flop with Clear		
30107	54LS175	Fairchild
	54LS175	Motorola
	54LS175	Signetics
	54LS175	TI
34104	54F175	◊ Fairchild
	54F175	Motorola
37202	54ALS175	TI
Quad D-Type Flip-Flop		
01702	54175	Fairchild
	54175	National
	54175	Signetics
	54175	TI
07106	54S175	AMD
	54S175	TI
33107	25LS175	Motorola
65308	54HC175	TI
Quad D-Type Three-State Flip Flop		
36101	54LS173A	Signetics
Quad D-Type Three-State Flip-Flop		
36101	54LS173A	TI
Hex D-Type Flip-Flop		
01701	54174	Fairchild
	54174	Signetics
	54174	TI
07105	54S174	AMD
	54S174	TI
30106	54LS174	Fairchild
	54LS174	Motorola
	54LS174	National
	54L174	Signetics
	54LS174	TI
33106	25LS174	Motorola
	25LS174	TI
65307	54HC174	TI
Hex D" Master Slave Flip-Flop		
06103	10576	Motorola
Hex Edge-Triggered Flip-Flop with Clear		
07105	54S174	Signetics
34101	54F174	◊ Fairchild
	54F174	Signetics
34107	54F174	Fairchild
Hex Edge-Triggered with Clear		
37201	54ALS174	TI
Octal D-Type, Edge-Trigd, TS		
34105	54F374	Motorola
Octal D-Type Edge-Triggered Flip-Flop with Clear		
32501	54LS273	Fairchild
	54LS273	Motorola
	54LS273	Signetics
	54LS273	TI
Octal D-Type Edge-Triggered Flip-Flop, Three State		
32503	54LS374	Motorola
	54LS374	Signetics
	54LS374	TI
37104	54ALS574	TI
37204	54ALS374	TI
65602	54HC374	National
Octal D-Type, Edge-Triggered, TS		
34105	54F374	◊ Fairchild
	54F374	Signetics
Octal D-Type Flip-Flop, TS		
65602	54HC374	TI
Octal D-Type Flip-Flop with Enable		
32504	54LS377	Motorola
	54LS377	Signetics
	54LS377	TI
65601	54hc273	TI
Octal D-Type Positive Edge-Triggered Flip-Flop, TS		
34106	54f534	Motorola

Gates, AND/NAND

Description M38510/	Device	Source
Dual 4-Input AND Gate		
R17002	4082B	GE/RCA
17002	4082B	Sprague
31003	54LS21	Fairchild
	54LS21	Motorola
	54LS21	National
	54LS21	TI
Dual 4-Input NAND Gate		
R05002	4012A	GE/RCA
R05052	4012B	GE/RCA
00102	5420	Fairchild
	5420	National
	5420	TI
02002	54L20	National
02302	54H20	TI
05002	4012A	National
	4012A	Sprague
05052	4012B	Sprague
07006	54S20	National
	54S20	Signetics
	54S20	TI
30007	54LS20	Fairchild
	54LS20	Motorola
	54LS20	National
	54LS20	Signetics
	54LS20	TI
33004	54F20	◊ Fairchild
	54F20	Motorola
	54F20	Signetics
37003	54ALS20	TI
65003	54HC20	National
	54HC20	TI
Dual 4-Input NAND Gate, Expandable, DTL		
03001	930	Fairchild
Dual 4-Input NAND Gate, O/C		
07007	54S22	TI
30008	54LS22	Fairchild

(Continued)

Based on QPL-38510-72, 17 July 1987

© IC MASTER 1988

DIGITAL

Gates, AND/NAND (Cont'd)

Description M38510/	Device	Source
Dual 4-Input NAND Gate, O/C		
30008		(Cont'd)
	54LS22	Motorola
	54LS22	National
	54LS22	TI
Triple 3-Input AND Gate		
R17003	4073B	GE/RCA
08001	54S11	National
	54S11	Signetics
	54S11	TI
17003	4073B	Sprague
31001	54LS11	Fairchild
	54LS11	Motorola
	54LS11	National
	54LS11	TI
34002	54F11	◊ Fairchild
	54F11	Motorola
	54F11	Signetics
37402	54ALS11	TI
65204	54HC11	TI
Triple 3-Input AND Gate, O/C		
31002	54LS15	Motorola
	54LS15	National
	54LS15	TI
Triple 3-Input NAND Gate		
R05003	4023A	GE/RCA
R05053	4023B	GE/RCA
00103	5410	Fairchild
	5410	National
	5410	TI
02003	54L10	National
02303	54H10	TI
05003	4023A	National
	4023A	Sprague
05053	4023B	Sprague
07005	54S10	National
	54S10	Signetics
	54S10	TI
30005	54LS10	Fairchild
	54LS10	Motorola
	54LS10	National
	54LS10	Signetics
	54LS10	TI
33003	54F10	◊ Fairchild
	54F10	Signetics
37002	54ALS10	TI
65002	54HC10	National
	54HC10	TI
Triple 3-Input NAND Gate, DTL		
03005	962	Fairchild
Triple 3-Input NAND Gate, O/C		
00106	5412	TI
30006	54LS12	Motorola
	54LS12	National
	54LS12	TI
Quad 2-Input AND Gate		
01601	5408	Fairchild
	5408	National
01602	5409	National
08003	54S08	National
	54S08	Signetics

(Continued)

Description M38510/	Device	Source
Quad 2-Input AND Gate		(Cont'd)
31004	54LS08	Fairchild
	54LS08	Motorola
	54LS08	National
	54LS08	Signetics
	54LS08	TI
31005	54LS09	Motorola
34001	54F08	◊ Fairchild
	54F08	Motorola
	54F08	Signetics
37401	54ALS08	TI
65203	54HC08	National
	54HC08	TI
Quad 2-Input AND Gate, O/C		
01602	5409	Fairchild
Quad 2-Input NAND Gate		
R05001	4011A	GE/RCA
R05051	4011B	GE/RCA
00104	5400	Fairchild
	5400	National
	5400	Signetics
	5400	TI
02004	54L00	National
02304	54H00	TI
05001	4011A	National
	4011A	Sprague
05051	4011B	Sprague
06201	10504	Motorola
07001	54S00	National
	54S00	Signetics
	54S00	TI
30001	54LS00	Fairchild
	54LS00	Motorola
	54LS00	National
	54LS00	Signetics
	54LS00	TI
33001	54F00	◊ Fairchild
	54F00	Motorola
	54F00	Signetics
37001	54ALS00	National
	54ALS00	TI
65001	54HC00	GE/RCA
	54HC00	National
	54HC00	TI
Quad 2-Input NAND Gate, DTL		
03004	946	Fairchild
Quad 2-Input NAND Gate, O/C		
00109	5403	National
	5403	TI
02006	54L01	National
	54L03	National
02306	54H01	TI
07002	54S03	TI
30002	54LS03	Fairchild
	54LS03	Motorola
	54LS03	National
	54LS03	TI
30203	54LS38	Motorola
	54LS38	National
	54LS38	TI
Quad 2-Input NAND O/C to 15V		
32102	54LS26	Motorola
	54LS26	TI
Quad 2-Input AND Gate		
37401	54ALS08	National

Description M38510/	Device	Source
Quad–2-Input AND Gate		
R17001	4081B	GE/RCA
17001	4081B	Sprague
Quad–2-Input NAND Gate, O/C		
00107	5401	National
	5401	TI
Hex AND Gate		
06202	10597	Motorola
8 Input NAND Gate		
07008	54S30	TI
8-Input NAND Gate		
00101	5430	Fairchild
	5430	National
	5430	TI
02001	54L30	National
02301	54H30	TI
07008	54S30	National
30009	54LS30	Fairchild
	54LS30	Motorola
	54LS30	National
	54LS30	TI
37004	54ALS30	TI
65004	54HC30	National
	54HC30	TI
13-Input NAND Gate		
07009	54S133	National
	54S133	Signetics
37005	54ALS133	TI

Gates, AND-OR/AND-OR-Invert

Dual 2-Wide 2-Input AOI		
R17201	4085B	GE/RCA
17201	4085B	Sprague
Dual 2–2-Input AOI Gate		
30401	54LS51	Fairchild
	54LS51	Motorola
	54LS51	National
	54LS51	TI
Quad AND/OR Select Gate		
05352	4019B	Sprague
Quad AND-OR Select Gate		
R05352	4019B	GE/RCA
05302	4019A	GE/RCA
	4019A	National
	4019A	Sprague
05352	4019B	National
2-Input AOI Gate		
07401	54S51	National
07402	54S64	TI
2–2-Input AOI Gate		
07401	54S51	Signetics
2–2-Input AOI Gate, Expandable		
00501	5450	National
	5450	TI
00502	5451	TI
2–2–2–2-Input AOI Gate		
00504	5454	National
	5454	TI
2–2–2–2-Input AOI Gate, Expandable		
00503	5453	National
	5453	TI
2–2–2–3-Input AOI Gate		
30402	54LS54	Fairchild
	54LS54	Motorola

(Continued)

Based on QPL-38510-72, 17 July 1987

MILITARY PARTS—QPL Selection Guide (Cont'd)

DIGITAL

Gates, AND-OR/AND-OR-Invert (Cont'd)

Description M38510/	Device	Source
2-2-2-3-Input AOI Gate		
30402		(Cont'd)
	54LS54	National
	54LS54	TI
4-Wide 2-Input AOI Gate, Expandable		
R17202	4086B	GE/RCA
17202	4086B	Sprague
4-2-3-2-Input AOI Gate		
07402	54S64	National
33401	54F64	◊ Fairchild
	54F64	Signetics

Gates, OR/NOR

Dual 3-Input NOR Gate plus Inverter		
05201	4000A	GE/RCA
	4000A	Sprague
Dual 4-Input NOR Gate		
R05203	4002A	GE/RCA
R05253	4002B	GE/RCA
05203	4002A	National
	4002A	Sprague
65104	54HC4002	TI
Dual 4-Input NOR Gate with Strobe		
00402	5423	National
00403	5425	TI
Dual 4-Input NOR Gate with Strobe, Expandable		
00402	5423	TI
Dual 4-Input OR Gate		
R17102	4072B	GE/RCA
Triple 3-Input NOR Gate		
R05254	4025B	GE/RCA
00404	5427	TI
05204	4025A	GE/RCA
	4025A	National
	4025A	Sprague
05254	4025B	Sprague
17103	4075B	Sprague
30302	54LS27	Fairchild
	54LS27	Motorola
	54LS27	National
	54LS27	TI
37302	54ALS27	TI
65102	54HC27	TI
Triple 3-Input OR Gate		
R17103	4075B	GE/RCA
Quad 2-Input Gate (3 NOR, 1 OR/NOR)		
06002	10502	Motorola
Quad 2-Input NOR Gate		
R05202	4001A	GE/RCA
R05252	4001B	GE/RCA
00401	5402	Fairchild
	5402	National
	5402	TI
02701	54L02	National
05202	4001A	National
	4001A	Sprague
05252	4001B	Sprague
07301	54S02	National
	54S02	Signetics
	54S02	TI

(Continued)

Description M38510/	Device	Source
Quad 2-Input NOR Gate		(Cont'd)
30301	54LS02	Fairchild
	54LS02	Motorola
	54LS02	National
	54LS02	Signetics
	54LS02	TI
33301	54F02	◊ Fairchild
	54F02	Signetics
37301	54ALS02	TI
38402	54ALS1002	TI
65101	54HC02	National
	54HC02	TI
Quad 2-Input OR Gate		
H17101	4071B	GE/RCA
16101	5432	Signetics
17101	4071B	Sprague
30501	54LS32	Fairchild
	54LS32	Motorola
	54LS332	National
	54LS32	Signetics
	54LS32	TI
33501	54F32	◊ Fairchild
	54F32	Motorola
	54F32	Signetics
37501	54ALS32	National
	54ALS32	TI
65201	54HC32	National
	54HC32	TI
Quad 2-Input OR/NOR Gate		
06001	10501	Motorola
Quad 2-Input NOR Gate		
37301	54ALS02	National
2-3-2-Input OR/NOR Gate		
06003	10505	Motorola
4-3-3-Input OR/NOR Gate		
06004	10506	Motorola
4-5-Input OR/NOR Gate		
06006	10509	Motorola

Gates, Exclusive OR/NOR

Triple 2-Input Exclusive OR/NOR Gate		
06005	10507	Motorola
Quad Exclusive OR Gate		
H17203	4070B	National
R05353	4030B	GE/RCA
R17203	4070B	GE/RCA
R17204	4077B	GE/RCA
05303	4030A	National
	4030A	Sprague
05353	4030B	Sprague
17203	4070B	Sprague
17204	4077B	Sprague
Quad 2-Input Exclusive NOR Gate, O/C		
30303	54LS266	Fairchild
	54LS266	Motorola
	54LS266	National
	54LS266	TI
65103	54HC266	TI
Quad 2-Input Exclusive OR		
30502	54LS86	Motorola
	54LS86	National
	54LS86	Signetics
	54LS86	TI

Description M38510/	Device	Source
Quad 2-Input Exclusive OR Gate		
00701	5486	Fairchild
	5486	National
	5486	TI
02601	54L86	National
07501	54S86	Signetics
	54S86	TI
34501	54f86	Motorola
65202	54HC86	TI
Quad 2-Input, Totem Pole Outputs		
34501	54F86	◊ Fairchild

Latches

Complementary Output		
01501	5475	National
Quad Bistable Latch		
31601	54LS75	Motorola
	54LS75	Signetics
	54LS75	TI
31604	54LS375	Motorola
	54LS375	TI
Quad NOR R/S Latch		
05103	4043A	Sprague
Quad Set Reset Latch		
31602	54LS279	Fairchild
	54LS279	Motorola
	54LS279	National
	54LS279	TI
Octal D-Type Latch, TS, Cascadable		
34604	54F573	Fairchild
Octal D-Type Latch with Inverted Outputs, TS		
34603	54F563	Fairchild
8-Bit Addressable Latch		
R17601	4099B	GE/RCA
31603	54LS259	Motorola
8-Bit Addressable, with Clear		
31605	54LS259B	TI
8-Bit Latch, Transparent D-Type, Three State		
32502	54LS373	Motorola
	54LS373	Signetics
	54LS373	TI
34601	54F373	◊ Fairchild
	54F373	Signetics
35601	54F373	Motorola
38201	54ALS573	TI
8-Bit Transparent, D-Type, Inverting, Three-State		
34602	54F533	◊ Fairchild
8-Bit Transparent, D-Type, TS		
37203	54ALS373	TI
8-Bit Addressable Latch		
31603	54LS259	Fairchild

Multiplexers

Dual 3-Input Multiplexer, Inverting, TS		
33910	54F353	◊ Fairchild
	54F353	Motorola
Dual 4-Channel Data Selector/Multiplexer		
01403	54153	Fairchild
	54153	National
30902	54LS153	Fairchild
	54LS153	Motorola
	54LS153	National
	54LS153	Signetics
	54LS153	TI

(Continued)

Based on QPL-38510-72, 17 July 1987

© IC MASTER 1988

DIGITAL

Multiplexers (Cont'd)

Dual 4-Channel Data Selector/Multiplexer (Cont'd)

M38510/	Device	Source
33902	54F153	◊ Fairchild
	54F153	Motorola

Dual 4-Input Multiplexer

M38510/	Device	Source
01404	9309	Fairchild
07902	54S153	National
	54S153	Signetics
	54S153	TI

Dual 4-Input Multiplexer, Complementary Output

M38510/	Device	Source
01404	9309	National

Dual 4-Input Multiplexer, Inverting

M38510/	Device	Source
33909	54F352	◊ Fairchild
	54F352	Motorola

Dual 4-Input Multiplexer, TS

M38510/	Device	Source
30908	54LS253	Fairchild
	54LS253	Motorola
	54LS253	National
	54LS253	TI
33908	54F253	Motorola

Dual 4-Input Multiplexer, Three State

M38510/	Device	Source
07908	54S253	National
	54S253	Signetics

Quad 2-Input Data Selector/Multiplexer (Non-Inverting)

M38510/	Device	Source
01405	54157	◊ Fairchild
	54157	National

Quad 2-Input Multiplexer, Inverting

M38510/	Device	Source
07904	54S158	Signetics
	54S158	TI
30904	54LS158	Fairchild
	54LS158	Motorola
	54LS158	National
	54LS158	TI
33904	54F158	Fairchild

Quad 2-Input Multiplexer, Inverting, TS

M38510/	Device	Source
30907	54LS258	Fairchild
	54LS258	Motorola
	54LS258	National
	54LS258	Signetics
	54LS258	TI
33907	54F258	Fairchild
	54F258A	Fairchild

Quad 2-Input Multiplexer, Non-Inverting

M38510/	Device	Source
07903	54S157	Signetics
	54S157	TI
30903	54LS157	Fairchild
	54LS157	Motorola
	54LS157	National
	54LS157	TI
33903	54F157	Fairchild
	54F157A	◊ Fairchild

Quad 2-Input Multiplexer, Non-Inverting, TS

M38510/	Device	Source
07906	54S257	AMD
	54S257	TI
30906	54LS257	Fairchild
	54LS257	Motorola
	54LS257	National
	54LS257	Signetics
	54LS257	TI
33906	54F257	Fairchild
	54F257	Motorola

Quad 2-Input Multiplexer with Output Register

M38510/	Device	Source
30909	54LS298	Motorola
35002	54F399	Fairchild
	54F399	Signetics

Quad 2-Input with Output Register

M38510/	Device	Source
35001	54F398	Fairchild
	54F398	Signetics

Hex 2-Input Three-State Multiplexer

M38510/	Device	Source
37901	54ALS857	TI

8-Input Multiplexer

M38510/	Device	Source
01406	54151	Fairchild
	54151	National
07901	54S151	Signetics
	54S151	TI
30901	54LS151	Fairchild
	54LS151	Motorola
	54LS151	National
	54LS151	TI
33901	54F151	Fairchild
	54F151A	◊ Fairchild
	54F151A	Motorola

8-Input Multiplexer, Complementary Input, Strobe, TS

M38510/	Device	Source
07905	54S251	Signetics
30905	54LS251	Motorola
	54LS251	National
	54LS251	TI
33905	54F251	Fairchild
	54F251A	◊ Fairchild
	54F251A	Motorola

16-Channel Data Selector/Multiplexer

M38510/	Device	Source
01401	54150	National

Multivibrators

Monostable Multivibrator

M38510/	Device	Source
01201	54121	Fairchild

Retriggerable Monostable Multivibrator with Clear

M38510/	Device	Source
01202	54122	Fairchild
01203	54123	Fairchild
	54123	National
	54123	Signetics

Dual Monostable Multivibrator, Retriggerable

M38510/	Device	Source
R17504	4098B	GE/RCA

Dual Monostable Multivibrator, Schmitt Trigger Input

M38510/	Device	Source
31402	54LS221	Motorola
	54LS221	TI

Dual Retriggerable Monostable Multivibrator with Clear

M38510/	Device	Source
31401	54LS123	Motorola
	54LS123	TI
31403	54LS122	Motorola
	54LS122	TI

Dual One Shot Multivibrator

M38510/	Device	Source
01205	9602	Fairchild

One Shot Multivibrator

M38510/	Device	Source
01204	9601	Fairchild

Miscellaneous

Bus Transceiver, Octal Non-Inverting

M38510/	Device	Source
34803	54F245	Motorola
	54F245	Signetics

Octal Bus Driver, Non-Inverting, Three State

M38510/	Device	Source
33203	54F244	Signetics

Dual Complementary Pair Plus Inverter

M38510/	Device	Source
R05351	4007UB	GE/RCA

Dual 4-Input NAND Schmitt Trigger

M38510/	Device	Source
31301	54LS13	Motorola
	54LS13	TI

Quad Bus Transceiver

M38510/	Device	Source
32801	54LS242	Motorola
	54LS242	TI
32802	54LS243	Motorola
	54LS243	TI

Quad ECL to TTL Translator

M38510/	Device	Source
06302	10525	Motorola

Quad TTL to ECL OR/NOR Translator

M38510/	Device	Source
06301	10524	Motorola
17701	4093B	Sprague

Quad 2-Input NAND Gate Schmitt Trigger

M38510/	Device	Source
65005	54HC132	National

Quad 2-Input NAND Schmitt Trigger

M38510/	Device	Source
31303	54LS132	Motorola
	54LS132	Signetics
	54LS132	TI

Hex Schmitt Trigger, Inverting

M38510/	Device	Source
15102	5414	National
31302	54LS14	Motorola
	54LS14	Signetics
	54LS14	TI

Octal Bus Driver, Inverting

M38510/	Device	Source
32401	54LS240	Fairchild
	54LS240	Motorola
	54LS240	National
	54LS240	Signetics
	54LS240	TI
32404	54LS540	TI

Octal Bus Driver, Inverting, Three State

M38510/	Device	Source
33201	54F240	◊ Fairchild
	54F240	Motorola
	54F240	Signetics

Octal Bus Driver, Non-Inverting, Three State

M38510/	Device	Source
32402	54LS241	Fairchild
	54LS241	Motorola
	54LS241	Signetics
	54LS241	TI
32403	54LS244	Fairchild
	54LS244	Motorola
	54LS244	Signetics
	54LS244	TI
32405	54LS541	TI
33202	54F241	◊ Fairchild
33203	54F244	◊ Fairchild
38303	54ALS244A	TI

Octal Bus Transceiver, Non-Inverting, Open Collector

M38510/	Device	Source
32803	32803	Signetics

Octal Bus Transceiver, Three State

M38510/	Device	Source
32803	54LS245	Motorola
	54LS245	TI

9-Bit Odd/Even Parity Generator/Checker

M38510/	Device	Source
01901	54180	National
32901	54LS280	Motorola
	54LS280	TI
34901	54F280	◊ Fairchild
	54F280	Signetics

16-Bit Register File, 4x4, Simultaneous Read/Write, Three-State

M38510/	Device	Source
31901	54LS670	National

Based on QPL-38510-72, 17 July 1987

MILITARY PARTS—QPL Selection Guide (Cont'd)

MICROPROCESSORS

Description M38510/	Device	Source	
Microprocessor			
42001	8080A	Intel	
48002	**Z80**	**Zilog**	**(3418)**
52004	**Z8002A CPU**	**Zilog**	**(3418)**
53001	8086	◊ Intel	
54001	68000-6	Thomson	
54002	68000-8	Thomson	

INTERFACE

Analog Switches

2xSPST, Bipolar			
12301	HI200	Siliconix	
2xSPST, CMOS			
10502	5041	GE/Intersil	
11601	**DG300**	**GE/Intersil**	**(2679)**
	DG300	Siliconix	
11605	DG304	Siliconix	
2xSPST, JFET			
11101	**DG181A**	**GE/Intersil**	**(2680)**
	DG181A	Siliconix	
11102	**DG182A**	**GE/Intersil**	**(2680)**
	DG182A	Siliconix	
4xSPST, CMOS			
R05852	4066B	GE/RCA	
05801	4016A	Sprague	
05802	4066A	Sprague	
05852	4066B	Sprague	
12302	**DG201**	**GE/Intersil**	**(2679)**
	201	Harris	
	DG201	Siliconix	
SPST, CMOS			
10501	5040	GE/Intersil	
2xSPDT, CMOS			
10504	5043	GE/Intersil	
11604	**DG303**	**GE/Intersil**	**(2680)**
	DG303	Siliconix	
11608	DG307	Siliconix	
2xSPDT, JFET			
11107	**DG190A**	**GE/Intersil**	**(2680)**
	DG190A	Siliconix	
11108	**DG191A**	**GE/Intersil**	**(2680)**
	DG191A	Siliconix	
SPDT, CMOS			
10503	5042	GE/Intersil	
11602	**DG301**	**GE/Intersil**	**(2680)**
	DG301	Siliconix	
11606	DG305	Siliconix	
SPDT, JFET			
11105	**DG187A**	**GE/Intersil**	**(2680)**
	DG187A	Siliconix	
11106	**DG188A**	**GE/Intersil**	**(2680)**
	DG188A	Siliconix	
2xDPST, CMOS			
10506	5045	GE/Intersil	
11603	DG302	Siliconix	
11607	DG306	Siliconix	
2xDPST, JFET			
11103	**DG184A**	**GE/Intersil**	**(2680)**
	DG184A	Siliconix	
11104	**DG185A**	**GE/Intersil**	**(2680)**
	DG185A	Siliconix	
DPST, CMOS			
10505	5044	GE/Intersil	
Dual 4-Input, Three State Multiplexer			
33908	54F253	Fairchild	
Quad Bilateral Switch			
05851	4016B	Sprague	
2xDPST, CMOS			
11603	**DG302**	**GE/Intersil**	**(2680)**
4-Channel Multiplexer Differential, Latched			
19008	6208	GE/Intersil	
	509	Siliconix	
8-Channel Multiplexer			
19007	6108	GE/Intersil	
	6108	Siliconix	

Digital to Analog Converters

D/A Converter, 8-Bit			
11301	**DAC08**	◊ **PMI**	**(2973)**
	DAC08	Raytheon	
11302	**DAC08A**	**PMI**	**(2973)**
	DAC08A	Raytheon	
D/A Converter, 10-Bit			
12702	7520	AD	
D/A Converter, 12-Bit			
12101	562	AD	
12103	565	AD	

Line Drivers and Receivers

Differential Line Receiver			
10401	55107	Fairchild	
	55107	Motorola	
	55107	TI	
10402	55108	TI	
Memory Driver			
13001	55325	SiliconG	
	55325	TI	
13002	55326	TI	
13003	55327	TI	
Dual Differential Line Driver			
10403	9614	Fairchild	
	55114	TI	
Dual Differential Line Driver, Three-State			
10405	55113	TI	
Dual Differential Line Receiver			
10404	9615	Fairchild	
	55115	TI	
Dual Peripheral AND Driver			
12902	55451	TI	
12907	55461	TI	
Dual Peripheral OR Driver			
12904	55453	TI	
Dual 4-Input Positive NAND Line Driver			
08101	54S140	Signetics	

Peripheral Drivers

Driver, 7 Channel			
14103	2003	Sprague	
Dual Peripheral NAND Driver			
12903	55452	TI	
12908	55462	TI	
Dual Peripheral NOR Driver			
12905	55454	TI	
Dual Peripheral OR Driver			
12909	55463	TI	

LINEAR

Amplifiers

Operational Amplifier			
10101	741	Fairchild	
	741	National	
	LM741A	PMI	
	741	Raytheon	
10103	LM101A	Fairchild	
	LM101A	National	
	LM101A	Raytheon	
	LM101A	Signetics	
	LM101A	SiliconG	
10104	LM108A	Fairchild	
	LM108A	LinearTech	
	LM108A	National	
	LM108A	PMI	
	LM108A	Raytheon	
10107	LM118	AMD	
	LM118	LinearTech	
	LM118	◊ National	
11401	LF155	LinearTech	
	LF155	National	
	LF155	PMI	
11402	LF156	LinearTech	
	PM156	LinearTech	
	PM156	National	
	LF156	PMI	
	PM156	**PMI**	**(2971)**
11403	**PM157**	**PMI**	**(2971)**
11404	LF155A	LinearTech	
	LF155A	PMI	
11405	LF156A	LinearTech	
	PM156A	LinearTech	
	PM156A	◊ **PMI**	**(2971)**
11406	**PM157A**	**PMI**	**(2971)**
11904	LF151	Fairchild	
	LF151	National	
12202	**HA2600**	**Harris**	**(2706, 2737, 2747)**
12203	**HA2620**	◊ **Harris**	**(2706, 2737, 2747)**
12204	**HA2500**	**Harris**	**(2705)**
12205	**HA2510**	**Harris**	**(2705)**
12206	**HA2520**	◊ **Harris**	**(2705, 2737, 2747)**
13101	5534A	Raytheon	
13501	OP07A	LinearTech	
	OP07A	**PMI**	**(2970)**
	4021B	PMI	
	OP07A	**Raytheon**	**(2979)**
13502	714	AD	
	714	LinearTech	
	714	PMI	
	714	Raytheon	
13503	OP07	LinearTech	
	OP07	◊ **PMI**	**(2970)**
	OP07	**Raytheon**	**(2979)**
Dual Operational Amplifier			
10102	747	Fairchild	
	747	National	
	LM747A	PMI	
	747	Raytheon	

(Continued)

Based on QPL-38510-72, 17 July 1987

© IC MASTER 1988

LINEAR

Amplifiers (Cont'd)

Description M38510/	Device	Source
Dual Operational Amplifier (Cont'd)		
10105	LH2101A	Fairchild
	LH2101A	Raytheon
	LH2101A	Signetics
10106	PM3108A	Fairchild
	PM2108A	LinearTech
	PM2108A	**PMI (2970, 2972)**
	PM2108A	Raytheon
10108	1558	Fairchild
11905	LF153	Fairchild
	772	National
13102	5532A	Raytheon
Quad Operational Amplifier		
11001	LM148	Fairchild
	LM148	National
	LM148	Raytheon
11003	**HA4741**	◊ **Harris (2706, 2737, 2747)**
	4156	Raytheon
11004	4136	Fairchild
	4136	PMI
	4136	Raytheon
11005	LM124	Fairchild
	LM124	National
	LM124	Raytheon

Comparators

Voltage Comparator		
10301	710	Fairchild
10304	111	Fairchild
	111	National
	111	PMI
	111	Raytheon
34701	54F521	Fairchild
Dual Voltage Comparator		
10302	711	Fairchild
10305	LH2111	Fairchild
	LH2111	Raytheon
11202	LM193	National
Quad Voltage Comparator		
11201	139	AMD
	139	Fairchild
	LM139	National
	LM139	PMI
	139	Raytheon

Timers

Timer		
10901	555	Fairchild
	555	Signetics
Dual Timer		
10902	556	Signetics

Voltage Regulators

Voltage Reference		
12802	AD584T	AD
13902	534S	AD
Voltage Regulator		
10201	LM723	Fairchild
	LM723	National

(Continued)

Description M38510/	Device	Source
Voltage Regulator (Cont'd)		
10701	LM109	Fairchild
10702	78M05	Fairchild
10703	78M12	Fairchild
10704	78M15	Fairchild
10706	7805	Fairchild
10707	7812	Fairchild
10708	7815	Fairchild
10709	7824	Fairchild
11501	79M05	Fairchild
11502	79M12	Fairchild
11503	79M15	Fairchild
11505	7905	Fairchild
11506	7912	Fairchild
11507	7915	Fairchild
11703	LM117H	LinearTech
	LM117H	National
11704	LM117K	LinearTech
	LM117K	National
	LM117K	Siliconix
	LM117K	Unitrode
11803	LM137H	LinearTech
11804	LM137K	LinearTech

Transistor Arrays

Transistor Array		
10802	3045	Fairchild
14103	2003	SiliconG

Miscellaneous

Multiplier/Divider		
13901	534T	AD
13903	532S	AD
Voltage Reference		
12801	584S	AD

MEMORY

RAMs

256x4, TS		
23110	93422(60ns)	Fairchild
23112	93L422 (75 ns)	Fairchild
23114	93422A(45ns)	Fairchild
23115	93L422A (55 ns)	Fairchild
512x9, TS		
25001	**MKB4501-81**	**Thomson (3296)**
25002	**MKB4501-80**	**Thomson (3296)**
1024x1, OC		
23103	93L415 (60 ns)	Fairchild
1024x1, TS		
23102	93425 (60 ns)	Fairchild
23104	93L425 (70 ns)	Fairchild
23106	93425	◊ Fairchild
23108	93425A (45 ns)	Fairchild
23113	93L425A(50ns)	Fairchild
1024x4, TS		
23806	2148H	Intel
24502	**HM6514**	◊ **Harris (2704, 2762, 2768)**
4096x1, TS		
23801	2147H (85 ns)	Intel
23803	2147H (70 ns)	Intel
23805	2147H (55 ns)	Intel
23807	2147H (45 ns)	Intel
24501	6504	Harris
16384x1, TS		
24001	4116 (200 ns)	Thomson
24002	4116 (250 ns)	Thomson
65536x1, TS		
24402	4564 (150 ns)	Thomson
24403	4564 (200 ns)	Thomson
2048x8, TS		
29104	65162	Harris
26214x1		
24602	MT1257-12	MicronTech
262144x1		
24602	41256P-12	AT&T
4096x1, TS		
28901	7C147 (35 ns)	Cypress
28903	7C147 (55 ns)	Cypress
65536x1, TS		
24401	4564 (150 ns)	Thomson

PROMs

PROM, 512x4, OC		
20401	82S130	Signetics
20403	82S130A	Signetics
PROM, 512x4, TS		
20402	HM7621-2	Harris
	82S131	Signetics
20404	82S131A	Signetics
32x8, OC		
20701	82S23	Signetics
20703	82S23A	Signetics
32x8, TS		
20702	HM7603-2	Harris
	54S288	National
	82S123	Signetics
20704	82S123A	Signetics
256x4, OC		
20301	82S126	Signetics
20303	82S126A	Signetics
256x4, TS		
20302	HM7611-2	Harris
	54S287	National
	82S129	Signetics
20304	82S129A	Signetics
512x4, TS		
20402	54S571	National
512x8, TS		
20802	HM7641-2	Harris
	54S474	National
	82S141	Signetics
20803	82S115	Signetics
1024x4		
20602	5353-1	MMI
1024x4, TS		
20602	HM7643-2	Harris
	54S573	National
	82S137	Signetics
20604	82S137A	Signetics
1024x8, TS		
20904	7681	Harris
	77S181	National
	29631	**Raytheon (2985)**
	82S181	Signetics
20905	82S2708	Signetics
20909	82S181A	Signetics

Based on QPL-38510-72, 17 July 1987

MILITARY PARTS—QPL Selection Guide (Cont'd)

MEMORY

PROMs (Cont'd)

Description M38510/	Device	Source
2048x4		
20902	7685	Harris
	77S185	National
	29651	**Raytheon (2985)**
	82S185	Signetics
2048x4, TS		
20908	53S841	◊ MMI
2048x8		
21002	77S191	AMD
2048x8, TS		
21002	93Z511	Fairchild
	82S191	Signetics
21004	93Z511	Fairchild
	82S191A	Signetics
2048x8,TS		
21002	76161	Harris
	77S191	National
	29681	**Raytheon (2985)**
32768x8, TS		
22401	27256-250	Intel
22402	27256-200	Intel
	27256-200	Signetics
2048x4, TS		
20910	82S185A	Signetics

Shift Registers

R057054	4021B	GE/RCA
Dual 4-Bit Serial Input, Parallel Output, S.R.		
R05753	4015B	GE/RCA
Dual 4-Bit Static S.R.		
05703	4015A	GE/RCA
	4015A	National
	4015A	Sprague
4-Bit Parallel Access S.R.		
00901	5495	National
02801	54L95	National
30603	54LS95	Fairchild
	54LS95	Motorola
	54LS95B	Signetics
	54LS95	TI
4-Bit Parallel In, Parallel Out, Cascadable S.R.		
30607	54LS395A	Signetics
	54LS395	TI
4-Bit Parallel In, Parallel Out, Right/Left S.R.		
30606	54LS295	Signetics
	54LS295	TI
4-Bit Parallel In, Parallel Out, S.R.		
30602	54LS195	Motorola
	54LS195	Signetics
	54LS195	TI
30606	54LS295B	Signetics
4-Bit Universal Bidirectional S.R.		
07601	54S194	AMD
	54S194	TI
4-Bit Universal Bidirectional S.R.		
30601	54LS194	Fairchild
	54LS194	Motorola
	54LS194	TI
4-Bit Universal S.R.		
00905	54194	National
	54194	Signetics
4x4 Register File, TS		
31901	54LS670	Motorola
5-Bit S.R.		
00902	5496	National
30604	54LS96	TI
8-Bit Asynchronous Parallel In/Serial Out or Synchronous Serial In/Out S.R.		
R057054	4021B	GE/RCA
8-Bit Parallel In, Serial Out, S.R., Synchronous		
R05752	4014B	GE/RCA
8-Bit Parallel Load S.R., Complementary Outputs		
30608	54LS165	Motorola
	54LS165	TI
8-Bit Parallel-In, Serial-Out S.R.		
30609	54LS166	Motorola
	54LS166	TI
8-Bit Serial In, Parallel Out, S.R.		
30605	54LS164	Motorola
	54LS164	National
	54LS164	Signetics
	54LS164	TI
8-Bit Serial-In Parallel-Out S.R.		
00903	54164	National
	54164	Signetics
8-Bit Static S.R. Asynchronous		
05704	4021A	GE/RCA
	4021A	National
	4021A	Sprague
18-Bit Static S.R.		
05701	4006A	GE/RCA
	4006A	National
18-Bit Static S.R. (Synchronous)		
05702	4014A	GE/RCA
	4014A	National
64-Bit Static S.R.		
05705	4031A	National

Programmable Logic

FPLA		
50202	82S100	Signetics
PAL		
50301	PAL10H8	MMI
50302	PAL12H6	MMI
50303	PAL14H4	MMI
50306	PAL10L8	MMI
50307	PAL12L6	MMI
50308	PAL14L4	MMI
50401	PAL16L8A	MMI
	PAL16L8A	◊ TI
50402	PAL16R8A	MMI
	PAL16R8A	TI
50403	PAL16R6A	MMI
	PAL16R6A	◊ TI
50404	PAL16R4	MMI
	PAL16R4A	◊ TI
50407	PAL16L8A-2	MMI
	PAL16L8A-2	TI
50408	PAL16R8A-2	MMI
	PAL16R8A-2	TI
50409	PAL16R6A-2	MMI
	PAL16R6A-2	TI
50410	PAL16R4A-2	TI
50501	PAL20L8A	MMI
50502	PAL20R8A	MMI
PAL (Cont'd)		
50503	PAL20R6A	MMI
50504	PAL20R4A	MMI
1FPLA		
50201	82S101	Signetics

(Continued)

Based on QPL-38510-72, 17 July 1987

Last Page This Section. Next Page 601.

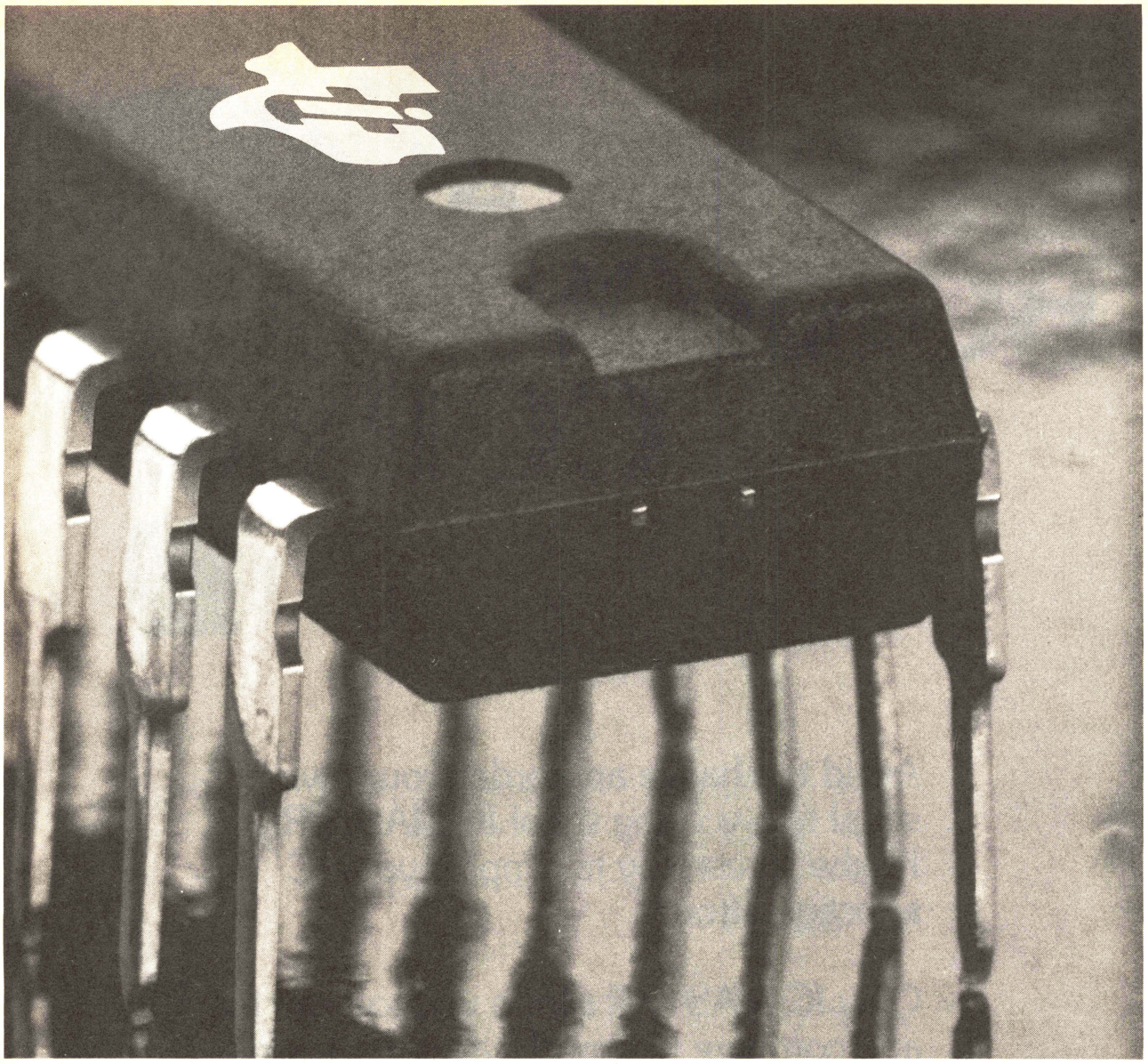
© IC MASTER 1988

IS THIS A BORROWED COPY?

Avoid the hassle and order your own personal two-volume set of IC MASTER. It's the surest way to simplify your IC selection efforts.

Only IC MASTER allows you to examine and compare the specifications, relative strengths, and weaknesses of all devices in serious contention for your application. And only IC MASTER brings you actual manufacturers' data sheets, allowing you to make complete and definitive device selections.

You can order IC MASTER simply by charging it to your VISA or MasterCard credit card. To place your order call Marie Botta at (516) 227-1314.

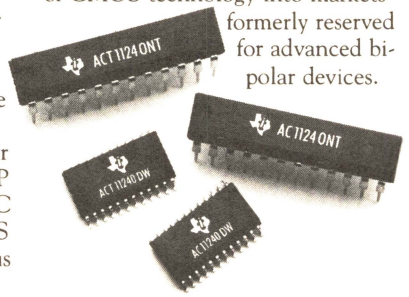


In the emerging world of advanced CMOS, TI has a big idea: EPIC™ ACL.

Presenting EPIC ACL, a broad and expanding family of advanced CMOS logic devices that offer major design advantages.

Consider: Simultaneous switching noise levels 50% lower than conventional end-pin ACLs, and 10% lower than advanced bipolar devices. Speeds comparable to bipolar 74F. Low CMOS power consumption. 24 m/A sink/source currents for high drive capability. And flow through architecture for ease of design. Your choice of DIP or SOIC packaging, as well as AC and ACT options for both CMOS and TTL interface capability. Plus alternate sourcing of the entire family by co-developer Philips/ Signetics.

Those are the big ideas behind EPIC ACL — ideas that will enable you to extend the application of CMOS technology into markets formerly reserved for advanced bipolar devices.



Start some epic ideas of your own. With an ACL family that not only provides bipolar speed and performance, but reliable system-level operation as well. Best of all, it's available now. In quantity. At TI Authorized distributors everywhere.

EPIC ACL. A truly big idea in advanced CMOS logic.

TEXAS INSTRUMENTS

© 1987, Texas Instruments
EPIC is a trademark of Texas Instruments

INTRODUCTION TO DIGITAL

Digital devices are listed by major product families: CMOS, ECL, GaAs, or TTL, and within them by functional groups such as arithmetic, buffers and inverters. The adjacent table shows how these families and functional groups are organized. Digital circuits not in the major logic families are listed under the heading Digital-Special.

A separate guide for circuits specifically directed to Digital Signal Processing (DSP) applications is included within the Digital section. Some of these circuits may also be repeated in the Digital families, the Interface, or Microprocessor portions of IC Master.

A few digital devices, such as watch, clock, speech and music circuits, are not covered in the digital section, but are included in the Linear—Consumer guide.

DSP Topics.

Arithmetic Functions.....644
Converters, A/D 644
Converters, D/A 645
Processors 645
Registers 646
Miscellaneous 646

Digital Logic Topics

	CMOS	10K ECL	100K ECL	III ECL	GaAs	HNIL/ HTL	TTL
Arithmetic Functions	602	647	649		652	654	656
Buffers	605	647	650		652	654	658
Inverters	607	647	650			654	659
Counters							
Binary	608	647			652	654	660
Count Up/Down	611				652		660
Decade	611	647				654	662
Miscellaneous	613		650	651			662
Decoders	614	647	650		652	654	663
Drivers	616	647	650		652	654	665
Flip-Flops							
D-Type	617	647	650	651	652	654	666
J-K Type	620	647	650			654	669
R-S Type				651		654	
Gates							
AND	621	647	650		652	654	670
NAND	622		650		652	654	671
AND-OR	624	648	650				674
AND-OR Invert	624	648	650			654	674
OR	624	647		651		654	674
NOR	624	648		651	652	654	675
OR/NOR		648	650	651	652		675
Exclusive OR	626	648		651	652	654	676
Exclusive NOR	626			651			676
Exclusive OR/NOR		648	650		652		
Miscellaneous	626					654	
Latches	626	648	650	651		654	676
Memories	629	648	650				679
Multiplexers-Digital	630	649	650		652	654	679
Multivibrators	632	649		651		654	681
Oscillators/Dividers	633						
Shift Registers	633	649	650	651	652	654	682
Transceivers, Bus							684
Translators	636	649	650			654	687
Miscellaneous	636	649	650	651	652	655	687

©IC MASTER 1988

Arithmetic Functions

Function	Device	Source	Line
Adder			
HC	**CD54HC583**	**† GE/RCA (2632)**	
	CD74HC583	**GE/RCA (2632)**	
	74HC583	**Signetics (3003)**	
HCT	**CD54HCT583**	**◇† GE/RCA (2632)**	
	CD74HCT583	**◇ GE/RCA (2632)**	5
	74HCT583	**Signetics (3003)**	
Adder, NBCD (natural binary coded decimal)			
4XXX	**GD4560B**	**GoldStar (2698)**	
	MC14560BA	◇† Motorola	
	MC14560BC	◇ Motorola	
	TC4560B	**Toshiba (3308)**	10
Adder, Triple Serial, Negative Logic, with Internal Carry			
4XXX	**CD4038A**	**† GE/RCA (2636)**	
	CD4038AE	**GE/RCA (2636)**	
	CD4038B	**† GE/RCA (2636)**	
	CD4038BE	**GE/RCA (2636)**	
	MC14038BA	† Motorola	15
	MC14038BC	Motorola	
	HCC4038B	† SGS	
	HCF4038B	◇ SGS	
	TC4038B	**Toshiba (3308)**	
Adder, Triple Serial, Positive Logic, with Internal Carry			
4XXX	**CD4032A**	**† GE/RCA (2636)**	20
	CD4032AE	**GE/RCA (2636)**	
	CD4032B	**† GE/RCA (2636)**	
	CD4032BE	**GE/RCA (2636)**	
	MC14032BA	† Motorola	
	MC14032BC	Motorola	25
	HCF4032B	◇ SGS	
	TC4032B	**Toshiba (3308)**	
Adder, 4-Bit, Full			
AC	CD54AC283	† GE/RCA	
	CD74AC283	**GE/RCA (2629)**	
ACT	CD54ACT283	† GE/RCA	30
	CD74ACT283	**GE/RCA (2629)**	
C	MM54C83	† National	
	MM74C83	◇ National	
Cell	SN74283-Cell	° TI	
HC	**CD54HC283**	**† GE/RCA (2632)**	35
	CD74HC283	**GE/RCA (2632)**	
	GD74HC283	**† GoldStar (2696)**	
	HD74HC283	Hitachi	
	HD74HC83	Hitachi	
	MC74HC283	Motorola	40
	MM54HC283	† National	
	MM74HC283	National	
	M74HC283	SGS	
	74HC283	**Signetics (3003)**	
	SN74HC283	TI	45
	TC74HC283	**Toshiba (3307)**	
HCT	**CD54HCT283**	**† GE/RCA (2632)**	
	CD74HCT283	**GE/RCA (2632)**	
	GD74HCT283	**GoldStar (2696)**	
	74HCT283	**Signetics (3003)**	50
4XXX	F4008BC	Fairchild	
	F4008BM	† Fairchild	
	CD4008A	**† GE/RCA (2636)**	
	CD4008AE	**GE/RCA (2636)**	
	CD4008B	**‡ GE/RCA (2636)**	55
	CD4008BE	**GE/RCA (2636)**	
	GD4008B	**‡ GoldStar (2697)**	
	CD4008A	‡ Micrel	
	CD4008B	‡ Micrel	
	MC14008BA	† Motorola	60

(Continued)

Function	Device	Source	Line
Adder, 4-Bit, Full			
4XXX		(Cont'd)	
	MC14008BC	Motorola	
	CD4008BC	National	
	CD4008BM	† National	
	HCC4008B	† SGS	
	HCF4008B	SGS	65
	HEF4008B	Signetics	
	883C4008B	† Sprague	
	TC4008B	**Toshiba (3308)**	
Adder-Subtractor	L4C381-1C	LogicDev	
	L4C381-1M	† LogicDev	70
Address Generator, 16 Bit with Look-Ahead Pipeline			
	ADSP1410J	**AD (2449)**	
	ADSP1410K	**AD (2449)**	
	ADSP1410S	**† AD (2449)**	
	ADSP1410T	**† AD (2449)**	
Arithmetic Logic Unit (ALU), 16-bit Cascadable			
	S614381	Gould	75
Barrel-Shifter, 32-bit			
	LSH32-1C	LogicDev	
	LSH32-1M	† LogicDev	
Bit Multiplier, 2's Complement (12x12)			
	MPY012-1	IMI	
	MPY012-5	IMI	
Cache Address Comparator (512x8 Internal RAM)			
ACT	**TACT2150**	**TI (3227, 3238)**	80
Comparator, 8-Bit			
HCT	P54PCT521A	† Performance	
	P54PCT521B	† Performance	
	P74PCT521A	Performance	
	P74PCT521B	Performance	85
Comparators, Address, 12-Bit			
HC	HD74HC679	Hitachi	
	HD74HC680	Hitachi	
Comparators, Address, 12-Bit to 4-Bit			
AHCT	KS54AHCT679	† Samsung	
	KS54AHCT680	† Samsung	
	KS74AHCT679	Samsung	90
	KS74AHCT680	Samsung	
HC	SN74HC679	TI	
	SN74HC680	◇ TI	
Comparators, Address, 16-Bit			
HC	HD74HC677	Hitachi	
	HD74HC678	Hitachi	95
Comparators, Address, 16-Bit to 4-Bit			
HC	SN74HC677	TI	
	SN74HC678	TI	
Data Access Register (for memory address arithmetic)			
4XXX	F4707BC	Fairchild	
	F4707BM	† Fairchild	
	GD4707B	**GoldStar (2698)**	100
Data Path Switch			
4XXX	F4704BC	Fairchild	
	F4704BM	† Fairchild	
	GD4704B	**GoldStar (2698)**	
Equality Comparator, 8-Bit			
HC	**CD54HC688**	**† GE/RCA (2632)**	
	CD74HC688	**GE/RCA (2632)**	105
	HD74HC688	Hitachi	
	74HC688	**† Signetics (3003)**	
	TC74HC688	**◇ Toshiba (3307)**	
HCT	**CD54HCT688**	**† GE/RCA (2632)**	
	CD74HCT688	**GE/RCA (2632)**	110
	GD74HCT688	**◇† GoldStar (2696)**	

(Continued)

Function	Device	Source	Line
Equality Comparator, 8-Bit			
HCT		(Cont'd)	
	HD74HCT688	Hitachi	
	74HCT688	**◇† Signetics (3003)**	
Fast Carry Look Ahead –32-Bit			
ACT	**74ACT11882**	**TI (3253)**	
Fixed-Point Multiplier (8x8)			
	ADSP1080A	**AD (2450)**	115
	ADSP1081A	**AD (2450)**	
Fixed-Point Multiplier (12x12)			
	ADSP1012A	**AD (2450)**	
Fixed-Point Multiplier (16x16)			
	ADSP1016A	**AD (2450)**	
Fixed-Point Multiplier (24x24)			
	ADSP1024A	**AD (2450)**	
Floating Point ALU, 22-bit			
	TDC1032	◇ TRW-LSI	120
Floating Point Arithmetic Unit (32–34-bit)			
	TMC3200	TRW-LSI	
Floating Point Chipset (multiplier and ALU)			
	ADSP3211	**AD (2448)**	
	ADSP3212	**AD (2448)**	
	ADSP3221	**◇ AD (2448)**	
	ADSP3222	**◇ AD (2448)**	125
Floating Point Divider, 32-bit			
	TMC3210	TRW-LSI	
Floating Point Multiplier and ALU, 32-Bit, 10 Megaflops			
	TMC3032-1	TRW-LSI	
Floating Point Multiplier and ALU, 32-Bit			
	TMC3032	TRW-LSI	
	TMC3033	TRW-LSI	
Floating Point Multiplier and ALU, 32-Bit, 10 Megaflops			
	TMC3033-1	TRW-LSI	130
Floating Point Processor			
ACT	**SN74ACT8837**	**TI (3224)**	
Floating Point Processor, 32-Bit			
	L64132	**LSI Logic (2869)**	
	L64132A	**LSI Logic (2869)**	
	L64132B	**LSI Logic (2869)**	
Geometric Arithmetic Parallel Processor Simulator/Assembler			
	NCR45GS2	NCR	135
Identify Comparator 8-bit			
AHCT	**IDT54AHCT521**	**◇† IDT (2811)**	
FCT	**IDT54FCT521A**	**◇† IDT (2808, 2810)**	
	IDT74FCT521A	**◇ IDT (2808, 2810)**	
Identity Comparator 4-Bit			
HC	**GD74HC85**	**GoldStar (2695)**	
HCT	**GD74HCT85**	**GoldStar (2695)**	140
Identity Comparator 8-Bit			
AHCT	KS54AHCT682	† Samsung	
	KS54AHCT684	† Samsung	
	KS54AHCT686	◇† Samsung	
	KS74AHCT682	Samsung	
	KS74AHCT684	Samsung	145
	KS74AHCT686	Samsung	
	KS74AHCT688	† Samsung	
HC	**GD74HC688**	**GoldStar (2696)**	
	HD74HC682	Hitachi	
	HD74HC684	Hitachi	150
	HD74HC686	Hitachi	
	MC54HC688	† Motorola	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Arithmetic Functions (Cont'd)

Function	Device	Source	Line
Identity Comparator 8-Bit			
HC		(Cont'd)	
	MC74HC688	Motorola	
	MM54HC688	† National	
	MM74HC688	National	
	M74HC688	SGS	
	LR74HC688	† Sharp	5
	SN54HC688	† TI	
	SN74HC682	◇ TI	
	SN74HC684	◇ TI	
	SN74HC688	◇ TI	
HCT	MM54HCT688	◇† National	10
	MM74HCT688	◇ National	
Identity Comparator 8-Bit with Open Drain Outputs			
AHCT	KS54AHCT689	◇† Samsung	
	KS74AHCT689	Samsung	
Identity Comparator 8-Bit			
AC	**74AC11521**	**TI** (3253)	
ACT	**74ACT11520**	**TI** (3253)	15
	74ACT11521	◇ **TI** (3253)	
Identity Comparator 8-Bit with Pullup Resistors			
AC	**74AC11520**	**TI** (3253)	
Logic Register Stack			
4XXX	F4705BC	Fairchild	
	F4705BM	† Fairchild	
	GD4705B	**GoldStar** (2698)	20
Logic Unit, Floating Point, IEEE 754			
	ADSP3220J	◇ **AD** (2448)	
	ADSP3220K	◇ **AD** (2448)	
	ADSP3220S	◇† **AD** (2448)	
	ADSP3220T	◇† **AD** (2448)	
Logic Unit, Registered, 32-Bit			
ACT	**SN74ACT8832**	**TI** (3224)	25
Logic Unit 4-Bit			
HC	**CD54HC181**	† **GE/RCA** (2632)	
	CD74HC181	**GE/RCA** (2632)	
	HD74HC181	Hitachi	
	HD74HC881	Hitachi	
	MC74HC181	Motorola	30
	MM54HC181	† National	
	MM74HC181	National	
	M74HC181	SGS	
	74HC181	**Signetics** (3003)	
	TC74HC181	**Toshiba** (3307)	35
HCT	**CD54HCT181**	† **GE/RCA** (2632)	
	CD74HCT181	**GE/RCA** (2632)	
	74HCT181	◇ **Signetics** (3003)	
4XXX	**CD40181B**	◇† **GE/RCA** (2636)	
	CD40181BE	◇ **GE/RCA** (2636)	40
	CD4057A	† GE/RCA	
	GD4581B	† **GoldStar** (2698)	
	MC14581BA	† Motorola	
	MC14581BC	Motorola	
	HCC40181B	◇† SGS	45
	HCF40181B	SGS	
	883C4581B	† Sprague	
Logic Unit, 16-Bit Slice, 12 MHz			
	L429C01C	LogicDev	
	L429C01M	† LogicDev	
Logic Unit, 16-Bit Registered, Registered			
ACT	**SN74ACT8816**	**TI** (3226)	50
Logic Unit 4-Bit			
AC	**74AC11881**	**TI** (3253)	
ACT	**74ACT11881**	**TI** (3253)	

Function	Device	Source	Line
Look-Ahead Carry Block			
HC	MC74HC182	Motorola	
Look-Ahead Carry Generator			
AHCT	**IDT54AHCT182**	◇† **IDT** (2811)	
FCT	**IDT54FCT182**	◇† **IDT** (2808)	55
	IDT54FCT182A	◇† **IDT** (2808)	
	IDT74FCT182	◇† **IDT** (2808)	
	IDT74FCT182A	◇† **IDT** (2808)	
HC	**CD54HC182**	† **GE/RCA** (2632)	
	CD74HC182	**GE/RCA** (2632)	60
	HD74HC182	Hitachi	
	MM54HC182	† National	
	MM74HC182	National	
	M74HC182	SGS	
	74HC182	**Signetics** (3003)	65
	TC74HC182	**Toshiba** (3307)	
HCT	**CD54HCT182**	† **GE/RCA** (2632)	
	CD74HCT182	**GE/RCA** (2632)	
	74HCT182	◇ **Signetics** (3003)	
4XXX	F4582BC	Fairchild	70
	F4582BM	† Fairchild	
	CD40182B	◇† **GE/RCA** (2636)	
	CD40182BE	◇ **GE/RCA** (2636)	
	GD4582B	**GoldStar** (2698)	
	MC14582BA	† Motorola	75
	MC14582BC	Motorola	
	HCC40182	◇† SGS	
	HCF40182	SGS	
	883C4582B	† Sprague	
Magnitude Comparator 4-Bit			
C	MM54C85	‡ Micrel	80
	MM54C85	† National	
	MM74C85	◇ National	
HC	**CD54HC85**	† **GE/RCA** (2632)	
	CD74HC85	**GE/RCA** (2632)	
	HD74HC85	Hitachi	85
	MC54HC85	† Motorola	
	MC74HC85	Motorola	
	MM54HC521	◇† National	
	MM54HC85	† National	
	MM74HC521	National	90
	MM74HC85	◇ National	
	MN74HC85	Panasonic	
	M74HC85	SGS	
	LR74HC85	Sharp	
	74HC85	◇ **Signetics** (3003)	95
	SN74HC85	TI	
	TC74HC85	**Toshiba** (3307)	
HCT	**CD54HCT85**	† **GE/RCA** (2632)	
	CD74HCT85	◇ **GE/RCA** (2632)	
	MM54HCT521	† National	100
	MM74HCT521	◇ National	
	P54PCT521	Performance	
	P74PCT521	Performance	
	74HCT85	**Signetics** (3003)	
4XXX	F40085BC	Fairchild	105
	F40085BM	† Fairchild	
	CD4063B	† **GE/RCA** (2636)	
	CD4063BE	**GE/RCA** (2636)	
	CD4585B	† **GE/RCA** (2636)	
	CD4585BE	**GE/RCA** (2636)	110
	GD40085B	**GoldStar** (2698)	
	MC14585BA	† Motorola	

(Continued)

Function	Device	Source	Line
Magnitude Comparator 4-Bit			
4XXX		(Cont'd)	
	MC14585BC	Motorola	
	MN4585B	◇† Panasonic	
	HCC4063B	† SGS	115
	HCF4063B	◇ SGS	
	HEF4585B	Signetics	
	883C4585B	† Sprague	
	TC4063B	**Toshiba** (3308)	
	TC4585B	**Toshiba** (3308)	120
Multi-Level Pipeline Register			
HCT	P29PCT520	† Performance	
	P29PCT521	† Performance	
Multilevel Pipeline Register			
FCT	**IDT29FCT520A**	**IDT** (2808)	
	IDT29FCT521A	**IDT** (2808)	
Multiplier			
ACT	**SN74ACT8836**	**TI** (3224)	125
Multiplier/Accumulator with Pipeline and Scan Test			
(16x16)	**L64012**	◇ **LSI Logic** (2868)	
	L64012A	**LSI Logic** (2868)	
Multiplier/Accumulator with Pipeline (16x16)			
	L64011	**LSI Logic** (2868)	
	L64011A	**LSI Logic** (2868)	
Multiplier Accumulator (12x12)			
	ADSP1009AJ	AD	130
	ADSP1009AK	AD	
	ADSP1009AS	† AD	
	ADSP1009AT	† AD	
	IDT7209L	**IDT** (2806)	
	IDT7209LB	† **IDT** (2806)	135
	LMA1009C	◇ LogicDev	
	LMA1009M	◇ LogicDev	
Multiplier Accumulator (16x16)			
	IDT7243LB	† **IDT** (2806)	
	L64010	**LSI Logic** (2868)	
	L64010A	**LSI Logic** (2868)	140
	TMC2210-1	TRW-LSI	
	TMC2210-2	TRW-LSI	
	TMC2210-3	TRW-LSI	
	WS59510	**Waferscale** (3376)	
HCT	**TACT1010-65**	**TI** (3226)	145
	THCT1010-140	TI	
Multiplier Accumulator, 16x16 bit			
	CY7C510C	**Cypress** (2569)	
	CY7C510M	† **Cypress** (2569)	
Multiplier Accumulator (16x16) 2's Complement and Unsigned Magnitude			
	HS1010	HybridSys	
	LMA1043C	LogicDev	150
	LMA1043M	† LogicDev	
Multiplier/Accumulator (16x16)			
	THCT1010-100	**TI** (3226)	
Multiplier, Floating Point, IEEE 754			
	ADSP3210J	**AD** (2448)	
	ADSP3210K	**AD** (2448)	
	ADSP3210S	† **AD** (2448)	155
	ADSP3210T	† **AD** (2448)	
Multiplier, Serial, 8-Bit			
HC	**74HC384**	**Signetics** (3003)	
Multiplier, Unsigned Magnitude (8x8)			
	LMU8UC	† LogicDev	
	LMU8UM	† LogicDev	
Multiplier, 2's Complement and Unsigned Magnitude			
(12x12)	LMU12C	† LogicDev	160
	LMU13C	† LogicDev	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—CMOS (Cont'd)

Arithmetic Functions (Cont'd)

Function	Device	Source	Line
Multiplier, 2's Complement and Unsigned Magnitude (16x16) (Cont'd)			
	LMU16C	† LogicDev	
	LMU17C	† LogicDev	
	LMU557C	LogicDev	
	LMU557M	† LogicDev	
	LMU558C	LogicDev	5
	LMU558M	† LogicDev	
Multiplier, 2's Complement (8x8)			
	LMU08C	† LogicDev	
Multiplier (2x2) Parallel			
4XXX	MC14554BA	† Motorola	
	MC14554BC	Motorola	
Multiplier (8x8) Divider (16÷8)			
	MSM6203	OKI	10
	MSM80C58	OKI	
Multiplier (8x8) Unsigned Magnitude			
	ADSP1081AJ	AD	
	ADSP1081AK	AD	
	ADSP1081AS	† AD	
	ADSP1081AT	† AD	15
	TMC28	TRW-LSI	
	TMC28-1	TRW-LSI	
Multiplier (8x8) 2's Complement			
	ADSP1080AJ	AD	
	ADSP1080AK	AD	
	ADSP1080AS	† AD	20
	ADSP1080AT	† AD	
	LMU08M	† LogicDev	
	TMC208	TRW-LSI	
	TMC208-1	TRW-LSI	
Multiplier (12x12)	**IDT7212L**	**IDT (2806)**	25
	IDT7212LB	**† IDT (2806)**	
	IDT7213L	**IDT (2806)**	
	IDT7213LB	**† IDT (2806)**	
	LMU13M	† LogicDev	
Multiplier (12x12) 2's Complement			
	ADSP1012AJ	AD	30
	ADSP1012AK	AD	
	ADSP1012AS	† AD	
	ADSP1012AT	† AD	
Multiplier (12x12) 2's Complement and Unsigned Magnitude, Mixed Mode			
	MPY12IMI	IMI	
	LMU112C	LogicDev	35
	LMU112C	LogicDev	
	LMU112M	† LogicDev	
	LMU12M	† LogicDev	
Multiplier (16x16)	67C7016-45	MMI	
	67C7016-55	MMI	40
	TMC216	TRW-LSI	
	TMC216-1	TRW-LSI	
	TMC216-2	TRW-LSI	
Multiplier (16x16) Common Clock			
	67C7017-45	MMI	
	67C7017-55	MMI	45
Multiplier (16x16) 2's Complement			
	ADSP1016AJ	AD	
	ADSP1016AK	AD	
	ADSP1016AS	† AD	
	ADSP1016AT	† AD	
(Multiplier (16x16) 2's Complement and Unsigned Magnitude, Individual Clocks			
	CY7C516C	**Cypress (2569)**	50
	CY7C516M	**† Cypress (2569)**	

(Continued)

Function	Device	Source	Line
Multiplier (16x16) 2's Complement and Unsigned Magnitude, Single Clock (Cont'd)			
	CY7C517C	**◇ Cypress (2569)**	
	CY7C517M	**◇† Cypress (2569)**	
	ISP9216	**GE/Intersil (2661)**	
	ISP9216M	**† GE/Intersil (2661)**	55
	IDT7216L	**IDT (2806, 2832)**	
	IDT7216LB	**† IDT (2806, 2832)**	
	IDT7217L	**IDT (2806, 2832)**	
	IDT7217LB	**† IDT (2806, 2832)**	
	MPY16IMI	IMI	60
	LMU16M	† LogicDev	
	LMU17M	† LogicDev	
	LMU216C	LogicDev	
	LMU217C	† LogicDev	
	LMU217M	† LogicDev	65
	TMC216H	TRW-LSI	
	WTL2517C	Weitek	
	WTL2517M	† Weitek	
Multiplier (16x16) 2's Complement, Unsigned or Mixed Operands	LMU18C	LogicDev	
	LMU18M	† LogicDev	70
Multiplier (24x24)	ADSP1024AJ	AD	
	ADSP1024AK	AD	
	ADSP1024AS	AD	
	ADSP1024AT	AD	
Multiplier (16x16)	**L64016**	**◇ LSI Logic (2868)**	75
	L64017	**◇ LSI Logic (2868)**	
Multiplier-Accumulator (8x8)			
	ADSP1008A	**AD (2450)**	
	ADSP1008AJ	AD	
	ADSP1008AK	AD	
	ADSP1008AS	† AD	80
	ADSP1008AT	† AD	
Multiplier-Accumulator (12x12)	**ADSP1009A**	**AD (2450)**	
Multiplier-Accumulator (16x16)			
	ADSP1010A	**AD (2450)**	
	ADSP1010AJ	AD	
	ADSP1010AK	AD	85
	ADSP1010AS	† AD	
	ADSP1010AT	† AD	
	ADSP1101	**AD (2450)**	
	ADSP1110AJ	AD	
	ADSP1110AK	AD	90
	ADSP1110AS	† AD	
	ADSP1110AT	† AD	
	CY7C510	**◇† Cypress (2569)**	
	ISP9210	**GE/Intersil (2660)**	
	ISP9210M	**† GE/Intersil (2660)**	95
	IDT7210L	**IDT (2806)**	
	IDT7210LB	**† IDT (2806)**	
	IDT7243L	**IDT (2806)**	
	LMA1010C	LogicDev	
	LMA1010M	† LogicDev	100
	LMA2010C	LogicDev	
	LMA2010M	† LogicDev	
	WTL2010C	Weitek	
	WTL2010M	† Weitek	

Function	Device	Source	Line
Multiplier-Accumulator (16x16) Expandable			
	WTL2245C	Weitek	105
	WTL2245M	† Weitek	
Multiplier-Accumulator (16x16) Multiply Only or Multiply-Accumulate Modes			
	WTL2044C	Weitek	
	WTL2044M	† Weitek	
Multiplier-Accumulator (32x32)			
	L64032	**† LSI Logic (2868)**	
	L64032A	**† LSI Logic (2868)**	110
	L64032B	**† LSI Logic (2868)**	
Multiplier-Divider, 16-bit			
	67C7560	MMI	
Multiplier-Summer (12x12)			
	LMS12C	◇ LogicDev	
	LMS12M	◇† LogicDev	
Parity Generator and Checker, 9-Bit			
4XXX	**CD40101B**	**† GE/RCA (2636)**	115
	CD40101BE	**GE/RCA (2636)**	
	HCC40101B	† SGS	
	HCF40101B	◇ SGS	
Parity Generator/Checker, 9-Bit Odd/Even			
AC	CD54AC280	† GE/RCA	
	CD74AC280	**GE/RCA (2629)**	120
	54AC11280	† TI	
	74AC11280	**TI (3252)**	
ACT	CD54ACT280	† GE/RCA	
	CD74ACT280	**GE/RCA (2629)**	
HC	**CD54HC280**	**† GE/RCA (2632)**	125
	CD74HC280	**GE/RCA (2632)**	
	HD74HC280	Hitachi	
	M74HC280	Mitsubishi	
	MC54HC280	† Motorola	
	MC74HC280	Motorola	130
	MM54HC280	† National	
	MM74HC280	National	
	M74HC280	SGS	
	74HC280	**Signetics (3003)**	
HCT	**CD54HCT280**	**† GE/RCA (2632)**	135
	CD74HCT280	**GE/RCA (2632)**	
	74HCT280	**Signetics (3003)**	
Parity Generator/Checker, 9-Bit Odd/Even			
AC	**74AC11286**	**TI (3252)**	
ACT	**74ACT11280**	**◇ TI (3252)**	
	74ACT11286	**◇ TI (3252)**	140
Priority Encoder, 10-Line Decimal to 4-Line BCD			
HC	LR74HC147	Sharp	
	SN74HC147	TI	
Program Sequencer, 16 Bit with Look-Ahead Pipeline			
	ADSP1401J	**AD (2449)**	
	ADSP1401K	**AD (2449)**	
	ADSP1401S	**AD (2449)**	145
	ADSP1401T	**AD (2449)**	
	ADSP3220J	**◇ AD (2448)**	
	ADSP3220K	**◇ AD (2448)**	
	ADSP3220S	**◇† AD (2448)**	
	ADSP3220T	**◇† AD (2448)**	150
Successive Approximation Register, 12-Bit (serial to parallel converter)			
HC	SI25HC04C	Siliconix	
Nines Complementer			
4XXX	**GD4561B**	**GoldStar (2698)**	155
	MC14561BA	◇† Motorola	
	MC14561BC	◇ Motorola	
	TC4561B	**Toshiba (3308)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Arithmetic Functions (Cont'd)

Function	Device	Source
4-Stage Pipeline Register		
	29C520C	MMI
	29C521C	MMI
8 to 3-Line Priority Encoder		
AHCT	KS74AHCT148	◊ Samsung
HC	**GD74HC148**	◊ **GoldStar (2695)**
	HD74HC148	Hitachi
	SN74HC148	TI
HCT	**GD74HCT148**	**GoldStar (2695)**
16-Bit ALU	IDT7381	IDT
16-Bit Eight Level Deep Pipeline Register		
	7320	◊ IDT
16x16 Multiplier with 32-Bit Output		
	IDT7316	IDT
	IDT7317	IDT
32-Bit Error Detection and Correction Unit, Three-State		
HCT	P54PCT632	† Performance
	P54PCT632A	† Performance
	P54PCT632B	† Performance
	P54PCT633	† Performance
	P54PCT633A	† Performance
	P54PCT633B	† Performance
	P54PCT634	† Performance
	P54PCT634A	† Performance
	P54PCT634B	† Performance
	P54PCT635	† Performance
	P54PCT635A	† Performance
	P54PCT635B	† Performance
	P74PCT632	Performance
	P74PCT632A	Performance
	P74PCT632B	Performance
	P74PCT633	Performance
	P74PCT633A	Performance
	P74PCT633B	Performance
	P74PCT634	Performance
	P74PCT634A	Performance
	P74PCT634B	Performance
	P74PCT635	Performance
	P74PCT635A	Performance
	P74PCT635B	Performance
32-Bit Look Ahead Carry Generator		
AC	**74AC11882**	**TI (3253)**

Buffers

Buffer, Three-State		
AC	**TC74AC367**	**Toshiba (3307)**
	TC74AC368	**Toshiba (3307)**
Quad Bidirectional		
40HXXX	TC40H242	Toshiba
	TC40H243	Toshiba
Quad Gate, Three-State		
HCT	**GD74HCT126**	**GoldStar (2695)**
Quad Gated Three-State		
HC	**CD54HC125**	◊† **GE/RCA (2631)**
	CD54HC126	† **GE/RCA (2631)**
	CD74HC125	**GE/RCA (2631)**
	CD74HC126	**GE/RCA (2631)**
	GD74HC125	**GoldStar (2695)**
	GD74HC126	**GoldStar (2695)**
	HD74HC125	Hitachi
	HD74HC126	Hitachi
	MC54HC125	† Motorola
	MC54HC126	† Motorola
	MC74HC125	Motorola
	MC74HC126	Motorola

(Continued)

Function	Device	Source
Quad Gated Three-State		
HC		(Cont'd)
	MM54HC125	† National
	MM74HC125	National
	M74HC125	SGS
	M74HC126	SGS
	74HC125	**Signetics (3003)**
	74HC126	**Signetics (3003)**
	SN54HC125	TI
	SN74HC125	TI
	SN74HC126	TI
	TC74HC126	**Toshiba (3307)**
HCT	**CD54HCT125**	† **GE/RCA (2631)**
	CD54HCT126	† **GE/RCA (2631)**
	CD74HCT125	**GE/RCA (2631)**
	CD74HCT126	**GE/RCA (2631)**
	HD74HCT125	Hitachi
	HD74HCT126	Hitachi
	74HCT125	**Signetics (3003)**
	74HCT126	**Signetics (3003)**
Quad Gated, Three-State (Inverted Control)		
HC	MM54HC126	† National
	MM74HC126	National
Quad, Inverted Control		
HCT	**GD74HCT125**	**GoldStar (2695)**
Quad Low Impedance		
4XXX	883C4441UB	† Sprague
Quad True/Complement		
4XXX	F4041BC	Fairchild
	F4041BM	† Fairchild
	CD4041A	† **GE/RCA (2633)**
	CD4041AE	**GE/RCA (2633)**
	CD4041UB	‡ **GE/RCA (2633)**
	CD4041UBE	**GE/RCA (2633)**
	GD4041B	‡ **GoldStar (2697)**
	CD4041A	‡ Micrel
	CD4041C	National
	CD4041M	National
	HCC4041UB	† SGS
	HCF4041UB	◊ SGS
	HEF4041B	Signetics
	883C4041UB	† Sprague
Quad, Three-State		
HC	**TC74HC125**	**Toshiba (3307)**
Quad Three-State Non-Inverting		
5XXX	**TC5024B**	**Toshiba (3308)**
	TC5025B	**Toshiba (3308)**
Hex		
HC	**GD74HC34**	**GoldStar (2695)**
	SN74HC4061	◊ TI
HCT	**GD74HCT34**	**GoldStar (2695)**
	MC74HCT34	Motorola
	TC74HCT7007	**Toshiba (3307)**
40HXXX	TC40H368	Toshiba
50HXXX	TC50H001	Toshiba
Hex CMOS Compatible		
	DS1630	† National
	DS3630	National
Hex High Voltage		
5XXX	**TC5064B**	**Toshiba (3308)**
	TC5065B	**Toshiba (3308)**
Hex, Inverting		
HC	M74HC4049B	Mitsubishi
HCT	CD54HCT4049	† GE/RCA
	CD74HCT4049	GE/RCA
4XXX	**CD4009A**	† **GE/RCA (2633)**
	CD4009AE	**GE/RCA (2633)**

(Continued)

Function	Device	Source
Hex (Inverting)		
4XXX		(Cont'd)
	CD4009UB	† **GE/RCA (2633)**
	CD4009UBE	**GE/RCA (2633)**
	CD4009A	‡ Micrel
	CD4009AC	National
	CD4009AM	† National
	883C4009UB	† Sprague
	TC4009UB	**Toshiba (3308)**
Hex (Inverting) Three-State, Strobed		
4XXX	**CD4502B**	‡ **GE/RCA (2633)**
	CD4502BE	**GE/RCA (2633)**
	MC14502BA	† Motorola
	MC14502BC	Motorola
	HCC4502B	† SGS
	HCF4502B	◊ SGS
	HEF4502B	◊ Signetics
	883C4502B	◊† Sprague
	TC4502B	**Toshiba (3308)**
Hex (Inverting)-Improved		
	TC50H000	Toshiba
HC	**CD54HC4049**	† **GE/RCA (2631)**
	CD74HC4049	**GE/RCA (2631)**
	MC54HC4049	† Motorola
	MC74HC4049	Motorola
	MM54HC4049	◊† National
	MM74HC4049	◊ National
	MN74HC4049	Panasonic
	M74HC4049	SGS
	74HC4049	◊ **Signetics (3003)**
	TC74HC4049	**Toshiba (3307)**
HCT	**74HCT4049**	**Signetics (3003)**
50HXXX	TC50H001	Toshiba
4XXX	F4049BC	Fairchild
	F4049BM	† Fairchild
	CD4049A	† **GE/RCA (2633)**
	CD4049AE	**GE/RCA (2633)**
	CD4049UB	‡ **GE/RCA (2633)**
	CD4049UBE	**GE/RCA (2633)**
	GD4049B	‡ **GoldStar (2697)**
	CD4049A	‡ Micrel
	CD4049UB	‡ Micrel
	MC14049UBA	◊† Motorola
	MC14049UBC	◊ Motorola
	CD4049UB	National
	MN4049B	◊† Panasonic
	HCC4049UB	† SGS
	HCF4049UB	◊ SGS
	HEF4049B	Signetics
	883C4049UB	† Sprague
	TC4049B	**Toshiba (3308)**
50HXXX	LR50H000	Sharp
Hex, Non-Inverter		
AC	**74AC11034**	**TI (3252)**
Hex, Non-Inverting		
AC	SN54AC11034	† TI
ACT	**74ACT11034**	† **TI (3252)**
HC	M74HC4050B	Mitsubishi
4XXX	**CD4010A**	† **GE/RCA (2633)**
	CD4010AE	**GE/RCA (2633)**
	CD4010B	† **GE/RCA (2633)**
	CD4010BE	**GE/RCA (2633)**
	CD4010A	‡ Micrel
	CD4010A	National
	883C4010B	† Sprague
	TC4010B	**Toshiba (3308)**
Hex, Non-Inverting Dual Supply		
	883C4504B	◊ Sprague

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—CMOS (Cont'd)

Function	Device	Source	Line
Buffers (Cont'd)			
Hex, Non-Inverting, Three-State			
4XXX	TC4503B	Toshiba	
Hex Non-Inverting-Improved			
HC	**CD54HC4050**	**† GE/RCA (2631)**	
	CD74HC4050	**GE/RCA (2631)**	
	MC54HC4050	† Motorola	
	MC74HC4050	Motorola	5
	MM54HC4050	◇† National	
	MM74HC4050	◇ National	
	MN74HC4050	Panasonic	
	M74HC4050	SGS	
	74HC4050	**◇ Signetics (3003)**	10
	TC74HC4050	**Toshiba (3307)**	
HCT	**74HCT4050**	**Signetics (3003)**	
4XXX	F4050BC	Fairchild	
	F4050BM	† Fairchild	
	CD4050A	**† GE/RCA (2633)**	15
	CD4050AE	**GE/RCA (2633)**	
	CD4050B	**‡ GE/RCA (2633)**	
	CD4050BE	**GE/RCA (2633)**	
	GD4050B	**‡ GoldStar (2697)**	
	CD4050A	‡ Micrel	20
	CD4050B	‡ Micrel	
	MC14050BA	◇† Motorola	
	MC14050BC	◇ Motorola	
	CD4050BC	National	
	CD4050BM	National	25
	MN4050B	◇† Panasonic	
	HCC4050B	† SGS	
	HCF4050B	◇ SGS	
	HEF4050B	Signetics	
	883C4050B	† Sprague	30
	TC4050B	**Toshiba (3308)**	
Hex Open Drain Active Pull Down			
C	MM54C906	‡ Micrel	
	MM54C906	† National	
	MM74C906	National	
Hex Open Drain Active Pull Up			
C	MM54C907	‡ Micrel	35
	MM54C907	† National	
	MM74C907	National	
Hex PMOS Inverting (PMOS to CMOS or TTL)			
C	MM54C903	‡ Micrel	
	MM54C903	† National	
	MM74C903	National	40
Hex PMOS Non-Inverting (PMOS to CMOS or TTL)			
C	MM54C904	‡ Micrel	
	MM54C904	† National	
	MM74C904	National	
Hex TTL Inverting (CMOS to TTL)			
C	MM54C901	‡ Micrel	
	MM54C901	† National	45
	MM74C901	National	
Hex TTL Non-Inverting (CMOS to TTL)			
C	MM54C902	‡ Micrel	
	MM54C902	† National	
	MM74C902	National	
Hex Three-State	MM70C95	† National	50
	MM70C97	† National	
	MM80C95	National	
	MM80C97	National	
AHCT	KS74AHCT365	Samsung	
HC	**CD54HC365**	**◇† GE/RCA (2631)**	55
	CD54HC367	**◇† GE/RCA (2631)**	
	CD74HC365	**GE/RCA (2631)**	

(Continued)

Function	Device	Source	Line
Hex Three-State			
HC		(Cont'd)	
	CD74HC367	**GE/RCA (2631)**	
	GD74HC365	**GoldStar (2696)**	
	GD74HC367	**GoldStar (2696)**	60
	HD74HC365	Hitachi	
	HD74HC367	Hitachi	
	MC54HC365	† Motorola	
	MC54HC367	† Motorola	
	MC74HC365	Motorola	65
	MC74HC367	Motorola	
	MM54HC365	† National	
	MM54HC367	† National	
	MM74HC365	National	
	MM74HC367	National	70
	MN74HC365	◇ Panasonic	
	MN74HC367	Panasonic	
	M74HC365	SGS	
	M74HC367	SGS	
	LR74HC365	Sharp	75
	74HC365	**◇ Signetics (3003)**	
	74HC367	**◇ Signetics (3003)**	
	SN54HC365	† TI	
	TC74HC365	**Toshiba (3307)**	
	TC74HC367	**Toshiba (3307)**	80
HCT	**CD54HCT365**	**† GE/RCA (2631)**	
	CD54HCT367	**† GE/RCA (2631)**	
	CD74HCT365	**GE/RCA (2631)**	
	CD74HCT367	**GE/RCA (2631)**	
	GD74HCT365	**GoldStar (2696)**	85
	GD74HCT367	**GoldStar (2696)**	
	KS74HCTLS365	Samsung	
	KS74HCTLS367	Samsung	
	74HCT365	**Signetics (3003)**	
	74HCT367	**Signetics (3003)**	90
4XXX	F40097BC	Fairchild	
	F40097BM	† Fairchild	
	CD4503BD	**† GE/RCA (2633)**	
	CD4503BE	**GE/RCA (2633)**	
	GD40097B	**GoldStar (2698)**	95
	MC14503BA	† Motorola	
	MC14503BC	Motorola	
	CD4503BC	National	
	CD4503BM	† National	
	MN4503B	† Panasonic	100
	HEF40097B	Signetics	
40HXXX	LR40H367	Sharp	
	TC40H365	Toshiba	
	TC40H367	Toshiba	
5XXX	**TC5012B**	**Toshiba (3308)**	105
Hex Three-State, Inverting			
AHCT	KS74AHCT366	Samsung	
	KS74AHCT368	Samsung	
HC	**CD54HC366**	**◇† GE/RCA (2631)**	
	CD54HC368	**◇† GE/RCA (2631)**	
	CD74HC366	**GE/RCA (2631)**	110
	CD74HC368	**GE/RCA (2631)**	
	GD74HC366	**GoldStar (2696)**	
	GD74HC368	**GoldStar (2696)**	
	HD74HC366	Hitachi	
	HD74HC368	Hitachi	115
	MC54HC366	† Motorola	
	MC54HC368	† Motorola	
	MC74HC366	Motorola	
	MC74HC368	Motorola	
	MM54HC366	† National	120
	MM54HC368	† National	
	MM74HC366	National	

(Continued)

Function	Device	Source	Line
Hex Three-State, Inverting			
HC		(Cont'd)	
	MM74HC368	National	
	MN74HC366	Panasonic	
	MN74HC368	Panasonic	125
	M74HC366	SGS	
	M74HC368	SGS	
	LR74HC366	Sharp	
	LR74HC368	Sharp	
	74HC366	**◇ Signetics (3003)**	130
	74HC368	**◇ Signetics (3003)**	
	SN54HC366	† TI	
	SN54HC368	† TI	
	TC74HC366	**Toshiba (3307)**	
	TC74HC368	**Toshiba (3307)**	135
HCT	**CD54HCT366**	**† GE/RCA (2631)**	
	CD54HCT368	**† GE/RCA (2631)**	
	CD74HCT366	**GE/RCA (2631)**	
	CD74HCT368	**GE/RCA (2631)**	
	GD74HCT366	**GoldStar (2696)**	140
	GD74HCT368	**GoldStar (2696)**	
	KS74HCTLS366	Samsung	
	KS74HCTLS368	Samsung	
	74HCT366	**Signetics (3003)**	
	74HCT368	**Signetics (3003)**	145
40HXXX	TC40H368	Toshiba	
4XXX	TC40368	Toshiba	
40HXXX	LR40H368	Sharp	
	TC40H366	Toshiba	
Octal Buffer/Level Translator, Inverting			
HC	MM54HC4305	◇ National	150
	MM74HC4305	◇ National	
Octal Buffer/Line Driver			
C	MM54C941	‡ Micrel	
	MM54C941	† National	
	MM74C941	National	
Octal Buffer/Line Driver, Three State			
AC	54AC540	† Fairchild	155
	74AC540	Fairchild	
	74AC541	Fairchild	
	CD54AC540	† GE/RCA	
	CD54AC541	† GE/RCA	
	CD74AC540	**GE/RCA (2629)**	160
	CD74AC541	**GE/RCA (2629)**	
	TC74AC540	**Toshiba (3307)**	
	TC74AC541	**Toshiba (3307)**	
ACT	CD54ACT540	† GE/RCA	
	CD54ACT541	† GE/RCA	165
	CD74ACT540	**GE/RCA (2629)**	
	CD74ACT541	**GE/RCA (2629)**	
	V54ACT465	**† VTC (3370)**	
	V54ACT467	**† VTC (3370)**	
	V54ACT541	**† VTC (3370)**	170
	V74ACT465	**VTC (3370)**	
	V74ACT467	**VTC (3370)**	
	V74ACT541	**VTC (3370)**	
AHCT	KS54AHCT465	† Samsung	
	KS54AHCT467	† Samsung	175
	KS74AHCT465	Samsung	
	KS74AHCT467	Samsung	
	KS74AHCT540	Samsung	
HC	**CD54HC540**	**† GE/RCA (2631)**	
	CD54HC541	**† GE/RCA (2631)**	180
	CD74HC540	**GE/RCA (2631)**	
	CD74HC541	**GE/RCA (2631)**	
	GD74HC540	**GoldStar (2696)**	
	HD74HC540	Hitachi	
	HD74HC541	Hitachi	185

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Buffers (Cont'd)

Function	Device	Source	Line
Octal Buffer/Line Driver, Three State			
HC		(Cont'd)	
	MC54HC540	† Motorola	
	MC54HC541	† Motorola	
	MC74HC540	Motorola	
	MC74HC541	Motorola	
	74HC540	Samsung	5
	74HC541	Samsung	
	M74HC540	SGS	
	M74HC541	SGS	
	74HC540	**Signetics (3003)**	
	74HC541	**Signetics (3003)**	10
	SN54HC540	† TI	
	SN74HC540	TI	
	TC74HC540	**Toshiba (3307)**	
HCT	**CD54HCT540**	**† GE/RCA (2631)**	
	CD54HCT541	**† GE/RCA (2631)**	15
	CD74HCT540	**GE/RCA (2631)**	
	CD74HCT541	**GE/RCA (2631)**	
	GD74HCT540	**GoldStar (2696)**	
	GD74HCT541	**GoldStar (2696)**	
	HD74HCT540	Hitachi	20
	HD74HCT541	Hitachi	
	54HCT540SOS	‡ Marconi	
	54HCT541SOS	‡ Marconi	
	74HCT540	Marconi	
	74HCT541	Marconi	25
	MIC74HCT540	Micrel	
	MIC74HCT541	Micrel	
	MD54HCT540R	† Mitel	
	MD54HCT541R	† Mitel	
	MD74HCT540R	Mitel	30
	MD74HCT541R	Mitel	
	MC54HCT540	† Motorola	
	MC54HCT541	† Motorola	
	MC74HCT540	◊ Motorola	
	MC74HCT541	◊ Motorola	35
	MM54HCT540	† National	
	MM54HCT541	† National	
	MM74HCT540	National	
	MM74HCT541	National	
	MV74HCT540	Plessey	40
	MV74HCT541	Plessey	
	KS74HCTLS540	Samsung	
	KS74HCTLS541	Samsung	
	M74HCT540	SGS	
	M74HCT541	SGS	45
	74HCT540	**Signetics (3003)**	
	74HCT541	**Signetics (3003)**	
	54HCT541	† Supertex	
	74HCT540	Supertex	
	74HCT541	Supertex	50
	SN54HCT541	TI	
	SN74HCT541	◊ TI	
	TC74HCT540	Toshiba	
SC	74SC540	Supertex	
	74SC541	Supertex	55
Octal Buffer/Line Driver, Three-State			
AC	**V54AC465**	**† VTC (3370)**	
	V54AC467	**† VTC (3370)**	
	V54AC541	**† VTC (3370)**	
	V74AC465	VTC	
	V74AC467	VTC	60
	V74AC541	VTC	

(Continued)

Function	Device	Source	Line
Octal Buffer/Line Driver, Three-State		(Cont'd)	
HCT	P54PCT240A	† Performance	
	P54PCT241A	† Performance	
	P54PCT244A	† Performance	
	P74PCT240A	Performance	65
	P74PCT241A	Performance	
	P74PCT244A	Performance	
	54HCT540	† Supertex	
Octal Bus Driver, Inverting, Three-State			
AC	CD54AC240	GE/RCA	
	CD74AC240	**GE/RCA (2629)**	70
Octal Bus Driver, Non-Inverting, Three State, Complementary Controls			
AC	CD54AC244	† GE/RCA	
	CD74AC244	**GE/RCA (2629)**	
Octal Bus Driver, Non-Inverting, Three-State, Complementary Controls			
AC	CD54AC241	† GE/RCA	
	CD74AC241	**GE/RCA (2629)**	
Octal Inverting Buffer			
FCT	**IDT54FCT540**	**† IDT (2808, 2810)**	75
	IDT54FCT540A	**† IDT (2808, 2810)**	
	IDT74FCT540	**IDT (2808, 2810)**	
	IDT74FCT540A	**IDT (2808, 2810)**	
Octal, Non-Inverting			
FCT	**IDT74FCT541A**	**IDT (2808, 2810)**	
Octal Non-Inverting Buffer			
FCT	**IDT54FCT541**	**† IDT (2808, 2810)**	80
	IDT54FCT541A	**† IDT (2808, 2810)**	
	IDT74FCT541	**IDT (2808, 2810)**	
Nine Wide			
HCT	MC74HCT9035	Motorola	
Nine Wide, Open Drain			
HC	MC54HC9135	† Motorola	
Nine Wide Schmitt Trigger			
HC	MC54HC9015	† Motorola	85
Nine Wide Schmitt Trigger, Open Drain			
HC	MC74HC9114	Motorola	
	MC54HC9114	† Motorola	
7-Line High Voltage			
5XXX	**TC5066B**	**Toshiba (3308)**	
	TC5067B	**Toshiba (3308)**	
10-Bit Buffer/Line Driver, Inverting			
AC	**V54AC828**	**† VTC (3370)**	90
	V74AC828	VTC	
	V74FCT828A	**† VTC (3370)**	
FCT	**IDT54FCT828A**	**◊† IDT (2809)**	
	IDT54FCT828B	**◊† IDT (2809)**	
	IDT74FCT828A	**◊ IDT (2809)**	95
	IDT74FCT828B	**◊ IDT (2809)**	
	V54FCT828A	**† VTC (3370)**	
10-Bit Buffer/Line Driver, Non-Inverting			
	IDR54FCT827B	IDT	
AC	**V54AC827**	**† VTC (3370)**	

(Continued)

Function	Device	Source	Line
10-Bit Buffer/Line Driver, Non-Inverting			
AC		(Cont'd)	
	V74AC827	VTC	100
	V74FCT827A	**† VTC (3370)**	
C	**IDT54FCT827A**	**◊† IDT (2809)**	
FCT	**IDT54FCT827B**	**◊† IDT (2809)**	
	IDT74FCT827A	**◊ IDT (2809)**	
	V54FCT827A	**† VTC (3370)**	105
HCT	**IDT74FCT827B**	**◊ IDT (2809)**	
10-Bit Buffer/Line Driver, Inverting			
ACT	**74ACT11828**	**TI (3253)**	
	V54ACT828	**† VTC (3370)**	
	V74ACT828	**VTC (3370)**	
C	IDR39C828	IDT	110
FCT	IDR74FCT828B	IDT	
10-Bit Buffer/Line Driver, Non-Inverting			
ACT	**74ACT11827**	**TI (3253)**	
	V54ACT827	**† VTC (3370)**	
	V74ACT827	**VTC (3370)**	
FCT	IDT54DCT827B	◊† Motorola	115

Inverters

Function	Device	Source	Line
Dual Complementary Pair Plus Inverter			
4XXX	F4007UBC	Fairchild	
	F4007UBM	† Fairchild	
	CD4007A	**† GE/RCA (2633)**	
	CD4007AE	**GE/RCA (2633)**	
	CD4007UB	**‡ GE/RCA (2633)**	120
	CD4007UBE	**GE/RCA (2633)**	
	GD4007UB	**‡ GoldStar (2697)**	
	CD4007A	‡ Micrel	
	CD4007UB	‡ Micrel	
	MC14007UBA	† Motorola	125
	MC14007UBC	Motorola	
	CD4007C	National	
	CD4007M	† National	
	MN4007UB	◊† Panasonic	
	HCC4007UB	† SGS	130
	HCF4007UB	SGS	
	HEF4007UB	Signetics	
	883C4007UB	† Sprague	
	TC4007UB	**Toshiba (3308)**	
Hex	MM74PC04	National	135
AC	54AC04	† Fairchild	
	74AC04	Fairchild	
	CD54AC04	† GE/RCA	
	CD54AC05	† GE/RCA	
	CD74AC04	**GE/RCA (2629)**	140
	CD74AC05	**GE/RCA (2629)**	
	SN54AC11004	† TI	
	74AC11004	**TI (3252)**	
	TC74AC04	**Toshiba (3307)**	
ACT	54ACT04	† Fairchild	145
	CD54ACT04	† GE/RCA	
	CD54ACT05	† GE/RCA	
	CD74ACT04	**GE/RCA (2629)**	
	CD74ACT05	**GE/RCA (2629)**	
	74ACT11004	**TI (3252)**	150
AHCT	KS74AHCT04	Samsung	
	KS74AHCT05	Samsung	
C	MM54C04	‡ Micrel	
	MM54C04	† National	
	MM74C04	National	155

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—CMOS (Cont'd)

Function	Device	Source	Line
Inverters (Cont'd)			
Hex (Cont'd)			
HC	**CD54HCU04**	◇† **GE/RCA (2631)**	
	CD54HC04	† **GE/RCA (2631)**	
	CD74HCU04	**GE/RCA (2631, 2648)**	
	CD74HC04	**GE/RCA (2631)**	
	GD74HC04	**GoldStar (2695)**	5
	GD74HC05	**GoldStar (2695)**	
	HD74HC04	Hitachi	
	MC54HC04	† Motorola	
	MC54HC05	† Motorola	
	MC74HC04	Motorola	10
	MM54HC04	† National	
	MM74HC04	National	
	M74HC04	SGS	
	LR74HC04	Sharp	
	74HC04	**Signetics (3003)**	15
	SN54HC04	† TI	
	SN54HC05	† TI	
	SN74HC04	TI	
	SN74HC05	TI	
	TC74HCU04A	Toshiba	20
	TC74HC04	**Toshiba (3307)**	
HCT	**CD54HCT04**	† **GE/RCA (2631)**	
	CD74HCT04	**GE/RCA (2631)**	
	GD74HCT04	**GoldStar (2695)**	
	GD74HCT05	**GoldStar (2695)**	25
	MC54HCT04	† Motorola	
	MC54HCT05	† Motorola	
	MC54HCT34	† Motorola	
	MM54HCT04	◇† National	
	MM54HCT05	◇† National	30
	MM54HCT34	† National	
	MM74HCT04	National	
	MM74HCT05	National	
	MM74HCT34	National	
	KS74HCTLS04	Samsung	35
	KS74HCTLS05	Samsung	
	M74HCT04	SGS	
	74HCT04	**Signetics (3003)**	
	SN54HCT04	† TI	
	TC74HCT04	Toshiba	40
4XXX	**TC4584B**	**Toshiba (3308)**	
4XXX	F4069UBC	Fairchild	
	F4069UBM	† Fairchild	
	CD4069UB	‡ **GE/RCA (2633)**	
	CD4069UBE	**GE/RCA (2633)**	45
	GD4069UB	‡ **GoldStar (2697)**	
	CD4069A	‡ Micrel	
	CD4069UB	‡ Micrel	
	MC14069UBA	† Motorola	
	MC14069UBC	Motorola	50
	CD4069C	National	
	CD4069M	† National	
	MN4069UB	◇† Panasonic	
	LC4069UB	◇ Sanyo	
	HCC4069UB	† SGS	55
	HCF4069UB	◇ SGS	
	HEF4069UB	† Signetics	
	883C4069UB	† Sprague	
	883C4449UB	† Sprague	
	TC4069UB	**Toshiba (3308)**	60
40HXXX	LR40H004	Sharp	
	TC40H004	Toshiba	

Function	Device	Source	Line
Hex Schmitt Trigger			
HC	**TC74HC14**	**Toshiba (3307)**	
4XXX	MC14106	Motorola	
Hex Unbuffered			
HC	**GD74HCU04**	**GoldStar (2695)**	65
	MC54HCU04	† Motorola	
	MC74HCU04	Motorola	
	MM54HCU04	† National	
	MM74HCU04	National	
	M74HCU04	SGS	70
	74HCU04	◇ Signetics	
	SN54HCU04	TI	
	SN74HCU04	TI	
	TC74HCU04	Toshiba	
Hex Three-State	MM70C96	‡ Micrel	75
	MM70C98	‡ Micrel	
	MM70C96	† National	
	MM70C98	† National	
	MM80C96	National	
	MM80C98	National	80
4XXX	F40098BC	Fairchild	
	F40098BM	† Fairchild	
	GD40098B	**GoldStar (2698)**	
	HEF40098B	Signetics	
Octal Inverter/Line Driver, Three State			
AHCT	KS54AHCT466	† Samsung	85
	KS54AHCT468	† Samsung	
	KS74AHCT466	Samsung	
	KS74AHCT468	Samsung	
Octal Inverter/Line Driver, Three-State			
AC	**V54AC466**	† **VTC (3370)**	
	V54AC468	† **VTC (3370)**	90
	V74AC466	VTC	
	V74AC468	VTC	
ACT	**V54ACT466**	† **VTC (3370)**	
	V54ACT466	**VTC (3370)**	
	V54ACT466	† **VTC (3370)**	95
	V54ACT466	**VTC (3370)**	
	V54ACT468	† **VTC (3370)**	
	V54ACT468	**VTC (3370)**	
	V74ACT466	**VTC (3370)**	
	V74ACT468	**VTC (3370)**	100
Octal Inverter/Line Driver,Three-State			
ACT	**V54ACT468**	† **VTC (3370)**	
	V54ACT468	**VTC (3370)**	
	V74ACT468	**VTC (3370)**	
Nine Wide			
HCT	MC74HCT9034	Motorola	105
Nine Wide Schmitt Trigger			
HC	MC54HC9014	† Motorola	
Counters, Binary			
Clock Generator with 4-Bit			
5XXX	**TC5018**	**Toshiba (3308)**	
Divide by 2, 8 or 16			
C	MM54C93	† National	
	MM74C93	◇ National	
Divider with 4-Bit			
5XXX	**TC5027B**	**Toshiba (3308)**	110
Presettable Fully Synchronous, Synchronous Clear			
AC	CD54AC163	† GE/RCA	
	CD74AC163	**GE/RCA (2629)**	
	74AC11163	**TI (3252)**	
	TC74AC163	**Toshiba (3307)**	

(Continued)

Function	Device	Source	Line
Presettable Fully Synchronous, Synchronous Clear (Cont'd)			
ACT	CD54ACT163	† GE/RCA	115
	CD74ACT163	**GE/RCA (2629)**	
	74ACT11163	**TI (3252)**	
AHCT	**IDT54AHCT163** ◇†	**IDT (2811)**	
	KS74AHCT163	◇ Samsung	
C	MM54C163	‡ Micrel	120
	MM54C163	† National	
	MM74C163	National	
Cell	SN74163A-Cell	° TI	
FCT	**IDT54FCT163** ◇†	**IDT (2808)**	
	IDT54FCT163A ◇†	**IDT (2808)**	125
	IDT74FCT163	◇ **IDT (2808)**	
	IDT74FCT163A	◇ **IDT (2808)**	
HC	**CD54HC163**	† **GE/RCA (2632)**	
	CD74HC163	**GE/RCA (2632)**	
	GD74HC163	**GoldStar (2695)**	130
	HD74HC163	Hitachi	
	MC54HC163	† Motorola	
	MC74HC163	Motorola	
	MM54HC163	† National	
	MM74HC163	National	135
	MN74HC163	◇ Panasonic	
	M74HC163	SGS	
	LR74HC163	Sharp	
	74HC163	**Signetics (3003)**	
	SN74HC163	TI	140
	TC74HC163	◇ **Toshiba (3307)**	
	US74HC163	Universal	
HCT	**CD54HCT163**	† **GE/RCA (2632)**	
	CD74HCT163	**GE/RCA (2632)**	
	GD74HCT163	◇ **GoldStar (2695)**	145
	MM54HCT163	† National	
	MM74HCT163	National	
	KS74HCTLS163	Samsung	
	74HCT163	**Signetics (3003)**	
4XXX	F40163BC	Fairchild	150
	F40163BM	† Fairchild	
	CD40163B	† **GE/RCA (2635)**	
	CD40163BE	**GE/RCA (2635)**	
	GD40163B	**GoldStar (2698)**	
	CD40163B	‡ Micrel	155
	MC14163BA	† Motorola	
	MC14163BC	Motorola	
	CD40163BC	National	
	CD40163BM	† National	
	HCC40163B	† SGS	160
	HCF40163	SGS	
	HEF40163B	Signetics	
	883C4163B	† Sprague	
	TC40163B	**Toshiba (3308)**	
40HXXX	TC40H163	Toshiba	165
Presettable Synchronous, Asynchronous Clear			
AC	CD54AC161	† GE/RCA	
	CD74AC161	**GE/RCA (2629)**	
	74AC11161	**TI (3252)**	
	TC74AC161	**Toshiba (3307)**	
ACT	CD54ACT161	† GE/RCA	170
	CD74ACT161	**GE/RCA (2629)**	
	74ACT11161	**TI (3252)**	
AHCT	**IDT54AHCT161** ◇†	**IDT (2811)**	
	KS74AHCT161	◇ Samsung	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Counters, Binary (Cont'd)

Function	Device	Source	Line
Presettable Synchronous, Asynchronous Clear (Cont'd)			
C	MM54C161	‡ Micrel	
	MM54C161	† National	
	MM74C161	National	
Cell	SN74161A-Cell	° TI	
FCT	**IDT54FCT161**	◇†	
		IDT (2808)	5
	IDT54FCT161A	◇†	
		IDT (2808)	
	IDT74FCT161	◇ **IDT (2808)**	
	IDT74FCT161A	◇ **IDT (2808)**	
HC	**CD54HC161**	† **GE/RCA (2632)**	
	CD74HC161	**GE/RCA (2632)**	10
	GD74HC161A	**GoldStar (2695)**	
	HD74HC161	Hitachi	
	MC54HC161	† Motorola	
	MC74HC161	Motorola	
	MM54HC161	† National	15
	MM74HC161	National	
	MN74HC161	◇ Panasonic	
	M74HC161	SGS	
	LR74HC161	Sharp	
	74HC161	**Signetics (3003)**	20
	SN54HC161	† TI	
	SN74HC161	TI	
	TC74HC161	◇ **Toshiba (3307)**	
	US74HC161	Universal	
HCT	**CD54HCT161**	† **GE/RCA (2632)**	25
	CD74HCT161	**GE/RCA (2632)**	
	GD74HCT161A	◇ **GoldStar (2695)**	
	MM54HCT161	† National	
	MM74HCT161	National	
	KS74HCTLS161	Samsung	30
	74HCT161	**Signetics (3003)**	
4XXX	F40161BC	Fairchild	
	F40161BM	† Fairchild	
	CD40161B	† **GE/RCA (2635)**	
	CD40161BE	**GE/RCA (2635)**	35
	GD40161B	**GoldStar (2698)**	
	CD40161B	‡ Micrel	
	MC14161BA	† Motorola	
	MC14161BC	Motorola	
	CD40161BC	National	40
	CD40161BM	† National	
	MN40161B	◇† Panasonic	
	HCC40161B	† SGS	
	HCF40161B	◇ SGS	
	HEF40161B	Signetics	45
	883C4161B	† Sprague	
	TC40161B	**Toshiba (3308)**	
40HXXX	TC40H161	Toshiba	
Presettable Up/Down			
AC	CD54AC191	† GE/RCA	
	CD54AC193	† GE/RCA	50
	CD74AC191	◇ **GE/RCA (2629)**	
	CD74AC193	◇ **GE/RCA (2629)**	
	SN54AC11191	† TI	
	74AC11168	**TI (3252)**	
	74AC11191	**TI (3252)**	55
	74AC11193	**TI (3252)**	
	74AC11569	**TI (3253)**	
ACT	CD54ACT191	† GE/RCA	
	CD54ACT193	† GE/RCA	
	CD74ACT191	**GE/RCA (2629)**	60
	CD74ACT193	**GE/RCA (2629)**	

(Continued)

Function	Device	Source	Line
Presettable Up/Down			
ACT (Cont'd)			
	74ACT11168	**TI (3252)**	
	74ACT11191	**TI (3252)**	
	74ACT11193	**TI (3252)**	
	74ACT11569	**TI (3253)**	65
	74ACT11579	**TI (3253)**	
C	MM54C193	‡ Micrel	
	MM54C193	† National	
	MM74C193	National	
FCT	**IDT54FCT191**	◇†	
		IDT (2808)	70
	IDT54FCT191A	◇†	
		IDT (2808)	
	IDT74FCT191	◇ **IDT (2808)**	
	IDT74FCT191A	◇ **IDT (2808)**	
HC	**CD54HC191**	† **GE/RCA (2632)**	
	CD54HC193	† **GE/RCA (2632)**	75
	CD54HC4516	† **GE/RCA (2632)**	
	CD74HC191	**GE/RCA (2632)**	
	CD74HC193	**GE/RCA (2632)**	
	CD74HC4516	**GE/RCA (2632)**	
	GD74HC191	**GoldStar (2696)**	80
	GD74HC193	**GoldStar (2696)**	
	HD74HC191	Hitachi	
	HD74HC193	Hitachi	
	MC74HC168	Motorola	
	MC74HC191	◇ Motorola	85
	MC74HC193	◇ Motorola	
	MM54HC191	† National	
	MM54HC193	† National	
	MM74HC191	National	
	MM74HC193	National	90
	MN74HC193	◇ Panasonic	
	M74HC191	SGS	
	M74HC193	SGS	
	74HC191	**Signetics (3003)**	
	74HC193	**Signetics (3003)**	95
	74HC4516	**Signetics (3003)**	
	TC74HC193	**Toshiba (3307)**	
	US74HC191	Universal	
	US74HC193	Universal	
HCT	**CD54HCT191**	† **GE/RCA (2632)**	100
	CD54HCT193	† **GE/RCA (2632)**	
	CD54HCT4516	† **GE/RCA (2632)**	
	CD74HCT191	**GE/RCA (2632)**	
	CD74HCT193	**GE/RCA (2632)**	
	CD74HCT4516	**GE/RCA (2632)**	105
	GD74HCT191	**GoldStar (2696)**	
	GD74HCT193	**GoldStar (2696)**	
	MM54HCT191	◇† National	
	MM54HCT193	◇† National	
	MM74HCT191	National	110
	MM74HCT193	National	
	74HCT191	◇ **Signetics (3003)**	
	74HCT193	◇ **Signetics (3003)**	
	74HCT4516	**Signetics (3003)**	
4XXX	F40193BC	Fairchild	115
	F40193BM	† Fairchild	
	F4516BC	Fairchild	
	F4516BM	† Fairchild	
	CD40193B	† **GE/RCA (2635)**	
	CD40193BE	**GE/RCA (2635)**	120
	CD4516B	† **GE/RCA (2635)**	
	CD4516BE	**GE/RCA (2635)**	
	GD40193B	◇ **GoldStar (2698)**	
	GD4516B	† **GoldStar (2698)**	
	CD40193B	‡ Micrel	125

(Continued)

Function	Device	Source	Line
Presettable Up/Down			
4XXX (Cont'd)			
	CD4516B	‡ Micrel	
	MC14516BA	† Motorola	
	MC14516BC	Motorola	
	CD40193BC	National	
	CD40193BM	† National	130
	CD4516BC	National	
	CD4516BM	† National	
	MN4516B	† Panasonic	
	HCC4516B	† SGS	
	HCF4516B	SGS	135
	HEF40193B	Signetics	
	HEF4516B	◇ Signetics	
	883C4193B	† Sprague	
	883C4516B	† Sprague	
	TC40193B	**Toshiba (3308)**	140
	TC4516B	**Toshiba (3308)**	
40HXXX	LR40H193	Sharp	
	TC40H193	Toshiba	
Presettable 8-Bit Down			
HC	**TC74HC40103**	**Toshiba (3307)**	
4XXX	**CD40103B**	† **GE/RCA (2635)**	145
	CD40103BE	**GE/RCA (2635)**	
	HCC40103B	† SGS	
	HCF40103B	◇ SGS	
	TC40103B	**Toshiba (3308)**	
Programmable Divide-by-N, 4-Bit			
4XXX	F4526BC	Fairchild	150
	F4526BM	† Fairchild	
	GD4526B	**GoldStar (2698)**	
	MC14526BA	† Motorola	
	MC14526BC	Motorola	
	CD4526BC	National	155
	CD4526BM	† National	
	HEF4526B	Signetics	
	883C4526B	† Sprague	
	TC4526B	**Toshiba (3308)**	
Up/Down, Synchronous, 4-Bit			
HC	HD74HC669	Hitachi	160
Dual			
HC	**CD54HC4520**	† **GE/RCA (2632)**	
	CD74HC4520	**GE/RCA (2632)**	
	TC74HC4520	**Toshiba (3307)**	
HCT	**CD54HCT4520**	† **GE/RCA (2632)**	
	CD74HCT4520	**GE/RCA (2632)**	165
Dual Synchronous			
AHCT	KS74AHCT393	Samsung	
Cell	SN74393-Cell	° TI	
HC	HD74HC4520	Hitachi	
	MC54HC393	† Motorola	
	MC74HC393	Motorola	170
	M74HC393	SGS	
	LR74HC393	Sharp	
	74HC4520	**Signetics (3003)**	
	SN54HC393	† TI	
	SN74HC393	TI	175
HCT	**74HCT4520**	**Signetics (3003)**	
	54HCT393	† Supertex	
	74HCT393	Supertex	
SC	74SC393	Supertex	
4XXX	F4520BC	Fairchild	180
	F4520BM	† Fairchild	
	CD4520B	† **GE/RCA (2635)**	
	CD4520BE	**GE/RCA (2635)**	
	GD4520B	**GoldStar (2698)**	
	CD4520B	‡ Micrel	185

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—CMOS (Cont'd)

Counters, Binary (Cont'd)

Function	Device	Source	Line
Dual Synchronous			
4XXX		(Cont'd)	
	MC14520BA	† Motorola	
	MC14520BC	Motorola	
	CD4520BC	National	
	CD4520BM	† National	
	MN4520B	◊† Panasonic	5
	HCC4520B	† SGS	
	HCF4520B	◊ SGS	
	HEF4520B	Signetics	
	883C4520B	† Sprague	
	TC4520B	**Toshiba (3308)**	10
Dual 4-Bit			
HC	**CD54HC393**	**† GE/RCA (2632)**	
	CD74HC393	**GE/RCA (2632)**	
	GD74HC393	**GoldStar (2696)**	
	HD74HC393	Hitachi	
	MM54HC393	† National	15
	MM74HC393	National	
	MN74HC393	◊ Panasonic	
	M74HC4520	SGS	
	74HC393	**Signetics (3003)**	
	TC74HC393	**Toshiba (3307)**	20
HCT	**CD54HCT393**	**† GE/RCA (2632)**	
	CD74HCT393	**GE/RCA (2632)**	
	GD74HCT393	**GoldStar (2696)**	
	KS74HCTLS393	Samsung	
	74HCT393	**Signetics (3003)**	25
40HXXX	TC40H393	◊ Toshiba	
4-Bit			
HC	M74HC691	SGS	
	M74HC693	SGS	
	M74HC699	SGS	
4-Bit, Ripple			
HC	**CD54HC93**	**† GE/RCA (2632)**	30
	CD74HC93	**GE/RCA (2632)**	
	GD74HC93	**GoldStar (2695)**	
	HD74HC93	Hitachi	
	74HC93	**◊ Signetics (3003)**	
HCT	**CD54HCT93**	**† GE/RCA (2632)**	35
	CD74HCT93	**◊ GE/RCA (2632)**	
	GD74HCT93	**GoldStar (2695)**	
	74HCT93	**Signetics (3003)**	
4-Bit Synchronous, Asynchronous Clear			
AC	SN54AC11161	† TI	
	SN54AC11163	† TI	40
4-Bit Synchronous with Output Registers, Asynchronous Clear			
HC	**TC74HC691**	**◊ Toshiba (3307)**	
4-Bit Synchronous with Output Registers, Synchronous Clear			
HC	**TC74HC693**	**◊ Toshiba (3307)**	
4-Bit Synchronous Binary Up/Down with Output Registers			
HC	**TC74HC697**	**Toshiba (3307)**	
	TC74HC699	**Toshiba (3307)**	
4-Bit Up/Down, Asynchronous Load			
AHCT	**IDT54AHCT191**	**◊† IDT (2811)**	45
	KS74AHCT191	Samsung	
Cell	SN74191-Cell	° TI	
	SN74193-Cell	° TI	
HC	SN54HC191	† TI	
	SN54HC193	◊† TI	50
	SN74HC191	TI	

(Continued)

Function	Device	Source	Line
4-Bit Up/Down, Asynchronous Load			
HC		(Cont'd)	
	SN74HC193	TI	
	TC74HC191	**Toshiba (3307)**	
HCT	KS74HCTLS191	Samsung	
4-Bit Up/Down Synchronous			
AC	74AC169	Fairchild	55
	SN54AC11169	† TI	
	74AC11169	**TI (3252)**	
ACT	**74ACT11169**	**TI (3252)**	
HC	MC74HC169	Motorola	
	MM54HC169	† National	60
	MM74HC169	National	
HCT	MM54HCT169	† National	
	MM74HCT169	◊ National	
5, 6, 7, 8, 9-Stage			
5XXX	**TC5048**	**Toshiba (3308)**	
7-Stage			
HC	**CD54HC4024**	**† GE/RCA (2632)**	65
	CD74HC4024	**GE/RCA (2632)**	
	HD74HC4024	Hitachi	
	MC54HC4024	† Motorola	
	MC74HC4024	Motorola	
	MM54HC4024	† National	70
	MM74HC4024	National	
	M74HC4024	SGS	
	LR74HC4024	Sharp	
	74HC4024	**Signetics (3003)**	
	SN74HC4024	TI	75
	TC74HC4024	**Toshiba (3307)**	
HCT	**CD54HCT4024**	**† GE/RCA (2632)**	
	CD74HCT4024	**GE/RCA (2632)**	
	74HCT4024	**Signetics (3003)**	
	SN54HCT4027	† TI	80
4XXX	F4024BC	Fairchild	
	F4024BM	† Fairchild	
	CD4024A	**† GE/RCA (2634)**	
	CD4024AE	**GE/RCA (2634)**	
	CD4024B	**‡ GE/RCA (2634)**	85
	CD4024BE	**GE/RCA (2634)**	
	GD4024B	**‡ GoldStar (2697)**	
	CD4024A	‡ Micrel	
	CD4024B	‡ Micrel	
	MC14024BA	† Motorola	90
	MC14024BC	Motorola	
	CD4024BC	National	
	CD4024BM	† National	
	MN4024B	◊† Panasonic	
	HCC4024B	† SGS	95
	HCF4024B	◊ SGS	
	HEF4024B	Signetics	
	883C4024B	† Sprague	
	TC4024B	**Toshiba (3308)**	
7-Stage Counter	**GD4727B**	**GoldStar (2698)**	100
	GD4737B	**GoldStar (2698)**	
7-Stage Ripple Counter			
HC	M74HC4024	Mitsubishi	
8-Bit			
AC	**TC74AC393**	**Toshiba (3307)**	
ACT	**74ACT11269**	**◊ TI (3252)**	
HC	M74HC592	SGS	105
	M74HC593	SGS	
8-Bit, Down			
HC	**CD54HC40103**	**† GE/RCA (2632)**	
	CD74HC40103	**GE/RCA (2632)**	
	74HC40103	**Signetics (3003)**	

(Continued)

Function	Device	Source	Line
8-Bit, Down		(Cont'd)	
HCT	**CD54HCT40103**	**†**	
		GE/RCA (2632)	110
	CD74HCT40103	**◊**	
		GE/RCA (2632)	
	74HCT40103	**Signetics (3003)**	
8-Bit Synchronous			
AC	**74AC11579**	**TI (3253)**	
8-Bit with Input Registers			
AHCT	KS74AHCT592	Samsung	
	KS74AHCT593	Samsung	115
HC	HD74HC592	Hitachi	
	HD74HC593	Hitachi	
8-Bit with Input Registers			
HC	MC74HC592	Motorola	
	MC74HC593	Motorola	
8-Bit with Input Registers			
HC	MM54HC592	† National	120
	MM54HC593	† National	
	MM74HC592	National	
	MM74HC593	National	
	TC74HC592	**Toshiba (3307)**	
	TC74HC593	**Toshiba (3307)**	125
8-Bit with Output Registers			
AHCT	KS74AHCT590	Samsung	
HC	**GD74HC590**	**GoldStar (2696)**	
	HD74HC590	Hitachi	
	MC74HC590	Motorola	
	MM54HC590	† National	130
	MM74HC590	National	
	SN54HC590A	† TI	
	SN74HC590	TI	
	TC74HC590	**Toshiba (3307)**	
HCT	**GD74HCT590**	**GoldStar (2696)**	135
	MM54HCT590	† National	
	MM74HCT590	National	
8-Bit wth Input Registers			
AHCT	KS54AHCT592	† Samsung	
	KS54AHCT593	† Samsung	
8-Bit wth Output Registers			
AHCT	KS54AHCT590	† Samsung	140
	KS54AHCT591	† Samsung	
	KS74AHCT591	Samsung	
8-Bit Binary Counter with Output Registers			
HCT	**UM74HCT590**	**UMC (3316)**	
8-Stage Synchronous			
4XXX	883C4404B	† Sprague	
12-Stage			
HC	**CD54HC4040**	**† GE/RCA (2632)**	145
	CD74HC4040	**GE/RCA (2632)**	
	HD74HC4040	Hitachi	
	MC54HC4040	† Motorola	
	MC74HC4040	Motorola	
	MM54HC4040	† National	150
	MM74HC4040	National	
	MN74HC4040	◊ Panasonic	
	M74HC4040	SGS	
	74HC4040	**Signetics (3003)**	
	SN74HC4040	TI	155
	TC74HC4040	**Toshiba (3307)**	
HCT	**CD54HCT4040**	**† GE/RCA (2632)**	
	CD74HCT4040	**GE/RCA (2632)**	
	74HCT4040	**Signetics (3003)**	
4XXX	F4040BC	Fairchild	160
	F4040BM	† Fairchild	
	CD4040A	**† GE/RCA (2634)**	
	CD4040AE	**GE/RCA (2634)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Counters, Binary (Cont'd)

Function	Device	Source	Line
12-Stage			
4XXX		(Cont'd)	
	CD4040B	**† GE/RCA (2634)**	
	CD4040BE	**GE/RCA (2634)**	
	GD4040B	**† GoldStar (2697)**	
	CD4040A	‡ Micrel	
	CD4040B	‡ Micrel	5
	MC14040BA	† Motorola	
	MC14040BC	Motorola	
	CD4040BC	National	
	CD4040BM	† National	
	MN4040B	◇† Panasonic	10
	HCC4040B	† SGS	
	HCF4040B	◇ SGS	
	HEF4040B	Signetics	
	883C4040B	† Sprague	
	TC4040B	**Toshiba (3308)**	15
12-Stage Ripple Counter			
HC	M74HC4040	Mitsubishi	
14, 15, 16-Stage (with reset)			
5XXX	**TC5036**	**Toshiba (3308)**	
14-Stage			
HC	**CD54HC4020**	**† GE/RCA (2632)**	
	CD74HC4020	**GE/RCA (2632)**	
	HD74HC4020	Hitachi	20
	MC54HC4020	† Motorola	
	MC74HC4020	Motorola	
	MM54HC4020	† National	
	MM74HC4020	National	
	M74HC4020	SGS	25
	74HC4020	**Signetics (3003)**	
	SN74HC4020	TI	
	TC74HC4020	**Toshiba (3307)**	
HCT	**CD54HCT4020**	**† GE/RCA (2632)**	
	CD74HCT4020	**GE/RCA (2632)**	30
	74HCT4020	**Signetics (3003)**	
4XXX	F4020BC	Fairchild	
	F4020BM	† Fairchild	
	CD4020A	**† GE/RCA (2634)**	
	CD4020AE	**GE/RCA (2634)**	35
	CD4020B	**‡ GE/RCA (2634)**	
	CD4020BE	**GE/RCA (2634)**	
	GD4020B	**‡ GoldStar (2697)**	
	CD4020A	‡ Micrel	
	CD4020B	‡ Micrel	40
	MC14020BA	† Motorola	
	MC14020BC	Motorola	
	CD4020BC	National	
	CD4020BM	† National	
	HCC4020B	† SGS	45
	HCF4020B	◇ SGS	
	HEF4020B	Signetics	
	883C4020B	† Sprague	
	TC4020B	**Toshiba (3308)**	
14-Stage Ripple Counter			
HC	M74HC4020	Mitsubishi	50
14-Stage Ripple Counter with Oscillator			
AC	CD54AC7060	† GE/RCA	
	CD74AC7060	**GE/RCA (2629)**	
ACT	CD54ACT7060	† GE/RCA	
	CD74ACT7060	**GE/RCA (2629)**	
14-Stage with Oscillator			
HC	**CD54HC4060**	**† GE/RCA (2632)**	55
	CD74HC4060	**GE/RCA (2632)**	
	HD74HC4060	Hitachi	
	MC54HC4060	† Motorola	

(Continued)

Function	Device	Source	Line
14-Stage with Oscillator			
HC		(Cont'd)	
	MC74HC4060	Motorola	
	MM54HC4060	◇† National	60
	MM74HC4060	◇ National	
	M74HC4060	SGS	
	74HC4060	**◇† Signetics (3003)**	
	SN74HC4060	◇ TI	
	TC74HC4060	**Toshiba (3307)**	65
HCT	**CD54HCT4060**	**GE/RCA (2632)**	
	CD74HCT4060	**GE/RCA (2632)**	
	74HCT4060	**† Signetics (3003)**	
4XXX	**CD4060A**	**† GE/RCA (2634)**	
	CD4060AE	**GE/RCA (2634)**	70
	CD4060B	**† GE/RCA (2634)**	
	CD4060BE	**GE/RCA (2634)**	
	MC14060B	◇ Motorola	
	CD4060BC	National	
	CD4060BM	† National	75
	HCC4060B	† SGS	
	HCF4060B	SGS	
	HEF4060B	Signetics	
	883C4060B	† Sprague	
16-Bit Synchronous			
FCT	**IDT49FCT661**	**IDT (2808)**	80

Counters, Binary Count Up/Down

Function	Device	Source	Line
Programmable Divider			
HC	M74HC7292	SGS	
	M74HC7294	SGS	
Synchronous, 8-Bit, Three-State			
TTL-LS	DM54LS469	† National	
	DM74LS469	National	
Up/Down Binary Counter			
FCT	**IDT54FCT193**	**† IDT (2808)**	85
	IDT54FCT193A	**† IDT (2808)**	
	IDT74FCT193	**IDT (2808)**	
	IDT74FCT193A	**IDT (2808)**	
HC	M74HC697	SGS	
Octal Counter/Divider			
HC	M74HC4022	Mitsubishi	90
4-Bit Binary Up/Down Counter, Presettable			
HC	M74HC669	◇ Mitsubishi	

Counters, Decade

Function	Device	Source	Line
Counter/Divider			
HC	M74HC4017	Mitsubishi	
Counter/Divider, 7 Segment Display Output and Display Enable			
4XXX	**CD4026A**	**† GE/RCA (2635)**	
	CD4026AE	**GE/RCA (2635)**	
	CD4026B	**† GE/RCA (2635)**	95
	CD4026BE	**GE/RCA (2635)**	
	CD4033A	**† GE/RCA (2635)**	
	CD4033AE	**GE/RCA (2635)**	
	CD4033B	**† GE/RCA (2635)**	
	CD4033BE	**GE/RCA (2635)**	100
	HCC4026B	† SGS	
	HCF4026B	SGS	
	HCF4033B	SGS	
	883C4026AB	† Sprague	
	883C4033AB	† Sprague	
	883C4426AB	† Sprague	105
	883C4433AB	† Sprague	

Function	Device	Source	Line
Counter/Divider, 10 Line Output			
HC	**CD54HC4017**	**† GE/RCA (2632)**	
	CD74HC4017	**GE/RCA (2632)**	
	HD74HC4017	Hitachi	110
	MC54HC4017	† Motorola	
	MC74HC4017	Motorola	
	MM54HC4017	† National	
	MM74HC4017	National	
	M74HC4017	SGS	115
	74HC4017	**Signetics (3003)**	
	SN74HC4017	TI	
	TC74HC4017	**Toshiba (3307)**	
HCT	**CD54HCT4017**	**† GE/RCA (2632)**	
	CD74HCT4017	**GE/RCA (2632)**	120
	74HCT4017	**Signetics (3003)**	
4XXX	F4017BC	Fairchild	
	F4017BM	† Fairchild	
	CD4017A	**† GE/RCA (2635)**	
	CD4017AE	**GE/RCA (2635)**	125
	CD4017B	**‡ GE/RCA (2635)**	
	CD4017BE	**GE/RCA (2635)**	
	GD4017B	**‡ GoldStar (2697)**	
	CD4017A	‡ Micrel	
	CD4017B	‡ Micrel	130
	MC14017BA	† Motorola	
	MC14017BC	Motorola	
	CD4017BC	National	
	CD4017BM	† National	
	MN4017B	◇† Panasonic	135
	HCC4017B	† SGS	
	HCF4017B	◇ SGS	
	HEF4017B	Signetics	
	883C4017B	† Sprague	
	TC4017B	**Toshiba (3308)**	140
Counter/Latch/Display Driver			
	ICM7208	**GE/Intersil (2669)**	
Presettable Fully Synchronous, Synchronous Clear			
AC	**74AC11162**	**TI (3252)**	
ACT	**74ACT11162**	**TI (3252)**	
AHCT	KS74AHCT162	◇ Samsung	
C	MM54C162	‡ Micrel	145
	MM54C162	† National	
	MM74C162	National	
HC	**CD54HC162**	**† GE/RCA (2632)**	
	CD74HC162	**GE/RCA (2632)**	
	GD74HC162	**GoldStar (2695)**	150
	HD74HC162	Hitachi	
	MC54HC162	† Motorola	
	MC74HC162	Motorola	
	MM54HC162	† National	
	MM74HC162	National	155
	M74HC162	SGS	
	LR74HC162	Sharp	
	74HC162	**Signetics (3003)**	
	SN74HC162	TI	
	TC74HC162	**◇ Toshiba (3307)**	160
	US74HC162	Universal	
HCT	**CD54HCT162**	**† GE/RCA (2632)**	
	CD74HCT162	**GE/RCA (2632)**	
	GD74HCT162	**◇ GoldStar (2695)**	
	MM54HCT162	† National	165
	MM74HCT162	National	
	KS74HCTLS162	Samsung	
	74HCT162	**Signetics (3003)**	
4XXX	F40162BC	Fairchild	
	F40162BM	† Fairchild	170
	CD40162B	**† GE/RCA (2635)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—CMOS (Cont'd)

Counters, Decade (Cont'd)

Function	Device	Source	Line
Presettable Fully Synchronous, Synchronous Clear			
4XXX		(Cont'd)	
	CD40162BE	**GE/RCA (2635)**	
	GD40162B	**GoldStar (2698)**	
	CD40162B	‡ Micrel	
	MC14162BA	† Motorola	
	MC14162BC	Motorola	5
	CD40162BC	National	
	CD40162BM	† National	
	HCF40162B	◊ SGS	
	HEF40162B	Signetics	
	883C4162B	† Sprague	10
	TC40162B	**Toshiba (3308)**	
40HXXX	TC40H162	Toshiba	
Presettable (sets to 0 or 9, divides by 2, 5 or 10)			
C	MM54C90	† National	
Presettable (sets to 0 or 9, divides by 2, 5 or 10)			
C	MM74C90	◊ National	
Presettable Synchronous, Asynchronous Clear			
AC	**74AC11160**	**TI (3252)**	15
	TC74AC160	**Toshiba (3307)**	
ACT	**74ACT11160**	**TI (3252)**	
AHCT	KS74AHCT160	◊ Samsung	
C	MM54C160	‡ Micrel	
	MM54C160	† National	20
	MM74C160	National	
HC	**CD54HC160**	**† GE/RCA (2632)**	
	CD74HC160	**GE/RCA (2632)**	
	HD74HC160	Hitachi	
	MC54HC160	† Motorola	25
	MC74HC160	Motorola	
	MM54HC160	† National	
	MM74HC160	National	
	MN74HC160	◊ Panasonic	
	M74HC160	SGS	30
	LR74HC160	Sharp	
	SN54HC160	† TI	
	SN74HC160	TI	
	TC74HC160	**◊ Toshiba (3307)**	
	US74HC160	Universal	35
HCT	**CD54HCT160**	**† GE/RCA (2632)**	
	CD74HCT160	**GE/RCA (2632)**	
	MM54HCT160	† National	
	MM74HCT160	National	
	KS74HCTLS160	Samsung	40
4XXX	F40160BC	Fairchild	
	F40160BM	† Fairchild	
	CD40160B	**† GE/RCA (2635)**	
	CD40160BE	**GE/RCA (2635)**	
	GD40160B	**GoldStar (2698)**	45
	CD40160B	‡ Micrel	
	MC14160BA	† Motorola	
	MC14160BC	Motorola	
	CD40160BC	National	
	CD40160BM	† National	50
	HCC40160B	† SGS	
	HCF40160B	◊ SGS	
	HEF40160B	Signetics	
	883C4160B	† Sprague	
	TC40160B	**Toshiba (3308)**	55
40HXXX	TC40H160	Toshiba	
Presettable Up/Down			
	HCTR0200	Hughes	
AC	**74AC11192**	**TI (3252)**	
ACT	**74ACT11192**	**TI (3252)**	
		(Continued)	

Function	Device	Source	Line
Presettable Up/Down		(Cont'd)	
AHCT	**IDT54AHCT193**	**◊† IDT (2811)**	60
	KS74AHCT193	Samsung	
C	MM54C192	‡ Micrel	
	MM54C192	† National	
	MM74C192	National	
HC	**CD54HC192**	**† GE/RCA (2632)**	65
	CD74HC192	**GE/RCA (2632)**	
	GD74HC192	**GoldStar (2696)**	
	HD74HC192	Hitachi	
	MC74HC192	◊ Motorola	
	MM54HC192	† National	70
	MM74HC192	National	
	MN74HC192	◊ Panasonic	
	M74HC192	SGS	
	74HC192	**Signetics (3003)**	
	SN54HC192	◊† TI	75
	SN74HC192	TI	
	TC74HC192	**Toshiba (3307)**	
	US74HC192	Universal	
HCT	**CD54HCT192**	**† GE/RCA (2632)**	
	CD74HCT192	**GE/RCA (2632)**	80
	GD74HCT192	**GoldStar (2696)**	
	74HCT192	**◊ Signetics (3003)**	
	74HCT4510	Signetics	
4XXX	F40192BC	Fairchild	
	F40192BM	† Fairchild	85
	F4510BC	Fairchild	
	F4510BM	† Fairchild	
	CD40192B	**◊† GE/RCA (2635)**	
	CD40192BE	**◊ GE/RCA (2635)**	
	CD4510B	**† GE/RCA (2635)**	90
	CD4510BE	**GE/RCA (2635)**	
	GD40192B	**◊ GoldStar (2698)**	
	GD4510B	**† GoldStar (2697)**	
	CD40192B	‡ Micrel	
	CD4510B	‡ Micrel	95
	MC14510BA	† Motorola	
	MC14510BC	Motorola	
	CD40192BC	National	
	CD40192BM	† National	
	CD4510BC	National	100
	CD4510BM	† National	
	HCC40192B	◊† SGS	
	HCC4510B	† SGS	
	HCF40192B	SGS	
	HCF4510B	SGS	105
	HEF40192B	Signetics	
	HEF4510B	◊ Signetics	
	883C4192B	† Sprague	
	883C4510B	◊† Sprague	
	TC40192B	**Toshiba (3308)**	110
	TC4510B	**Toshiba (3308)**	
40HXXX	LR40H192	Sharp	
	TC40H192	Toshiba	
Presettable Up/Down with mode control			
HC	**GD74HC190**	**GoldStar (2696)**	
	74HC190	**Signetics (3003)**	115
HCT	**GD74HCT190**	**GoldStar (2696)**	
	74HCT190	**◊ Signetics (3003)**	
Presettable 2-Decade Down, BCD			
HC	**CD54HC40102**	**† GE/RCA (2632)**	
	CD74HC40102	**GE/RCA (2632)**	
	74HC40102	**Signetics (3003)**	120
		(Continued)	

Function	Device	Source	Line
Presettable 2-Decade Down, BCD		(Cont'd)	
HCT	**CD54HCT40102**	**† GE/RCA (2632)**	
	CD74HCT40102	**◊ GE/RCA (2632)**	
	74HCT40102	**Signetics (3003)**	
4XXX	**CD40102B**	**† GE/RCA (2635)**	
	CD40102BE	**GE/RCA (2635)**	125
	HCC40102B	† SGS	
	HCF40102B	◊ SGS	
	TC40102B	**Toshiba (3308)**	
Programmable Divide-by-N, 4-Bit			
4XXX	F4522BC	Fairchild	
	F4522BM	† Fairchild	130
	GD4522B	**GoldStar (2698)**	
	MC14522BA	† Motorola	
	MC14522BC	Motorola	
	CD4522BC	National	
	CD4522BM	† National	135
	HEF4522B	Signetics	
	883C4522B	† Sprague	
	TC4522B	**Toshiba (3308)**	
Synchronous Up/Down with Output Registers			
HC	**TC74HC696**	**Toshiba (3307)**	
	TC74HC698	**Toshiba (3307)**	140
Synchronous with Output Registers, Asynchronous Clear			
HC	**TC74HC690**	**◊ Toshiba (3307)**	
Synchronous with Output Registers, Synchronous Clear			
HC	**TC74HC692**	**◊ Toshiba (3307)**	
Up/Down Counter/Decoder/Latch/Driver (direct 7-segment driver)			
4XXX	**CD40110B**	**† GE/RCA (2635)**	
	CD40110BE	**GE/RCA (2635)**	
Up/Down, Programmable			
HC	**CD54HC4510**	**† GE/RCA (2632)**	145
	CD74HC4510	**GE/RCA (2632)**	
	74HC4510	**Signetics (3003)**	
HCT	**CD54HCT4510**	**† GE/RCA (2632)**	
	CD74HCT4510	**GE/RCA (2632)**	
	HCT4510	Signetics	150
Up/Down, Synchronous			
AC	**74AC11190**	**TI (3252)**	
ACT	**74ACT11190**	**TI (3252)**	
HC	**CD54HC190**	**† GE/RCA (2632)**	
	CD74HC190	**GE/RCA (2632)**	
	HD74HC190	Hitachi	155
	HD74HC668	Hitachi	
	MC74HC190	◊ Motorola	
	MM54HC190	† National	
	MM74HC190	National	
	M74HC190	SGS	160
	SN54HC190	† TI	
	SN74HC190	TI	
	TC74HC190	**Toshiba (3307)**	
	US74HC190	Universal	
HCT	**CD54HCT190**	**† GE/RCA (2632)**	165
	CD74HCT190	**GE/RCA (2632)**	
Up/Down Decade Counter			
HC	M74HC696	SGS	
	M74HC698	SGS	
Up/Down, Three-State			
AC	**74AC11568**	**TI (3253)**	
ACT	**74ACT11568**	**TI (3253)**	170
Dual	TC40H390	Toshiba	
HC	**CD54HC390**	**† GE/RCA (2632)**	
	CD74HC390	**GE/RCA (2632)**	
		(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Counters, Decade (Cont'd)

Function	Device	Source
Dual		
HC		(Cont'd)
	GD74HC390	**GoldStar (2696)**
	HD74HC390	Hitachi
	HD74HC490	Hitachi
	MC54HC390	† Motorola
	MM54HC390	† National
	MM74HC390	National
	MN74HC390	◊ Panasonic
	LR74HC390	Sharp
	74HC390	**Signetics (3003)**
	SN54HC390	† TI
	SN74HC390	TI
	SN74HC490	TI
	TC74HC390	**Toshiba (3307)**
HCT	**CD54HCT390**	**† GE/RCA (2632)**
	CD74HCT390	**GE/RCA (2632)**
	GD74HCT390	**GoldStar (2696)**
	74HCT390	**Signetics (3003)**
40HXXX	TC40HC390	Toshiba
Dual Synchronous		
HC	**CD54HC4518**	**† GE/RCA (2632)**
	CD74HC4518	**GE/RCA (2632)**
	HD74HC4518	Hitachi
	MC74HC390	Motorola
	M74HC390	SGS
	M74HC4518	SGS
	74HC4518	Signetics
	TC74HC4518	**Toshiba (3307)**
HCT	**CD54HCT4518**	**† GE/RCA (2632)**
	CD74HCT4518	**GE/RCA (2632)**
	74HCT4518	**Signetics (3003)**
4XXX	F4518BC	Fairchild
	F4518BM	† Fairchild
	CD4518B	**† GE/RCA (2635)**
	CD4518BE	**GE/RCA (2635)**
	GD4518B	**† GoldStar (2698)**
	CD4518B	‡ Micrel
	MC14518BA	† Motorola
	MC14518BC	Motorola
	CD4518BC	National
	CD4518BM	† National
	MN4518B	◊† Panasonic
	HCC4518B	† SGS
	HCF4518B	SGS
	HEF4518B	◊ Signetics
	883C4518B	† Sprague
	TC4518B	**Toshiba (3308)**
Dual BCD Programmable Down Counter		
HC	**TC74HC40102**	**Toshiba (3307)**
Decade Counter		
HC	M74HC690	SGS
	M74HC692	SGS
3– 1/2 Digit Counter to BCD Driver		
	HCTR6010	Hughes
HCT	HCTR4010	Hughes
3-Decade, Decoder, Driver		
	LC7960	Sanyo
3-Decade Multiplexed Output		
4XXX	F4553BC	Fairchild
	F4553BM	† Fairchild
	GD4553B	**GoldStar (2698)**
	MC14553BA	† Motorola
	MC14553BC	Motorola
4– 1/2 Digit	ICM7236	GE/Intersil
4– 1/2 Digit Counter/Timer		
	ICM7236A	GE/Intersil
4– 1/2 Digit Up Counter		
	ICM7224	**GE/Intersil (2669)**
	ICM7224A	**GE/Intersil (2669)**
	ICM7225	**GE/Intersil (2669)**
	ICM7225A	**GE/Intersil (2669)**
4– 1/2 Digit Up Counter/Decoder/Driver		
	ICM7224	◊ Maxim
	ICM7225	◊ Maxim
4– 1/2 Digit Up-Down Counter/Latch/Decoder Driver, LCD		
C	MM74C946	National
4– 1/2-Digit, Programmable		
	TC9122	Toshiba
4-Bit		
AC	**74AC11269**	**TI (3252)**
4-Digit, Multiplexed Output, Left Digit Counts to 2-(Maximum count 1999.)		
C	MM74C928	National
4-Digit, Multiplexed Output, Second Digit Counts to 6 (Maximum count 9599.)		
C	MM74C927	National
4-Digit Up/Down, Counter/Latch/Decoder Driver, LCD		
C	MM74C945	◊ Maxim
	MM74C947	◊ Maxim
	MM74C945	National
	MM74C947	National
4-Digit Up/Down Counter/Latch/Display Driver		
	ICM7217	**GE/Intersil (2669)**
	ICM7217A	**GE/Intersil (2669)**
	ICM7217B	**GE/Intersil (2669)**
	ICM7217C	**GE/Intersil (2669)**
	ICM7227	**GE/Intersil (2669)**
	ICM7227A	**GE/Intersil (2669)**
	ICM7227B	**GE/Intersil (2669)**
	ICM7227C	**GE/Intersil (2669)**
	ICM7217	◊ Maxim
	ICM7217A	Maxim
	ICM7217B	Maxim
	ICM7217C	Maxim
4-Decade		
4XXX	HEF4737	Signetics
5XXX	**TC5001**	**Toshiba (3308)**
	TC5037	**Toshiba (3308)**
	TC5051	**Toshiba (3308)**
	TC5052	**Toshiba (3308)**
	TC5053	**Toshiba (3308)**
	TC5054	**Toshiba (3308)**
4-Decade, Decoder, Driver		
	LC7961	Sanyo
4-Decade Divide-by-N		
HC	**CD54HC4059**	**† GE/RCA (2632)**
	CD74HC4059	**GE/RCA (2632)**
	74HC4059	**◊ Signetics (3003)**

(Continued)

Function	Device	Source
4-Decade Divide-by-N		(Cont'd)
HCT	**CD54HCT4059**	**† GE/RCA (2632)**
	CD74HCT4059	**GE/RCA (2632)**
	74HCT4059	**Signetics (3003)**
4XXX	**CD4059A**	**† GE/RCA (2635)**
	CD4059AE	**GE/RCA (2635)**
	HEF4059B	Signetics
4-Decade Divider	**RDD104**	**LSIComp (2867)**
4-Decade, Multiplexed Output (The 926 gives carry at 6000.)		
C	MM74C925	National
	MM74C926	National
5-Decade, Multiplexed Output		
4XXX	**GD4534B**	**† GoldStar (2698)**
	MC14534BA	† Motorola
	MC14534BC	Motorola
	HEF4534B	† Signetics
6-Bit, Universal, to "999999"		
5XXX	**TC5070**	**Toshiba (3308)**
6-Digit		
5XXX	**TC5032**	**Toshiba (3308)**
8-Bit		
AC	**TC74AC162**	**Toshiba (3307)**
	TC74AC390	**Toshiba (3307)**

Counters, Miscellaneous

Function	Device	Source
Divide-by-8 Counter/Divider, Decoded Output		
HC	**TC74HC4022**	**Toshiba (3307)**
4XXX	F4022BC	Fairchild
	F4022BM	† Fairchild
	CD4022A	**† GE/RCA (2635)**
	CD4022AE	**GE/RCA (2635)**
	CD4022B	**‡ GE/RCA (2635)**
	CD4022BE	**GE/RCA (2635)**
	GD4022B	**‡ GoldStar (2697)**
	CD4021A	‡ Micrel
	CD4021B	‡ Micrel
	CD4022A	‡ Micrel
	CD4022B	‡ Micrel
	MC14022BA	† Motorola
	MC14022BC	Motorola
	CD4022BC	National
	CD4022BM	† National
	HCC4022B	† SGS
	HCF4022B	◊ SGS
	HEF4022B	Signetics
	883C4022B	† Sprague
	TC4022B	**Toshiba (3308)**
Divide-by-60, BCD Output (industrial time base generator)		
4XXX	**GD4566B**	**† GoldStar (2698)**
	MC14566BA	◊† Motorola
	MC14566BC	◊ Motorola
Frequency Counter		
	ICM7216	**GE/Intersil (2669)**
	ICM7226	**GE/Intersil (2669)**
Phase Comparator and Programmable		
4XXX	MC14568BA	◊† Motorola
	MC14568BC	◊ Motorola
Presettable Divide-by-N		
4XXX	F4018BC	Fairchild
	F4018BM	† Fairchild
	CD4018A	**† GE/RCA (2635)**
	CD4018AE	**GE/RCA (2635)**
	CD4018B	**‡ GE/RCA (2635)**

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—CMOS (Cont'd)

Counters, Miscellaneous (Cont'd)

Function	Device	Source	Line
Presettable Divide-by-N			
4XXX		(Cont'd)	
	CD4018BE	**GE/RCA (2635)**	
	GD4018B	**‡ GoldStar (2697)**	
	CD4018A	‡ Micrel	
	CD4018B	‡ Micrel	
	MC14018BA	† Motorola	5
	MC14018BC	Motorola	
	CD4018BC	National	
	CD4018BM	† National	
	HCC4018B	† SGS	
	HCF4018B	◇ SGS	10
	HEF4018B	Signetics	
	883C4018B	† Sprague	
	TC4018B	**Toshiba (3308)**	
Presettable Up/Down Binary or Decade			
4XXX	F4029BC	Fairchild	
	F4029BM	† Fairchild	15
	CD4029A	**† GE/RCA (2635)**	
	CD4029B	**† GE/RCA (2635)**	
	CD4029BE	**GE/RCA (2635)**	
	GD4029B	**† GoldStar (2697)**	
	CD4029A	‡ Micrel	20
	CD4029B	‡ Micrel	
	MC14029BA	† Motorola	
	MC14029BC	Motorola	
	CD4029BC	National	
	CD4029BM	† National	25
	MN4029B	◇† Panasonic	
	HCC4029B	† SGS	
	HCF4029B	◇ SGS	
	HEF4029B	Signetics	
	883C4029B	† Sprague	30
	TC4029B	**Toshiba (3308)**	
Binary/Decade with Two Reset Functions			
5XXX	TC5026B	Toshiba	
Dual Programmable Divide-by-N Binary/Decade			
4XXX	MC14569BC	◇† Motorola	
Octal Counter/Divider			
HC	HD74HC4022	Hitachi	
	SN74HC7022	TI	35

Decoders

Function	Device	Source	Line
LCD, 4-Digit, Microprocessor Interface			
	ICM7211AM	Maxim	
	ICM7211M	Maxim	
LCD, 4-Digit, Multiplexed BCD to LCD Decoder/Driver,			
AC Drive	ICM7211	◇ Maxim	
	ICM7211A	Maxim	
LED, 4-Digit BCD or Binary to 7-Segment			
Decoder/Driver, Data and Digit Select Input Latches for			
μP Interface	ICM7212AM	Maxim	40
	ICM7212M	Maxim	
N-Bit (for I/O interface)			
	CDP1853	**◇ GE/RCA (2642)**	
	CDP1853C	**◇ GE/RCA (2642)**	
	HMMP1853	† Hughes	
	HMMP1853C	† Hughes	45
HC	HCMP1853	◇ Hughes	
	HCMP1853C	Hughes	
Programmable Chip Select Decoder			
	HPL82C138	◇† Harris	
	HPL82C139	◇† Harris	
	HPL82C338	◇† Harris	50
	HPL82C339	◇† Harris	

Function	Device	Source	Line
BCD to 7-Segment Latch/Decoder			
HC	M74HC4543	Mitsubishi	
BCD-to Decimal			
AHCT	KS54AHCT42	† Samsung	
	KS74AHCT42	Samsung	
C	MM54C42	◇‡ Micrel	55
	MM54C42	◇† National	
	MM74C42	National	
HC	**CD54HC42**	**† GE/RCA (2632)**	
	CD74HC42	**GE/RCA (2632)**	
	GD74HC145	◇ GoldStar	60
	GD74HC42	**GoldStar (2695)**	
	HD74HC42	Hitachi	
	MC54HC42	† Motorola	
	MC74HC42	Motorola	
	MM54HC42	† National	65
	MM74HC42	National	
	MN74HC42	◇ Panasonic	
	M74HC42	SGS	
	LR74HC42	Sharp	
	74HC42	**Signetics (3003)**	70
	SN54HC42	† TI	
	SN74HC42	TI	
	TC74HC4028	**Toshiba (3307)**	
	TC74HC42	**Toshiba (3307)**	
HCT	**CD54HCT42**	**† GE/RCA (2632)**	75
	CD74HCT42	**GE/RCA (2632)**	
	GD74HCT42	**GoldStar (2695)**	
	74HCT42	**Signetics (3003)**	
4XXX	F4028BC	Fairchild	
	F4028BM	† Fairchild	80
	CD4028A	**† GE/RCA (2633)**	
	CD4028AE	**GE/RCA (2633)**	
	CD4028B	**‡ GE/RCA (2633)**	
	CD4028BE	**GE/RCA (2633)**	
	GD4028B	**‡ GoldStar (2697)**	85
	CD4028A	‡ Micrel	
	CD4028B	‡ Micrel	
	MC14028BA	† Motorola	
	MC14028BC	Motorola	
	CD4028BC	National	90
	CD4028BM	† National	
	MN4028B	◇† Panasonic	
	HCC4028B	† SGS	
	HCF4028B	◇ SGS	
	HEF4028B	Signetics	95
	883C4028B	† Sprague	
	TC4028B	**Toshiba (3308)**	
40HXXX	LR40H042	Sharp	
	TC40H042	Toshiba	
BCD-to-7 Segment Decoder/Driver			
4XXX	MC14547BA	† Motorola	100
	MC14547BC	Motorola	
BCD-to-7-Segment			
C	MM54C48	◇† National	
	MM74C48	National	
5XXX	**TC5002B**	**Toshiba (3308)**	
Dual Binary to 1 of 4 Decoder/Demultiplexer (high)			
4XXX	F4555BC	Fairchild	105
	F4555BM	† Fairchild	
	F4556BC	Fairchild	
	F4556BM	† Fairchild	
	CD4555B	**† GE/RCA (2633, 2635)**	
	CD4555BE	**GE/RCA (2633, 2635)**	110

(Continued)

Function	Device	Source	Line
Dual Binary to 1 of 4 Decoder/Demultiplexer (low)			
4XXX		(Cont'd)	
	CD4556B	**† GE/RCA (2633, 2635)**	
	CD4556BE	**GE/RCA (2633, 2635)**	
	GD4555B	**GoldStar (2698)**	
	MC14555BA	† Motorola	
	MC14555BC	Motorola	115
	MC14556BA	† Motorola	
	MC14556BC	Motorola	
	MN4556B	◇† Panasonic	
	HCC4555B	† SGS	
	HCC4556B	† SGS	120
	HCF4555B	◇ SGS	
	HCF4556B	◇ SGS	
	HEF4555B	Signetics	
	HEF4556B	Signetics	
	883C4555B	† Sprague	125
	883C4556B	† Sprague	
	TC4555B	**Toshiba (3308)**	
	TC4556B	**Toshiba (3308)**	
Dual 2-Line to 4-Line Decoder			
HC	**GD74HC155**	**◇ GoldStar (2695)**	
	HD74HC155	Hitachi	130
	MC74HC155	Motorola	
	TC74HC155	**Toshiba (3307)**	
Dual 2-Line to 4-Line Decoder/Demultiplexer			
AC	54AC139	† Fairchild	
	74AC139	Fairchild	
	CD54AC139	† GE/RCA	135
	CD74AC139	**GE/RCA (2629)**	
	TC74AC139	**Toshiba (3307)**	
ACT	54ACT139	† Fairchild	
	74ACT139	Fairchild	
	CD54ACT139	† GE/RCA	140
	CD74ACT139	**GE/RCA (2629)**	
AHCT	KS74AHCT139	Samsung	
	KS74AHCT155	◇ Samsung	
	KS74AHCT239	Samsung	
Cell	SN74155-Cell	° TI	145
FCT	**IDT54FCT139**	**◇† IDT (2808)**	
	IDT54FCT139A	**◇† IDT (2808)**	
	IDT74FCT139	**◇ IDT (2808)**	
	IDT74FCT139A	**◇ IDT (2808)**	
HC	**CD54HC139**	**† GE/RCA (2632)**	150
	CD74HC139	**GE/RCA (2632)**	
	GD74HC139	**◇ GoldStar (2695)**	
	HD74HC139	Hitachi	
	IDT54AHCT139	**◇† IDT (2810)**	
	MC54HC139	† Motorola	155
	MC74HC139	Motorola	
	MC74HC239	Motorola	
	MM54HC139	† National	
	MM74HC139	National	
	MN74HC139	◇ Panasonic	160
	74HC139	Samsung	
	M74HC139	SGS	
	LR74HC139	Sharp	
	74HC139	**Signetics (3003)**	
	SN54HC139	† TI	165
	SN74HC139	TI	
	SN74HC239	TI	
	TC74HC139	**Toshiba (3307)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Decoders (Cont'd)

Function	Device	Source	Line
Dual 2-Line to 4-Line Decoder/Demultiplexer (Cont'd)			
HCT	**CD54HCT139**	**† GE/RCA (2632)**	
	CD74HCT139	**GE/RCA (2632)**	
	GD74HCT139	**GoldStar (2695)**	
	GD74HCT155	**GoldStar (2695)**	
	54HCT139SOS	‡ Marconi	5
	54HCT239SOS	‡ Marconi	
	74HCT139	Marconi	
	74HCT239	Marconi	
	MD54HCT139R	† Mitel	
	MD74HCT139R	Mitel	10
	MM54HCT139	† National	
	MM54HCT155	† National	
	MM74HCT139	National	
	MM74HCT155	National	
	MV74HCT139	Plessey	15
	KS74HCTLS139	Samsung	
	KS74HCTLS155	Samsung	
	KS74HCTLS239	◊ Samsung	
	74HCT139	**Signetics (3003)**	
	54HCT139	† Supertex	20
	54HCT239	† Supertex	
	74HCT139	Supertex	
	74HCT239	◊ Supertex	
SC	MV74SC239	Plessey	
	74SC139	Supertex	25
	74SC239	Supertex	
40HXXX	LR40H139	Sharp	
	LR40H155	Sharp	
	TC40H139	◊ Toshiba	
	TC40H155	◊ Toshiba	30
Dual 2 to 4 Line Decoder			
HC	M74HC155	SGS	
Dual 2-Line to 4-Line Decoder/Demultiplexer			
AC	**74AC11139**	**TI (3252)**	
	74AC11239	**TI (3252)**	
ACT	**74ACT11139**	**TI (3252)**	
	74ACT11239	**TI (3252)**	35
1 of 16 Decoder/Demultiplexer			
HC	M74HC4515	Mitsubishi	
1 of 8 Strobed			
4XXX	883C4428B	† Sprague	
3-Line to 8-Line Decoder/Demultiplexer			
AC	54AC11238	† TI	
3-Line to 8-Line Decoder			
HC	74HC237	Signetics	
HCT	**74HCT227**	**Signetics (3003)**	40
3-Line to 8-Line Decoder/Demultiplexer			
	MM74PC138	National	
AC	54AC138	† Fairchild	
	74AC138	Fairchild	
	CD54AC138	† GE/RCA	
	CD54AC238	† GE/RCA	45
	CD74AC138	**GE/RCA (2629)**	
	CD74AC238	**GE/RCA (2629)**	
	54AC11138	† TI	
	74AC11138	**TI (3252)**	
	74AC11138	**TI (3252)**	50
	74AC11238	**TI (3252)**	
	TC74AC138	**Toshiba (3307)**	
ACT	54ACT138	† Fairchild	
	74ACT138	Fairchild	

(Continued)

Function	Device	Source	Line
3-Line to 8-Line Decoder/Demultiplexer (Cont'd)			
ACT	CD54ACT138	† GE/RCA	55
	CD54ACT238	† GE/RCA	
	CD74ACT138	**GE/RCA (2629)**	
	CD74ACT238	**GE/RCA (2629)**	
	74ACT11238	**TI (3252)**	
AHCT	**IDT54AHCT138**	◊† **IDT (2810)**	60
C	**HS54C138RH**	**‡ Harris (2709)**	
FCT	**IDT54FCT138**	◊† **IDT (2808)**	
	IDT54FCT138A	◊† **IDT (2808)**	
	IDT74FCT138	◊ **IDT (2808)**	
	IDT74FCT138A	**IDT (2808)**	65
HC	**CD54HCT238**	**† GE/RCA (2632)**	
	CD54HC138	**† GE/RCA (2632)**	
	CD54HC238	**† GE/RCA (2632)**	
	CD74HCT238	**GE/RCA (2632)**	
	CD74HC138	**GE/RCA (2632)**	70
	CD74HC238	**GE/RCA (2632)**	
	GD74HC138	**◊ GoldStar (2695)**	
	HD74HC138	Hitachi	
	HD74HC238	Hitachi	
	MC54HC138	† Motorola	75
	MC74HC138	Motorola	
	MM54HC138	† National	
	MM74HC138	National	
	MN74HC138	◊ Panasonic	
	KS74HCTLS238	◊ Samsung	80
	74HC138	Samsung	
	M74HC138	SGS	
	LR74HC138	Sharp	
	74HC138	**Signetics (3003)**	
	74HC238	**Signetics (3003)**	85
	SN54HC138	† TI	
	SN74HC138	TI	
	TC74HC138	**Toshiba (3307)**	
HCT	**CD54HCT138**	**† GE/RCA (2632)**	
	CD74HCT138	**GE/RCA (2632)**	90
	GD74HCT138	**GoldStar (2695)**	
	HD74HCT138	Hitachi	
	54HCT138SOS	‡ Marconi	
	54HCT238SOS	‡ Marconi	
	74HCT138	Marconi	95
	74HCT238	Marconi	
	MD54HCT138R	† Mitel	
	MD74HCT138R	Mitel	
	MM54HCT138	† National	
	MM74HCT138	National	100
	MV74HCT138	Plessey	
	MV74HCT238	Plessey	
	KS74HCTLS138	Samsung	
	M74HCT137	SGS	
	74HCT138	**Signetics (3003)**	105
	74HCT238	**Signetics (3003)**	
	54HCT138	† Supertex	
	54HCT238	† Supertex	
	74HCT138	Supertex	
	74HCT238	◊ Supertex	110
	SN54HCT138	† TI	
	SN74HCT138	TI	
	TC74HCT138	Toshiba	
SC	74SC138	Supertex	
	74SC238	Supertex	115

(Continued)

Function	Device	Source	Line
3-Line to 8-Line Decoder/Demultiplexer (Cont'd)			
40HXXX	LR40H138	Sharp	
	TC40H138	◊ Toshiba	
3-Line to 8-Line Decoder/Demultiplexer, Non-Inverting			
AC	**74AC11238**	**TI (3252)**	
AHCT	KS74AHCT238	Samsung	
HC	SN54HC237	† TI	120
	SN54HC238	† TI	
	SN74HC237	TI	
	SN74HC238	TI	
	TC74HC237	**Toshiba (3307)**	
	TC74HC238	**Toshiba (3307)**	125
HCT	HD74HCT237	Hitachi	
	HD74HCT238	Hitachi	
	SN54HCT237	† TI	
	SN54HCT237	† TI	
	SN54HCT238	† TI	130
	SN54HCT238	† TI	
	SN74HCT237	TI	
	SN74HCT238	TI	
3-Line to 8-Line Decoder/Demultiplexer with Input Latches			
HC	**CD54HC137**	**† GE/RCA (2632)**	
	CD54HC237	**† GE/RCA (2632)**	135
	CD74HC137	**GE/RCA (2632)**	
	CD74HC237	**GE/RCA (2632)**	
	GD74HC137	**GoldStar (2695)**	
	HD74HC137	Hitachi	
	HD74HC237	Hitachi	140
	M74HC137	Mitsubishi	
	MC54HC137	† Motorola	
	MC54HC237	◊† Motorola	
	MC74HC137	Motorola	
	MC74HC237	Motorola	145
	MM54HC137	† National	
	MM54HC237	† National	
	MM74HC137	National	
	MM74HC237	◊ National	
	74HC137	Samsung	150
	74HC237	Samsung	
	M74HC137	SGS	
	M74HC237	SGS	
	LR74HC137	Sharp	
	74HC137	**Signetics (3003)**	155
	SN54HC137	† TI	
	SN74HC137	TI	
	TC74HC137	**Toshiba (3307)**	
HCT	**CD54HCT137**	**† GE/RCA (2632)**	
	CD54HCT237	**† GE/RCA (2632)**	160
	CD74HCT137	**GE/RCA (2632)**	
	CD74HCT237	**GE/RCA (2632)**	
	GD74HCT137	**GoldStar (2695)**	
	HD74HCT137	Hitachi	
	54HCT137SOS	‡ Marconi	165
	54HCT237SOS	‡ Marconi	
	74HCT137	Marconi	
	74HCT237	Marconi	
	MV74HCT137	Plessey	
	MV74HCT237	Plessey	170
	74HCT137	**Signetics (3003)**	
	54HCT137	† Supertex	
	54HCT237	† Supertex	
	74HCT137	Supertex	
	74HCT237	◊ Supertex	175
	SN54HCT137	† TI	
	SN54HCT137	† TI	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—CMOS (Cont'd)

Function	Device	Source	Line
Decoders (Cont'd)			
3-Line to 8-Line Decoder/Demultiplexer with Input Latches			
HCT		(Cont'd)	
	SN74HCT137	TI	
	TC74HCT137	Toshiba	
SC	MV74SC137	Plessey	
	MV74SC237	Plessey	
	74SC137	Supertex	5
	74SC237	Supertex	
3-Line to 8-Line Decoder/Latch			
HC	**TC74HC131**	**Toshiba (3307)**	
3-to-8 Line Decoder			
HC	M74HC131	SGS	
	M74HC238	SGS	
4-Bit Latch/4-to-16-Line Decoder (high)			
HC	**CD54HC4514**	**† GE/RCA (2632)**	10
	CD54HC4515	**† GE/RCA (2632)**	
	CD74HC4514	**GE/RCA (2632)**	
	CD74HC4515	**GE/RCA (2632)**	
	HD74HC4514	Hitachi	
	MC54HC4514	† Motorola	15
	MC74HC4514	Motorola	
	MC74HC4515	Motorola	
	MM54HC4514	† National	
	MM74HC4514	National	
	M74HC4514	SGS	20
	74HC4514	**Signetics (3003)**	
	74HC4515	**Signetics (3003)**	
HCT	**CD54HCT4514**	**† GE/RCA (2632)**	
	CD54HCT4515	**† GE/RCA (2632)**	
	CD74HCT4514	**GE/RCA (2632)**	25
	CD74HCT4515	**GE/RCA (2632)**	
	74HCT4514	**Signetics (3003)**	
	74HCT4515	**Signetics (3003)**	
4XXX	F4514BC	Fairchild	
	F4514BM	† Fairchild	30
	F4515BC	Fairchild	
	F4515BM	† Fairchild	
	CD4514B	**† GE/RCA (2633)**	
	CD4514BE	**GE/RCA (2633)**	
	CD4515B	**† GE/RCA (2633)**	35
	CD4515BE	**GE/RCA (2633)**	
	GD4514B	**† GoldStar (2697)**	
	GD4515B	**† GoldStar (2697)**	
	CD4514B	‡ Micrel	
	CD4515B	‡ Micrel	40
	MC14514BA	† Motorola	
	MC14514BC	Motorola	
	MC14515BA	† Motorola	
	MC14515BC	Motorola	
	CD4514BC	National	45
	CD4514BM	† National	
	CD4515BC	National	
	CD4515BM	† National	
	HCC4514B	† SGS	
	HCC4515B	† SGS	50
	HCF4514B	SGS	
	HCF4515B	SGS	
	HEF4514B	◊ Signetics	
	HEF4515B	◊ Signetics	
	883C4514B	† Sprague	55
	883C4515B	† Sprague	
	TC4514B	**Toshiba (3308)**	
	TC4515B	**Toshiba (3308)**	

Function	Device	Source	Line
4-Line to 16-Line Decoder/Demultiplexer, Inverting			
HC	HD74HC4515	Hitachi	
	SN74HC4515	TI	60
	TC74HC4515	**Toshiba (3307)**	
4-Line to 16-Line Decoder/Demultiplexer, Non-Inverting			
HC	LR74HC4514	◊ Sharp	
	SN74HC4514	TI	
	TC74HC4514	**Toshiba (3307)**	
4-Line-to-16-Line Decoder/Demultiplexer			
AHCT	KS74AHCT154	◊ Samsung	65
C	MM54C154	† National	
	MM74C154	National	
HC	**CD54HC154**	**† GE/RCA (2632)**	
	CD74HC154	**GE/RCA (2632)**	
	GD74HC154	**◊ GoldStar (2695)**	70
	HD74HC154	Hitachi	
	MC54HC154	† Motorola	
	MC74HC154	Motorola	
	MM54HC154	† National	
	MM74HC154	National	75
	MN74HC154	◊ Panasonic	
	M74HC154	SGS	
	74HC154	**Signetics (3003)**	
	SN74HC154	TI	
	TC74HC154	**Toshiba (3307)**	80
	US74HC154	Universal	
HCT	**CD54HCT154**	**† GE/RCA (2632)**	
	CD74HCT154	**GE/RCA (2632)**	
	74HCT154	**Signetics (3003)**	
4-Line-to-16-Line-Decoder/Demultiplexer			
AHCT	KS54AHCT148	† Samsung	85
8 to 3-Line Priority Encoder			
HC	**TC74HC148**	**Toshiba (3307)**	
8-Line to 8-Line Priority Encoder			
HC	MM54HC149	† National	
	MM74HC149	National	
HCT	MM54HCT149	† National	
	MM74HCT149	National	
8-to-3 Line Priority			90
HC	M74HC148	SGS	
10-Line to 4-Line Priority Encoder			
HC	**CD54HC147**	**† GE/RCA (2632)**	
	CD74HC147	**GE/RCA (2632)**	
	GD74HC147	**◊ GoldStar (2695)**	
	HD74HC147	Hitachi	95
	MC54HC147	† Motorola	
	MC74HC147	Motorola	
	M74HC147	SGS	
	74HC147	**Signetics (3003)**	
HCT	**CD54HCT147**	**† GE/RCA (2632)**	100
	CD74HCT147	**GE/RCA (2632)**	
	74HCT147	**Signetics (3003)**	
10-Line to 4-Line Priority Encoder			
HCT	**GD74HCT147**	**GoldStar (2695)**	
3-Line to 8-Line Decoder/Demultiplexer			
ACT	**74ACT11138**	**TI (3252)**	
8 to 3-Line Priority Encoder			
HCT	**GD74HCT154**	**GoldStar (2695)**	105
Drivers			
LCD, Dot Matrix	HLCD0488	Hughes	
	HLCD0538A	◊ Hughes	
	HLCD0539A	◊ Hughes	
	HLCD0540	◊ Hughes	
	HLCD0541	◊ Hughes	110
	HLCD0542	◊ Hughes	
		(Continued)	

Function	Device	Source	Line
LCD, Dot Matrix		(Cont'd)	
	HLCD0548	◊ Hughes	
	HLCD0550	◊ Hughes	
	HLCD0551	◊ Hughes	
	HLCD0607	Hughes	115
LCD, BCD-to-7-Segment Decoder/Driver with "Display Frequency Output"			
4XXX	**CD4055B**	**† GE/RCA (2635)**	
	CD4055BE	**GE/RCA (2635)**	
	CD4056B	**† GE/RCA (2635)**	
	CD4056BE	**GE/RCA (2635)**	
	HCC4055B	† SGS	120
	HCC4056B	† SGS	
	HCF4055B	◊ SGS	
	HCF4056B	◊ SGS	
	TC4055B	**Toshiba (3308)**	
	TC4056B	**Toshiba (3308)**	125
LCD, BCD-to-7-Segment Latch/Decoder/Driver			
HC	**CD54HC4543**	**† GE/RCA (2632)**	
	CD74HC4543	**GE/RCA (2632)**	
	HD74HC4543	Hitachi	
	MC54HC4543	† Motorola	
	MC74HC4543	Motorola	130
	M74HC4543	SGS	
	LR74HC4543	Sharp	
	74HC4543	**Signetics (3003)**	
	TC74HC4543	**Toshiba (3307)**	
HCT	**CD54HCT4543**	**† GE/RCA (2632)**	135
	CD74HCT4543	**GE/RCA (2632)**	
	74HCT4543	**Signetics (3003)**	
4XXX	**GD4543B**	**GoldStar (2698)**	
	MC14543BA	† Motorola	
	MC14543BC	Motorola	140
	CD4543BC	National	
	CD4543BM	† National	
	HEF4543B	Signetics	
	883C4534B	† Sprague	
	TC4543B	**Toshiba (3308)**	145
LCD, 4-Digit, Microprocessor Interface			
	ICM7211AM	**GE/Intersil (2671)**	
	ICM7211M	**GE/Intersil (2671)**	
	CD22105	GE/RCA	
	CD22105A	GE/RCA	
LCD, 4-Digit Multiplex Input			
	HLCD0437	◊ Hughes	150
LCD, 4-Digit, Multiplexed BCD to LCD Decoder/Driver, AC Drive			
	ICM7211	**GE/Intersil (2671)**	
	ICM7211A	**GE/Intersil (2671)**	
	CD22104	GE/RCA	
	CD22104A	GE/RCA	
LCD, 4-Digit Serial Input			
	HLCD0438A	Hughes	155
LCD, 4-Line			
4XXX	**CD4054B**	**† GE/RCA (2635)**	
	CD4054BE	**GE/RCA (2635)**	
	HCC4054B	† SGS	
	HCF4054B	◊ SGS	
	TC4054B	**Toshiba (3308)**	160
LED, 4-Digit Multiplexed BCD or Binary to 7-Segment Decoder/Driver	**ICM7212**	**GE/Intersil (2671)**	
	ICM7212A	**GE/Intersil (2671)**	
		(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Drivers (Cont'd)

Function	Device	Source	Line
LED, 4-Digit Multiplexed BCD or Binary to 7-Segment Decoder/Driver (Cont'd)			
	ICM7212	◇ Maxim	
	ICM7212A	Maxim	
LED, 4-Digit BCD or Binary to 7-Segment Decoder/Driver, Data and Digit Select Input Latches for µP Interface	**ICM7212AM**	**GE/Intersil (2671)**	
	ICM7212M	**GE/Intersil (2671)**	
LED, 4-Digit, 17-Segment Alphanumeric Display with Memory, Decoder			
C	MM74C956	National	5
BCD (hexadecimal) to 7-Segment Latch/Decoder/Driver			
4XXX	MC14495	◇ Motorola	
BCD-to-7-Segment Latch/Decoder/Driver			
HC	**CD54HC4511**	**† GE/RCA (2632)**	
	CD74HC4511	**GE/RCA (2632)**	
	HD74HC4511	Hitachi	
	MC54HC4511	† Motorola	10
	MC74HC4511	Motorola	
	MM54HC4511	† National	
	MM54HC4543	† National	
	MM74HC4511	National	
	MM74HC4543	National	15
	M74HC4511	SGS	
	LR74HC4511	◇ Sharp	
	74HC4511	**Signetics (3003)**	
	TC74HC4511	**Toshiba (3307)**	
HCT	**CD54HCT4511**	**† GE/RCA (2632)**	20
	CD74HCT4511	**GE/RCA (2632)**	
	74HCT4511	**Signetics (3003)**	
4XXX	F4511BC	Fairchild	
	F4511BM	† Fairchild	
	F4734BC	† Fairchild	25
	F4734BM	Fairchild	
	CD4511B	**† GE/RCA (2635)**	
	CD4511BE	**GE/RCA (2635)**	
	GD4511B	**† GoldStar (2697)**	
	GD4734B	**† GoldStar (2698)**	30
	MC14511BA	† Motorola	
	MC14511BC	Motorola	
	MC14513BA	† Motorola	
	MC14513BC	Motorola	
	CD4511BC	National	35
	CD4511BM	† National	
	MN4511B	◇† Panasonic	
	HCC4511B	† SGS	
	HCF4511B	◇ SGS	
	HEF4511B	◇ Signetics	40
	883C4511B	◇† Sprague	
	TC4511B	**Toshiba (3308)**	
5XXX	**TC5022B**	**Toshiba (3308)**	
	TC5068B	**Toshiba (3308)**	
	TC5069B	**Toshiba (3308)**	45
Dual High Voltage, Source 250 mA			
C	MM74C908	National	
	MM74C918	National	
Hex 2-Input AND Driver			
HC	SN74HC808	TI	
Hex 2-Input NAND Driver			
HC	SN74HC804	TI	
Hex 2-Input NOR Driver			
HC	SN74HC805	TI	50
Hex 2-Input OR Driver			
HC	SN74HC832	TI	
4-Digit Display (stores segment and address data, drives 7–8 segment digits)			
C	MM74C911	National	
6-Digit BCD Display (stores segment and address data, drives 7–8 segment digits)			
C	MM74C912	National	
6-Digit Hex Display (stores segment and address data, drives 7-segment digits)			
C	MM74C917	National	
7-Segment to BCD Converter/Driver			
C	MM54C915	† National	55
	MM74C915	National	
10-Bit Buffer/Driver, Three-State, Non-Inverting			
AC	**74AC11827**	**TI (3253)**	

Flip-Flops, D-Type

Function	Device	Source	Line
Dual	MM74PC74	National	
AC	54AC74	† Fairchild	
	74AC74	Fairchild	60
	CD54AC74	† GE/RCA	
	CD74AC74	**GE/RCA (2629)**	
	SN54AC11074	◇† TI	
	74AC11074	**TI (3252)**	
ACT	CD54ACT74	† GE/RCA	65
	CD74ACT74	**GE/RCA (2629)**	
	SN54ACT11074	† TI	
	74ACT11074	**TI (3252)**	
AHCT	KS74AHCT74	Samsung	
C	MM54C74	† National	70
	MM74C74	◇ National	
HC	**CD54HC74**	**† GE/RCA (2631)**	
	CD74HC74	**GE/RCA (2631)**	
	GD74HC74	**GoldStar (2695)**	
	HD74HC74	Hitachi	75
	MC54HC74	† Motorola	
	MC74HC74	Motorola	
	MM54HC74	† National	
	MM74HC74	National	
	MN74HC74	Panasonic	80
	M74HC74	SGS	
	LR74HC74	Sharp	
	74HC74	**Signetics (3003)**	
	SN54HC74	† TI	
	SN74HC74	TI	85
	TC74HC74	**Toshiba (3307)**	
HCT	**CD54HCT74**	**† GE/RCA (2631)**	
	CD74HCT74	**GE/RCA (2631)**	
	GD74HCT74	**GoldStar (2695)**	
	MM54HCT74	† National	90
	MM74HCT74	National	
	KS74HCTLS74	Samsung	
	74HCT74	**Signetics (3003)**	
4XXX	F4013BC	Fairchild	
	F4013BM	† Fairchild	95
	CD4013A	**† GE/RCA (2634)**	
	CD4013AE	**GE/RCA (2634)**	
	CD4013B	**‡ GE/RCA (2634)**	
	CD4013BE	**GE/RCA (2634)**	
	GD4013B	**‡ GoldStar (2697)**	100
	CD4013A	‡ Micrel	
	CD4013B	‡ Micrel	
	MC14013BA	† Motorola	
	MC14013BC	Motorola	
	CD4013BC	National	105

(Continued)

Function	Device	Source	Line
Dual 4XXX (Cont'd)			
	CD4013BM	† National	
	MN4013B	◇† Panasonic	
	LC4013B	Sanyo	
	HCC4013B	† SGS	
	HCF4013B	◇ SGS	110
	HEF4013B	Signetics	
	883C4013B	† Sprague	
	TC4013B	**Toshiba (3308)**	
40HXXX	LR40H074	Sharp	
	TC40H074	Toshiba	115
Dual 4-Bit			
AC	**V54AC874**	**◇† VTC (3370)**	
	V54AC876	**◇† VTC (3370)**	
	V54AC878	**◇† VTC (3370)**	
	V54AC879	**◇† VTC (3370)**	
	V74AC874	VTC	120
	V74AC876	VTC	
	V74AC878	VTC	
	V74AC879	VTC	
Dual 4-Bit Edge-Triggered, Non-Inverting			
AC	**74AC11874**	**◇ TI (3253)**	
Dual 4-Bit			
ACT	**74ACT11874**	**TI (3253)**	125
	V54ACT874	**† VTC (3370)**	
	V54ACT876	**† VTC (3370)**	
	V54ACT878	**† VTC (3370)**	
	V54ACT879	**† VTC (3370)**	
	V74ACT874	**VTC (3370)**	130
	V74ACT876	**VTC (3370)**	
	V74ACT878	**VTC (3370)**	
	V74ACT879	**VTC (3370)**	
Quad			
AC	CD54AC175	† GE/RCA	
	CD74AC175	**◇ GE/RCA (2629)**	135
	SN54AC11175	† TI	
	74AC11175	**TI (3252)**	
	TC74AC175	**Toshiba (3307)**	
ACT	CD54ACT175	† GE/RCA	
	CD74ACT175	**GE/RCA (2629)**	140
	74ACT11175	**TI (3252)**	
AHCT	KS74AHCT175	Samsung	
C	MM54C175	‡ Micrel	
	MM54C175	† National	
	MM74C175	National	145
Cell	SN74175-Cell	° TI	
HC	**CD54HC175**	**† GE/RCA (2631)**	
	CD74HC175	**GE/RCA (2631)**	
	GD74HC175	**GoldStar (2696)**	
	HD74HC175	Hitachi	150
	MC54HC175	† Motorola	
	MC74HC175	Motorola	
	MM54HC175	† National	
	MM74HC175	National	
	M74HC175	SGS	155
	LR74HC175	Sharp	
	74HC175	**Signetics (3003)**	
	SN54HC175	† TI	
	SN74HC175	◇ TI	
	TC74HC175	**◇ Toshiba (3307)**	160
	US74HC175	Universal	
HCT	**CD54HCT175**	**† GE/RCA (2631)**	
	CD74HCT175	**GE/RCA (2631)**	
	GD74HCT175	**◇ GoldStar (2696)**	
	KS74HCTLS175	Samsung	165
	74HCT175	**◇ Signetics (3003)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—CMOS (Cont'd)

Flip-Flops, D-Type (Cont'd)

Function	Device	Source	Line
Quad		(Cont'd)	
4XXX	F40175BC	Fairchild	
	F40175BM	† Fairchild	
	CD40175B	**◇† GE/RCA (2634)**	
	CD40175BE	**◇ GE/RCA (2634)**	
	GD40175B	**GoldStar (2698)**	5
	MC14175BA	† Motorola	
	MC14175BC	Motorola	
	CD40175B	National	
	HEF40175B	Signetics	
	TC40175B	**Toshiba (3308)**	10
40HXXX	LR40H175	Sharp	
	TC40H175	Toshiba	
Quad with Enable			
AC	**74AC11379**	**TI (3253)**	
ACT	**74ACT11379**	**TI (3253)**	
HC	SN54HC379	† TI	15
	SN74HC379	TI	
Quad Three-State			
AHCT	KS74AHCT173	Samsung	
C	MM54C173	‡ Micrel	
	MM54C173	† National	
	MM74C173	National	20
Cell	SN74173-Cell	° TI	
HC	**CD54HC173**	**† GE/RCA (2631)**	
	CD74HC173	**GE/RCA (2631)**	
	GD74HC173	**GoldStar (2695)**	
	HD74HC173	Hitachi	25
	MC54HC173	† Motorola	
	MC74HC173	Motorola	
	MM54HC173	† National	
	MM74HC173	National	
	M74HC173	SGS	30
	LR74HC173	Sharp	
	74HC173	**Signetics (3003)**	
	SN54HC173	† TI	
	SN74HC173	◇ TI	
	TC74HC173	**◇ Toshiba (3307)**	35
	US74HC173	Universal	
HCT	**CD54HCT173**	**† GE/RCA (2631)**	
	CD74HCT173	**GE/RCA (2631)**	
	GD74HCT173	**◇ GoldStar (2695)**	
	74HCT173	**◇ Signetics (3003)**	40
4XXX	F4076BC	Fairchild	
	F4076BM	† Fairchild	
	CD4076B	**† GE/RCA (2634)**	
	CD4076BE	**GE/RCA (2634)**	
	GD4076B	**† GoldStar (2697)**	45
	CD4076B	‡ Micrel	
	MC14076BA	Motorola	
	MC14076BC	Motorola	
	CD4076BC	National	
	CD4076BM	† National	50
	MN4076B	◇† Panasonic	
	HCC4076B	† SGS	
	HCF4076B	◇ SGS	
	HEF4076B	Signetics	
	883C4076B	† Sprague	55
	TC4076B	**Toshiba (3308)**	
Hex			
AC	54AC174	† Fairchild	
	74AC174	† Fairchild	
	CD54AC174	† GE/RCA	
	CD74AC174	**◇ GE/RCA (2629)**	60
	SN54AC11174	† TI	

(Continued)

Function	Device	Source	Line
Hex			
AC		(Cont'd)	
	74AC11174	**TI (3252)**	
	TC74AC174	**† Toshiba (3307)**	
ACT	54ACT174	◇† Fairchild	
	74ACT174	◇† Fairchild	65
	CD54ACT174	† GE/RCA	
	CD74ACT174	**GE/RCA (2629)**	
	74ACT11174	**TI (3252)**	
AHCT	KS74AHCT174	Samsung	
C	MM54C174	‡ Micrel	70
	MM54C174	† National	
	MM74C174	National	
Cell	SN74174-Cell	° TI	
HC	**CD54HC174**	**† GE/RCA (2631)**	
	CD74HC174	**† GE/RCA (2631)**	75
	GD74HC174	**† GoldStar (2696)**	
	HD74HC174	† Hitachi	
	MC54HC174	† Motorola	
	MC74HC174	† Motorola	
	MM54HC174	† National	80
	MM74HC174	National	
	MN74HC174	◇† Panasonic	
	M74HC174	† SGS	
	LR74HC174	Sharp	
	74HC174	**† Signetics (3003)**	85
	SN54HC174	† TI	
	SN74HC174	◇ TI	
	TC74HC174	**◇ Toshiba (3307)**	
	US74HC174	† Universal	
HCT	**CD54HCT174**	**† GE/RCA (2631)**	90
	CD74HCT174	**GE/RCA (2631)**	
	GD74HCT174	**◇† GoldStar (2696)**	
	MM54HCT174	◇† National	
	MM74HCT174	◇ National	
	KS74HCTLS174	Samsung	95
	74HCT174	**◇† Signetics (3003)**	
4XXX	F40174BC	Fairchild	
	F40174BM	† Fairchild	
	CD40174B	**◇† GE/RCA (2634)**	
	CD40174BE	**◇ GE/RCA (2634)**	100
	GD40174B	**GoldStar (2698)**	
	CD40174B	‡ Micrel	
	MC14174BA	† Motorola	
	MC14174BC	Motorola	
	CD40174BC	National	105
	CD40174BM	† National	
	HCC40174B	◇† SGS	
	HCF40174B	◇ SGS	
	HEF40174B	Signetics	
	883C4174B	† Sprague	110
	TC40174B	**Toshiba (3308)**	
40HXXX	LR40H174	Sharp	
	TC40H174	Toshiba	
Hex with Enable			
AC	**74AC11378**	**TI (3253)**	
ACT	**74ACT11378**	**TI (3253)**	115
HC	SN54HC378	† TI	
	SN74HC378	TI	
Octal D-Type Flip-Flop, Three-State (BiCMOS)			
BCT	**SN74BCT374**	**TI (3249)**	
Octal D-Type, Inverting, Three-State			
AC	CD54AC564	† GE/RCA	
	CD74AC564	**GE/RCA (2629)**	120
ACT	CD54ACT564	† GE/RCA	
	CD74ACT564	**GE/RCA (2629)**	

Function	Device	Source	Line
Octal, Edge-triggered, Inverting, Three-State			
AC	SN54AC11534	† TI	
	74AC11534	**TI (3253)**	
Octal Edge-Triggered with Clear			
AC	54AC273	† Fairchild	125
	74AC273	Fairchild	
	CD74AC273	**GE/RCA (2629)**	
	TC74AC273	**◇ Toshiba (3307)**	
ACT	CD54ACT273	◇† GE/RCA	
	CD74ACT273	**◇ GE/RCA (2629)**	130
AHCT	KS74AHCT273	Samsung	
Cell	SN74273-Cell	◇° TI	
FCT	**IDT54FCT273**	**◇†**	
		IDT (2808)	
	IDT54FCT273A	**◇†**	
		IDT (2808)	
	IDT74FCT273	**◇ IDT (2808)**	135
	IDT74FCT273A	**◇ IDT (2808)**	
HC	**CD54HC273**	**† GE/RCA (2631)**	
	CD74HC273	**GE/RCA (2631)**	
	GD74HC273	**GoldStar (2696)**	
	HD74HC273	Hitachi	140
	IDT54AHCT273	**◇†**	
		IDT (2811)	
	MC54HC273	† Motorola	
	MC74HC273	Motorola	
	MM54HC273	◇† National	
	MM74HC273	National	145
	MN74HC273	◇ Panasonic	
	M74HC273	SGS	
	LR74HC273	Sharp	
	74HC273	**Signetics (3003)**	
	SN54HC273	† TI	150
	SN74HC273	TI	
	TC74HC273	**Toshiba (3307)**	
HCT	**CD54HCT273**	**† GE/RCA (2631)**	
	CD74HCT273	**GE/RCA (2631)**	
	GD74HCT273	**GoldStar (2696)**	155
	MM54HCT273	† National	
	MM74HCT273	National	
	P54PCT273	Performance	
	KS74HCTLS273	Samsung	
	74HCT273	**Signetics (3003)**	160
	54HCT273	† Supertex	
	74HCT273	Supertex	
PCT	P74PCT273	Performance	
SC	74SC273	Supertex	
40HXXX	TC40H273	Toshiba	165
Octal, TTL Input, Three-State			
HC	MM54HC4304	◇† National	
	MM74HC4304	◇ National	
Octal, TTL Input, Three-State, Inverting			
HC	MM54HC4303	◇† National	
	MM74HC4303	◇ National	
Octal with Enable			
AC	54AC377	◇† Fairchild	170
	74AC377	Fairchild	
ACT	54ACT377	† Fairchild	
	74ACT377	Fairchild	
AHCT	KS54AHCT377	† Samsung	
	KS74AHCT377	Samsung	175
FCT	**IDT54FCT377**	**◇†**	
		IDT (2808, 2810)	
	IDT54FCT377A	**◇†**	
		IDT (2808, 2810)	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Flip-Flops, D-Type (Cont'd)

Function	Device	Source	Line
Octal with Enable			
FCT		(Cont'd)	
	IDT54FCT521 ◇†		
		IDT (2808, 2810)	
	IDT74FCT377 ◇	**IDT (2808, 2810)**	
	IDT74FCT377A ◇	**IDT (2808, 2810)**	
	IDT74FCT521 ◇	**IDT (2808, 2810)**	
HC	**CD54HC377** ◇†	**GE/RCA (2631)**	5
	CD74HC377	**GE/RCA (2631)**	
	GD74HC377	**GoldStar (2696)**	
	HD74HC377	Hitachi	
	IDT54AHCT377 ◇†		
		IDT (2811)	
	74HC377 ◇	**Signetics (3003)**	10
	SN54HC377 †	TI	
	SN74HC377	TI	
	TC74HC377	**Toshiba (3307)**	
HCT	**CD54HCT377** †	**GE/RCA (2631)**	
	CD74HCT377	**GE/RCA (2631)**	15
	GD74HCT377	**GoldStar (2696)**	
	74HCT377	**Signetics (3003)**	
Octal, with Master Reset			
HCT	P54PCT273A †	Performance	
	P74PCT273A	Performance	
Octal Three State, Non-Inverting			
AC	CD54AC374 †	GE/RCA	20
	CD74AC374	**GE/RCA (2629)**	
Octal, Three-State			
HCT	P54PCT374A †	Performance	
	P54PCT534A †	Performance	
	P74PCT374A	Performance	
	P74PCT534A	Performance	25
Octal Three-State, Inverting			
AC	CD54AC534 †	GE/RCA	
	CD74AC534	**GE/RCA (2629)**	
	TC74AC534	**Toshiba (3307)**	
	TC74AC564	**Toshiba (3307)**	
	V54AC534 †	**VTC (3370)**	30
	V54AC564 †	**VTC (3370)**	
	V54AC576 †	**VTC (3370)**	
	V54AC826 †	**VTC (3370)**	
	V74AC534	VTC	
	V74AC564	VTC	35
	V74AC576 ◇	VTC	
	V74AC826	VTC	
ACT	CD54ACT534 ◇†	GE/RCA	
	CD74ACT534	**GE/RCA (2629)**	
	74ACT11534 ◇	**TI (3253)**	40
	V54ACT534 †	**VTC (3370)**	
	V54ACT564 ◇†	**VTC (3370)**	
	V54ACT576 †	**VTC (3370)**	
	V54ACT826 ◇†	**VTC (3370)**	
	V74ACT534	**VTC (3370)**	45
	V74ACT564 ◇	**VTC (3370)**	
	V74ACT576	**VTC (3370)**	
AHCT	KS74AHCT534	Samsung	
	KS74AHCT564	Samsung	

(Continued)

Function	Device	Source	Line
Octal Three-State, Inverting		(Cont'd)	
FCT	**IDT54FCT534** ◇†		
		IDT (2808, 2810)	50
	IDT54FCT534A ◇†		
		IDT (2808, 2810)	
	IDT54FCT826A ◇†		
		IDT (2809)	
	IDT54FCT826B †	**IDT (2809)**	
	IDT74FCT534 ◇	**IDT (2808, 2810)**	
	IDT74FCT534A ◇	**IDT (2808, 2810)**	55
	IDT74FCT826A ◇	**IDT (2809)**	
	IDT74FCT826B ◇		
		IDT (2809)	
	V54FCT534 ◇†	**VTC (3370)**	
	V54FCT826A †	**VTC (3370)**	
	V74FCT534 ◇†	**VTC (3370)**	60
	V74FCT826A †	**VTC (3370)**	
HC	**CD54HC534** †	**GE/RCA (2631)**	
	CD54HC564 †	**GE/RCA (2631)**	
	CD74HC534	**GE/RCA (2631)**	
	CD74HC564	**GE/RCA (2631)**	65
	GD74HC534	**GoldStar (2696)**	
	GD74HC564	**GoldStar (2696)**	
	HD74HC534	Hitachi	
	HD74HC564 ◇	Hitachi	
	IDT54AHCT534 ◇†		
		IDT (2811)	70
	IDT74AHCT534 ◇		
		IDT	
	MC54HC534 †	Motorola	
	MC54HC564 †	Motorola	
	MC74HC534	Motorola	
	MC74HC564	Motorola	75
	MM54HC534 ◇†	National	
	MM54HC564 †	National	
	MM74HC534	National	
	MM74HC564	National	
	74HC534	Samsung	80
	74HC564	Samsung	
	M74HC534	SGS	
	M74HC564 ◇	SGS	
	LR74HC534 ◇	Sharp	
	LR74HC564	Sharp	85
	74HC534	**Signetics (3003)**	
	74HC564	**Signetics (3003)**	
	SN54HC534 †	TI	
	SN54HC564 †	TI	
	SN74HC534	TI	90
	SN74HC564	TI	
	TC74HC534	**Toshiba (3307)**	
	TC74HC564	**Toshiba (3307)**	
HCT	**CD54HCT534** †	**GE/RCA (2631)**	
	CD54HCT564 †	**GE/RCA (2631)**	95
	CD74HCT534	**GE/RCA (2631)**	
	CD74HCT564	**GE/RCA (2631)**	
	GD74HCT534	**GoldStar (2696)**	
	GD74HCT564	**GoldStar (2696)**	
	HD74HCT534	Hitachi	100
	HD74HCT564	Hitachi	
	54HCT534SOS ‡	Marconi	
	54HCT564SOS ‡	Marconi	
	74HCT534	Marconi	
	74HCT564	Marconi	105
	MIC74HCT534	Micrel	
	MIC74HCT564	Micrel	

(Continued)

Function	Device	Source	Line
Octal Three-State, Inverting			
HCT		(Cont'd)	
	MC54HCT534 †	Motorola	
	MC74HCT534	Motorola	
	MM54HCT534 †	National	110
	MM74HCT534 ◇	National	
	P54PCT534	Performance	
	MV74HCT534	Plessey	
	MV74HCT564 ◇	Plessey	
	KS74HCTLS534	Samsung	115
	KS74HCTLS564	Samsung	
	74HCT534	**Signetics (3003)**	
	74HCT564	**Signetics (3003)**	
	54HCT534 †	Supertex	
	54HCT564 †	Supertex	120
	74HCT534	Supertex	
	74HCT56	Supertex	
	SN74HCT534 ◇	TI	
	SN74HCT564 ◇	TI	
	TC74HCT564	Toshiba	125
PCT	P74PCT534	Performance	
SC	74SC534	Supertex	
	74SC564	Supertex	
Octal Three-State, Inverting, mult. enable			
ACT	**74ACT11826**	**TI (3253)**	
	V74ACT826	**VTC (3370)**	130
Octal Three-State, Inverting with clear			
AC	**V54AC577** †	**VTC (3370)**	
	V74AC577 ◇	VTC	
ACT	**V54ACT577** †	**VTC (3370)**	
	V74ACT577	**VTC (3370)**	
Octal Three-State, Non-Inverting			
AC	54AC374 ◇†	Fairchild	135
	74AC374	Fairchild	
	CD54AC574 †	GE/RCA	
	CD74AC574	**GE/RCA (2629)**	
	SN54AC11374 †	TI	
	74AC11374	**TI (3253)**	140
	TC74AC374	**Toshiba (3307)**	
	TC74AC574	**Toshiba (3307)**	
	V54AC374 †	**VTC (3370)**	
	V54AC574 †	**VTC (3370)**	
	V54AC825 †	**VTC (3370)**	145
	V74AC374	VTC	
	V74AC574	VTC	
	V74AC825	VTC	
ACT	CA74ACT825	Calmos	
	54ACT374 †	Fairchild	150
	54ACT574 †	Fairchild	
	74ACT374	Fairchild	
	74ACT574	Fairchild	
	CD74ACT574	**GE/RCA (2629)**	
	SN54ACT11374 †		
		TI	155
	74ACT11374	**TI (3253)**	
	V54ACT374 †	**VTC (3370)**	
	V54ACT574 †	**VTC (3370)**	
	V54ACT825 ◇†	**VTC (3370)**	
	V74ACT374	**VTC (3370)**	160
	V74ACT574	**VTC (3370)**	
AHCT	**IDT54AHCT574** ◇†		
		IDT (2811)	
	IDT74AHCT574 ◇		
		IDT	
	KS74AHCT374	Samsung	
	KS74AHCT574	Samsung	165
BCT	SN54BCT374 †	TI	
C	MM54C374 ‡	Micrel	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—CMOS (Cont'd)

Flip-Flops, D-Type (Cont'd)

Function	Device	Source	Line
Octal Three-State, Non-Inverting			
C (Cont'd)			
	MM54C374	† National	
	MM74C374	National	
FCT	**IDT54FCT374**	**◇† IDT (2808)**	
	IDT54FCT374A	**◇† IDT (2808)**	
	IDT54FCT574	**◇† IDT (2808, 2810)**	5
	IDT54FCT574A	**◇† IDT (2808, 2810)**	
	IDT54FCT825A	**◇† IDT (2809)**	
	IDT54FCT825B	**◇† IDT (2809)**	
	IDT74FCT374	**◇ IDT (2808)**	
	IDT74FCT374A	**◇ IDT (2808)**	10
	IDT74FCT574	**◇ IDT (2808, 2810)**	
	IDT74FCT574A	**◇ IDT (2808, 2810)**	
	IDT74FCT825A	**◇ IDT (2809)**	
	IDT74FCT825B	**◇ IDT (2809)**	
	V54FCT374	**◇† VTC (3370)**	15
	V54FCT574	**◇† VTC (3370)**	
	V54FCT825A	**◇† VTC (3370)**	
	V74FCT374	**◇† VTC (3370)**	
	V74FCT574	**◇† VTC (3370)**	
	V74FCT825A	**◇† VTC (3370)**	20
HC	**CD54HC374**	**◇† GE/RCA (2631)**	
	CD54HC574	**† GE/RCA (2631)**	
	CD74HC374	**GE/RCA (2631)**	
	CD74HC574	**GE/RCA (2631)**	
	GD74HC374	**GoldStar (2696)**	25
	GD74HC574	**GoldStar (2696)**	
	HD74HC374	Hitachi	
	HD74HC574	◇ Hitachi	
	IDT54AHCT374	**◇† IDT (2811)**	
	MC54HC374	† Motorola	30
	MC54HC574	† Motorola	
	MC74HC374	Motorola	
	MC74HC574	Motorola	
	MM54HC374	† National	
	MM54HC574	† National	35
	MM74HC374	National	
	MM74HC574	National	
	MN74HC374	◇ Panasonic	
	74HC374	Samsung	
	74HC574	Samsung	40
	M74HC374	SGS	
	M74HC574	◇ SGS	
	LR74HC374	Sharp	
	LR74HC574	Sharp	
	74HC374	**◇ Signetics (3003)**	45
	74HC574	**Signetics (3003)**	
	SN54HC374	† TI	
	SN54HC574	† TI	
	SN74HC574	TI	
	TC74HC374	**Toshiba (3307)**	50
	TC74HC574	**Toshiba (3307)**	
HCT	**CD54HCT374**	**† GE/RCA (2631)**	
	CD54HCT574	**† GE/RCA (2631)**	

(Continued)

Function	Device	Source	Line
Octal Three-State, Non-Inverting			
HCT (Cont'd)			
	CD74HCT374	**GE/RCA (2631)**	
	CD74HCT574	**GE/RCA (2631)**	55
	GD74HCT374	**GoldStar (2696)**	
	GD74HCT574	**GoldStar (2696)**	
	HD74HCT374	Hitachi	
	HD74HCT574	Hitachi	
	54HCT374SOS	‡ Marconi	60
	54HCT574SOS	‡ Marconi	
	74HCT374	Marconi	
	74HCT574	Marconi	
	MIC74HCT374	Micrel	
	MIC74HCT574	Micrel	65
	MD54HCT374R	† Mitel	
	MD54HCT574R	† Mitel	
	MD74HCT374R	Mitel	
	MD74HCT574R	Mitel	
	MC54HCT374	† Motorola	70
	MC74HCT374	Motorola	
	MM54HCT374	† National	
	MM54HCT574	† National	
	MM74HCT374	National	
	MM74HCT574	National	75
	P54PCT374	Performance	
	MV74HCT374	Plessey	
	MV74HCT574	◇ Plessey	
	KS74HCTLS374	Samsung	
	KS74HCTLS574	Samsung	80
	M74HCT374	SGS	
	74HCT374	**Signetics (3003)**	
	74HCT574	**Signetics (3003)**	
	54HCT374	† Supertex	
	54HCT574	† Supertex	85
	74HCT374	Supertex	
	74HCT574	Supertex	
	SN54HCT374	† TI	
	SN74HCT374	◇ TI	
	SN74HCT574	◇ TI	90
	SN74HC374	TI	
	TC74HCT574	Toshiba	
PCT	P74PCT374	Performance	
SC	MV74SC374	Plessey	
	MV74SC574	Plessey	95
	74SC374	Supertex	
	74SC574	Supertex	
4XXX	HEF40374B	Signetics	
40HXXX	TC40H374	Toshiba	
Octal Three-State, Non-Inverting, mult. enable			
ACT	**74ACT11825**	**TI (3253)**	100
	V74ACT825	**VTC (3370)**	
Octal Three-State, Non-Inverting with clear			
AC	**V54AC575**	**† VTC (3370)**	
	V74AC575	◇ VTC	
ACT	**V54ACT575**	**† VTC (3370)**	
	V74ACT575	**VTC (3370)**	105
8-Bit Parallel, Inverting			
AC	**74AC11826**	**TI (3253)**	
8-Bit Parallel, Non-Inverting			
AC	**74AC11825**	**TI (3253)**	
9-Bit Parallel, Inverting			
AC	**74AC11824**	**TI (3253)**	
9-Bit Parallel, Non-Inverting			
AC	**74AC11823**	**TI (3253)**	

Function	Device	Source	Line
9-Bit Three-State, Inverting			
AC	**V54AC824**	**† VTC (3370)**	110
	V74AC824	VTC	
FCT	**IDT54FCT824A**	**◇† IDT (2809)**	
	IDT54FCT824B	**◇† IDT (2809)**	
	IDT74FCT824A	**◇ IDT (2809)**	
	IDT74FCT824B	**◇ IDT (2809)**	115
	V54FCT824A	**◇† VTC (3370)**	
	V74FCT824A	**◇† VTC (3370)**	
9-Bit Three-State, Non-Inverting			
ACT	**74ACT11823**	**TI (3253)**	
	V54ACT823	**◇† VTC (3370)**	
	V74ACT823	**◇ VTC (3370)**	120
10-Bit Parallel, Inverting			
AC	**74AC11822**	**TI (3253)**	
10-Bit Parallel, Non-Inverting			
AC	**74AC11821**	**TI (3253)**	
10-Bit Three-State, Inverting			
ACT	**74ACT11822**	**TI (3253)**	
	V54ACT822	**◇† VTC (3370)**	
	V74ACT822	**◇ VTC (3370)**	125
10-Bit Three-State, Non-Inverting			
ACT	**74ACT11821**	**TI (3253)**	
	V54ACT821	**◇† VTC (3370)**	
	V74ACT821	**◇ VTC (3370)**	
9-Bit Three-State,Inverting			
ACT	**74ACT11824**	**TI (3253)**	
	V54ACT824	**◇† VTC (3370)**	130
	V74ACT824	**VTC (3370)**	

Flip-Flops, J-K Type

Function	Device	Source	Line
AND-Gated Master-Slave			
4XXX	**CD4095B**	**† GE/RCA (2634)**	
	CD4095BE	**GE/RCA (2634)**	
	CD4096B	**† GE/RCA (2634)**	
	CD4096BE	**GE/RCA (2634)**	135
	HCF4096B	◇ SGS	
Dual			
AC	54AC109	◇† Fairchild	
	74AC109	Fairchild	
	CD54AC109	† GE/RCA	
	CD74AC109	**GE/RCA (2629)**	140
	SN54AC11109	† TI	
	74AC11109	**TI (3252)**	
	TC74AC109	**Toshiba (3307)**	
ACT	CD54ACT109	† GE/RCA	
	CD74ACT109	**GE/RCA (2629)**	145
	SN54ACT11109	† TI	
	74ACT11109	**TI (3252)**	
AHCT	KS74AHCT109	Samsung	
C	MM54C76	† National	
	MM74C76	◇ National	150
HC	**CD54HC109**	**◇† GE/RCA (2631)**	
	CD74HC109	**GE/RCA (2631)**	
	GD74HC109	**GoldStar (2695)**	
	GD74HC76	**GoldStar (2695)**	
	HD74HC109	Hitachi	155
	HD74HC76	Hitachi	
	MC54HC109	† Motorola	
	MC54HC76	† Motorola	
	MC74HC109	Motorola	
	MC74HC76	Motorola	160
	MM54HC109	† National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Flip-Flops, J-K Type (Cont'd)

Function	Device	Source	Line
Dual			
HC		(Cont'd)	
	MM54HC76	† National	
	MM74HC109	National	
	MM74HC76	National	
	MN74HC109	Panasonic	
	MN74HC76	Panasonic	5
	M74HC109	SGS	
	M74HC76	SGS	
	LR74HC109	Sharp	
	LR74HC76	Sharp	
	74HC109	**◇ Signetics (3003)**	10
	SN54HC109	† TI	
	SN74HC109	TI	
	SN74HC76	TI	
	TC74HC109	**Toshiba (3307)**	
	TC74HC112	**Toshiba (3307)**	15
	TC74HC76	**Toshiba (3307)**	
HCT	**CD54HCT109**	**† GE/RCA (2631)**	
	CD74HCT109	**GE/RCA (2631)**	
	GD74HCT109	**GoldStar (2695)**	
	GD74HCT76	**GoldStar (2695)**	20
	MM54HCT109	† National	
	MM54HCT76	† National	
	MM74HCT109	National	
	MM74HCT76	National	
	KS74HCTLS109	Samsung	25
	KS74HCTLS76	Samsung	
	74HCT109	**Signetics (3003)**	
4XXX	F4027BC	Fairchild	
	F4027BM	† Fairchild	
	CD4027A	**† GE/RCA (2634)**	30
	CD4027AE	**GE/RCA (2634)**	
	CD4027B	**‡ GE/RCA (2634)**	
	CD4027BE	**GE/RCA (2634)**	
	GD4027B	**‡ GoldStar (2697)**	
	CD4027A	‡ Micrel	35
	CD4027B	‡ Micrel	
	MC14027BA	† Motorola	
	MC14027BC	Motorola	
	CD4027BC	National	
	CD4027BM	† National	40
	MN4027B	◇† Panasonic	
	HCC4027B	† SGS	
	HCF4027B	◇ SGS	
	HEF4027B	Signetics	
	883C4027B	† Sprague	45
	TC4027B	**Toshiba (3308)**	
40HXXX	LR40H076	Sharp	
	TC40H076	Toshiba	
	TC40H076A	Toshiba	
Dual Negative Edge-Triggered, Separate Preset and Clock			
HC	**GD74HC113**	**GoldStar (2695)**	50
	HD74HC113	Hitachi	
	MC54HC113	† Motorola	
	MC74HC113	Motorola	
	MM54HC113	† National	
	MM74HC113	National	55
	M74HC113	SGS	
	LR74HC113	Sharp	
	SN54HC113	† TI	
	SN74HC113	TI	
	TC74HC113	**Toshiba (3307)**	60
HCT	**GD74HCT113**	**GoldStar (2695)**	
Dual Negative Edge-Triggered with Preset and Clear			
AC	CD54AC112	† GE/RCA	
	CD74AC112	**GE/RCA (2629)**	
	SN54AC11112	† TI	
	74AC11112	**TI (3252)**	65
	TC74AC112	**Toshiba (3307)**	
ACT	CD54ACT112	† GE/RCA	
	CD74ACT112	**GE/RCA (2629)**	
AHCT	KS74AHCT112	Samsung	
HC	**CD54HC112**	**◇† GE/RCA (2631)**	70
	CD74HC112	**GE/RCA (2631)**	
	GD74HC112	**GoldStar (2695)**	
	HD74HC112	Hitachi	
	MC54HC112	† Motorola	
	MC74HC112	Motorola	75
	MM54HC112	† National	
	MM74HC112	National	
	MN74HC112	Panasonic	
	M74HC112	SGS	
	LR74HC112	Sharp	80
	74HC112	**◇ Signetics (3003)**	
	SN54HC112	† TI	
	SN74HC112	TI	
HCT	**CD54HCT112**	**† GE/RCA (2631)**	
	CD74HCT112	**GE/RCA (2631)**	85
	GD74HCT112	**GoldStar (2695)**	
	MM54HCT112	† National	
	MM74HCT112	National	
	KS74HCTLS112	Samsung	
	74HCT112	**Signetics (3003)**	90
Dual Negative Edge-Triggered with Preset, Common Clock and Common Clear			
HC	HD74HC108	Hitachi	
	HD74HC114	Hitachi	
	HD74HC78	Hitachi	
	M74HC114	Mitsubishi	
	SN54HC114	† TI	95
	SN74HC114	TI	
	SN74HC78	TI	
HCT	KS74HCTLS78	Samsung	
Dual w/o Preset			
AHCT	KS74AHCT107	Samsung	
	KS74AHCT73	Samsung	100
C	MM54C107	◇† National	
	MM54C73	† National	
	MM74C107	National	
	MM74C73	◇ National	
HC	**CD54HC107**	**◇† GE/RCA (2631)**	105
	CD54HC73	**† GE/RCA (2631)**	
	CD74HC107	**GE/RCA (2631)**	
	CD74HC73	**◇ GE/RCA (2631)**	
	GD74HC107	**GoldStar (2695)**	
	GD74HC73	**GoldStar (2695)**	110
	HD74HC107	Hitachi	
	HD74HC73	Hitachi	
	MC54HC107	† Motorola	
	MC54HC73	† Motorola	
	MC74HC107	Motorola	115
	MC74HC73	Motorola	
	MM54HC107	† National	
	MM54HC73	† National	
	MM74HC107	National	
	MM74HC73	National	120
	MN74HC107	Panasonic	
	M74HC107	SGS	
	M74HC73	SGS	
	LR74HC107	Sharp	
	74HC107	**◇ Signetics (3003)**	125
		(Continued)	
Dual w/o Preset			
HC		(Cont'd)	
	74HC73	**Signetics (3003)**	
	SN54HC107	† TI	
	SN74HC107	TI	
	SN74HC73	TI	
	TC74HC107	**Toshiba (3307)**	130
	TC74HC73	**Toshiba (3307)**	
HCT	**CD54HCT107**	**† GE/RCA (2631)**	
	CD54HCT73	**† GE/RCA (2631)**	
	CD74HCT107	**GE/RCA (2631)**	
	CD74HCT73	**GE/RCA (2631)**	135
	GD74HCT107	**GoldStar (2695)**	
	GD74HCT73	**GoldStar (2695)**	
	MM54HCT107	† National	
	MM74HCT107	National	
	KS74HCTLS107	Samsung	140
	KS74HCTLS73	Samsung	
	74HCT107	**Signetics (3003)**	
	74HCT73	**Signetics (3003)**	
40HXXX	LR40H107	Sharp	
	TC40H107	Toshiba	145
	TC40H107A	Toshiba	

Gates, AND

Function	Device	Source	Line
Dual 4-Input			
AC	**74AC11021**	**TI (3252)**	
ACT	**74ACT11021**	**◇ TI (3252)**	
HC	**CD54HC21**	**† GE/RCA (2631)**	
	CD74HC21	**GE/RCA (2631)**	150
	GD74HC21	**GoldStar (2695)**	
	HD74HC21	Hitachi	
	M74HC21	◇ SGS	
	74HC21	**Signetics (3003)**	
	SN54HC21	† TI	155
	SN74HC21	TI	
	TC74HC21	**Toshiba (3307)**	
	US74HC21	Universal	
HCT	**CD54HCT21**	**† GE/RCA (2631)**	
	CD74HCT21	**GE/RCA (2631)**	160
	GD74HCT21	**GoldStar (2695)**	
	74HCT21	**Signetics (3003)**	
4XXX	F4082BC	Fairchild	
	F4082BM	† Fairchild	
	CD4082B	**‡ GE/RCA (2633)**	165
	CD4082BE	**GE/RCA (2633)**	
	GD4082B	**‡ GoldStar (2697)**	
	CD4082B	‡ Micrel	
	MC14082BA	† Motorola	
	MC14082BC	Motorola	170
	CD4082BC	National	
	CD4082BM	† National	
	HCC4082B	† SGS	
	HCF4082B	◇ SGS	
	HEF4082B	Signetics	175
	883C4082B	† Sprague	
	TC4082B	Toshiba	
40HXXX	LR40H021	Sharp	
	TC40H021	Toshiba	
Dual4-Input			
AC	SN54AC11021	† TI	180
Triple 3-Input			
AC	54AC11	† Fairchild	
	74AC11	Fairchild	
	SN54AC11011	† TI	
	74AC11011	**TI (3252)**	
	TC74AC11	**Toshiba (3307)**	185
		(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—CMOS (Cont'd)

Gates, AND (Cont'd)

Function	Device	Source	Line
Triple 3-Input (Cont'd)			
ACT	**74ACT11011**	**◊ TI (3252)**	
AHCT	KS74AHCT11	◊ Samsung	
HC	**CD54HC11**	**† GE/RCA (2631)**	
	CD74HC11	**GE/RCA (2631)**	
	GD74HC11	**GoldStar (2695)**	5
	HD74HC11	Hitachi	
	MC54HC11	† Motorola	
	MC74HC11	Motorola	
	MM54HC11	† National	
	MM74HC11	National	10
	MN74HC11	◊ Panasonic	
	M74HC11	◊ SGS	
	LR74HC11	Sharp	
	74HC11	**Signetics (3003)**	
	SN54HC11	† TI	15
	SN74HC11	TI	
	TC74HC11	**Toshiba (3307)**	
HCT	**CD54HCT11**	**† GE/RCA (2631)**	
	CD74HCT11	**GE/RCA (2631)**	
	GD74HCT11	**GoldStar (2695)**	20
	KS74HCTLS11	Samsung	
	74HCT11	**Signetics (3003)**	
4XXX	F4073BC	Fairchild	
	F4073BM	† Fairchild	
	CD4073B	**‡ GE/RCA (2633)**	25
	CD4073BE	**GE/RCA (2633)**	
	GD4073B	**‡ GoldStar (2697)**	
	CD4073B	‡ Micrel	
	MC14073BA	† Motorola	
	MC14073BC	Motorola	30
	CD4073BC	National	
	CD4073BM	† National	
	MN4073B	◊† Panasonic	
	HCC4073B	† SGS	
	HCF4073B	SGS	35
	HEF4073B	Signetics	
	883C4073B	† Sprague	
	TC4073B	Toshiba	
40HXXX	LR40H011	Sharp	
	TC40H011	Toshiba	40
Quad 2-Input	MM74PC08	National	
AC	54AC08	† Fairchild	
	74AC08	Fairchild	
	CD54AC08	† GE/RCA	
	CD74AC08	**GE/RCA (2629)**	45
	SN54AC11008	† TI	
	74AC11008	**TI (3252)**	
	TC74AC08	**Toshiba (3307)**	
ACT	54ACT08	† Fairchild	
	CD54ACT08	† GE/RCA	50
	CD74ACT08	**GE/RCA (2629)**	
	74ACT11008	**◊ TI (3252)**	
AHCT	KS74AHCT08	◊ Samsung	
C	MM54C08	† National	
	MM74C08	National	55
HC	**CD54HC08**	**† GE/RCA (2631)**	
	CD74HC08	**GE/RCA (2631)**	
	GD74HC08	**GoldStar (2695)**	
	HD74HC08	Hitachi	
	MC54HC08	† Motorola	60
	MC74HC08	Motorola	
	MM54HC08	† National	
	MM74HC08	National	
	MN74HC08	◊ Panasonic	
	M74HC08	SGS	65

(Continued)

Function	Device	Source	Line
Quad 2-Input HC (Cont'd)			
	LR74HC08	Sharp	
	74HC08	**Signetics (3003)**	
	SN54HC08	† TI	
	SN74HC08	TI	
	SN74HC7001	TI	70
	TC74HC08	**Toshiba (3307)**	
	TC74HC08A	**Toshiba (3307)**	
HCT	**CD54HCT08**	**† GE/RCA (2631)**	
	CD74HCT08	**GE/RCA (2631)**	
	GD74HCT08	**GoldStar (2695)**	75
	KS74HCTLS08	Samsung	
	74HCT08	**Signetics (3003)**	
4XXX	F4081BC	Fairchild	
	F4081BM	† Fairchild	
	CD4081B	**‡ GE/RCA (2633)**	80
	CD4081BE	**GE/RCA (2633)**	
	GD408B	‡ GoldStar	
	GD4081B	**GoldStar (2697)**	
	CD4081B	‡ Micrel	
	MC14081BA	† Motorola	85
	MC14081BC	Motorola	
	CD4081BC	National	
	CD4081BM	† National	
	MN4081B	◊† Panasonic	
	LC4081B	◊ Sanyo	90
	HCC4081B	† SGS	
	HCF4081B	◊ SGS	
	HEF4081B	Signetics	
	883C4081B	† Sprague	
	TC4081B	Toshiba	95
40HXXX	LR40H008	Sharp	
	TC40H008	Toshiba	
Quad 2-Input, Open Collector			
AHCT	KS74AHCT09	◊ Samsung	
HC	HD74HC09	Hitachi	
	SN54HC09	† TI	100
	SN74HC09	◊ TI	
HCT	KS74HCTLS09	Samsung	
Quad 2-Input, Open Collector			
HC	**GD74HC09**	**GoldStar (2695)**	
Quad 2-Input, Open Drain			
HCT	**GD74HCT09**	**GoldStar (2695)**	

Gates, NAND

Function	Device	Source	Line
Dual 2-Input (Driver)			
4XXX	**CD40107B**	**† GE/RCA (2633)**	105
	CD40107BE	**GE/RCA (2633)**	
	HCC40107B	† SGS	
	HCF40107B	◊ SGS	
	TC40107B	Toshiba	
Dual 4-Input			
AC	54AC20	† Fairchild	110
	74AC20	Fairchild	
	CD54AC20	† GE/RCA	
	CD74AC20	**GE/RCA (2629)**	
	SN54AC11020	† TI	
	74AC11020	**TI (3252)**	115
	TC74AC20	**Toshiba (3307)**	
ACT	CD54ACT20	† GE/RCA	
	CD74ACT20	**GE/RCA (2629)**	
	74ACT11020	**◊ TI (3252)**	
C	MM54C20	† National	120
	MM74C20	National	

(Continued)

Function	Device	Source	Line
Dual 4-Input HC (Cont'd)			
	CD54HC20	**† GE/RCA (2631)**	
	CD74HC20	**GE/RCA (2631)**	
	GD74HC20	**GoldStar (2695)**	
	HD74HC01	Hitachi	125
	HD74HC20	Hitachi	
	MC54HC20	† Motorola	
	MC74HC20	Motorola	
	MN74HC20	◊ Panasonic	
	M74HC20	◊ SGS	130
	LR74HC20	Sharp	
	74HC20	**Signetics (3003)**	
	SN54HC20	† TI	
	SN74HC20	TI	
	TC74HC20	**Toshiba (3307)**	135
	US74HC20	Universal	
HCT	**CD54HCT20**	**† GE/RCA (2631)**	
	CD74HCT20	**GE/RCA (2631)**	
	GD74HCT20	**GoldStar (2695)**	
	74HCT20	**Signetics (3003)**	140
4XXX	F4012BC	Fairchild	
	F4012BM	† Fairchild	
	CD4012A	**† GE/RCA (2633)**	
	CD4012AE	**GE/RCA (2633)**	
	CD4012B	**‡ GE/RCA (2633)**	145
	CD4012BE	**GE/RCA (2633)**	
	CD4012UB	**† GE/RCA (2633)**	
	CD4012UBE	**GE/RCA (2633)**	
	GD4012B	**‡ GoldStar (2697)**	
	CD4012A	‡ Micrel	150
	CD4012B	‡ Micrel	
	MC14012BA	† Motorola	
	MC14012BC	Motorola	
	MC14012UBA	† Motorola	
	MC14012UBC	Motorola	155
	CD4012A	National	
	CD4012BC	National	
	CD4012BM	† National	
	MN4012B	◊† Panasonic	
	HCC4012B	† SGS	160
	HCF4012B	◊ SGS	
	HEF4012B	Signetics	
	883C4012B	† Sprague	
	TC4012B	**Toshiba (3308)**	
40HXXX	TC40H020	Toshiba	165
Dual 4-Input Expandable			
4XXX	883C4412B	† Sprague	
Triple 3-Input			
AC	54AC10	† Fairchild	
	74AC10	Fairchild	
	CD54AC10	† GE/RCA	
	CD74AC10	**GE/RCA (2629)**	170
	SN54AC11010	† TI	
	74AC11010	**TI (3252)**	
	TC74AC10	**Toshiba (3307)**	
ACT	CD54ACT10	† GE/RCA	
	CD74ACT10	**GE/RCA (2629)**	175
	74ACT11010	**◊ TI (3252)**	
AHCT	KS74AHCT10	◊ Samsung	
	KS74AHCT12	◊ Samsung	
C	MM54C10	† National	
	MM74C10	National	180
HC	**CD54HC10**	**† GE/RCA (2631)**	
	CD74HC10	**GE/RCA (2631)**	
	GD74HC10	**GoldStar (2695)**	
	HD74HC10	Hitachi	
	MC54HC10	† Motorola	185

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Gates, NAND (Cont'd)

Function	Device	Source	Line
Triple 3-Input			
HC		(Cont'd)	
	MC74HC10	Motorola	
	MM54HC10	† National	
	MM54HC20	† National	
	MM74HC10	National	
	MM74HC20	National	5
	MN74HC10	◊ Panasonic	
	M74HC10	◊ SGS	
	LR74HC10	Sharp	
	74HC10	**Signetics (3003)**	
	SN54HC10	† TI	10
	SN74HC10	TI	
	TC74HC10	**Toshiba (3307)**	
	TC74HC10A	**Toshiba (3307)**	
HCT	**CD54HCT10**	**† GE/RCA (2631)**	
	CD74HCT10	**GE/RCA (2631)**	15
	GD74HCT10	**GoldStar (2695)**	
	KS74HCTLS10	Samsung	
	KS74HCTLS12	Samsung	
	74HCT10	**Signetics (3003)**	
4XXX	F4023BC	Fairchild	20
	F4023BM	† Fairchild	
	CD4023A	**† GE/RCA (2633)**	
	CD4023AE	**GE/RCA (2633)**	
	CD4023B	**‡ GE/RCA (2633)**	
	CD4023BE	**GE/RCA (2633)**	25
	CD4023UB	**† GE/RCA (2633)**	
	CD4023UBE	**GE/RCA (2633)**	
	GD4023B	**‡ GoldStar (2697)**	
	CD4023A	‡ Micrel	
	CD4023B	‡ Micrel	30
	MC14023BA	† Motorola	
	MC14023BC	Motorola	
	MC14023UBA	† Motorola	
	MC14023UBC	Motorola	
	CD4023BC	National	35
	CD4023BM	† National	
	MN4023B	◊† Panasonic	
	HCC4023B	† SGS	
	HCF4023B	◊ SGS	
	HEF4023B	Signetics	40
	883C4023B	† Sprague	
	TC4023B	**Toshiba (3308)**	
40HXXX	LR40H010	Sharp	
	TC40H010	Toshiba	
Quad 2 Input			
AC	CD54AC00	† GE/RCA	45
	CD74AC00	**GE/RCA (2629)**	
Quad 2-Input	MM74PC00	National	
AC	54AC00	† Fairchild	
	74AC00	Fairchild	
	SN54AC11000	† TI	50
	74AC11000	**TI (3252)**	
	TC74AC00	**Toshiba (3307)**	
ACT	54ACT00	† Fairchild	
	CD54ACT00	† GE/RCA	
	CD74ACT00	**GE/RCA (2629)**	55
	SN54ACT11000	† TI	
	74ACT11000	**TI (3252)**	
AHCT	KS74AHCT00	Samsung	
C	MM54C00	† National	
	MM74C00	National	60
HC	**CD54HC00**	**† GE/RCA (2631)**	
	CD74HC00	**GE/RCA (2631)**	
		(Continued)	

Function	Device	Source	Line
Quad 2-Input			
HC		(Cont'd)	
	GD74HC00	**GoldStar (2695)**	
	HD74HC00	Hitachi	
	MC54HC00	† Motorola	65
	MC74HC00	Motorola	
	MM54HC00	† National	
	MM74HC00	National	
	M74HC00	SGS	
	LR74HC00	Sharp	70
	74HC00	**Signetics (3003)**	
	SN54HC00	† TI	
	SN74HC00	TI	
	TC74HC00	**Toshiba (3307)**	
	TC74HC00A	**Toshiba (3307)**	75
HCT	**CD54HCT00**	**† GE/RCA (2631)**	
	CD74HCT00	**GE/RCA (2631)**	
	GD74HCT00	**GoldStar (2695)**	
	MM54HCT00	◊† National	
	MM74HCT00	National	80
	KS74HCTLS00	Samsung	
	74HCT00	**Signetics (3003)**	
4XXX	F4011BC	Fairchild	
	F4011BM	† Fairchild	
	CD4011A	**GE/RCA (2633)**	85
	CD4011AE	**GE/RCA (2633)**	
	CD4011B	**‡ GE/RCA (2633)**	
	CD4011BE	**GE/RCA (2633)**	
	CD4011UB	**† GE/RCA (2633)**	
	CD4011UBE	**GE/RCA (2633)**	90
	GD4011B	**‡ GoldStar (2697)**	
	CD4011A	‡ Micrel	
	CD4011B	‡ Micrel	
	MC14011BA	† Motorola	
	MC14011BC	Motorola	95
	MC14011UBA	† Motorola	
	MC14011UBC	Motorola	
	CD4011AC	National	
	CD4011AM	† National	
	CD4011BC	National	100
	CD4011BM	† National	
	MN4011B	◊† Panasonic	
	LC4011B	◊ Sanyo	
	HCC4011B	† SGS	
	HCF4011B	◊ SGS	105
	HEF4011B	Signetics	
	HEF4011UB	Signetics	
	883C4011B	† Sprague	
	883C4011UB	† Sprague	
	TC4011B	**Toshiba (3308)**	110
	TC4011UB	**Toshiba (3308)**	
40HXXX	LR40H000	Sharp	
	TC40H000	Toshiba	
Quad 2-Input, Open Collector			
HC	**CD54HC03**	**† GE/RCA (2631)**	
	CD74HC03	**GE/RCA (2631)**	115
	GD74HC03	**GoldStar (2695)**	
	74HC03	**Signetics (3003)**	
HCT	**CD54HCT03**	**† GE/RCA (2631)**	
	CD74HCT03	**GE/RCA (2631)**	
	GD74HCT03	**GoldStar (2695)**	120
	74HCT03	**Signetics (3003)**	
Quad 2-Input (open drain)			
AHCT	KS74AHCT03	Samsung	
HC	MC54HC03	† Motorola	
	MC74HC03	Motorola	
	MM54HC03	† National	125
	MM74HC03	National	
		(Continued)	

Function	Device	Source	Line
Quad 2-Input (open drain)			
HC		(Cont'd)	
	M74HC03	SGS	
	LR74HC03	Sharp	
	SN54HC03	† TI	
	SN74HC01	TI	130
	SN74HC03	TI	
	TC74HC03	**Toshiba (3307)**	
HCT	KS74HCTLS01	Samsung	
	KS74HCTLS03	Samsung	
5XXX	**TC5029B**	**Toshiba (3308)**	135
Quad 2-Input NAND Schmitt Trigger			
AC	**74AC11132**	**TI (3252)**	
8-Input			
AC	SN54AC11030	† TI	
	74AC11030	**TI (3252)**	
ACT	SN54ACT11030	† TI	
	74ACT11030	**TI (3252)**	140
C	MM54C30	◊† National	
	MM74C30	National	
HC	**CD54HC30**	**† GE/RCA (2631)**	
	CD74HC30	**GE/RCA (2631)**	
	GD74HC30	**GoldStar (2695)**	145
	HD74HC30	Hitachi	
	MC54HC30	† Motorola	
	MC74HC30	Motorola	
	MM54HC30	† National	
	MM74HC30	National	150
	MN74HC30	◊ Panasonic	
	M74HC30	◊ SGS	
	LR74HC30	Sharp	
	74HC30	**Signetics (3003)**	
	SN54HC30	† TI	155
	SN74HC30	TI	
	TC74HC30	**Toshiba (3307)**	
HCT	**CD54HCT30**	**† GE/RCA (2631)**	
	CD74HCT30	**GE/RCA (2631)**	
	GD74HCT30	**GoldStar (2695)**	160
	74HCT30	**Signetics (3003)**	
4XXX	F4068BC	Fairchild	
	F4068BM	† Fairchild	
	CD4068B	**† GE/RCA (2633)**	
	CD4068BE	**GE/RCA (2633)**	165
	GD4068B	**† GoldStar (2697)**	
	MC14068BA	† Motorola	
	MC14068BC	Motorola	
	HCC4068B	† SGS	
	HCF4068B	◊ SGS	170
	HEF4068B	Signetics	
	883C4068B	† Sprague	
	TC4068B	**Toshiba (3308)**	
13-Input			
HC	**GD74HC133**	**GoldStar (2695)**	
	HD74HC133	Hitachi	175
	MC54HC133	† Motorola	
	MC74HC133	Motorola	
	MM54HC133	† National	
	MM74HC133	National	
	MN74HC133	◊ Panasonic	180
	M74HC133	SGS	
	LR75HC133	Sharp	
	SN54HC133	† TI	
	SN74HC133	TI	
	TC74HC133	**Toshiba (3307)**	185
13-Input			
HCT	**GD74HCT133**	**GoldStar (2695)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—CMOS (Cont'd)

Gates, AND-OR

Function	Device	Source	Line
Triple Bi-Phase Pairs			
4XXX	CD4037A	† GE/RCA	
	CD4037AE	GE/RCA	
Quad Select			
4XXX	F4019BC	Fairchild	
	F4019BM	† Fairchild	
	CD4019A	**† GE/RCA (2633, 2635)**	5
	CD4019AE	**GE/RCA (2633, 2635)**	
	CD4019B	**‡ GE/RCA (2633, 2635)**	
	CD4019BE	**GE/RCA (2633, 2635)**	
	GD4019B	**‡ GoldStar (2697)**	
	CD4019A	‡ Micrel	10
	CD4019B	‡ Micrel	
	CD4019BC	National	
	CD4019BM	† National	
	HCC4019B	† SGS	
	HCF4019B	◊ SGS	15
	HEF4019B	Signetics	
	883C4019B	† Sprague	
	TC4019B	**Toshiba (3308)**	
2-Wide, 2-Input/2-Wide, 3-Input			
HC	MC54HC58	† Motorola	
	MC74HC58	Motorola	20
	MM54HC58	† National	
	MM74HC58	National	
	LR74HC58	Sharp	

Gates, AND-OR-Invert

Function	Device	Source	Line
Dual 2-Wide 2-Input			
4XXX	F4085BC	Fairchild	
	F4085BM	Fairchild	25
	CD4085B	**‡ GE/RCA (2633)**	
	CD4085BE	**GE/RCA (2633)**	
	GD4085B	**‡ GoldStar (2697)**	
	MC14506BA	† Motorola	
	MC14506BC	Motorola	30
	MN4085B	◊† Panasonic	
	HCC4085B	† SGS	
	HCF4085B	◊ SGS	
	HEF4085B	Signetics	
	883C4085B	† Sprague	35
	TC4085B	**Toshiba (3308)**	
40HXXX	LR40H051	Sharp	
	TC40H051	Toshiba	
2-Wide, 2-Input/2-Wide, 3-Input			
AHCT	KS74AHCT51	Samsung	
HC	**GD74HC51**	**GoldStar (2695)**	40
	HD74HC51	Hitachi	
	MC54HC51	† Motorola	
	MC74HC51	Motorola	
	MM54HC51	† National	
	MM74HC51	National	45
	MN74HC51	◊ Panasonic	
	M74HC51	SGS	
	LR74HC51	Sharp	
	SN54HC51	† TI	
	SN74HC51	TI	50
	TC74HC51	**◊ Toshiba (3307)**	
4-Wide 2-Input Expandable			
4XXX	F4086BC	Fairchild	
	F4086BM	† Fairchild	
	CD4086B	**‡ GE/RCA (2633)**	

(Continued)

Function	Device	Source	Line
4-Wide 2-Input Expandable			
4XXX		(Cont'd)	
	CD4086BE	**GE/RCA (2633)**	55
	GD4086B	**‡ GoldStar (2697)**	
	HCC4086B	† SGS	
	HCF4086B	SGS	
	HEF4086B	Signetics	
	883C4086B	† Sprague	60
	TC4086B	**Toshiba (3308)**	
2-Wide, 2-Input/2-Wide, 3-Input			
HCT	**GD74HCT58**	**GoldStar (2695)**	

Gates, OR

Function	Device	Source	Line
Dual 4-Input			
HC	**TC74HC4072**	**Toshiba (3307)**	
4XXX	F4072BC	Fairchild	
	F4072BM	† Fairchild	65
	CD4072B	**‡ GE/RCA (2633)**	
	CD4072BE	**GE/RCA (2633)**	
	GD4072B	**‡ GoldStar (2697)**	
	CD4072B	‡ Micrel	
	MC14072BA	† Motorola	70
	MC14072BC	Motorola	
	CD4072BC	National	
	CD4072BM	† National	
	MN4072B	◊† Panasonic	
	HCC4072B	† SGS	75
	HCF4072B	◊ SGS	
	HEF4072B	Signetics	
	883C4072B	† Sprague	
	TC4072B	Toshiba	
Triple 3-Input			
HC	**CD54HC4075**	**† GE/RCA (2631)**	80
	CD74HC4075	**GE/RCA (2631)**	
	M74HC4075	Mitsubishi	
	MC54HC4075	† Motorola	
	MC74HC4075	Motorola	
	MM54HC266	◊† National	85
	MM54HC4075	† National	
	MM74HC266	National	
	MM74HC4075	National	
	MN74HC4075	◊ Panasonic	
	M74HC4075	SGS	90
	LR74HC4075	Sharp	
	74HC4075	Signetics	
	SN54HC4075	◊† TI	
	SN74HC4075	◊ TI	
	TC74HC4075	**Toshiba (3307)**	95
HCT	**CD54HCT4075**	**† GE/RCA (2631)**	
	CD74HCT4075	**GE/RCA (2631)**	
	74HCT4075	**Signetics (3003)**	
4XXX	F4075BC	Fairchild	
	F4075BM	† Fairchild	100
	CD4075B	**‡ GE/RCA (2633)**	
	CD4075BE	**GE/RCA (2633)**	
	GD4075B	**‡ GoldStar (2697)**	
	CD4075B	‡ Micrel	
	MC14075BA	† Motorola	105
	MC14075BC	Motorola	
	CD4075BC	National	
	CD4075BM	† National	
	MN4075B	◊† Panasonic	
	HCC4075B	† SGS	110
	HCF4075B	◊ SGS	
	HEF4075B	Signetics	
	883C4075B	† Sprague	
	TC4075B	Toshiba	

Function	Device	Source	Line
Quad 2-Input			
AC	54AC32	† Fairchild	115
	74AC32	Fairchild	
	CD54AC32	† GE/RCA	
	CD74AC32	**GE/RCA (2629)**	
	SN54AC11032	† TI	
	74AC11032	**TI (3252)**	120
	TC74AC32	**Toshiba (3307)**	
ACT	CD54ACT32	† GE/RCA	
	CD74ACT32	**GE/RCA (2629)**	
	SN54ACT11032	◊† TI	
	74ACT11032	**TI (3252)**	125
AHCT	KS74AHCT32	Samsung	
C	MM54C32	◊† National	
	MM74C32	National	
HC	**CD54HC32**	**† GE/RCA (2631)**	
	CD74HC32	**GE/RCA (2631)**	130
	GD74HC32	**GoldStar (2695)**	
	HD74HC32	Hitachi	
	MC54HC32	† Motorola	
	MC74HC32	Motorola	
	MM54HC32	† National	135
	MM74HC32	National	
	MN74HC32	◊ Panasonic	
	M74HC32	SGS	
	LR74HC32	Sharp	
	74HC32	**Signetics (3003)**	140
	SN54HC32	† TI	
	SN74HC32	TI	
	SN74HC7032	TI	
	TC74HC32	**Toshiba (3307)**	
	TC74HC32A	**Toshiba (3307)**	145
HCT	**CD54HCT32**	**† GE/RCA (2631)**	
	CD74HCT32	**GE/RCA (2631)**	
	GD74HCT32	**GoldStar (2695)**	
	74HCT32	**Signetics (3003)**	
4XXX	F4071BC	Fairchild	150
	F4071BM	† Fairchild	
	CD4071B	**‡ GE/RCA (2633)**	
	CD4071BE	**GE/RCA (2633)**	
	GD4071B	**‡ GoldStar (2697)**	
	CD4071B	‡ Micrel	155
	MC14071BA	† Motorola	
	MC14071BC	Motorola	
	CD4071BC	National	
	CD4071BM	† National	
	MN4071B	◊† Panasonic	160
	LC4071B	Sanyo	
	HCC4071B	† SGS	
	HCF4071B	◊ SGS	
	HEF4071B	Signetics	
	883C4071B	† Sprague	165
	TC4071B	Toshiba	
40HXXX	LR40H032	Sharp	
	TC40H032	Toshiba	

Gates, NOR

Function	Device	Source	Line
Dual 3-Input plus Inverter			
4XXX	**CD4000A**	**† GE/RCA (2633)**	
	CD4000AE	**GE/RCA (2633)**	170
	CD4000B	**GE/RCA (2633)**	
	CD4000BE	**GE/RCA (2633)**	
	CD4000UB	**† GE/RCA (2633)**	
	CD4000UBE	**GE/RCA (2633)**	
	CD4000A	‡ Micrel	175
	MC14000UBA	† Motorola	
	MC14000UBC	Motorola	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Gates, NOR (Cont'd)

Function	Device	Source	Line
Dual 3-Input plus Inverter			
4XXX (Cont'd)			
	CD4000C	National	
	CD4000M	† National	
	HCC4000B	† SGS	
	HCF4000B	◊ SGS	
	HEF4000B	◊ Signetics	5
	883C4000B	† Sprague	
	TC4000B	**Toshiba (3308)**	
Dual 4-Input			
HC	**CD54HC4002**	**† GE/RCA (2631)**	
	CD74HC4002	**GE/RCA (2631)**	
	GD74HC58	**GoldStar (2695)**	10
	M74HC4002	Mitsubishi	
	MC54HC4002	† Motorola	
	MC74HC4002	Motorola	
	MM54HC4002	† National	
	MM74HC4002	National	15
	MN74HC4002	◊ Panasonic	
	M74HC4002	SGS	
	LR74HC4002	◊ Sharp	
	74HC4002	**Signetics (3003)**	
	74HC58	**Signetics (3003)**	20
	SN54HC4002	† TI	
	SN74HC4002	TI	
	TC74HC4002	**Toshiba (3307)**	
HCT	**CD54HCT4002**	**† GE/RCA (2631)**	
	CD74HCT4002	**GE/RCA (2631)**	25
	54HCT4002	† Signetics	
	74HCT4002	**Signetics (3003)**	
4XXX	F4002BC	Fairchild	
	F4002BM	† Fairchild	
	CD4002A	**† GE/RCA (2633)**	30
	CD4002AE	**GE/RCA (2633)**	
	CD4002B	**‡ GE/RCA (2633)**	
	CD4002BE	**GE/RCA (2633)**	
	CD4002UB	**† GE/RCA (2633)**	
	CD4002UBE	**GE/RCA (2633)**	35
	GD4002B	**‡ GoldStar (2697)**	
	CD4002A	‡ Micrel	
	CD4002B	‡ Micrel	
	MC14002BA	† Motorola	
	MC14002BC	Motorola	40
	MC14002UBA	† Motorola	
	MC14002UBC	Motorola	
	CD4002A	National	
	CD4002BC	National	
	CD4002BM	† National	45
	MN4002B	◊† Panasonic	
	HCC4002B	† SGS	
	HCF4002B	◊ SGS	
	HEF4002B	◊ Signetics	
	883C4002B	† Sprague	50
	TC4002B	**Toshiba (3308)**	
Triple 3-Input			
AC	SN54AC11027	† TI	
	74AC11027	**TI (3252)**	
ACT	**74ACT11027**	**◊ TI (3252)**	
HC	**CD54HC27**	**† GE/RCA (2631)**	55
	CD74HC27	**GE/RCA (2631)**	
	GD74HC27	**GoldStar (2695)**	
	HD74HC27	Hitachi	
	MC54HC27	† Motorola	
	MC74HC27	Motorola	60
	MM54HC27	† National	
	MM74HC27	National	

(Continued)

Function	Device	Source	Line
Triple 3-Input			
HC (Cont'd)			
	MN74HC27	◊ Panasonic	
	M74HC27	◊ SGS	
	LR74HC27	Sharp	65
	74HC27	**Signetics (3003)**	
	SN54HC27	† TI	
	SN74HC27	TI	
	TC74HC27	**Toshiba (3307)**	
HCT	**CD54HCT27**	**† GE/RCA (2631)**	70
	CD74HCT27	**GE/RCA (2631)**	
	GD74HCT27	**GoldStar (2695)**	
	74HCT27	**Signetics (3003)**	
4XXX	F4025BC	Fairchild	
	F4025BM	† Fairchild	75
	CD4025A	**† GE/RCA (2633)**	
	CD4025AE	**GE/RCA (2633)**	
	CD4025B	**‡ GE/RCA (2633)**	
	CD4025BE	**GE/RCA (2633)**	
	CD4025UB	**† GE/RCA (2633)**	80
	CD4025UBE	**GE/RCA (2633)**	
	GD4025B	**‡ GoldStar (2697)**	
	CD4025A	‡ Micrel	
	CD4025B	‡ Micrel	
	MC14025BA	† Motorola	85
	MC14025BC	Motorola	
	MC14025UBA	† Motorola	
	MC14025UBC	Motorola	
	CD4025A	National	
	CD4025BC	National	90
	CD4025BM	† National	
	MN4025B	◊† Panasonic	
	HCC4025B	† SGS	
	HCF4025B	◊ SGS	
	HEF4025B	Signetics	95
	883C4025B	† Sprague	
	TC4025B	**Toshiba (3308)**	
40HXXX	LR40H027	Sharp	
	TC40H027	Toshiba	
Quad 2-Input	MM74PC02	National	100
AC	54AC02	† Fairchild	
	74AC02	Fairchild	
	CD54AC02	† GE/RCA	
	CD74AC02	**† GE/RCA (2629)**	
	SN54AC11002	† TI	105
	74AC11002	**TI (3252)**	
	TC74AC02	**Toshiba (3307)**	
ACT	CD54ACT02	† GE/RCA	
	CD74ACT02	**GE/RCA (2629)**	
	SN54ACT11002	† TI	110
	74ACT11002	**TI (3252)**	
AHCT	KS74AHCT02	Samsung	
C	MM54C02	† National	
	MM74C02	National	
HC	**CD54HC02**	**† GE/RCA (2631)**	115
	CD74HC02	**GE/RCA (2631)**	
	GD74HC02	**GoldStar (2695)**	
	HD74HC02	Hitachi	
	MC54HC02	† Motorola	
	MC74HC02	Motorola	120
	MM54HC02	† National	
	MM74HC02	National	
	MN74HC02	◊ Panasonic	
	M74HC02	SGS	
	LR74HC02	Sharp	125
	74HC02	**Signetics (3003)**	
	SN54HC02	† TI	

(Continued)

Function	Device	Source	Line
Quad 2-Input			
HC (Cont'd)			
	SN54HC36	† TI	
	SN74HC02	TI	
	SN74HC36	TI	130
	SN74HC7002	TI	
	TC74HC02	**Toshiba (3307)**	
	TC74HC02A	**Toshiba (3307)**	
HCT	**CD54HCT02**	**† GE/RCA (2631)**	
	CD74HCT02	**GE/RCA (2631)**	135
	GD74HCT02	**GoldStar (2695)**	
	KS74HCTLS02	Samsung	
	74HCT02	**Signetics (3003)**	
4XXX	F4001BC	Fairchild	
	F4001BM	† Fairchild	140
	CD4001A	**† GE/RCA (2633)**	
	CD4001AE	**GE/RCA (2633)**	
	CD4001B	**‡ GE/RCA (2633)**	
	CD4001BE	**GE/RCA (2633)**	
	CD4001UB	**† GE/RCA (2633)**	145
	CD4001UBE	**GE/RCA (2633)**	
	GD4001B	**‡ GoldStar (2697)**	
	CD4001A	‡ Micrel	
	CD4001B	‡ Micrel	
	MC14001BA	† Motorola	150
	MC14001BC	Motorola	
	MC14001UBA	† Motorola	
	MC14001UBC	Motorola	
	CD4001A	National	
	CD4001BC	National	155
	CD4001BM	† National	
	MN4001B	◊† Panasonic	
	LC4001B	◊ Sanyo	
	HCC4001B	† SGS	
	HCF4001B	◊ SGS	160
	HEF4001B	◊ Signetics	
	HEF4001UB	◊ Signetics	
	883C4001B	† Sprague	
	883C4001UB	† Sprague	
	TC4001B	**Toshiba (3308)**	165
	TC4001UB	**Toshiba (3308)**	
40HXXX	LR50H002	Sharp	
	TC40H002	Toshiba	
8-Input			
HC	M74HC4078	Mitsubishi	
	MC54HC4078	† Motorola	170
	MC74HC4078	Motorola	
	MM54HC4018	† National	
	MM54HC4078	† National	
	MM74HC4018	National	
	MM74HC4078	National	175
	MN74HC4078	◊ Panasonic	
	M74HC4078	SGS	
	LR74HC4078	Sharp	
	SN54HC4078A	◊† TI	
	SN74HC4078A	TI	180
	TC74HC4078	**Toshiba (3307)**	
4XXX	F4078BC	Fairchild	
	F4078BM	† Fairchild	
	CD4078B	**† GE/RCA (2633)**	
	CD4078BE	**GE/RCA (2633)**	185
	GD4078B	**† GoldStar (2697)**	
	MC14078BA	† Motorola	
	MC14078BC	Motorola	
	MN4078B	◊† Panasonic	
	HCC4078B	† SGS	190
	HCF4078B	◊ SGS	
	HEF4078B	Signetics	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—CMOS (Cont'd)

Gates, NOR (Cont'd)

Function	Device	Source	Line
8-Input			
4XXX		(Cont'd)	
	SCL4402B	Solitron	
	883/4402B	† Solitron	
	883C4078B	† Sprague	
	TC4078B	**Toshiba (3308)**	

Gates, Exclusive OR

Function	Device	Source	Line
Quad			
AC	CD54AC86	† GE/RCA	5
	CD74AC86	**GE/RCA (2629)**	
	TC74AC86	**Toshiba (3307)**	
ACT	CD54ACT86	† GE/RCA	
	CD74ACT86	**GE/RCA (2629)**	
AHCT	KS74AHCT86	Samsung	10
C	MM54C86	‡ Micrel	
	MM54C86	† National	
	MM74C86	◊ National	
HC	**CD54HC86**	**† GE/RCA (2631)**	
	CD74HC86	**GE/RCA (2631)**	15
	GD74HC386	**GoldStar (2696)**	
	GD74HC86	**GoldStar (2695)**	
	HD74HC386	Hitachi	
	HD74HC86	Hitachi	
	MC54HC86	† Motorola	20
	MC74HC386	† Motorola	
	MC74HC386	† Motorola	
	MC74HC86	Motorola	
	MM54HC86	† National	
	MM74HC86	◊ National	25
	MN74HC86	◊ Panasonic	
	M74HC86	SGS	
	LR74HC86	Sharp	
	74HC86	**◊ Signetics (3003)**	
	SN54HC386	† TI	30
	SN54HC86	† TI	
	SN74HC386	TI	
	SN74HC86	TI	
	TC74HC386	**Toshiba (3307)**	
	TC74HC86	**Toshiba (3307)**	35
HCT	**CD54HCT86**	**† GE/RCA (2631)**	
	CD74HCT86	**◊ GE/RCA (2631)**	
	GD74HCT386	**GoldStar (2696)**	
	GD74HCT86	**GoldStar (2695)**	
	KS74HCTLS86	Samsung	40
	74HCT86	**Signetics (3003)**	
4XXX	F4030BC	Fairchild	
	F4030BM	† Fairchild	
	F4070BC	Fairchild	
	F4070BM	† Fairchild	45
	CD4030A	**† GE/RCA (2633, 2636)**	
	CD4030AE	**GE/RCA (2633, 2636)**	
	CD4030B	**‡ GE/RCA (2633, 2636)**	
	CD4030BE	**GE/RCA (2633, 2636)**	
	CD4070B	**‡ GE/RCA (2633, 2636)**	50
	CD4070BE	**GE/RCA (2633, 2636)**	
	GD4030B	**‡ GoldStar (2697)**	
	GD4070B	**‡ GoldStar (2697)**	
	CD4030A	‡ Micrel	
	CD4070B	‡ Micrel	55

(Continued)

Function	Device	Source	Line
Quad			
4XXX		(Cont'd)	
	MC14070BA	† Motorola	
	MC14070BC	Motorola	
	CD4030A	National	
	CD4070BC	National	
	CD4070BM	† National	60
	CD4507BC	National	
	CD4507BM	† National	
	MN4030B	◊† Panasonic	
	MN4070B	† Panasonic	
	HCC4030B	† SGS	65
	HCC4070B	† SGS	
	HCF4030B	◊ SGS	
	HCF4070B	◊ SGS	
	HEF4030B	Signetics	
	HEF4070B	Signetics	70
	883C4030B	† Sprague	
	883C4070B	† Sprague	
	TC4030B	**Toshiba (3308)**	
40HXXX	TC40H386	Toshiba	

Gates, Exclusive NOR

Function	Device	Source	Line
Quad			
AHCT	KS74AHCT266	Samsung	75
HC	**CD54HC7266**	**† GE/RCA (2631)**	
	CD74HC7266	**GE/RCA (2631)**	
	GD74HC266	**GoldStar (2696)**	
	HD74HC266	Hitachi	
	MN74HC266	◊ Panasonic	80
	M74HC266	SGS	
	M74HC7266	SGS	
	LR74HC266	Sharp	
	74HC7266	Signetics	
	SN54HC266	† TI	85
	SN74HC266	TI	
	SN74HC7266	TI	
	TC74HC7266	**Toshiba (3307)**	
HCT	KS74HCTLS266	Samsung	
4XXX	**TC4077B**	**Toshiba (3308)**	90
	TC4077B	**Toshiba (3308)**	
	F4077BC	Fairchild	
	F4077BM	† Fairchild	
	CD4077B	**‡ GE/RCA (2633, 2636)**	
	CD4077BE	**GE/RCA (2633, 2636)**	95
	GD4077B	**‡ GoldStar (2697)**	
	MC14077BA	† Motorola	
	MC14077BC	Motorola	
	HCC4077B	† SGS	
	HCF4077B	◊ SGS	100
	HEF4077B	Signetics	
	883C4077B	† Sprague	
Quad (open drain)			
HC	MC54HC266	† Motorola	
	MC74HC266	Motorola	
Quad 2-Input			
HC	MC54HC7266	◊† Motorola	105
	MC74HC7266	Motorola	
Quad, 2-Input			
HCT	**GD74HCT266**	**GoldStar (2696)**	

Gates, Miscellaneous

Function	Device	Source	Line
Dual 5-Input Majority Logic			
4XXX	MC14530BA	† Motorola	
	MC14530BC	Motorola	
	TC4530B	**Toshiba (3308)**	110
Triple (dual 4-input NAND and 2-input OR/NOR)			
4XXX	MC14501UBA	† Motorola	
	MC14501UBC	Motorola	
	TC4501B	**Toshiba (3308)**	
Hex Function (quad inverter plus 2-input NOR gate plus 2-input NAND gate)			
4XXX	MC14572A	◊† Motorola	
	MC14572C	◊ Motorola	115
	TC4572B	**Toshiba (3308)**	
8-Input Expandable Multifunction			
4XXX	**CD4048A**	**† GE/RCA (2633)**	
	CD4048AE	**GE/RCA (2633)**	
	CD4048B	**† GE/RCA (2633)**	
	CD4048BE	**GE/RCA (2633)**	120
	CD4048A	‡ Micrel	
	CD4048B	‡ Micrel	
	CD4048BC	National	
	CD4048BM	† National	
	HCC4048B	† SGS	125
	HCF4048B	◊ SGS	
	883C4402B	† Sprague	

Latches

Function	Device	Source	Line
Dual 4-Bit			
HC	HD74HC77	Hitachi	
	SN74HC77	TI	
	TC74HC77	**Toshiba (3307)**	130
4XXX	**CD4508B**	**† GE/RCA (2634)**	
	CD4508BE	**GE/RCA (2634)**	
	MC14508BA	† Motorola	
	MC14508BC	Motorola	
	HCC4508B	† SGS	135
	HEF4508B	◊ Signetics	
	883C4508B	◊† Sprague	
	TC4508B	**Toshiba (3308)**	
Dual 4-Bit Addressable			
	F4723BC	◊ Fairchild	
4XXX	F4723BM	◊† Fairchild	140
	GD4723B	**† GoldStar (2698)**	
	CD4723BC	National	
	CD4723BM	National	
Dual 4-Bit D-Type			
AC	**V54AC880**	**† VTC (3370)**	
	V74AC880	VTC	145
Dual 4-Bit D-Type, Three State			
HC	MC74HC7873	Motorola	
Dual 4-Bit, D-Type, Three-State			
AC	**74AC11873**	**◊ TI (3253)**	
ACT	SN54HC620	TI	
	74ACT11873	**TI (3253)**	
HC	MC74HC873	Motorola	150
Dual 4-Bit D-Type			
ACT	**V54ACT880**	**† VTC (3370)**	
	V74ACT880	**VTC (3370)**	
Quad, Bistable			
HC	HD74HC375	Hitachi	
	M74HC77	SGS	
	SN74HC375	TI	155
	TC74HC375	**Toshiba (3307)**	
40HXXX	LR40H375	Sharp	
	TC40H375	Toshiba	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Latches (Cont'd)

Function	Device	Source	Line
Quad Clocked D			
4XXX	F4042BC	Fairchild	
	F4042BM	† Fairchild	
	CD4042A	**† GE/RCA (2634)**	
	CD4042AE	**GE/RCA (2634)**	
	CD4042B	**† GE/RCA (2634)**	5
	CD4042BE	**GE/RCA (2634)**	
	GD4042B	**† GoldStar (2697)**	
	CD4042A	‡ Micrel	
	CD4042B	‡ Micrel	
	MC14042BA	† Motorola	10
	MC14042BC	Motorola	
	CD4042BC	National	
	CD4042BM	† National	
	HCC4042B	† SGS	
	HCF4042B	◇ SGS	15
	HEF4042B	Signetics	
	883C4042B	† Sprague	
	TC4042B	**Toshiba (3308)**	
Quad NAND R/S			
4XXX	F4044BC	Fairchild	
	F4044BM	† Fairchild	20
	CD4044A	**† GE/RCA (2634)**	
	CD4044AE	**GE/RCA (2634)**	
	CD4044B	**GE/RCA (2634)**	
	GD4044B	**GoldStar (2697)**	
	CD4044A	‡ Micrel	25
	CD4044B	‡ Micrel	
	MC14044BA	◇† Motorola	
	MC14044BC	◇ Motorola	
	CD4044A	National	
	CD4044BC	National	30
	CD4044BM	† National	
	HCC4044B	† SGS	
	HCF4044B	◇ SGS	
	HEF4044B	Signetics	
	TC4044B	**Toshiba (3308)**	35
Quad NAND R-S Latch			
	883C4044B	Sprague	
Quad NOR R/S			
4XXX	F4043BC	Fairchild	
	F4043BM	† Fairchild	
	CD4043A	**† GE/RCA (2634)**	
	CD4043AE	**GE/RCA (2634)**	40
	CD4043B	**† GE/RCA (2634)**	
	CD4043BE	**GE/RCA (2634)**	
	GD4043B	**† GoldStar (2697)**	
	CD4043A	‡ Micrel	
	CD4043B	‡ Micrel	45
	MC14043BA	◇† Motorola	
	MC14043BC	◇ Motorola	
	CD4043A	National	
	CD4043BC	National	
	CD4043BM	† National	50
	HCC4043B	† SGS	
	HCF4043B	◇ SGS	
	HEF4043B	Signetics	
	883C4043B	† Sprague	
	TC4043B	**Toshiba (3308)**	55
Quad Set-Reset			
HC	**TC74HC279**	**Toshiba (3307)**	
Octal D-Type, Inverting, Three-State			
HC	**TC74HC533A**	**Toshiba (3307)**	
Octal D-Type Latch			
BCT	**SN74BCT533**	**TI (3249)**	
Octal D-Type Latch, Three-State (BiCMOS)			
BCT	**SN74BCT373**	**TI (3249)**	
Octal D-Type, Three-State			
HC	**TC74HC373A**	**Toshiba (3307)**	60
Octal, Inverting, Back-to-Back Configuration			
ACT	54ACT547	† MMI	
	54ACT567	† MMI	
	54ACT793	◇† MMI	
	74ACT547	◇ MMI	
	74ACT567	◇ MMI	65
	74ACT793	◇ MMI	
Octal Inverting Transparent Latch, Three-State			
AC	CD54AC563	† GE/RCA	
	CD74AC563	**GE/RCA (2629)**	
ACT	CD54ACT563	† GE/RCA	
	CD74ACT563	**GE/RCA (2629)**	70
Octal Latch with Readback			
AHCT	KS54AHCT793	† Samsung	
	KS74AHCT793	Samsung	
Octal Transparent, D-Type with Clear			
HC	MC74HC7373	Motorola	
	MC74HC7533	Motorola	
	MC74HC7563	Motorola	75
	MC74HC7573	Motorola	
	MC74HC9533	Motorola	
	MC74HC9563	◇ Motorola	
	MC74HC9573	◇ Motorola	
Octal Transparent, D-Type with Readback, Non-Inverting, Three-State			
HC	MC54HC7793	† Motorola	80
	MC74HC7793	Motorola	
	MC74HC793	Motorola	
Octal Transparent, D-Type with Readback, Three-State			
HC	MC74HC7793	Motorola	
Octal Transparent, D-Type, Three State			
AC	54AC373	◇† Fairchild	
	74AC373	Fairchild	85
	CD54AC373	† GE/RCA	
	CD54AC573	† GE/RCA	
	CD74AC373	**GE/RCA (2629)**	
	CD74AC573	**GE/RCA (2629)**	
	74AC11373	**TI (3253)**	90
	TC74AC373	**Toshiba (3307)**	
	TC74AC573	**Toshiba (3307)**	
ACT	54ACT373	† Fairchild	
	54ACT573	† Fairchild	
	74ACT373	Fairchild	95
	74ACT573	Fairchild	
	CD54ACT373	† GE/RCA	
	CD54ACT573	† GE/RCA	
	CD74ACT373	**GE/RCA (2629)**	
	CD74ACT573	**GE/RCA (2629)**	100
	SN54ACT11373	† TI	
	74ACT11373	**TI (3253)**	
	V54ACT373	**† VTC (3370)**	
	V54ACT573	**† VTC (3370)**	
	V74ACT373	**VTC (3370)**	105
	V74ACT573	**VTC (3370)**	
AHCT	**IDT54AHCT573**	**◇† IDT (2811)**	
	IDT74AHCT573	◇ IDT	
	KS74AHCT373	Samsung	
	KS74AHCT573	Samsung	110

(Continued)

Function	Device	Source	Line
Octal Transparent, D-Type, Three State (Cont'd)			
FCT	**IDT54FCT373**	**◇† IDT (2808)**	
	IDT54FCT373A	**◇† IDT (2808)**	
	IDT54FCT573	**◇† IDT (2808, 2810)**	
	IDT54FCT573A	**◇† IDT (2808, 2810)**	
	IDT74FCT373	**◇ IDT (2808)**	115
	IDT74FCT373A	**◇ IDT (2808)**	
	IDT74FCT573	**◇ IDT (2808, 2810)**	
	IDT74FCT573A	**◇ IDT (2808, 2810)**	
	V54FCT373	**◇† VTC (3370)**	
	V54FCT573	**◇† VTC (3370)**	120
	V74FCT373	**◇† VTC (3370)**	
	V74FCT573	**◇† VTC (3370)**	
HC	**CD54HC373**	**◇† GE/RCA (2632)**	
	CD54HC573	**† GE/RCA (2632)**	
	CD74HC373	**GE/RCA (2632)**	125
	CD74HC573	**GE/RCA (2632)**	
	GD74HC373	**GoldStar (2696)**	
	GD74HC573	**GoldStar (2696)**	
	HD74HC373	Hitachi	
	HD74HC573	◇ Hitachi	130
	IDT54AHCT373	**◇† IDT (2811)**	
	MC54HC373	† Motorola	
	MC54HC573	† Motorola	
	MC74HC373	Motorola	
	MC74HC573	Motorola	135
	MM54HC373	† National	
	MM54HC573	† National	
	MM74HC373	National	
	MM74HC573	National	
	MN74HC373	Panasonic	140
	74HC373	Samsung	
	74HC573	Samsung	
	M74HC373	SGS	
	M74HC573	◇ SGS	
	LR74HC373	Sharp	145
	74HC373	**◇ Signetics (3003)**	
	74HC573	**Signetics (3003)**	
	SN54HC373	† TI	
	SN54HC573	† TI	
	SN74HC373	TI	150
	SN74HC573	TI	
	TC74HC373	**Toshiba (3307)**	
	TC74HC573	**Toshiba (3307)**	
HCT	**CD54HCT373**	**† GE/RCA (2632)**	
	CD54HCT573	**† GE/RCA (2632)**	155
	CD74HCT373	**GE/RCA (2632)**	
	CD74HCT573	**GE/RCA (2632)**	
	GD74HCT373	**GoldStar (2696)**	
	GD74HCT573	**GoldStar (2696)**	
	HD74HCT373	Hitachi	160
	HD74HCT573	Hitachi	
	54HCT373SOS	‡ Marconi	
	54HCT573SOS	‡ Marconi	
	74HCT373	Marconi	
	74HCT573	Marconi	165
	MIC74HCT373	Micrel	
	MIC74HCT573	Micrel	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—CMOS (Cont'd)

Function	Device	Source	Line
Latches (Cont'd)			
Octal Transparent, D-Type, Three State			
HCT (Cont'd)			
	MD54HCT373R †	Mitel	
	MD54HCT573R †	Mitel	
	MD74HCT373R	Mitel	
	MD74HCT573R	Mitel	
	MC54HCT373 †	Motorola	5
	MC74HCT373	Motorola	
	MM54HCT373 †	National	
	MM74HCT373	National	
	P54PCT373	Performance	
	MV74HCT373	Plessey	10
	MV74HCT573 ◊	Plessey	
	KS74HCTLS373	Samsung	
	KS74HCTLS573	Samsung	
	M74HCT373	SGS	
	74HCT373	**Signetics (3003)**	15
	74HCT573	**Signetics (3003)**	
	54HCT373	† Supertex	
	54HCT573	† Supertex	
	74HCT373	Supertex	
	74HCT573	Supertex	20
	SN54HCT373	† TI	
	SN74HCT373	◊ TI	
	SN74HCT573	◊ TI	
	TC74HCT373	Toshiba	
	TC74HCT573	Toshiba	25
PCT	P74PCT373	Performance	
SC	MV74SC573	Plessey	
	74SC373	Supertex	
	74SC573	Supertex	
4XXX	HEF40373B	Signetics	30
40HXXX	TC40H373	Toshiba	
Octal Transparent, D-Type, Three State with Clear			
HC	MC74HC9373	Motorola	
Octal Transparent, D-Type, Three-State			
AC	SN54AC11373	† TI	
	V54AC373	**† VTC (3370)**	
	V54AC573	**† VTC (3370)**	35
	V74AC373	VTC	
	V74AC573	VTC	
BCT	SN54BCT373	† TI	
Octal Transparent with Readback, Non-Inverting, Three-State			
HC	MC54HC793	† Motorola	
Octal Transparent, Three-State			
HCT	P54PCT373A	† Performance	40
	P54PCT533A	† Performance	
	P74PCT373A	Performance	
	P74PCT533A	Performance	
Octal Transparent, Three-State, Inverted Output			
AC	CD54AC533	† GE/RCA	
	CD74AC533	**GE/RCA (2629)**	45
	TC74AC533	**◊ Toshiba (3307)**	
	TC74AC563	**Toshiba (3307)**	
	V54AC533	**† VTC (3370)**	
	V54AC563	**† VTC (3370)**	
	V54AC580	**† VTC (3370)**	50
	V74AC533	VTC	
	V74AC563	VTC	
	V74AC580	◊ VTC	
ACT	CA54ACT533	† Calmos	
	CD54ACT533	◊† GE/RCA	55
	CD74ACT533	**GE/RCA (2629)**	

(Continued)

Function	Device	Source	Line
Octal Transparent, Three-State, Inverted Output			
ACT (Cont'd)			
	74ACT11533	**◊ TI (3253)**	
	V54ACT533	**† VTC (3370)**	
	V54ACT563	**◊† VTC (3370)**	
	V54ACT580	**† VTC (3370)**	60
	V74ACT533	**VTC (3370)**	
	V74ACT563	**◊ VTC (3370)**	
	V74ACT580	**VTC (3370)**	
AHCT	KS74AHCT533	Samsung	
	KS74AHCT563	Samsung	65
BCT	SN54BCT533	† TI	
FCT	**IDT54FCT533**	**◊† IDT (2808, 2810)**	
	IDT54FCT533A	**◊† IDT (2808, 2810)**	
	IDT74FCT533	**◊ IDT (2808, 2810)**	
	IDT74FCT533A	**◊ IDT (2808, 2810)**	70
	V54FCT533	**◊† VTC (3370)**	
	V74FCT533	**◊† VTC (3370)**	
HC	**CD54HC533**	**† GE/RCA (2632)**	
	CD54HC563	**† GE/RCA (2632)**	
	CD74HC533	**GE/RCA (2632)**	75
	CD74HC563	**GE/RCA (2632)**	
	GD74HC533	**GoldStar (2696)**	
	GD74HC563	**GoldStar (2696)**	
	HD74HC533	Hitachi	
	HD74HC563	◊ Hitachi	80
	IDT54AHCT533	**◊† IDT (2811)**	
	MC54HC533	† Motorola	
	MC54HC563	† Motorola	
	MC74HC533	Motorola	
	MC74HC563	Motorola	85
	MM54HC533	◊† National	
	MM54HC563	† National	
	MM74HC533	National	
	MM74HC563	National	
	74HC533	Samsung	90
	74HC563	Samsung	
	M74HC533	SGS	
	LR74HC533	◊ Sharp	
	LR74HC563	Sharp	
	74HC533	**Signetics (3003)**	95
	74HC563	**Signetics (3003)**	
	SN54HC533	† TI	
	SN54HC563	† TI	
	SN74HC533	TI	
	SN74HC563	TI	100
	TC74HC533	**Toshiba (3307)**	
	TC74HC563	**Toshiba (3307)**	
HCT	**CD54HCT533**	**† GE/RCA (2632)**	
	CD54HCT563	**† GE/RCA (2632)**	
	CD74HCT533	**GE/RCA (2632)**	105
	CD74HCT563	**GE/RCA (2632)**	
	GD74HCT533	**GoldStar (2696)**	
	GD74HCT563	**GoldStar (2696)**	
	HD74HCT533	Hitachi	
	HD74HCT563	Hitachi	110
	54HCT533SOS	‡ Marconi	
	54HCT563SOS	‡ Marconi	
	74HCT533	Marconi	
	74HCT563	Marconi	
	MIC74HCT533	Micrel	115
	MIC74HCT563	Micrel	

(Continued)

Function	Device	Source	Line
Octal Transparent, Three-State, Inverted Output			
HCT (Cont'd)			
	MC54HCT533	† Motorola	
	MC74HCT533	Motorola	
	MM54HCT533	† National	
	MM74HCT533	National	120
	P54PCT533	Performance	
	MV74HCT533	Plessey	
	MV74HCT563	◊ Plessey	
	KS74HCTLS533	Samsung	
	KS74HCTLS563	Samsung	125
	M74HCT563	SGS	
	74HCT533	**Signetics (3003)**	
	74HCT563	**Signetics (3003)**	
	54HCT533	† Supertex	
	54HCT563	† Supertex	130
	74HCT533	Supertex	
	74HCT563	Supertex	
	SN74HCT533	◊ TI	
	SN74HCT563	◊ TI	
	TC74HCT563	Toshiba	135
PCT	P74PCT533	Performance	
SC	MV74SC533	Plessey	
	MV74SC563	Plessey	
	74SC533	Supertex	
	74SC563	Supertex	140
Octal, TTL Input, Three-State			
HC	MM54HC4302	† National	
	MM74HC4302	◊ National	
Octal, TTL Input, Three-State, Inverting			
HC	MM54HC4301	† National	
	MM74HC4301	◊ National	
Octal Three-State, Inverting			
BCT	SN54BCT534	† TI	145
4-Bit Bistable			
HC	**CD54HC75**	**† GE/RCA (2632)**	
	CD74HC75	**GE/RCA (2632)**	
	GD74HC75	**GoldStar (2695)**	
	HD74HC75	Hitachi	
	MC54HC75	† Motorola	150
	MC74HC75	Motorola	
	MM54HC75	† National	
	MM74HC75	National	
	MN74HC75	Panasonic	
	M74HC75	SGS	155
	LR74HC75	Sharp	
	74HC75	**Signetics (3003)**	
	SN54HC75	† TI	
	SN74HC75	TI	
	TC74HC75	**Toshiba (3307)**	160
HCT	**CD54HCT75**	**† GE/RCA (2632)**	
	CD74HCT75	**◊ GE/RCA (2632)**	
	74HCT75	**Signetics (3003)**	
8-Bit			
ACT	**74ACT11845**	**TI (3253)**	
HC	MC74HC793	Motorola	165
8-Bit Addressable, Bidirectional Data Port (serial in/out and parallel out)			
4XXX	MC14599BA	† Motorola	
	MC14599BC	Motorola	
8-Bit Addressable Input, Parallel Output, Three-State			
4XXX	MC14598BA	† Motorola	
	MC14598BC	Motorola	
8-Bit Addressable (serial in, parallel out)			
AHCT	KS74AHCT259	Samsung	170
Cell	SN74259-Cell	◊° TI	
HC	**CD54HC259**	**† GE/RCA (2632)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Latches (Cont'd)

Function	Device	Source	Line
8-Bit Addressable (serial in, parallel out)			
HC		(Cont'd)	
	CD74HC259	**GE/RCA (2632)**	
	GD74HC259	**GoldStar (2696)**	
	HD74HC259	Hitachi	
	MC54HC259	† Motorola	
	MC74HC259	Motorola	5
	MM54HC259	◊† National	
	MM54HC77	† National	
	MM74HC259	National	
	MM74HC77	National	
	M74HC259	SGS	10
	LR74HC259	Sharp	
	74HC259	**Signetics (3003)**	
	SN54HC259	† TI	
	SN74HC259	TI	
	SN74HC4724	TI	15
	TC74HC259	**Toshiba (3307)**	
HCT	**CD54HCT259**	**† GE/RCA (2632)**	
	CD74HCT259	**GE/RCA (2632)**	
	GD74HCT259	**GoldStar (2696)**	
	KS74HCTLS259	Samsung	20
	74HCT259	**Signetics (3003)**	
4XXX	F4724BC	◊ Fairchild	
	F4724BM	◊† Fairchild	
	CD4099B	**‡ GE/RCA (2634)**	
	CD4099BE	**GE/RCA (2634)**	25
	CD4724B	**† GE/RCA (2634)**	
	CD4724BE	**GE/RCA (2634)**	
	GD4724B	**GoldStar (2698)**	
	CD4099B	‡ Micrel	
	CD4724B	‡ Micrel	30
	MC14099BA	† Motorola	
	MC14099BC	Motorola	
	CD4099BC	National	
	CD4099BM	† National	
	CD4724BC	National	35
	CD4724BM	† National	
	HCC4099B	† SGS	
	HCF4099B	SGS	
	HEF4724B	Signetics	
	883C4099B	† Sprague	40
	TC4099B	**Toshiba (3308)**	
40HXXX	TC40H259	Toshiba	
8-Bit, Counter, Incremented Input, Parallel Output, Three-State			
4XXX	MC14597BA	† Motorola	
	MC14597BC	Motorola	
8-Bit transparent, D-Type, Inverting, Three-State			
AC	SN54AC11533	† TI	45
	74AC11533	**TI (3253)**	
	74AC11846	**TI (3253)**	
FCT	**IDT54FCT846A**	**◊† IDT (2809)**	
	IDT54FCT846B	**◊† IDT (2809)**	
	IDT74FCT846A	**◊ IDT (2809)**	50
	IDT74FCT846B	**◊ IDT (2809)**	
	V54FCT846A	**◊† VTC (3370)**	
	V74FCT846A	**◊† VTC (3370)**	
8-Bit Transparent, D-Type, Three-State, Non-Inverting			
AC	**74AC11845**	**TI (3253)**	
FCT	**IDT54FCT845A**	**◊† IDT (2809)**	55

(Continued)

Function	Device	Source	Line
8-Bit Transparent, D-Type, Three-State, Non-Inverting			
FCT		(Cont'd)	
	IDT74FCT845A	**◊ IDT (2809)**	
	IDT74FCT845B	**◊ IDT (2809)**	
9-Bit Interface D-Type Latches, Three State			
AHCT	KS54AHCT843	† Samsung	
	KS54AHCT844	† Samsung	
	KS74AHCT843	Samsung	60
	KS74AHCT844	Samsung	
BCT	SN54BCT29844	† TI	
9-Bit Interface D-Type Latches, Three-State			
BCT	SN54BCT29843	† TI	
9-Bit Transparent, D-Type, Three-State, Inverting			
AC	**74AC11844**	**TI (3253)**	
	V54AC844	**† VTC (3370)**	65
	V54AC846	**† VTC (3370)**	
	V74AC844	◊ VTC	
	V74AC846	◊ VTC	
BCT	SN54BCT29846	† TI	
FCT	**IDT54FCT844B**	**◊† IDT (2809)**	70
	IDT54FCT845B	**◊† IDT (2809)**	
	IDT74FCT844B	**◊ IDT (2809)**	
	IDT54FCT845B	◊† VTC	
	V54FCT844A	**◊† VTC (3370)**	
	V54FCT845A	**◊† VTC (3370)**	75
	V74FCT844A	**◊† VTC (3370)**	
9-Bit Transparent, D-Type, Three-State, Non-Inverting			
AC	**74AC11843**	**TI (3253)**	
	V54AC843	**† VTC (3370)**	
	V54AC845	**† VTC (3370)**	
	V74AC843	◊ VTC	80
	V74AC845	◊ VTC	
BCT	SN54BCT29845	† TI	
FCT	**IDT54FCT843B**	**◊† IDT (2809)**	
	IDT74FCT843B	**◊ IDT (2809)**	
	V54FCT843A	**◊† VTC (3370)**	85
	V74FCT843A	**◊† VTC (3370)**	
10-Bit Interface D-Type Latches, Three State			
AHCT	KS54AHCT841	† Samsung	
	KS54AHCT842	† Samsung	
	KS74AHCT841	Samsung	
	KS74AHCT842	Samsung	90
10-Bit Interface D-Type Latches, Three-State			
BCT	SN54BCT29841	† TI	
	SN54BCT29842	† TI	
10-Bit Transparent, D-Type, Three-State, Inverting			
AC	**74AC11842**	**TI (3253)**	
	V54AC842	**† VTC (3370)**	
	V74AC842	◊ VTC	95
FCT	**IDT54FCT842A**	**◊† IDT (2809)**	
	IDT54FCT842B	**◊† IDT (2809)**	
	IDT54FCT844A	**◊† IDT (2809)**	
	IDT74FCT842A	**◊ IDT (2809)**	

(Continued)

Function	Device	Source	Line
10-Bit Transparent, D-Type, Three-State, Inverting			
FCT		(Cont'd)	
	IDT74FCT842B	**◊ IDT (2809)**	100
	IDT74FCT844A	**◊ IDT (2809)**	
	V54FCT842A	**◊† VTC (3370)**	
	V74FCT842A	**◊† VTC (3370)**	
10-Bit Transparent, D-Type, Three-State, Non-Inverting			
AC	**74AC11841**	**TI (3253)**	
	V54AC841	**† VTC (3370)**	105
	V74AC841	◊ VTC	
FCT	**IDT54FCT841A**	**◊† IDT (2809)**	
	IDT54FCT841B	**◊† IDT (2809)**	
	IDT74FCT841A	**◊ IDT (2809)**	
	IDT74FCT841B	**◊ IDT (2809)**	110
	V54FCT841A	**◊† VTC (3370)**	
	V74FCT841A	**◊† VTC (3370)**	
16-Bit Bidirectional Latch with Byte Swap			
FCT	**IDT49FCT601**	**IDT (2808)**	
10-Bit Transparent, D-Type, Three-State, Inverting			
ACT	**74ACT11842**	**TI (3253)**	
	V54ACT842	**† VTC (3370)**	115
	V74ACT842	**VTC (3370)**	
10-Bit Transparent, D-Type, Three-State, Non-Inverting			
ACT	**74ACT11841**	**TI (3253)**	
	V54ACT841	**† VTC (3370)**	
	V74ACT841	**VTC (3370)**	
4-Bit Bistable			
HCT	**GD74HCT75**	**GoldStar (2695)**	120
8-Bit Transparent, D-Type, Three-State, Inverting			
ACT	**74ACT11846**	**TI (3253)**	
	V54ACT846	**† VTC (3370)**	
	V74ACT846	**VTC (3370)**	
8-Bit Transparent, D-Type, Three-State, Non-Inverting			
ACT	S74ACT11845	TI	
	V54ACT845	**† VTC (3370)**	125
	V74ACT845	**VTC (3370)**	
9-Bit Transparent, D-Type, Three-State, Inverting			
ACT	**74ACT11844**	**TI (3253)**	
	V54ACT844	**† VTC (3370)**	
	V74ACT844	**VTC (3370)**	
9-Bit Transparent, D-Type, Three-State, Non-Inverting			
ACT	**74ACT11843**	**TI (3253)**	130
	V54ACT843	**† VTC (3370)**	
	V74ACT843	**VTC (3370)**	

Memories

Memory Mapper (expands 4 address lines to 12)			
HCT	**UM74HCT612**	**UMC (3313)**	
Memory Mapper (expands 4 lines to 12 lines of address)			
HCT	74HCT612	ZyMOS	
Dual-Port RAM, 256 Bytes			
HC	MCM68HC34	◊ Motorola	135
Octal Memory Driver (BiCMOS)			
BCT	**SN74BCT2240**	**TI (3228, 3249)**	
	SN74BCT2241	**TI (3228, 3249)**	
	SN74BCT2244	**TI (3228, 3249)**	
4-Bit x 16 FIFO Register			
HC	**CD54HC40105**	**† GE/RCA (2631)**	
	CD74HC40105	**◊ GE/RCA (2631)**	140
	74HC40105	**Signetics (3003)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—CMOS (Cont'd)

Memories (Cont'd)

Function	Device	Source	Line
4-Bit x 16 FIFO Register (Cont'd)			
HCT	**CD54HCT40105**	† **GE/RCA (2631)**	
	CD74HCT40105	◊ **GE/RCA (2631)**	
	74HCT40105	**Signetics (3003)**	
4x4 Register File, Three-State			
HC	M74HC670	◊ Mitsubishi	
10-Bit Memory Driver (BiCMOS)			
BCT	**SN74BCT2827**	**TI (3228, 3249)**	5
	SN74BCT2828	**TI (3228, 3249)**	
16-Bit FIFO (4x4)			
4XXX	**CD40105B**	† **GE/RCA (2634)**	
	CD40105BE	**GE/RCA (2634)**	
	HCC40105B	† SGS	
	HCF40105B	◊ SGS	10
16-Bit Multiport Register File (4x4 read while write RAM)			
4XXX	**CD40108B**	† **GE/RCA (2634, 2636)**	
	CD40108BE	**GE/RCA (2634, 2636)**	
	CD40208B	† **GE/RCA (2634, 2636)**	
	CD40208BE	**GE/RCA (2634, 2636)**	
	MC14580BA	† Motorola	15
	MC14580BC	Motorola	
	HCC40208B	† SGS	
	HCF40208B	SGS	
16-Bit (4x4) Register File			
AHCT	KS54AHCT670	† Samsung	
	KS74AHCT670	◊ Samsung	20
HC	**CD54HC670**	† **GE/RCA (2631)**	
	CD74HC670	**GE/RCA (2631)**	
	74HC670	**Signetics (3003)**	
	TC74HC670	**Toshiba (3307)**	
HCT	**CD54HCT670**	† **GE/RCA (2631)**	25
	CD74HCT670	**GE/RCA (2631)**	
	GD74HCT670	**GoldStar (2696)**	
	74HCT670	**Signetics (3003)**	
32-Bit RAM (binary addressing)			
4XXX	**TC4036B**	**Toshiba (3308)**	
32-Bit RAM (direct word line addressing)			
4XXX	**TC4039B**	**Toshiba (3308)**	30
64-Bit FIFO (16x4)			
4XXX	F4703BC	Fairchild	
	F4703BM	† Fairchild	
	GD4703B	**GoldStar (2698)**	
64-Bit Multiport Register File (8x8) with 5 Ports			
	LRF08M	† LogicDev	
TTL(C)	LRF08C	† LogicDev	35
64-Bit Program Stack (16x4 LIFO)			
4XXX	F4706BC	Fairchild	
	F4706BM	† Fairchild	
	GD4706B	**GoldStar (2698)**	
64-Bit RAM			
HC	HD74HC189	Hitachi	
64-Bit RAM (16x4)			
	CY7C189C	**Cypress (2562, 2564)**	40
	CY7C190C	**Cypress (2562, 2564)**	
	CY7C190M	**Cypress (2562, 2564)**	

(Continued)

Function	Device	Source	Line
64-Bit RAM (16x4) (Cont'd)			
C	MM54C89	‡ Micrel	
	MM54C89	† National	
	MM74C89	◊ National	45
4XXX	F4725BC	◊ Fairchild	
	F4725BM	◊† Fairchild	
	CD40114B	† GE/RCA	
	GD4725B	**GoldStar (2698)**	
64-Bit RAM (16x4 clocked RAM, three state output register)			
4XXX	F4710BC	◊ Fairchild	50
	F4710BM	◊† Fairchild	
	GD4710B	**GoldStar (2698)**	
64-Bit RAM (64x1)			
4XXX	MCM14505A	† Motorola	
	MCM14505C	Motorola	
	HEF4505B	◊ Signetics	55
64x4-Bit FIFO, Three-State			
HC	**CD54HC7030**	◊† **GE/RCA (2631)**	
	CD74HC7030	◊ **GE/RCA (2631)**	
HCT	**CD54HCT7030**	† **GE/RCA (2631)**	
	CD74HCT7030	◊ **GE/RCA (2631)**	
65x56-Bit FIFO			
AC	CD54AC7402	† GE/RCA	60
	CD74AC7402	**GE/RCA (2629)**	
ACT	CD54ACT7402	◊† GE/RCA	
	CD74ACT7402	**GE/RCA (2629)**	
256-Bit RAM (256x1)			
C	MM54C200	‡ Micrel	
	MM54C200	† National	65
	MM74C200	National	
4XXX	F4720AC	◊ Fairchild	
	F4720AM	◊† Fairchild	
	F4720C	◊ Fairchild	
	F4720M	◊† Fairchild	70
	CD40061	GE/RCA	
	CD40061A	† GE/RCA	
	GD4720B	**GoldStar (2698)**	
	MCM14537A	† Motorola	
	MCM14537C	Motorola	75
	HEF4720B	Signetics	
	HEF4720V	† Signetics	
256-Bit RAM (32x8)			
	CDP1824	† **GE/RCA (2643)**	
	CDP1824C	† **GE/RCA (2643)**	
	HMMP1824	◊† Hughes	80
	HMMP1824C	◊† Hughes	
HC	HCMP1824	◊ Hughes	
	HCMP1824C	Hughes	
256-Bit RAM (64x4)			
	COP498	◊ National	
C	MM54C910	† National	85
	MM74C910	National	
4XXX	MCM14552A	† Motorola	
	MCM14552C	Motorola	
512x9-Bit FIFO			
ACT	SMJ54ACT7201	† TI	
1024x9-Bit FIFO			
ACT	SMJ54ACT7202	† TI	90
1024x9-Bit Parallel In/Out FIFO			
AC	CD54AC7202	† GE/RCA	
	CD74AC7202	**GE/RCA (2629)**	
ACT	CD54ACT7202	† GE/RCA	
	CD74ACT7202	**GE/RCA (2629)**	

Function	Device	Source	Line
2048x9-Bit Cache			
ACT	SMJ54ACT2152	† TI	95

Multiplexers (Digital)

Dual 4-Channel			
AC	54AC153	† Fairchild	
	74AC153	Fairchild	
	SN54AC11153	† TI	
	74AC11153	**TI (3252)**	
ACT	**74ACT11153**	**TI (3252)**	100
Cell	SN74153-Cell	° TI	
HC	MC54HC153	† Motorola	
	MC74HC153	Motorola	
	M74HC153	SGS	
	LR74HC153	Sharp	105
	SN54HC153	† TI	
	SN74HC153	TI	
4XXX	F4539BC	Fairchild	
	F4539BM	† Fairchild	
	GD4539B	**GoldStar (2698)**	110
	MC14539BA	† Motorola	
	MC14539BC	Motorola	
	MN4539B	◊ Panasonic	
	HEF4539B	Signetics	
	TC4539B	**Toshiba (3308)**	115
40HXXX	LR40H153	Sharp	
	TC40H153	◊ Toshiba	
Dual 4-Channel Multiplexer/Demultiplexer			
HC	M74HC4052	Mitsubishi	
Dual 4-Channel, Three-State			
ACT	SN74ACT11253	TI	
	74ACT11253	**TI (3252)**	120
HC	**GD74HC253**	**GoldStar (2696)**	
	LR74HC253	Sharp	
	74HC253B	**Signetics (3003)**	
	SN54HC253	† TI	
	SN74HC253	TI	125
	TC74HC253	**Toshiba (3307)**	
HCT	**74HCT253B**	**Signetics (3003)**	
Dual 4-Input			
AC	CD54AC153	† GE/RCA	
	CD74AC153	**GE/RCA (2629)**	
ACT	CD54ACT153	† GE/RCA	130
	CD74ACT153	**GE/RCA (2629)**	
HC	**CD54HC153**	† **GE/RCA (2632)**	
	CD74HC153	**GE/RCA (2632)**	
	HD74HC153	Hitachi	
	MM54HC153	† National	135
	MM74HC153	National	
	US74HC153	Universal	
HCT	**CD54HCT153**	† **GE/RCA (2632)**	
	CD74HCT153	**GE/RCA (2632)**	
	MM54HCT153	† National	140
	MM74HCT153	National	
Dual 4-Input Inverting			
AC	SN54AC11352	† TI	
	74AC11352	◊ **TI (3253)**	
ACT	**74ACT11353**	**TI (3253)**	
HC	SN74HC352	TI	145
Dual 4-Input, Inverting, Three-State			
AC	SN54AC11353	† TI	
	74AC11353	◊ **TI (3253)**	
Dual 4-Input, Three-State			
AC	54AC253	† Fairchild	
	74AC253	Fairchild	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Multiplexers (Digital) (Cont'd)

Function	Device	Source	Line
Dual 4-Input, Three-State			
AC		(Cont'd)	
	CD54AC253	GE/RCA	
	CD74AC253	**GE/RCA (2629)**	
	SN54AC11253	† TI	
	TC74AC253	**Toshiba (3307)**	
ACT	54ACT253	† Fairchild	5
	74ACT253	Fairchild	
	CD54ACT253	GE/RCA	
	CD74ACT253	**◊ GE/RCA (2629)**	
HC	**CD54HC253**	**GE/RCA (2632)**	
	CD74HC253	**GE/RCA (2632)**	10
	HD74HC253	Hitachi	
	HD74HC257	Hitachi	
	MC54HC253	† Motorola	
	MC74HC253	Motorola	
	MM54HC253	† National	15
	MM74HC253	National	
	M74HC253	SGS	
HCT	**CD54HCT253**	**GE/RCA (2632)**	
	CD74HCT253	**GE/RCA (2632)**	
	MM54HCT253	† National	20
	MM74HCT253	National	
Dual 4-Input, Three-State, Inverting			
HC	HD74HC353	Hitachi	
	SN74HC353	TI	
Dual 4-Channel, Three-State			
HCT	**GD74HCT253**	**GoldStar (2696)**	
Dual 4-Input, Three-State			
AC	**74AC11253**	**TI (3252)**	25
Triple 2-Channel Multiplexer/Demultiplexer			
HC	M74HC4053	Mitsubishi	
Quad	74ACT11157	TI	
Quad 2-Input Data Selector			
AC	54AC157	† Fairchild	
	74AC157	Fairchild	
	CD54AC157	† GE/RCA	30
	CD74AC157	**GE/RCA (2629)**	
	SN54AC11157	† TI	
	74AC11157	**TI (3252)**	
ACT	54ACT157	† Fairchild	
	74ACT157	Fairchild	35
	CD54ACT157	† GE/RCA	
	CD74ACT157	**GE/RCA (2629)**	
AHCT	KS74AHCT157	◊ Samsung	
C	MM54C157	† National	
	MM74C157	National	40
HC	**CD54HC157**	**† GE/RCA (2632)**	
	CD74HC157	**GE/RCA (2632)**	
	GD74HC157	**◊ GoldStar (2695)**	
	HD74HC157	Hitachi	
	MC54HC157	† Motorola	45
	MC74HC157	Motorola	
	MM54HC157	† National	
	MM54HC158	† National	
	MM74HC157	National	
	MM74HC158	National	50
	MN74HC157	◊ Panasonic	
	M74HC157	SGS	
	LR74HC157	Sharp	
	74HC157	**Signetics (3003)**	
	SN54HC157	† TI	55
	SN74HC157	TI	
	TC74HC157	**Toshiba (3307)**	
	US74HC157	Universal	

(Continued)

Function	Device	Source	Line
Quad 2-Input Data Selector		(Cont'd)	
HCT	**CD54HCT157**	**† GE/RCA (2632)**	
	CD74HCT157	**GE/RCA (2632)**	60
	GD74HCT157	**GoldStar (2695)**	
	KS74HCTLS157	Samsung	
	74HCT157	**Signetics (3003)**	
40HXXX	LR40H157	Sharp	
	TC40H157	◊ Toshiba	65
Quad 2-Input Data Selector, Inverting			
AC	54AC158	† Fairchild	
	74AC158	Fairchild	
	CD54AC158	† GE/RCA	
	CD74AC158	**GE/RCA (2629)**	
	SN54AC11158	† TI	70
	74AC11158	**TI (3252)**	
	TC74AC158	**Toshiba (3307)**	
ACT	54ACT158	† Fairchild	
	74ACT158	Fairchild	
	CD54ACT158	† GE/RCA	75
	CD74ACT158	**GE/RCA (2629)**	
AHCT	KS74AHCT158	◊ Samsung	
HC	**CD54HC158**	**† GE/RCA (2632)**	
	CD74HC158	**GE/RCA (2632)**	
	GD74HC158	**◊ GoldStar (2695)**	80
	GD74HC160	**◊ GoldStar (2695)**	
	HD74HC158	Hitachi	
	MC54HC158	† Motorola	
	MC74HC158	Motorola	
	MN74HC158	◊ Panasonic	85
	M74HC158	SGS	
	LR74HC158	Sharp	
	74HC158	**Signetics (3003)**	
	74HC160	**Signetics (3003)**	
	SN54HC158	† TI	90
	SN74HC158	TI	
	TC74HC158	**◊ Toshiba (3307)**	
	US74HC158	Universal	
HCT	**CD54HCT158**	**† GE/RCA (2632)**	
	CD74HCT158	**GE/RCA (2632)**	95
	GD74HCT158	**◊ GoldStar (2695)**	
	GD74HCT160	**◊ GoldStar (2695)**	
	KS74HCTLS158	Samsung	
	74HCT158	**Signetics (3003)**	
	74HCT160	**Signetics (3003)**	100
40HXXX	LR40H158	Sharp	
	TC40H158	◊ Toshiba	
Quad 2-Input Data Selector, Three-State			
AC	CD54AC257	† GE/RCA	
	CD74AC257	**GE/RCA (2629)**	
	SN54AC11257	† TI	105
	TC74AC257	**◊ Toshiba (3307)**	
ACT	54ACT257	† Fairchild	
	74ACT257	Fairchild	
	CD54ACT257	◊† GE/RCA	
	CD74ACT257	**◊ GE/RCA (2629)**	110
AHCT	KS74AHCT257	Samsung	
HC	**CD54HC257**	**† GE/RCA (2632)**	
	CD74HC257	**GE/RCA (2632)**	
	GD74HC257	**GoldStar (2696)**	
	MC54HC257	† Motorola	115
	MC74HC257	Motorola	
	MM54HC257	◊† National	
	MM74HC257	National	
	M74HC257	SGS	
	LR74HC257	Sharp	120
	74HC257	**Signetics (3003)**	
	SN54HC257	† TI	

(Continued)

Function	Device	Source	Line
Quad 2-Input Data Selector, Three-State			
HC		(Cont'd)	
	SN74HC257	TI	
	TC74HC257	**Toshiba (3307)**	
HCT	**CD54HCT257**	**† GE/RCA (2632)**	125
	CD74HCT257	**GE/RCA (2632)**	
	GD74HCT257	**GoldStar (2696)**	
	KS74HCTLS257	Samsung	
	74HCT257	**Signetics (3003)**	
4XXX	**CD40257B**	**† GE/RCA (2635)**	130
	CD40257BE	**GE/RCA (2635)**	
	HCC40257B	† SGS	
	HCF40257B	◊ SGS	
Quad 2-Input, Inverting, Three State			
AC	SN54AC11258	† TI	
	CD74AC258	**GE/RCA (2629)**	135
	74AC11258	**TI (3252)**	
	TC74AC258	**◊ Toshiba (3307)**	
ACT	CD54ACT258	◊† GE/RCA	
	CD74ACT258	**◊ GE/RCA (2629)**	
AHCT	KS74AHCT258	Samsung	140
HC	**CD54HC258**	**† GE/RCA (2632)**	
	CD74HC258	**GE/RCA (2632)**	
	GD74HC258	**GoldStar (2696)**	
	HD74HC258	Hitachi	
	74HC258	**Signetics (3003)**	145
	SN54HC258	† TI	
	SN74HC258	TI	
	TC74HC258	**Toshiba (3307)**	
HCT	**CD54HCT258**	**† GE/RCA (2632)**	
	CD74HCT258	**GE/RCA (2632)**	150
	KS74HCTLS258	Samsung	
	74HCT258	**Signetics (3003)**	
Quad 2-Input, with Storage			
AHCT	KS74AHCT399	◊ Samsung	
Cell	SN74298-Cell	° TI	
HC	**GD74HC298**	**GoldStar (2696)**	155
	HD74HC298	◊ Hitachi	
	MM54HC298	† National	
	MM74HC298	National	
	M74HC298	SGS	
	SN74HC298	TI	160
	TC74HC298	**Toshiba (3307)**	
Quad 2-Input Data Selector			
ACT	**74ACT11157**	**TI (3252)**	
Quad 2-Input Data Selector, Inverting			
ACT	74ACT158	TI	
Quad 2-Input Data Selector, Three-State			
AC	**74AC11257**	**TI (3252)**	
ACT	**74ACT11257**	**TI (3252)**	165
Quad 2-Input, Inverting, Three-State			
ACT	**74ACT11258**	**TI (3252)**	
HCT	**GD74HCT258**	**GoldStar (2696)**	
Quad 2-Input, with Storage			
HCT	**GD74HCT298**	**GoldStar (2696)**	
Octal 2-Input, Three-State, Non-Inverting			
HC	SN74HC604	TI	
3-Line to 8-Line Decoder/Demultiplexer			
ACT	SN54ACT11138	†	
		TI	170
4-Bit AND/OR Selector			
4XXX	F4519BC	Fairchild	
	F4519BM	† Fairchild	
	GD4519B	**GoldStar (2698)**	
	MC14519BA	† Motorola	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL–CMOS (Cont'd)

Multiplexers (Digital) (Cont'd)

Function	Device	Source
4-Bit AND/OR Selector		
4XXX		(Cont'd)
	MC14519BC	Motorola
	CD4519BC	National
	CD4519BM	† National
	HEF4519B	◊ Signetics
	TC4519B	**Toshiba (3308)**
8-Channel		
AC	54AC151	† Fairchild
	74AC151	Fairchild
	CD54AC151	† GE/RCA
	CD74AC151	**GE/RCA (2629)**
	SN54AC11151	† TI
	TC74AC151	**Toshiba (3307)**
ACT	CD54ACT151	† GE/RCA
	CD74ACT151	**GE/RCA (2629)**
	74ACT11151	**TI (3252)**
C	MM54C151	† National
	MM74C151	National
Cell	SN74151-Cell	° TI
HC	**CD54HC151**	**† GE/RCA (2632)**
	CD74HC151	**GE/RCA (2632)**
	GD74HC151	**◊ GoldStar (2695)**
	HD74HC151	Hitachi
	MC54HC151	† Motorola
	MC74HC151	Motorola
	MM54HC151	† National
	MM74HC151	National
	MN74HC151	◊ Panasonic
	M74HC151	SGS
	LR74HC151	Sharp
	74HC151	**Signetics (3003)**
	SN54HC151	† TI
	SN74HC151	TI
	TC74HC151	**Toshiba (3307)**
	US74HC151	Universal
HCT	**CD54HCT151**	**† GE/RCA (2632)**
	CD74HCT151	**GE/RCA (2632)**
	GD74HCT151	**GoldStar (2695)**
	74HCT151	**Signetics (3003)**
40HXXX	TC40H151	◊ Toshiba
8-Channel Data Selector		
HC	HD74HC152	Hitachi
	SN54HC152	† TI
	SN74HC152	TI
4XXX	F4512BC	Fairchild
	F4512BM	† Fairchild
	CD4512B	**† GE/RCA (2635)**
	CD4512BE	**GE/RCA (2635)**
	GD4512B	**† GoldStar (2697)**
	CD4512B	‡ Micrel
	MC14512A	† Motorola
	MC14512C	Motorola
	CD4512BC	National
	CD4512BM	† National
	MN4512B	◊† Panasonic
	HCC4512B	† SGS
	HCF4512B	◊ SGS
	HEF4512B	◊ Signetics
	883C4512B	◊† Sprague
	TC4512B	**Toshiba (3308)**
8-Channel Differential Multiplexer/Demultiplexer		
4XXX	MC14067BA	† Motorola
	MC14067BC	Motorola
8-Channel Multiplexer/Demultiplexer		
HC	M74HC4051	Mitsubishi
8-Channel, Three State		
HC	MM54HC251	† National
	MM74HC251	◊ National
8-Channel, Three-State		
AC	SN54AC11251	† TI
ACT	**74ACT11251**	**TI (3252)**
Cell	SN74251-Cell	° TI
HC	**GD74HC153**	**◊ GoldStar (2695)**
	GD74HC251	**GoldStar (2696)**
	GD74HC354	**GoldStar (2696)**
	GD74HC356	**GoldStar (2696)**
	LR74HC251	Sharp
	LR74HC354	Sharp
	LR74HC356	Sharp
	74HC153	**Signetics (3003)**
	74HC251	**Signetics (3003)**
	SN54HC251	† TI
	SN74HC251	TI
	SN74HC356	TI
	TC74HC153	**Toshiba (3307)**
	TC74HC251	**Toshiba (3307)**
HCT	**GD74HCT153**	**GoldStar (2695)**
	74HCT153	**Signetics (3003)**
	74HCT251	**Signetics (3003)**
8-Input		
AC	**74AC11151**	**TI (3252)**
8-Input with Latch, Three-State		
HC	MM54HC354	† National
	MM54HC356	† National
	MM74HC354	National
	MM74HC356	National
8-Input, Three-State		
AC	54AC251	† Fairchild
	74AC251	Fairchild
	CD54AC251	† GE/RCA
	CD74AC251	**GE/RCA (2629)**
	74AC11251	**TI (3252)**
	TC74AC251	**Toshiba (3307)**
	74AC251	Toshiba
ACT	CD54ACT251	† GE/RCA
	CD74ACT251	**GE/RCA (2629)**
HC	**CD54HC251**	**† GE/RCA (2632)**
	CD54HC354	**† GE/RCA (2632)**
	CD54HC356	**† GE/RCA (2632)**
	CD74HC251	**GE/RCA (2632)**
	CD74HC354	**◊ GE/RCA (2632)**
	CD74HC356	**◊ GE/RCA (2632)**
	HD74HC251	Hitachi
	HD74HC354	Hitachi
	HD74HC356	Hitachi
	MC54HC251	† Motorola
	MC54HC354	† Motorola
	MC54HC356	† Motorola
	MC74HC251	Motorola
	MC74HC354	Motorola
	MC74HC356	Motorola
	M74HC251	SGS
	M74HC354	SGS
	M74HC356	SGS
	74HC354	**Signetics (3003)**
	74HC356	**Signetics (3003)**
	TC74HC354	**Toshiba (3307)**
	TC74HC356	**Toshiba (3307)**
HCT	**CD54HCT251**	**† GE/RCA (2632)**
	CD54HCT354	**† GE/RCA (2632)**
8-Input, Three-State		
HCT		(Cont'd)
	CD54HCT356	**† GE/RCA (2632)**
	CD74HCT251	**GE/RCA (2632)**
	CD74HCT354	**GE/RCA (2632)**
	CD74HCT356	**GE/RCA (2632)**
	74HCT354	**Signetics (3003)**
	74HCT356	**Signetics (3003)**
10-Line to 4-Line Priority Encoder		
HC	MM54HC147	National
	MM74HC147	National
10-Line to 4-Line BCD Priority Encoder		
HC	MM54HC147	† National
	MM74HC147	National
16-Channel	TP4320A	TI
C	MM54C150	† National
	MM74C150	National
16-Channel Multiplexer/Demultiplexer		
4XXX	MC14097BA	† Motorola
	MC14097BC	Motorola
16-Channel, Three-State		
	MM72C19	◊† National
	MM82C19	National
8-Channel, Three-State		
HCT	**GD74HCT251**	**GoldStar (2696)**
8-Input, Three-State		
HCT	**GD74HCT354**	**GoldStar (2696)**
	GD74HCT356	**GoldStar (2696)**

Multivibrators

Function	Device	Source
Monostable/Astable, Retriggerable		
4XXX	F4047BC	Fairchild
	F4047BM	† Fairchild
	CD4047A	**† GE/RCA (2634)**
	CD4047AE	**GE/RCA (2634)**
	CD4047B	**† GE/RCA (2634)**
	CD4047BE	**GE/RCA (2634)**
	GD4047B	**† GoldStar (2697)**
	CD4047B	‡ Micrel
	CD4047BC	National
	CD4047BM	† National
	HCC4047B	† SGS
	HCF4047B	SGS
	HEF4047B	Signetics
	883C4047B	† Sprague
	TC4047B	**Toshiba (3308)**
Monostable,Schmitt Trigger Input		
AHCT	KS74AHCT121	Samsung
Dual Monostable		
C	MM54C221	† National
	MM74C221	National
HC	**CD54HC221**	**† GE/RCA (2632)**
	CD54HC423	**† GE/RCA (2632)**
	CD54HC4538	**† GE/RCA (2632)**
	CD74HC221	**GE/RCA (2632)**
	CD74HC423	**GE/RCA (2632)**
	CD74HC4538	**GE/RCA (2632)**
	GD74HC221	**GoldStar (2696)**
	GD74HC423	**GoldStar (2696)**
	HD74HC221	Hitachi
	HD74HC423	Hitachi
	HD74HC4538	Hitachi
	MC54HC4538	† Motorola
	MC74HC221A	Motorola
	MC74HC423A	Motorola
	MC74HC4538	Motorola
	MM54HC221A	† National

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Multivibrators (Cont'd)

Function	Device	Source	Line
Dual Monostable			
HC		(Cont'd)	
	MM54HC423A	† National	
	MM54HC4538	† National	
	MM74HC221A	National	
	MM74HC423A	National	
	MM74HC4538	National	5
	MN74HC221	◊ Panasonic	
	M74HC423	SGS	
	M74HC4538	SGS	
	74HC221	**Signetics (3003)**	
	74HC423	**Signetics (3003)**	10
	74HC4538	**Signetics (3003)**	
	TC74HC123	**Toshiba (3307)**	
	TC74HC221	**Toshiba (3307)**	
	TC74HC423	**◊ Toshiba (3307)**	
	TC74HC4538	**Toshiba (3307)**	15
	US74HC221	Universal	
HCT	**CD54HCT221**	**† GE/RCA (2632)**	
	CD54HCT423	**† GE/RCA (2632)**	
	CD54HCT4538	**† GE/RCA (2632)**	
	CD74HCT221	**GE/RCA (2632)**	20
	CD74HCT423	**GE/RCA (2632)**	
	CD74HCT4538	**GE/RCA (2632)**	
	GD74HCT221	**GoldStar (2696)**	
	GD74HCT423	**◊ GoldStar (2696)**	
	74HCT221	**Signetics (3003)**	25
	74HCT423	**Signetics (3003)**	
	74HCT4538	**Signetics (3003)**	
4XXX	**CD4538B**	**† GE/RCA (2634)**	
	CD4538BE	**GE/RCA (2634)**	
	GD4538B	**GoldStar (2698)**	30
	MC14538BA	† Motorola	
	MC14538BC	Motorola	
	CD4538BC	National	
	CD4538BM	† National	
	MN4538B	◊ Panasonic	35
	MN4538B	◊ Panasonic	
	HEF4538B	Signetics	
	TC4538B	**Toshiba (3308)**	
Dual Monostable Multivibrators			
HC	M74HC221	SGS	
	M74HC123	SGS	40
Dual Monostable, Retriggerable			
HC	**CD54HC123**	**◊† GE/RCA (2632)**	
	CD74HC123	**GE/RCA (2632)**	
	GD74HC123	**GoldStar (2695)**	
	HD74HC123	Hitachi	
	MM54HC123	† National	45
	MM54HC123A	† National	
	MM74HC123	National	
	MM74HC123A	National	
	MN74HC123	◊ Panasonic	
	74HC123	**◊ Signetics (3003)**	50
HCT	**CD54HCT123**	**† GE/RCA (2632)**	
	CD74HCT123	**GE/RCA (2632)**	
	GD74HCT123	**GoldStar (2695)**	
	74HCT123	**Signetics (3003)**	
4XXX	F4528BC	Fairchild	55
	F4528BM	† Fairchild	
	CD4098B	**‡ GE/RCA (2634)**	
	CD4098BE	**GE/RCA (2634)**	
	GD4528B	**GoldStar (2698)**	
	CD4528B	‡ Micrel	60
	MC14528BA	† Motorola	

(Continued)

Function	Device	Source	Line
Dual Monostable, Retriggerable			
4XXX		(Cont'd)	
	MC14528BC	Motorola	
	CD4528BC	National	
	CD4528BM	† National	
	HCC4098B	† SGS	65
	HCF4098B	◊ SGS	
	HEF4528B	Signetics	
	883C4528B	† Sprague	
	TC4528B	**Toshiba (3308)**	

Oscillators/Dividers

Function	Device	Source	Line
Divider, Divide by 5/6			
	RED5/6	**LSIComp (2867)**	70
Divider, Divide by 6			
	D6	LSIComp	
Divider, Divide by 50/60			
	RED50/60	**LSIComp (2867)**	
Divider, Divide by 60			
	D60	LSIComp	
Divider, Divide by 100/120			
	RED100/120	**◊ LSIComp (2867)**	
Divider, Divide by 300/360			
	RED300/360	**LSIComp (2867)**	75
Divider, Divide by 3000/3600			
	RED3000/3600	**LSIComp (2867)**	
Divider, Divide by 3600			
	D3600	LSIComp	
Oscillator/Divider (programmable timer)			
4XXX	**CD4541B**	**† GE/RCA (2634)**	
	CD4541BE	**GE/RCA (2634)**	
	MC14541BA	† Motorola	80
	MC14541BC	Motorola	
	HEF4541B	Signetics	
Oscillator/2^0 to 2^{24} Divider (programmable timer)			
4XXX	**CD4536B**	**† GE/RCA (2634)**	
	CD4536BE	**GE/RCA (2634)**	
	MC14536BA	† Motorola	85
	MC14536BC	Motorola	
Oscillator/2^8 Divider (2–5 V supplies)			
	ICM7209	**GE/Intersil (2670)**	
Oscillator/2^{12} and 2^{17} Divider, also 2^{17}x10 (0.01 and 0.1 output, 6.4 MHz crystal, 3–5 V supply)			
	ICM7207	GE/Intersil	
Oscillator/2^{12} and 2^{20} Divider, also 2^{20}x10 (0.1 and 1 second output with 5.2 MHz crystal, 5 V supply)			
	ICM7207A	GE/Intersil	
Oscillator/2^{12}, 2^{18}, 2^{21}, and 2^{17} Divider (also 2^{21}x60, 2–5 V supplies)	**ICM7213**	**GE/Intersil (2670)**	90
Oscillator/2^{16} Divider/Buffer			
	SCL5411	Sprague	
Oscillator/2^{17} Divider (2.5–6 V supplies)			
	MM53107	◊ National	
Oscillator/2^{21} Divider/Buffer			
4XXX	**CD4045A**	**† GE/RCA (2634)**	
	CD4045AE	**GE/RCA (2634)**	
	CD4045B	**† GE/RCA (2634)**	95
	CD4045BE	**GE/RCA (2634)**	
	GD4045B	**† GoldStar (2697)**	
	HCC4045B	† SGS	
	HCF4045B	◊ SGS	
	883C4445B	† Sprague	100
Oscillator/2^{23} Divider			
	SCL5419	Sprague	
Oscillator/2^{24} Divider			
4XXX	**GD4521B**	**GoldStar (2698)**	
	MC14521BA	† Motorola	
	MC14521BC	Motorola	
	HEF4521B	Signetics	105
	TC4521B	**Toshiba (3308)**	
Oscillator/16-Stage Divider			
	SCL5602	Sprague	
Oscillator/17-Stage Divider			
	SCL5415	Sprague	
	SCL5603	Sprague	
Oscillator/32768 Hz Divider			
	MM5368	National	110
	MM5369	National	

Shift Registers

Function	Device	Source	Line
Phase-Locked Loop with In-Lock Detector			
HC	**CD54HC7046**	**◊† GE/RCA (2632)**	
	CD74HC7046	**GE/RCA (2632)**	
HCT	**CD54HCT7046**	**◊† GE/RCA (2632)**	
	CD74HCT7046	**GE/RCA (2632)**	115
Pipeline Register (BiCMOS)			
BCT	**SN74BCT29818**	**TI (3249)**	
Shadow Register			
BCT	**SN74BCT819**	**TI (3249)**	
Shift Register, Dynamic, 200-Stage			
4XXX	**CD4062A**	**GE/RCA (2634)**	
Dual 4-Bit Serial In/Parallel Out			
HC	**CD54HC4015**	**† GE/RCA (2631)**	
	CD74HC4015	**GE/RCA (2631)**	120
	74HC4015	**Signetics (3003)**	
HCT	**CD54HCT4015**	**† GE/RCA (2631)**	
	CD74HCT4015	**GE/RCA (2631)**	
	74HCT4015	**Signetics (3003)**	
4XXX	F4015BC	Fairchild	125
	F4015BM	Fairchild	
	CD4015A	**GE/RCA (2634)**	
	CD4015AE	**GE/RCA (2634)**	
	CD4015B	**‡ GE/RCA (2634)**	
	CD4015BE	**GE/RCA (2634)**	130
	GD4015B	**‡ GoldStar (2697)**	
	CD4015A	‡ Micrel	
	CD4015B	‡ Micrel	
	MC14015BA	Motorola	
	MC14015BC	Motorola	135
	CD4015AC	National	
	CD4015BC	National	
	CD4015BM	National	
	MN4015B	◊ Panasonic	
	HCC4015B	SGS	140
	HCF4015B	◊ SGS	
	HEF4015B	Signetics	
	883C4015B	† Sprague	
	TC4015B	**Toshiba (3308)**	
Dual 16-Bit Static	HSSR0321	† Hughes	145
	HSSR0351	◊† Hughes	
Dual 64-Bit Static			
4XXX	**CD4517B**	**† GE/RCA (2634)**	
	CD4517BE	**GE/RCA (2634)**	
	MC14517BA	† Motorola	
	MC14517BC	Motorola	150
	HCF4517B	† SGS	
	HEF4517B	◊ Signetics	
	883C4517B	† Sprague	
5XXX	**TC5050**	**Toshiba (3308)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—CMOS (Cont'd)

Shift Registers (Cont'd)

Function	Device	Source	Line
Quad Dual-Port Register			
FCT	**IDT54AHCT399**	† **IDT (2811)**	
	IDT54FCT399	† **IDT (2808, 2810)**	
	IDT54FCT399A	† **IDT (2808, 2810)**	
	IDT74FCT399	**IDT (2808, 2810)**	
	IDT74FCT399A	**IDT (2808, 2810)**	5
Quad 64-Bit Static, Separate Clock			
4XXX	F4731BC	◊ Fairchild	
	F4731BM	◊† Fairchild	
	GD4731B	**GoldStar (2698)**	
	HEF4731B	Signetics	
	HEF4731V	† Signetics	10
Octal D-Type Register			
BCT	**SN74BCT534**	**TI (3249)**	
Octal Register with Readback			
AHCT	KS54AHCT794	† Samsung	
	KS74AHCT794	Samsung	
4-Bit Bidirectional			
AC	SN54AC11194	† TI	
	74AC11194	**TI (3252)**	15
C	MM54C95	National	
	MM74C95	◊† National	
Cell	SN74194A-Cell	° TI	
HC	**CD54HC194**	† **GE/RCA (2631)**	
	CD74HC194	**GE/RCA (2631)**	20
	GD74HC194	**GoldStar (2696)**	
	HD74HC194	Hitachi	
	MC54HC194	† Motorola	
	MC74HC194	◊ Motorola	
	MM54HC194	† National	25
	MM74HC194	National	
	M74HC194	SGS	
	LR74HC194	Sharp	
	74HC194	**Signetics (3003)**	
	SN54HC194	◊† TI	30
	SN74HC194	TI	
	TC74HC194	**Toshiba (3307)**	
	US74HC194	Universal	
HCT	**CD54HCT194**	† **GE/RCA (2631)**	
	CD74HCT194	**GE/RCA (2631)**	35
	KS74HCTLS193	Samsung	
	74HCT194	◊ **Signetics (3003)**	
4XXX	F40194BC	Fairchild	
	F40194BM	† Fairchild	
	GD40194B	◊ **GoldStar (2698)**	40
	MC14194BA	† Motorola	
	MC14194BC	Motorola	
	HCC40194B	† SGS	
	HCF40194B	SGS	
	TC40194B	Toshiba	45
4-Bit Bidirectional Universal, Three State			
HC	**CD54HC40104**	† **GE/RCA (2631)**	
	CD74HC40104	◊ **GE/RCA (2631)**	
	74HC40104	**Signetics (3003)**	
HCT	**CD54HCT40104**	† **GE/RCA (2631)**	
	CD74HCT40104	◊ **GE/RCA (2631)**	50
	74HCT40104	**Signetics (3003)**	
4-Bit Directional			
ACT	**74ACT11194**	**TI (3252)**	

Function	Device	Source	Line
4-Bit Parallel In/Parallel Out			
4XXX	F4035BC	Fairchild	
	F4035BM	† Fairchild	
	CD40104B	**GE/RCA (2634)**	55
	CD40194B	**GE/RCA (2634)**	
	CD4035A	† **GE/RCA (2634)**	
	CD4035AE	**GE/RCA (2634)**	
	CD4035B	† **GE/RCA (2634)**	
	CD4035BE	**GE/RCA (2634)**	60
	GD4035B	† **GoldStar (2697)**	
	CD4035A	‡ Micrel	
	CD4035B	‡ Micrel	
	MC14035BA	† Motorola	
	MC14035BC	Motorola	65
	CD4035BC	National	
	CD4035BM	† National	
	MN4035B	◊† Panasonic	
	HCC40104B	† SGS	
	HCC4035B	† SGS	70
	HCF40104B	◊ SGS	
	HCF4035B	◊ SGS	
	HEF40194B	Signetics	
	HEF4035B	Signetics	
	883C4035B	† Sprague	75
	TC40104B	**Toshiba (3308)**	
	TC4035B	Toshiba	
4-Bit Parallel with Clear			
C	MM54C195	† National	
	MM74C195	National	
Cell	SN74195A-Cell	° TI	80
HC	**CD54HC195**	† **GE/RCA (2631)**	
	CD74HC195	**GE/RCA (2631)**	
	GD74HC195	**GoldStar (2696)**	
	HD74HC195	Hitachi	
	HD74HC95	Hitachi	85
	MC54HC195	† Motorola	
	MC74HC195	◊ Motorola	
	MM54HC195	† National	
	MM74HC195	National	
	M74HC195	SGS	90
	LR74HC195	Sharp	
	74HC195	**Signetics (3003)**	
	SN54HC195	◊† TI	
	SN74HC195	TI	
	TC74HC195	**Toshiba (3307)**	95
	US74HC195	Universal	
HCT	**CD54HCT195**	† **GE/RCA (2631)**	
	CD74HCT195	**GE/RCA (2631)**	
	74HCT195	◊ **Signetics (3003)**	
4XXX	F40195BC	Fairchild	100
	F40195BM	† Fairchild	
	GD40195B	◊ **GoldStar (2698)**	
	CD40195BC	National	
	CD40195BM	† National	
	HEF40195B	Signetics	105
8-Bit (asynchronous parallel or synchronous serial operation) Parallel In/Serial Out			
4XXX	F4021BC	Fairchild	
	F4021BM	† Fairchild	
	CD4021A	† **GE/RCA (2634)**	
	CD4021AE	**GE/RCA (2634)**	
	CD4021B	‡ **GE/RCA (2634)**	110
	CD4021BE	**GE/RCA (2634)**	
	GD4021B	‡ **GoldStar (2697)**	
	MC14021BA	† Motorola	
	MC14021BC	Motorola	
	CD4021A	National	115
	CD4021BC	National	

(Continued)

Function	Device	Source	Line
8-Bit (asynchronous parallel or synchronous serial operation) Parallel In/Serial Out			
4XXX		(Cont'd)	
	CD4021BM	† National	
	HCC4021B	† SGS	
	HCF4021B	SGS	
	HEF4021B	Signetics	120
	883C4021B	† Sprague	
	TC4021B	**Toshiba (3308)**	
8-Bit Bidirectional Parallel/Serial Input/Output Bus Register			
4XXX	F4034BC	Fairchild	
	F4034BM	† Fairchild	
	CD4034A	† **GE/RCA (2634, 2636)**	125
	CD4034AE	**GE/RCA (2634, 2636)**	
	CD4034B	† **GE/RCA (2634, 2636)**	
	CD4034BE	**GE/RCA (2634, 2636)**	
	GD4034B	† **GoldStar (2697)**	
	CD4034B	‡ Micrel	130
	MC14034BA	† Motorola	
	MC14034BC	Motorola	
	CD4034BC	National	
	CD4034BM	† National	
	HCC4034B	† SGS	135
	HCF4034B	SGS	
	883C4034B	† Sprague	
	TC4034B	**Toshiba (3308)**	
8-Bit Bus Interface Register, Three State			
AHCT	KS54AHCT825	† Samsung	
	KS54AHCT826	† Samsung	140
	KS74AHCT825	Samsung	
	KS74AHCT826	Samsung	
BCT	SN54BCT29825	† TI	
	SN54BCT29826	† TI	
8-Bit Bus Register, Shift and Store			
HC	**CD54HC4094**	**GE/RCA (2631)**	145
	CD74HC4094	**GE/RCA (2631)**	
	74HC4094	**Signetics (3003)**	
	TC74HC4094	**Toshiba (3307)**	
HCT	**CD54HCT4094**	† **GE/RCA (2631)**	
	CD74HCT4094	**GE/RCA (2631)**	150
	74HCT4094	**Signetics (3003)**	
4XXX	**CD4094B**	† **GE/RCA (2634)**	
	CD4094BE	**GE/RCA (2634)**	
	CD4094B	‡ Micrel	
	MC14094BA	† Motorola	155
	MC14094BC	Motorola	
	HCC4094B	† SGS	
	HCF4094B	◊ SGS	
	HEF4094B	Signetics	
	883C4094B	† Sprague	160
	TC4094B	**Toshiba (3308)**	
40HXXX	LR40H194	Sharp	
	TC40H194	Toshiba	
8-Bit Parallel In/Serial Out			
AHCT	KS74AHCT165	Samsung	
C	MM54C165	† National	165
	MM74C165	National	
Cell	SN74165-Cell	° TI	
HC	**CD54HC165**	† **GE/RCA (2631)**	
	CD74HC165	**GE/RCA (2631)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Shift Registers (Cont'd)

Function	Device	Source	Line
8-Bit Parallel In/Serial Out			
HC		(Cont'd)	
	GD74HC165	**GoldStar (2695)**	
	GD74HC166	**GoldStar (2695)**	
	HD74HC165	Hitachi	
	MC54HC165	† Motorola	
	MC74HC165	Motorola	5
	MM54HC165	† National	
	MM74HC165	National	
	M74HC165	SGS	
	LR74HC165	Sharp	
	74HC165	**Signetics (3003)**	10
	74HC166	**Signetics (3003)**	
	SN54HC165	† TI	
	SN74HC165	TI	
	TC74HC165	**◊ Toshiba (3307)**	
	US74HC165	Universal	15
HCT	**CD54HCT165**	**† GE/RCA (2631)**	
	CD74HCT165	**GE/RCA (2631)**	
	GD74HCT165	◊ GoldStar	
	GD74HCT166	**◊ GoldStar (2695)**	
	KS74HCTLS165	Samsung	20
	74HCT165	**Signetics (3003)**	
	74HCT166	**Signetics (3003)**	
40HXXX	TC40H166	Toshiba	
8-Bit Parallel with serial protocol channel			
	IDT49FCT818	**◊ IDT (2808)**	
8-Bit Parallel-In, Serial-Out Register with Input Latches			
HC	**CD54HC597**	**† GE/RCA (2631)**	25
	CD74HC597	**◊ GE/RCA (2631)**	
	MM54HC597	† National	
	MM74HC597	National	
	74HC597	**Signetics (3003)**	
HCT	**CD54HCT597**	**◊† GE/RCA (2631)**	30
	CD74HCT597	**◊ GE/RCA (2631)**	
	74HCT597	**Signetics (3003)**	
8-Bit Serial In/Parallel Out			
AC	CD54AC164	† GE/RCA	
	CD74AC164	**GE/RCA (2629)**	
ACT	CD54ACT164	† GE/RCA	35
	CD74ACT164	**GE/RCA (2629)**	
AHCT	KS74AHCT164	◊ Samsung	
C	MM54C164	† National	
	MM74C164	National	
Cell	SN74164-Cell	° TI	40
HC	**CD54HC164**	**† GE/RCA (2631)**	
	CD74HC164	**GE/RCA (2631)**	
	GD74HC164	**GoldStar (2695)**	
	HD74HC164	Hitachi	
	MC54HC164	† Motorola	45
	MC74HC164	Motorola	
	MM54HC164	† National	
	MM74HC164	National	
	M74HC164	SGS	
	LR74HC164	Sharp	50
	74HC164	**Signetics (3003)**	
	SN54HC164	† TI	
	SN74HC164	TI	
	TC74HC164	**◊ Toshiba (3307)**	
	US74HC164	Universal	55
HCT	**CD54HCT164**	**† GE/RCA (2631)**	
	CD74HCT164	**GE/RCA (2631)**	
	GD74HCT164	**◊ GoldStar (2695)**	
	MM54HCT164	† National	
	MM74HCT164	National	60

(Continued)

Function	Device	Source	Line
8-Bit Serial In/Parallel Out			
HCT		(Cont'd)	
	KS74HCTLS164	Samsung	
	74HCT164	**Signetics (3003)**	
40HXXX	LR40H164	Sharp	
	TC40H164	Toshiba	
8-Bit, Serial In, Serial Out			
HC	HD74HC91	Hitachi	65
8-Bit Serial/Parallel-In, Serial Out			
AHCT	KS74AHCT166	Samsung	
Cell	SN74166-Cell	° TI	
HC	**CD54HC166**	**† GE/RCA (2631)**	
	CD74HC166	**GE/RCA (2631)**	
	GD74HC322	**GoldStar (2696)**	70
	HD74HC166	Hitachi	
	MM54HC166	† National	
	MM74HC166	National	
	M74HC166	SGS	
	SN54HC166	† TI	75
	SN74HC166	◊ TI	
	TC74HC166	**◊ Toshiba (3307)**	
HCT	**CD54HCT166**	**† GE/RCA (2631)**	
	CD74HCT166	**GE/RCA (2631)**	
	GD74HCT322	**GoldStar (2696)**	80
	MM54HCT166	† National	
	MM74HCT166	National	
	KS74HCTLS166	Samsung	
8-Bit Serial/Parallel-In, Serial-Out Register with Input Latches			
AHCT	KS54AHCT597	† Samsung	
	KS74AHCT597	Samsung	85
HC	HD74HC597	Hitachi	
	MC54HC597	† Motorola	
	MC74HC597	Motorola	
	M74HC597	SGS	
	LR74HC597	Sharp	90
	TC74HC597	**Toshiba (3307)**	
8-Bit Serial-In, Parallel-Out Register with Output Latches			
AHCT	KS54AHCT595	† Samsung	
	KS54AHCT596	† Samsung	
	KS74AHCT595	Samsung	
	KS74AHCT596	Samsung	95
HC	HD74HC323	Hitachi	
	HD74HC595	Hitachi	
	MC54HC595	† Motorola	
	MC74HC595	Motorola	
	MM54HC595	† National	100
	MM74HC595	National	
	M74HC595	SGS	
	LR74HC595	Sharp	
	SN54HC595	† TI	
	SN74HC594	TI	105
	SN74HC595	TI	
	TC74HC323	**Toshiba (3307)**	
	TC74HC595	**Toshiba (3307)**	
8-Bit Synchronous Parallel In/Serial Out			
HC	HD74HC589	Hitachi	
	MC54HC589	† Motorola	110
	MC74HC589	Motorola	
	MM54HC589	† National	
	MM74HC589	National	
4XXX	F4014BC	Fairchild	
	F4014BM	† Fairchild	115
	CD4014A	**† GE/RCA (2634)**	
	CD4014AE	**GE/RCA (2634)**	
	CD4014B	**‡ GE/RCA (2634)**	

(Continued)

Function	Device	Source	Line
8-Bit Synchronous Parallel In/Serial Out			
4XXX		(Cont'd)	
	CD4014BE	**GE/RCA (2634)**	
	GD4014B	**‡ GoldStar (2697)**	120
	CD4014A	‡ Micrel	
	CD4014B	‡ Micrel	
	MC14014BA	† Motorola	
	MC14014BC	Motorola	
	CD4014A	National	125
	CD4014BC	National	
	CD4014BM	† National	
	HCC4014B	† SGS	
	HCF4014B	◊ SGS	
	HEF4014B	Signetics	130
	883C4014B	† Sprague	
	TC4014B	**Toshiba (3308)**	
8-Bit Universal, Three-State with Synchronous Reset			
AC	CD54AC323	† GE/RCA	
	CD74AC323	**GE/RCA (2629)**	
ACT	CD54ACT323	† GE/RCA	135
	CD74ACT323	**GE/RCA (2629)**	
8-Bit, Three-State			
AC	CD54AC299	† GE/RCA	
	CD74AC299	**GE/RCA (2629)**	
	74AC11299	**TI (3253)**	
	74AC11323	**TI (3253)**	140
	TC74AC299	**Toshiba (3307)**	
ACT	CD54ACT299	† GE/RCA	
	CD74ACT299	GE/RCA	
	54ACT299	† Motorola	
	SN54ACT11299	◊† TI	145
	74ACT11299	**TI (3253)**	
AHCT	KS74AHCT299	† Samsung	
FCT	**IDT54FCT299**	**◊†**	
		IDT (2808)	
	IDT54FCT299A	**◊†**	
		IDT (2808)	
	IDT74FCT299	**◊ IDT (2808)**	150
	IDT74FCT299A	**◊ IDT (2808)**	
HC	**CD54HC299**	**† GE/RCA (2631)**	
	CD74HC299	**GE/RCA (2631)**	
	GD74HC299	**GoldStar (2696)**	
	HD74HC299	◊ Hitachi	155
	IDT54AHCT299	**◊†**	
		IDT (2811)	
	MC54HC299	† Motorola	
	MC74HC299	Motorola	
	MM54HC299	† National	
	MM74HC299	National	160
	M74HC299	SGS	
	LR74HC299	Sharp	
	74HC299	**Signetics (3003)**	
	SN74HC299	TI	
	TC74HC299	**Toshiba (3307)**	165
HCT	**CD54HCT299**	**† GE/RCA (2631)**	
	CD74HCT299	**GE/RCA (2631)**	
	GD74HCT299	**GoldStar (2696)**	
	MM54HCT299	† National	
	MM74HCT299	National	170
	KS74HCTLS299	† Samsung	
	74HCT299	**Signetics (3003)**	
8-Bit, Three-State, Synchronous Clear			
AC	**TC74AC323**	**Toshiba (3307)**	175
HC	MM54HC245	† National	
	MM54HC323	† National	
	MM74HC245	◊ National	
	MM74HC323	National	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—CMOS (Cont'd)

Shift Registers (Cont'd)

Function	Device	Source	Line
9-Bit Bus Interface Register,			
BCT	SN54BCT29824	† TI	
9-Bit Bus Interface Register, Three State			
AHCT	KS54AHCT823	† Samsung	
	KS54AHCT824	† Samsung	
	KS74AHCT823	Samsung	
	KS74AHCT824	Samsung	5
9-Bit Bus Interface Register, Three-State			
AC	SN54BCT29823	† TI	
10-Bit Bus Interface Register, Three State			
AHCT	KS54AHCT821	† Samsung	
	KS54AHCT822	† Samsung	
	KS74AHCT821	Samsung	
	KS74AHCT822	Samsung	10
10-Bit Bus Interface Register, Three-State			
AC	SN54BCT29822	† TI	
BCT	SN54BCT29821	† TI	
16-Bit Serial In/Parallel Out			
HC	HD74HC674	Hitachi	
16-Bit Serial In/Parallel Out with Stored Parallel Output			
HC	HD74HC673	Hitachi	
16-Bit with Serial Protocol Channel (SPC)			
FCT	**IDT49FCT618**	**IDT (2808)**	15
18-Bit Static (4, 5, 8, 9, 10, 12, 13, 14, 16, 17, 18-bits)			
4XXX	F4006BC	Fairchild	
	F4006BM	† Fairchild	
	CD4006A	**† GE/RCA (2634)**	
	CD4006AE	**GE/RCA (2634)**	
	CD4006B	**† GE/RCA (2634)**	20
	CD4006BE	**GE/RCA (2634)**	
	GD4006B	**† GoldStar (2697)**	
	CD4006A	‡ Micrel	
	MC14006BA	† Motorola	
	MC14006BC	Motorola	25
	CD4006A	National	
	CD4006BC	National	
	CD4006BM	† National	
	HCC4006B	† SGS	
	HCF4006B	◊ SGS	30
	HEF4006B	Signetics	
	883C4006B	† Sprague	
	TC4006B	**Toshiba (3308)**	
30-Bit Static			
4XXX	MD4330B	† Mitel	
	MV4330	Plessey	35
32-Bit Bidirectional Serial In/Serial Out			
4XXX	**CD40100B**	**† GE/RCA (2634)**	
	CD40100BE	**GE/RCA (2634)**	
	HCC40100B	† SGS	
	HCF40100B	◊ SGS	
32-Bit Serial In/Parallel Out			
4XXX	MD4332B	† Mitel	40
	MV4332	Plessey	
64-Bit Static	MS612	RTC	
4XXX	F4031BC	Fairchild	
	F4031BM	† Fairchild	
	CD4031A	**† GE/RCA (2634)**	45
	CD4031AE	**GE/RCA (2634)**	
	CD4031B	**† GE/RCA (2634)**	
	CD4031BE	**GE/RCA (2634)**	
	GD4031B	† GoldStar	

(Continued)

Function	Device	Source	Line
64-Bit Static			
4XXX		(Cont'd)	
	CD4031A	‡ Micrel	50
	CD4031B	‡ Micrel	
	CD4031BC	National	
	CD4031BM	† National	
	HCC4031B	† SGS	
	HCF4031B	SGS	55
	HEF4031B	Signetics	
64-Bit Variable Length			
4XXX	F4557BC	† Fairchild	
	F4557BM	Fairchild	
	GD4557B	**GoldStar (2698)**	
	MC14557BA	◊† Motorola	60
	MC14557BC	◊ Motorola	
	HEF4557B	Signetics	
96-Bit Variable Length Elastic			
	MS618	† RTC	
128-Bit Static with Control Logic			
	MS625	† RTC	
128-Bit Static (16-bit increments)			
4XXX	MC14562BA	◊† Motorola	65
	MC14562BC	◊ Motorola	
4-Bit Bidirectional			
HCT	**GD74HCT194**	**GoldStar (2696)**	
4-Bit Parallel with Clear			
HCT	**GD74HCT195**	**GoldStar (2696)**	
8-Bit Serial In, Parallel-Out Register with Output Latches			
ACT	**74ACT11323**	**TI (3253)**	
8-Bit with Input Latches			
HC	74HC7597	Signetics	70
HCT	74HCT7597	Signetics	

Translators

Function	Device	Source	Line
Quad Level Shifter (low to high voltage)			
4XXX	**CD40109B**	**† GE/RCA (2633)**	
	CD40109BE	**GE/RCA (2633)**	
	HCC40109B	† SGS	
	HCF40109B	◊ SGS	75
Quad Voltage Up Level Translator			
4XXX	F4104BE	Fairchild	
	F4104BM	† Fairchild	
	GD4104B	**GoldStar (2697)**	
	HEF4104B	Signetics	
Hex Level Shifter (CMOS or TTL to CMOS)			
4XXX	MC14504BA	† Motorola	80
	MC14504BC	Motorola	
Hex Level Shifter (low-to-high voltage)			
5XXX	**TC5020B**	**Toshiba (3308)**	
Octal Bidirectional Level Shifter (CMOS/TTL)			
	HS3374RH	**‡ Harris (2709)**	
4XXX	**CD40115**	**GE/RCA (2633)**	
	CD40116	**GE/RCA (2633)**	85
Octal Bus Transceiver with Parity, Three State			
AHCT	KS54AHCT658	† Samsung	
	KS54AHCT659	† Samsung	
	KS74AHCT658	◊ Samsung	
	KS74AHCT659	◊ Samsung	
Octal Bus Transceiver, Three State, Non-Inverting			
AC	CD54AC245	† GE/RCA	90
	CD74AC245	**GE/RCA (2629)**	

Miscellaneous

Function	Device	Source	Line
Microprocessor, 1-Bit, Industrial Control Unit			
4XXX	MC14500B	Motorola	
Addressable Asynchronous Receiver/Transmitter			
4XXX	MC14469	◊ Motorola	
Asynchronous Serial Manchester Adapter			
	HD6408-9	**Harris (2735, 4249)**	
Cell	**HD6408-Cell**	**° Harris (2735, 4249)**	95
Bit Rate Generator			
Cell	**HD4702-Cell**	**° Harris (2703, 2735, 2768, 4249)**	
4XXX	F4702BC	Fairchild	
	F4702BM	† Fairchild	
	GD4702B	**GoldStar (2698)**	
	HD4702-2	**† Harris (2703, 2735, 2768, 4249)**	100
	MC14411	Motorola	
Bus Interface Latch			
FCT	**IDT54FCT843A**	**◊† IDT (2809)**	
	IDT74FCT843A	**◊ IDT (2809)**	
Bus Interface Register, Non-Inverting			
FCT	**IDT54FCT823A**	**◊† IDT (2809)**	
	IDT74FCT823A	**◊ IDT (2809)**	105
Bus Transceiver, Bi-directional			
FCT	**IDT54FCT863A**	**◊† IDT (2809)**	
	IDT74FCT863A	**◊ IDT (2810)**	
Code Identification System			
	HD15530-2	**† Harris (2703, 2736, 2768, 4249)**	
	HD15530-9	**Harris (2703, 2736, 2768, 4249)**	
	HD15531-2	**† Harris (2703, 2736, 4249)**	110
	HD15531-9	**Harris (2703, 2736, 4249)**	
	CT15530	◊ Marconi	
Cell	**HD15530-Cell**	**° Harris (2703, 2736, 2768, 4249)**	
	HD15531-Cell	**° Harris (2703, 2736, 4249)**	
Color Look-Up Table, 50 MHz			
	IMSG171	**Inmos (2795)**	115
Color Look-Up Table, 65 MHz			
	IMSG176	**Inmos (2796)**	
Comparator, Linear, Quad			
C	MM54C909	† National	
	MM74C909	National	
Comparator Phase			
C	MM74C932	National	
Comparator, Dual with Dual Op Amp			
4XXX	**MC14574**	**◊ Motorola (2925)**	120
Comparator, Quad			
4XXX	**MC14575**	**◊ Motorola (2925)**	
Controller, 16-Bit Microprogrammable			
ACT	**SN74ACT29116**	**◊ TI (3226)**	
Delay Line, 5 Taps			
	DS1000	Dallas	
Diagnostic Scan Register			
HCT	P29PCT818	† Performance	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Miscellaneous (Cont'd)

Function	Device	Source	Line
Digital FIR Filter Controller (TTL Compatible)			
C	**CA29C128**	**Calmos (2553)**	
Direction Discriminator			
HCT	THCT2000	TI	
Encoder			
40HXXX	TC40H147	◊ Toshiba	
	TC40H148	◊ Toshiba	
Filter Controller, Finite Impulse Response			
	ISP128M	† GE/Intersil	5
	ISP9128	**GE/Intersil (2662)**	
Floating Point Multiplier (32/34-bit)			
	TMC3201	TRW-LSI	
Heart Rate Monitor			
	HLSS0533	Hughes	
Identity Comparator, 8-Bit			
ACT	SN54ACT11521 †	TI	
Latched Transceiver			
AC	**74AC11854**	**TI (3253)**	10
ACT	**74ACT11853**	**TI (3253)**	
	74ACT11854	**TI (3253)**	
AC	**74AC11853**	**TI (3253)**	
Microsequencer 16-Bit			
ACT	**SN74ACT8818**	**TI (3224)**	
Multifunction Circuit, 6-Section			
HC	SN74HC7008	TI	15
Multilevel Pipeline Register			
	LPR520C	† LogicDev	
	LPR520M	† LogicDev	
	LPR521C	† LogicDev	
	LPR521M	† LogicDev	
	L29C520C	LogicDev	20
	L29C520M	† LogicDev	
	L29C521C	LogicDev	
	L29C521M	† LogicDev	
Numerically Controlled Oscillator			
	ST1172A	**STI (3207)**	
Op Amp, Linear, Quad			
4XXX	MC14573	◊ Motorola	25
Parity Bus Transceiver, Inverting (BiCMOS)			
BCT	**SN74BCT29854**	**TI (3249)**	
Parity Bus Transceiver, Non-Inverting			
BCT	SN54BCT29833 †	TI	
Parity Bus Transceivers, Inverting (BiCMOS)			
BCT	**SN74BCT29834**	**TI (3249)**	
Parity Bus Transceivers, Non-Inverting (BiCMOS)			
BCT	**SN74BCT29833**	**TI (3249)**	
	SN74BCT29853	**TI (3249)**	30
PC Mouse Controller			
	5720	**Commodore (2555)**	
Phase-Locked Loop			
HC	**CD54HC297**	**† GE/RCA (2632)**	
	CD54HC4046	**† GE/RCA (2632)**	
	CD74HC297	**GE/RCA (2632)**	
	CD74HC4046	**GE/RCA (2632)**	35
	MM54HC4046	◊† National	
	MM74HC4046	◊ National	
	74HC4046	**Signetics (3003)**	
HCT	**CD54HCT297**	**† GE/RCA (2632)**	
	CD54HCT4046	**† GE/RCA (2632)**	40

(Continued)

Function	Device	Source	Line
Phase-Locked Loop			
HCT		(Cont'd)	
	CD74HCT297	**GE/RCA (2632)**	
	CD74HCT4046	**GE/RCA (2632)**	
	74HCT4046A	**Signetics (3003)**	
4XXX	F4046BC	Fairchild	
	F4046BM	† Fairchild	45
	CD4046A	**† GE/RCA (2635)**	
	CD4046AE	**GE/RCA (2635)**	
	CD4046B	**† GE/RCA (2635)**	
	CD4046BE	**GE/RCA (2635)**	
	GD4046B	**† GoldStar (2697)**	50
	CD4046B	‡ Micrel	
	MC14046BA	◊† Motorola	
	MC14046BC	◊ Motorola	
	CD4046BC	National	
	CD4046BM	† National	55
	HCC4046B	† SGS	
	HCF4046B	SGS	
	HEF4046B	Signetics	
	883C4046B	† Sprague	
	883C4446B	† Sprague	60
Pipeline Register			
AC	**74AC11818**	**TI (3253)**	
	74AC11819	**TI (3253)**	
ACT	**74ACT11818**	**TI (3253)**	
	74ACT11819	**TI (3253)**	
BCT	SN54BCT29818 †	TI	65
Programmable Counter/Timer			
	GD4722B	**GoldStar (2698)**	
Programmable Digital Delay Timer			
	LS7210	**LSIComp (2867)**	
Programmable Frequency Divider/Digital Timer			
HC	MC74HC292	Motorola	
	MC74HC294	Motorola	
	MM54HC292	† National	70
	MM54HC294	† National	
	MM74HC292	National	
	MM74HC294	National	
	M74HC292	SGS	
	M74HC294	SGS	75
Programmable Frequency Dividers/Timers			
HC	HD74HC292	Hitachi	
	HD74HC294	Hitachi	
	TC74HC7292	**Toshiba (3307)**	
	TC74HC7294	**Toshiba (3307)**	
Rate Multiplier, Binary			
4XXX	**CD4089B**	**† GE/RCA (2636)**	80
	CD4089BE	**GE/RCA (2636)**	
	CD4089BC	National	
	CD4089BM	† National	
	HCC4089B	† SGS	
	HCF4089B	SGS	85
Rate Multiplier, BCD			
4XXX	**CD4527B**	**† GE/RCA (2636)**	
	CD4527BE	**GE/RCA (2636)**	
	GD4527B	**GoldStar (2698)**	
	MC14527BA	† Motorola	
	MC14527BC	Motorola	90
	CD4527BC	National	
	CD4527BM	† National	
	HCC4527B	† SGS	
	HCF4527B	SGS	
	HEF4527B	Signetics	
	883C4527B	† Sprague	95
	TC4527B	**Toshiba (3308)**	

Function	Device	Source	Line
Register File, 4x4, Three-State			
HC	**GD74HC670**	**◊ GoldStar (2696)**	
	HD74HC670	Hitachi	
Registered Transceiver			
AC	**74AC11833**	**TI (3253)**	100
	74AC11834	**TI (3253)**	
ACT	**74ACT11833**	**TI (3253)**	
	74ACT11834	**TI (3253)**	
Remote Control Manchester Encoder/Decoder with programmable address encoding/decoding			
	DC7	Supertex	
	ED11	Supertex	105
	ED15	Supertex	
	ED5	Supertex	
	ED9	Supertex	
Serial Manchester Encoder-Decoder			
	HD6409	**◊ Harris (2735, 2768, 4249)**	
Cell	**HD6409-Cell**	**° Harris (2735, 2768, 4249)**	110
Successive Approximation Register			
C	MM54C905	‡ Micrel	
	MM54C905	† National	
	MM74C905	National	
4XXX	**MC14559BA**	**◊† Motorola (2937)**	
	MC14559BC	**◊ Motorola (2937)**	115
Successive Approximation Register, Cascadable			
4XXX	**MC14549BA**	**† Motorola (2937)**	
	MC14549BC	**Motorola (2937)**	
Switch Eliminator (logic to replace manual digital switches)	DS1223	Dallas	
	DS1290	Dallas	
	DS1291	Dallas	120
	DS1292	Dallas	
	DS1293	Dallas	
Terminator, Dual Programmable 4-Bit			
4XXX	**TC40117B**	**Toshiba (3308)**	
Timekeeper, Internal Lithium Source			
	DS1216E	Dallas	
Timer			
5XXX	**TC5043**	**Toshiba (3308)**	125
Timer/Divider, Programmable			
HC	**TC74HC7292**	**Toshiba (3307)**	
	TC74HC7294	**Toshiba (3307)**	
Timer, Programmable			
HC	MC54HC9000	† Motorola	
	MC74HC9000	Motorola	
	MC74HC9000	Motorola	130
Timer, 6-Bit Universal, to "595999"			
5XXX	**TC5072**	**Toshiba (3308)**	
Timer, 6-Bit Universal, to "995959"			
5XXX	**TC5071**	**Toshiba (3308)**	
Timer, 6-Digit Universal			
5XXX	**TC5070**	**Toshiba (3308)**	
	TC5071	**Toshiba (3308)**	
	TC5072	**Toshiba (3308)**	135
Touch Switch	TC9130	Toshiba	
	TC9135	Toshiba	
Video-Speed Shift Register (250 MHz)			
	679501	MMI	
	679502	MMI	
Dual D-Type Flip-Flop, 2-Input NAND/NOR Combination			
HC	SN74HC7074	TI	140

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL–CMOS (Cont'd)

Miscellaneous (Cont'd)

Function	Device	Source	Line
Dual Differential Line Driver			
	MM78C30	‡ Micrel	
	MM78C30	† National	
	MM88C30	National	
Dual Precision Monostable Multivibrator			
HC	M74HC4538	Mitsubishi	
Dual Schmitt Trigger			
AC	**74AC11013**	**TI (3252)**	5
4XXX	F4583BC	Fairchild	
	F4583BM	† Fairchild	
	GD4583B	**GoldStar (2698)**	
	MC14583BA	† Motorola	
	MC14583BC	Motorola	10
	TC4583B	**Toshiba (3308)**	
Dual 4-Bit Terminator			
4XXX	**CD40117B**	**GE/RCA (2633)**	
Dual 4-Channel Analog Multiplexer/Demultiplexer			
HC	**74HC4052**	◊ **Signetics (3003)**	
HCT	**74HCT4052**	**Signetics (3003)**	
Dual 4-Input NAND Schmitt-Trigger			
AHCT	KS74AHCT13	◊ Samsung	15
Triple 2-Channel Analog Multiplexer/Demultiplexer			
HC	**74HC4053**	◊ **Signetics (3003)**	
HCT	**74HCT4053**	**Signetics (3003)**	
Quad Bilateral Switch			
50HXXX	TC50H4066	Toshiba	
Quad Bus Transceiver, Tridirectional			
HC	HD74HC442	Hitachi	
	HD74HC443	Hitachi	20
	HD74HC444	Hitachi	
Quad Bus Transceiver, Three-State, Inverting			
HC	**CD54HC242**	**† GE/RCA (2631)**	
	CD74HC242	**GE/RCA (2631)**	
	GD74HC242	**GoldStar (2696)**	
	HD74HC242	Hitachi	25
	MC54HC242	† Motorola	
	MC74HC242	Motorola	
	MM54HC242	† National	
	MM74HC242	◊ National	
	MN74HC242	Panasonic	30
	M74HC242	SGS	
	M74HC243	SGS	
	LR74HC242	Sharp	
	74HC242	**Signetics (3003)**	
	SN54HC242	† TI	35
	SN74HC242	TI	
	TC74HC242	**Toshiba (3307)**	
HCT	**CD54HCT242**	**† GE/RCA (2631)**	
	CD74HCT242	**GE/RCA (2631)**	
	GD74HCT242	**GoldStar (2696)**	40
	HD74HCT242	Hitachi	
	MIC74HCT242	Micrel	
	MIC74HCT243	Micrel	
	74HCT242	**Signetics (3003)**	
	54HCT242	◊† Supertex	45
	74HCT242	◊ Supertex	
	SN74HCT242	◊ TI	
SC	74SC242	Supertex	
40HXXX	TC40H242	Toshiba	
Quad Bus Transceiver, Three-State, Non-Inverting			
HC	**CD54HC243**	**† GE/RCA (2631)**	50
	CD74HC243	**GE/RCA (2631)**	
	GD74HC243	**GoldStar (2696)**	
	MC54HC243	† Motorola	
	MC74HC243	Motorola	

(Continued)

Function	Device	Source	Line
Quad Bus Transceiver, Three-State, Non-Inverting			
HC		(Cont'd)	
	MM54HC243	† National	55
	MM74HC243	◊ National	
	MN74HC243	Panasonic	
	LR74HC243	Sharp	
	74HC243	**Signetics (3003)**	
	SN54HC126	† TI	60
	SN54HC243	† TI	
	SN74HC243	TI	
	TC74HC243	**Toshiba (3307)**	
HCT	**CD54HCT243**	**† GE/RCA (2631)**	
	CD74HCT243	**GE/RCA (2631)**	65
	GD74HCT243	**GoldStar (2696)**	
	HD74HCT243	Hitachi	
	74HCT243	**Signetics (3003)**	
	54HCT243	◊† Supertex	
	74HCT243	◊ Supertex	70
	SN74HCT243	◊ TI	
SC	74SC243	Supertex	
40HXXX	TC40H243	Toshiba	
Quad Precision Timer/Driver (inputs cause outputs to switch state for 100 clock pulses)			
4XXX	MC14415	Motorola	
	MC14415E	† Motorola	75
Quad Single Ended Line Driver			
	MM78C29	‡ Micrel	
	MM78C29	† National	
	MM88C29	National	
Quad 2-Input NAND Schmitt Trigger			
HC	**CD54HC132**	**† GE/RCA (2631)**	
	CD74HC132	**GE/RCA (2631)**	80
	GD74HC132	**GoldStar (2695)**	
	HD74HC132	Hitachi	
	MC54HC132	† Motorola	
	MC74HC132	Motorola	
	MM54HC132	† National	85
	MM74HC132	National	
	M74HC132	SGS	
	LR74HC132	Sharp	
	74HC132	**Signetics (3003)**	
	SN54HC132	† TI	90
	SN74HC132	TI	
	TC74HC132	**Toshiba (3307)**	
HCT	**CD54HCT132**	**† GE/RCA (2631)**	
	CD74HCT132	**GE/RCA (2631)**	
	GD74HCT132	**GoldStar (2695)**	95
	KS74HCTLS132	Samsung	
	74HCT132	**Signetics (3003)**	
4XXX	F4093BC	† Fairchild	
	F4093BM	Fairchild	
	CD4093B	**† GE/RCA (2633)**	100
	CD4093BE	**GE/RCA (2633)**	
	GD4093B	**† GoldStar (2697)**	
	CD4093B	‡ Micrel	
	MC14093BA	† Motorola	
	MC14093BC	Motorola	105
	CD4093BC	National	
	CD4093BM	† National	
	MN4093B	◊† Panasonic	
	HCC4093B	† SGS	
	HCF4093B	◊ SGS	110
	HEF4093B	Signetics	
	883C4093B	† Sprague	
	TC4093B	**Toshiba (3308)**	
Quad 2-Input NAND Schmitt Trigger			
AC	**74AC11132**	**TI (3252)**	
ACT	**74ACT11132**	**TI (3252)**	115

Function	Device	Source	Line
Hex Bus Driver, Three-State, Non-Inverting			
AHCT	KS74AHCT367	Samsung	
HC	LR74HC367	Sharp	
	SN54HC367	† TI	
Hex Contact Bounce Eliminator			
4XXX	MC14490	Motorola	
Hex Schmitt Trigger			
	TC584B	◊ Toshiba	120
AC	54AC14	† Fairchild	
	74AC14	Fairchild	
C	MM54C14	‡ Micrel	
	MM54C914	‡ Micrel	
	MM54C14	† National	125
	MM54C914	† National	
	MM74C14	National	
	MM74C914	National	
HC	**CD54HC14**	**† GE/RCA (2631)**	
	CD74HC14	**GE/RCA (2631)**	130
	GD74HC14	**GoldStar (2695)**	
	HD74HC14	Hitachi	
	MC54HC14	† Motorola	
	MC74HC14	Motorola	
	MN74HC14	◊ Panasonic	135
	M74HC14	◊ SGS	
	LR74HC14	Sharp	
	74HC14	**Signetics (3003)**	
	SN54HC14	† TI	
	SN74HC14	TI	140
HCT	**CD54HCT14**	**† GE/RCA (2631)**	
	CD74HCT14	**GE/RCA (2631)**	
	GD74HCT14	**GoldStar (2695)**	
	74HCT14	**Signetics (3003)**	
4XXX	**TC4584B**	**Toshiba (3308)**	145
4XXX	F40014AM	† Fairchild	
	F40014BC	Fairchild	
	CD40106B	**† GE/RCA (2633)**	
	CD40106BE	**GE/RCA (2633)**	
	GD40014B	**GoldStar (2698)**	150
	CD40106B	‡ Micrel	
	CD4584B	‡ Micrel	
	MC14584BA	† Motorola	
	MC14584BC	Motorola	
	CD40106BC	National	155
	CD40106BM	† National	
	CD4584BC	National	
	CD4584BM	† National	
	HCC40106B	† SGS	
	HCF40106B	◊ SGS	160
	HEF40106B	Signetics	
	883C4584B	† Sprague	
Hex Schmitt Trigger Inverter			
AC	**74AC11014**	**TI (3252)**	
HC	MM54HC14	† National	
	MM74HC14	National	165
Octal Bidirectional Transceiver, Three-State			
HCT	P54PCT245A	† Performance	
	P54PCT545A	† Performance	
	P54PCT640A	† Performance	
	P54PCT643A	† Performance	
	P54PCT645A	† Performance	170
	P74PCT245A	Performance	
	P74PCT545A	Performance	
	P74PCT640A	Performance	
	P74PCT643A	Performance	
	P74PCT645A	Performance	175

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Miscellaneous (Cont'd)

Function	Device	Source	Line
Octal Bus Driver, Inverting, Three-State			
AC	54AC240	† Fairchild	
	74AC240	Fairchild	
	SN54AC11240	† TI	
	74AC11240	**TI (3252)**	
	TC74AC240	**Toshiba (3307)**	5
	V54AC240	**† VTC (3370)**	
	V54AC540	**† VTC (3370)**	
	V74AC240	VTC	
	V74AC540	VTC	
ACT	54ACT240	† Fairchild	10
	74ACT240	Fairchild	
	CD54ACT240	† GE/RCA	
	CD74ACT240	**GE/RCA (2629)**	
	SN54ACT11240	† TI	
	74ACT11240	**TI (3252)**	15
	V54ACT240	**VTC (3370)**	
	V54ACT540	**† VTC (3370)**	
	V74ACT240	**VTC (3370)**	
	V74ACT540	**VTC (3370)**	
AHCT	KS74AHCT210	Samsung	20
	KS74AHCT240	Samsung	
C	MM54C240	‡ Micrel	
	MM54C240	† National	
	MM74C240	National	
FCT	**IDT54FCT240** ◇†		
		IDT (2808)	25
	IDT54FCT240A ◇†		
		IDT (2808)	
	IDT74FCT240 ◇	**IDT (2808)**	
	IDT74FCT240A ◇	**IDT (2808)**	
	V54FCT240 ◇†	**VTC (3370)**	
	V74FCT240 ◇†	**VTC (3370)**	30
HC	**CD54HC240**	**† GE/RCA (2631)**	
	CD74HC240	**GE/RCA (2631)**	
	GD74HC240	**GoldStar (2696)**	
	HD74HC240	Hitachi	
	IDT54AHCT240 ◇†		
		IDT (2811)	35
	MC54HC240	† Motorola	
	MC74HC240	Motorola	
	MM54HC240	† National	
	MM74HC240	◇ National	
	MN74HC240	Panasonic	40
	74HC240	Samsung	
	M74HC240	SGS	
	LR74HC240	Sharp	
	54HC240	Signetics	
	74HC240	**Signetics (3003)**	45
	SN54HC240	† TI	
	SN74HC240	TI	
	TC74HC240	**Toshiba (3307)**	
HCT	**CD54HCT240**	**† GE/RCA (2631)**	
	CD74HCT240	**GE/RCA (2631)**	50
	GD74HCT240	**GoldStar (2696)**	
	HD74HCT240	Hitachi	
	54HCT240SOS	‡ Marconi	
	74HCT240	Marconi	
	MIC74HCT240	Micrel	55
	MD54HCT240R	† Mitel	
	MD74HCT240R	Mitel	
	MC54HCT240	† Motorola	
	MC74HCT240	Motorola	
	MM54HCT240	† National	60

(Continued)

Function	Device	Source	Line
Octal Bus Driver, Inverting, Three-State			
HCT		(Cont'd)	
	MM74HCT240	National	
	P54PCT240	Performance	
	MV74HCT240	Plessey	
	KS74HCTLS210	Samsung	
	KS74HCTLS240 ◇		
		Samsung	65
	74HCT240	Samsung	
	M74HCT240	SGS	
	54HCT240	Signetics	
	74HCT240	**Signetics (3003)**	
	54HCT240	◇† Supertex	70
	74HCT240	◇ Supertex	
	SN54HCT240	† TI	
	SN54HCT540	† TI	
	SN74HCT240	◇ TI	
	SN74HCT540	◇ TI	75
	TC74HCT240	◇ Toshiba	
PCT	P74PCT240	Performance	
SC	74SC240	Supertex	
4XXX	HEF40240B	Signetics	
40HXXX	LR40H240	◇ Sharp	80
	TC40H240	Toshiba	
Octal Bus Driver, Inverting, Three-State (BiCMOS)			
BCT	**SN74BCT240**	**TI (3249)**	
Octal Bus Driver, Non-Inverting, Three-State, Complementary Controls			
AC	54AC241	† Fairchild	
	54AC244	† Fairchild	
	74AC241	Fairchild	85
	74AC244	Fairchild	
	SN54AC11241	† TI	
	SN54AC11244	† TI	
	74AC11241	**TI (3252)**	
	74AC11244	**TI (3252)**	90
	TC74AC241	**Toshiba (3307)**	
	TC74AC244	**Toshiba (3307)**	
	V54AC241	**† VTC (3370)**	
	V54AC244	**† VTC (3370)**	
	V74AC241	VTC	95
	V74AC244	VTC	
ACT	54ACT241	† Fairchild	
	54ACT244	† Fairchild	
	74ACT241	Fairchild	
	74ACT244	Fairchild	100
	CD54ACT241	† GE/RCA	
	CD54ACT244	† GE/RCA	
	CD74ACT241	**GE/RCA (2629)**	
	CD74ACT244	**GE/RCA (2629)**	
	SN54ACT11244	† TI	
			105
	74ACT11244	**TI (3252)**	
	V54ACT244	**† VTC (3370)**	
AHCT	KS74AHCT244	Samsung	
C	MM54C244	‡ Micrel	
	MM54C244	National	110
	MM74C244	National	
FCT	**IDT54FCT244** ◇†		
		IDT (2808)	
	IDT54FCT244A ◇†		
		IDT (2808)	
	IDT74FCT244 ◇	**IDT (2808)**	
	IDT74FCT244A ◇	**IDT (2808)**	115
	V54FCT241	**† VTC (3370)**	
	V54FCT244 ◇†	**VTC (3370)**	
	V74FCT244 ◇†	**VTC (3370)**	

(Continued)

Function	Device	Source	Line
Octal Bus Driver, Non-Inverting, Three-State, Complementary Controls		(Cont'd)	
HC	**CD54HC241**	**† GE/RCA (2631)**	
	CD54HC244	**† GE/RCA (2631)**	120
	CD74HC241	**GE/RCA (2631)**	
	CD74HC244	**GE/RCA (2631)**	
	GD74HC241	**GoldStar (2696)**	
	GD74HC244	**GoldStar (2696)**	
	HD74HC241	Hitachi	125
	HD74HC244	Hitachi	
	IDT54AHCT244 ◇†		
		IDT (2811)	
	MC54HC241	† Motorola	
	MC54HC244	† Motorola	
	MC74HC241	Motorola	130
	MC74HC244	Motorola	
	MM54HC244	† National	
	MM74HC241	◇ National	
	MM74HC244	◇ National	
	MN74HC241	Panasonic	135
	MN74HC244	Panasonic	
	74HC241	Samsung	
	74HC244	◇ Samsung	
	M74HC241	SGS	
	M74HC244	SGS	140
	LR74HC244	Sharp	
	54HC241	Signetics	
	54HC244	Signetics	
	74HC241	**Signetics (3003)**	
	74HC244	**Signetics (3003)**	145
	TC74HC244	TeledyneS	
	IDT74AHCT244	TI	
	SN54HC244	† TI	
	SN74HC244	TI	
	TC74HC241	**Toshiba (3307)**	150
HCT	**CD54HCT241**	**† GE/RCA (2631)**	
	CD54HCT244	**† GE/RCA (2631)**	
	CD74HCT241	**GE/RCA (2631)**	
	CD74HCT244	**GE/RCA (2631)**	
	GD74HCT241	**GoldStar (2696)**	155
	GD74HCT244	**GoldStar (2696)**	
	HD74HCT241	Hitachi	
	HD74HCT244	Hitachi	
	54HCT241SOS	‡ Marconi	
	54HCT244SOS	‡ Marconi	160
	74HCT241	Marconi	
	74HCT244	Marconi	
	MIC74HCT241	Micrel	
	MIC74HCT244	Micrel	
	MD54HCT241R	† Mitel	
			165
	MD54HCT244R	† Mitel	
	MD74HCT241R	Mitel	
	MD74HCT244R	Mitel	
	MC54HCT241	† Motorola	
	MC54HCT244	† Motorola	170
	MC74HCT241	Motorola	
	MC74HCT244	Motorola	
	MM54HCT244	† National	
	MM74HCT244	National	
	P54PCT244	Performance	175
	MV74HCT241	Plessey	
	MV74HCT244	Plessey	
	KS74HCTLS241	◇ Samsung	
	KS74HCTLS244	◇ Samsung	
	74HCT241	Samsung	180

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—CMOS (Cont'd)

Miscellaneous (Cont'd)

Function	Device	Source	Line
Octal Bus Driver, Non-Inverting, Three-State, Complementary Controls			
HCT (Cont'd)			
	74HCT244	Samsung	
	M74HCT241	SGS	
	M74HCT244	SGS	
	54HCT241	Signetics	
	54HCT244	Signetics	5
	74HCT241	**Signetics (3003)**	
	74HCT244	**Signetics (3003)**	
	54HCT241	◊† Supertex	
	54HCT244	◊† Supertex	
	74HCT241	◊ Supertex	10
	74HCT244	◊ Supertex	
	SN54HCT244	† TI	
	SN74HCT244	◊ TI	
	TC74HCT244	◊ Toshiba	
	V74ACT244	**VTC (3370)**	15
	V74FCT241	**† VTC (3370)**	
PCT	P74PCT241	Performance	
	P74PCT244	Performance	
SC	74SC241	Supertex	
	74SC244	Supertex	20
4XXX	HEF40244B	Signetics	
40HXXX	TC40H241	Toshiba	
	TC40H244	Toshiba	
Octal Bus Driver, Non-Inverting, Three-State, Symmetrical Controls			
ACT	**74ACT11241**	**TI (3252)**	
	V54ACT241	**† VTC (3370)**	25
	V74ACT241	**VTC (3370)**	
AHCT	KS74AHCT241	Samsung	
HC	LR74HC241	Sharp	
	SN54HC241	† TI	
	SN74HC241	TI	30
HCT	MM54HCT241	† National	
	MM74HCT241	National	
	P54PCT241	Performance	
	SN54HCT241	† TI	
	SN74HCT241	◊ TI	35
	TC74HCT241	◊ Toshiba	
Octal Bus Driver (schmitt trigger), Inverting, Three-State			
HCT	HD54HCT240	† Hitachi	
Octal/Bus Driver (schmitt trigger), Non-Inverting, Three-State, Complementary Controls			
HC	**TC74HC244**	**Toshiba (3307)**	
Octal Bus Driver, Three-State (BiCMOS)			
BCT	**SN74BCT241**	**TI (3249)**	
	SN74BCT244	**TI (3249)**	40
Octal Bus Transceiver			
AC	SN54AC11245	† TI	
	74AC11657	**TI (3253)**	
AHCT	KS54AHCT645	† Samsung	
	KS74AHCT645	Samsung	
HC	M74HC640	SGS	45
	M74HC651	SGS	
	M74HC652	SGS	
HCT	P54PCT645	Performance	
Octal Bus Transceiver and Register, Inverting, Three-State			
AC	CD54AC648	† GE/RCA	
	CD74AC648	**GE/RCA (2629)**	50
	74AC11648	**TI (3253)**	
	TC74AC648	**Toshiba (3307)**	

(Continued)

Function	Device	Source	Line
Octal Bus Transceiver and Register, Inverting, Three-State (Cont'd)			
ACT	CD54ACT648	† GE/RCA	
	CD74ACT648	**GE/RCA (2629)**	
	54ACT648	† MMI	55
	54ACT651	† MMI	
	74ACT648	◊ MMI	
	74ACT651	◊ MMI	
	S74ACT11648	TI	
	74ACT11648	**TI (3253)**	60
	74ACT11651	**TI (3253)**	
AHCT	KS54AHCT651	Samsung	
	KS74AHCT648	Samsung	
BCT	SN54BCT648	† TI	
	SN54BCT651	† TI	65
	SN74BCT648	**TI (3249)**	
	SN74BCT651	**TI (3249)**	
HC	**CD54HC648**	**† GE/RCA (2631)**	
	CD74HC648	**GE/RCA (2631)**	
	GD74HC648	**GoldStar (2696)**	70
	HD74HC648	Hitachi	
	HD74HC651	Hitachi	
	MC54HC648	† Motorola	
	MC54HC651	† Motorola	
	MC74HC648	Motorola	75
	MC74HC651	Motorola	
	MC74HC651	Motorola	
	MM54HC648	† National	
	MM74HC648	National	
	74HC648	Samsung	80
	M74HC648	SGS	
	74HC648	**Signetics (3003)**	
	SN74HC648	TI	
	SN74HC651	TI	
	TC74HC648	**Toshiba (3307)**	85
	TC74HC651	**Toshiba (3307)**	
HCT	**CD54HCT648**	**† GE/RCA (2631)**	
	CD74HCT648	**GE/RCA (2631)**	
	GD74HCT648	**GoldStar (2696)**	
	HD74HCT648	Hitachi	90
	HD74HCT651	Hitachi	
	KS74HCTLS648	Samsung	
	74HCT648	**Signetics (3003)**	
	SN74HCT648	◊ TI	
	SN74HCT651	◊ TI	95
	TC74HCT648	Toshiba	
	TC74HCT651	Toshiba	
Octal Bus Transceiver and Register, Non-Inverting, Three-State			
AC	CD54AC646	† GE/RCA	
	CD74AC646	**GE/RCA (2629)**	
	74AC11646	**TI (3253)**	100
	TC74AC646	**Toshiba (3307)**	
ACT	CD54ACT646	† GE/RCA	
	CD74ACT646	**GE/RCA (2629)**	
	54ACT646	† MMI	
	54ACT652	† MMI	105
	74ACT646	◊† MMI	
	74ACT652	◊ MMI	
	74ACT11646	**TI (3253)**	
	74ACT11652	**TI (3253)**	
AHCT	KS54AHCT652	† Samsung	110
	KS74AHCT646	Samsung	
	KS74AHCT652	Samsung	
BCT	SN54BCT646	† TI	
	SN54BCT652	† TI	
	SN74BCT646	**TI (3249)**	115

(Continued)

Function	Device	Source	Line
Octal Bus Transceiver and Register, Non-Inverting, Three-State (Cont'd)			
HC	**CD54HC646**	**† GE/RCA (2631)**	
	CD74HC646	**GE/RCA (2631)**	
	GD74HC646	**GoldStar (2696)**	
	HD74HC646	Hitachi	
	HD74HC652	Hitachi	120
	MC54HC646	† Motorola	
	MC54HC652	† Motorola	
	MC74HC646	Motorola	
	MC74HC652	Motorola	
	MC74HC652	Motorola	125
	MM54HC646	† National	
	MM74HC646	National	
	74HC646	Samsung	
	M74HC646	SGS	
	74HC646	**Signetics (3003)**	130
	SN74HC646	TI	
	SN74HC652	TI	
	TC74HC646	**Toshiba (3307)**	
	TC74HC652	**Toshiba (3307)**	
HCT	**CD54HCT646**	**† GE/RCA (2631)**	135
	CD74HCT646	**GE/RCA (2631)**	
	GD74HCT646	**GoldStar (2696)**	
	HD74HCT646	Hitachi	
	HD74HCT652	Hitachi	
	KS74HCTLS646	Samsung	140
	74HCT646	**Signetics (3003)**	
	SN74HCT646	◊ TI	
	SN74HCT652	◊ TI	
	TC74HCT646	Toshiba	
	TC74HCT652	Toshiba	145
Octal Bus Transceiver, Inverting			
HC	**TC74HC640**	**Toshiba (3307)**	
Octal Bus Transceiver, Inverting/Non-Inverting			
HC	**TC74HC643**	**Toshiba (3307)**	
PCT	P74PCT643	Performance	
Octal Bus Transceiver, Inverting, Three-State			
AC	**74AC11643**	**TI (3253)**	
	74AC11651	**TI (3253)**	150
	74AC11652	**TI (3253)**	
HC	MC74HC620	Motorola	
HCT	MC74HCT620	Motorola	
Octal Bus Transceiver, Non-Inverting, Three-State			
HC	MC74HC623	Motorola	
HCT	MC74HCT623	Motorola	155
Octal Bus Transceiver, Open Collector, Inverting			
BCT	SN54BCT620	◊† TI	
Octal Bus Transceiver with Parity, Three State			
AHCT	KS54AHCT664	† Samsung	
	KS54AHCT665	† Samsung	
	KS74AHCT664	◊ Samsung	
	KS74AHCT665	◊ Samsung	160
Octal Bus Transceiver with Parity, Three-State			
HC	MC74HC658	Motorola	
	MC74HC659	Motorola	
	MC74HC664	Motorola	
	MC74HC665	Motorola	
Octal Bus Transceiver with Registers, Open-Collector			
HCT	**74HCT647**	**Signetics (3003)**	165
Octal Bus Transceiver with Status Flag, Inverting			
HC	MC74HC551	Motorola	
Octal Bus Transceiver with Status Flag, Non-Inverting			
HC	MC74HC550	Motorola	
Octal Bus Transceiver with Storage, Three-State			
HC	HD74HC620	Hitachi	
	TC74HC620	**Toshiba (3307)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Miscellaneous (Cont'd)

Function	Device	Source	Line
Octal Bus Transceiver, Three-State			
AC	**74AC11620**	◇ **TI** (3253)	
	74AC11623	**TI** (3253)	
	74AC11640	**TI** (3253)	
	TC74AC620	**Toshiba** (3307)	
	V54AC620	◇† **VTC** (3370)	5
	V54AC623	† **VTC** (3370)	
	V74AC620	VTC	
	V74AC623	VTC	
ACT	**74ACT11620**	**TI** (3253)	
	74ACT11623	**TI** (3253)	10
	V54ACT620	† **VTC** (3370)	
	V54ACT623	† **VTC** (3370)	
	V74ACT620	**VTC** (3370)	
	V74ACT623	**VTC** (3370)	
AHCT	KS74AHCT640	Samsung	15
BCT	SN54BCT640	† TI	
	SN74BCT620	◇ **TI** (3249)	
FCT	**IDT54FCT640A** ◇†		
		IDT (2809)	
	IDT74FCT640A	◇ **IDT** (2809)	
HC	**GD74HC640**	**GoldStar** (2696)	20
	HD54HC620	Hitachi	
	IDT54AHCT640 ◇†		
		IDT (2811)	
	IDT74AHCT640 ◇		
		IDT	
	MC54HC620	† Motorola	
	MC54HC623	† Motorola	25
	MC54HC643	† Motorola	
	MC74HC620	Motorola	
	MC74HC623	Motorola	
	MC74HC643	Motorola	
	74HC643	Samsung	30
	M74HC643	SGS	
	SN74HC620	TI	
	TC54HC620	Toshiba	
HCT	HD74HCT620	Hitachi	
	HD74HCT623	Hitachi	35
	MC54HCT623	† Motorola	
	SN74HCT620	TI	
	SN74HCT623	TI	
Octal Bus Transceiver, Three-State (BiCMOS)			
BCT	**SN74BCT245**	**TI** (3249)	
Octal Bus Transceiver, Three-State, Inverting			
AC	**TC74AC640**	**Toshiba** (3307)	40
	TC74AC643	**Toshiba** (3307)	
	V54AC640	† **VTC** (3370)	
	V54AC643	† **VTC** (3370)	
	V74AC640	VTC	
	V74AC643	VTC	45
ACT	**74ACT11640**	**TI** (3253)	
	74ACT11643	**TI** (3253)	
	V54ACT640	† **VTC** (3370)	
	V54ACT643	† **VTC** (3370)	
	V74ACT640	**VTC** (3370)	50
	V74ACT643	**VTC** (3370)	
AHCT	KS74AHCT643	Samsung	
BCT	SN54BCT623	◇† TI	
FCT	**IDT54FCT640** ◇†		
		IDT (2809)	
	IDT74FCT640	◇ **IDT** (2809)	55
	V54FCT640	◇† **VTC** (3370)	
	V74FCT640	◇† **VTC** (3370)	

(Continued)

Function	Device	Source	Line
Octal Bus Transceiver, Three-State, Inverting (Cont'd)			
HC	**CD54HC640**	† **GE/RCA** (2631)	
	CD74HC640	**GE/RCA** (2631)	
	GD74HC643	**GoldStar** (2696)	60
	HD74HC640	Hitachi	
	M74HC640	Mitsubishi	
	MC54HC640	Motorola	
	MC74HC640	Motorola	
	74HC640	Samsung	65
	LR74HC640	Sharp	
	LR74HC643	Sharp	
	74HC640	**Signetics** (3003)	
	SN54HC640	TI	
	SN54HC643	† TI	70
	SN74HC640	TI	
	SN74HC643	TI	
HCT	**CD54HCT640**	† **GE/RCA** (2631)	
	CD74HCT640	**GE/RCA** (2631)	
	GD74HCT640	**GoldStar** (2696)	75
	HD74HCT640	Hitachi	
	MC54HCT640	† Motorola	
	MC74HCT640	Motorola	
	MM54HCT640	† National	
	MM54HCT643	† National	80
	MM74HCT640	National	
	MM74HCT643	National	
	P54PCT545	† Performance	
	P54PCT640	Performance	
	P54PCT643	Performance	85
	MV74HCT545	Plessey	
	KS74HCTLS640	Samsung	
	KS74HCTLS643	Samsung	
	M74HCT640	SGS	
	74HCT640	**Signetics** (3003)	90
	SN74HCT640	◇ TI	
	SN74HCT643	◇ TI	
	TC74HCT640	Toshiba	
	TC74HCT643	Toshiba	
	US74HCT640	Universal	95
PCT	P74PCT640	Performance	
Octal Bus Transceiver, Three-State, Non-Inverting			
AC	74AC245	Fairchild	
	74AC11245	**TI** (3252)	
	TC74AC245	**Toshiba** (3307)	
	V54AC245	† **VTC** (3370)	100
	V54AC645	† **VTC** (3370)	
	V74AC245	VTC	
	V74AC645	VTC	
ACT	74ACT245	Fairchild	
	CD54ACT245	† GE/RCA	105
	CD74ACT245	**GE/RCA** (2629)	
	SN54ACT11245 †		
		TI	
	74ACT11245	**TI** (3252)	
	V54ACT245	† **VTC** (3370)	
	V54ACT645	† **VTC** (3370)	110
	V74ACT245	**VTC** (3370)	
	V74ACT645	**VTC** (3370)	
AHCT	**IDT54AHCT245** ◇†		
		IDT (2811)	
	KS74AHCT245	Samsung	
	KS74AHCT541	Samsung	115
BCT	**SN74BCT623**	**TI** (3249)	
FCT	**IDT54FCT245** ◇†		
		IDT (2808)	
	IDT54FCT245A ◇†		
		IDT (2808)	

(Continued)

Function	Device	Source	Line
Octal Bus Transceiver, Three-State, Non-Inverting (Cont'd)			
FCT	**IDT54FCT645** ◇†		
		IDT (2809)	
	IDT54FCT645A ◇†		
		IDT (2809)	120
	IDT74FCT245	◇ **IDT** (2808)	
	IDT74FCT245A	◇ **IDT** (2808)	
	IDT74FCT645	◇ **IDT** (2809)	
	IDT74FCT645A	◇ **IDT** (2809)	
	V54FCT245	◇† **VTC** (3370)	125
	V54FCT645	◇† **VTC** (3370)	
	V74FCT245	◇† **VTC** (3370)	
	V74FCT645	◇† **VTC** (3370)	
HC	**CD54HC245**	† **GE/RCA** (2631)	
	CD74HC245	**GE/RCA** (2631)	130
	GD74HC245	**GoldStar** (2696)	
	GD74HC541	**GoldStar** (2696)	
	HD74HC245	Hitachi	
	HD74HC623	Hitachi	
	IDT54AHCT645 ◇†		
		IDT (2811)	135
	IDT74AHCT645 ◇		
		IDT	
	MC54HC245	† Motorola	
	MC74HC245	Motorola	
	MN74HC245	Panasonic	
	74HC245	◇ Samsung	140
	M74HC245	SGS	
	LR74HC245	Sharp	
	LR74HC541	◇ Sharp	
	74HC245	**Signetics** (3003)	
	SN54HC245	† TI	145
	SN54HC541	† TI	
	SN54HC623	† TI	
	SN54HC645	† TI	
	SN74HC245	TI	
	SN74HC541	TI	150
	SN74HC623	TI	
	SN74HC645	TI	
	TC74HC245	**Toshiba** (3307)	
	TC74HC541	**Toshiba** (3307)	
	TC74HC623	**Toshiba** (3307)	155
HCT	**CD54HCT245**	† **GE/RCA** (2631)	
	CD74HCT245	**GE/RCA** (2631)	
	GD74HCT245	**GoldStar** (2696)	
	HD74HCT245	Hitachi	
	54HCT245SOS	‡ Marconi	160
	74HCT245	Marconi	
	MIC74HCT245	Micrel	
	MD54HCT245R †		
		Mitel	
	MD74HCT245R	Mitel	
	MC54HCT245	† Motorola	165
	MC74HCT245	Motorola	
	MM54HCT245	† National	
	MM74HCT245	◇ National	
	P54PCT245	Performance	
	MV74HCT245	Plessey	170
	74HCTLS245	Samsung	
	M74HCT245	SGS	
	74HCT245	**Signetics** (3003)	
	54HCT245	◇† Supertex	
	74HCT245	◇ Supertex	175
	SN54HCT245	† TI	
	SN74HCT245	◇ TI	
	SN74HCT645	◇ TI	
	TC74HCT245	◇ Toshiba	
	TC74HCT541	Toshiba	180

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—CMOS (Cont'd)

Miscellaneous (Cont'd)

Function	Device	Source	Line
Octal Bus Transceiver, Three-State, Non-Inverting (Cont'd)			
PCT	P74PCT245	Performance	
	P74PCT545	Performance	
	P74PCT645	Performance	
SC	74SC245	Supertex	
4XXX	HEF40245B	Signetics	5
40HXXX	TC40H245	Toshiba	
Octal Bus Transceiver, Three-State, True/Inverting			
HC	**CD54HC643**	**† GE/RCA (2631)**	
	CD74HC643	**GE/RCA (2631)**	
	HD74HC643	Hitachi	
	74HC643	**Signetics (3003)**	10
HCT	**CD54HCT643**	**† GE/RCA (2631)**	
	CD74HCT643	**GE/RCA (2631)**	
	GD74HCT643	**GoldStar (2696)**	
	HD74HCT643	Hitachi	
	MC54HCT643	† Motorola	15
	MC74HCT643	Motorola	
	M74HCT643	SGS	
	74HCT643	**Signetics (3003)**	
Octal Bus Transceivers			
BCT	SN74BCT1245	TI	
Octal Bus Transceivers and Register			
HCT	**UM74HCT646**	**UMC (3313)**	20
Octal Bus transceiverTand Register, Non-Inverting, Three-State			
BCT	**SN74BCT652**	**TI (3249)**	
Octal D Register/Bus Transceiver			
BCT	**SN74BCT543**	**TI (3249)**	
	SN74BCT544	**TI (3249)**	
HC	MM54HC543	† National	
	MM54HC544	† National	25
	MM74HC543	National	
	MM74HC544	National	
HCT	MM54HCT543	† National	
	MM54HCT544	† National	
	MM74HCT543	National	30
	MM74HCT544	National	
Octal, Inverting, Back-to-Back Configuration			
ACT	54ACT794	◊† MMI	
	74ACT794	◊ MMI	
Octal Inverting Registered Transceiver			
FCT	**IDT54FCT648**	**† IDT (2809)**	
	IDT54FCT648A	**† IDT (2809)**	35
	IDT54FCT652	**† IDT (2809)**	
	IDT54FCT652A	**† IDT (2809)**	
	IDT74FCT648	**IDT (2809)**	
	IDT74FCT648A	**IDT (2809)**	
	IDT74FCT652	**IDT (2809)**	40
	IDT74FCT652A	**IDT (2809)**	
Octal Non-Inverting Latched Transceiver			
FCT	**IDT54FCT543**	**† IDT (2808, 2810)**	
	IDT54FCT543A	**† IDT (2808, 2810)**	
	IDT74FCT543	**IDT (2808, 2810)**	
	IDT74FCT543A	**IDT (2808, 2810)**	45
Octal Non-Inverting Registered Transceiver			
FCT	**IDT54FCT646**	**† IDT (2809)**	
	IDT54FCT646A	**† IDT (2809)**	
	IDT54FCT651	**† IDT (2809)**	
	IDT54FCT651A	**† IDT (2809)**	

(Continued)

Function	Device	Source	Line
Octal Non-Inverting Registered Transceiver FCT (Cont'd)			
	IDT74FCT646	**IDT (2809)**	50
	IDT74FCT646A	**IDT (2809)**	
	IDT74FCT651	**IDT (2809)**	
	IDT74FCT651A	**IDT (2809)**	
Octal Register/Bus Transceiver			
HC	MM54HC550	† National	
	MM54HC551	† National	55
	MM74HC550	National	
	MM74HC551	National	
HCT	MM54HCT550	† National	
	MM54HCT551	† National	
	MM74HCT550	National	60
	MM74HCT551	National	
Octal Register Transceiver			
FCT	**IDT29FCT52**	**IDT (2808)**	
	IDT29FCT52A	**IDT (2808)**	
	IDT29FCT53	**IDT (2808)**	
	IDT29FCT53A	**IDT (2808)**	65
Octal transceiverT			
ACT	**74ACT11657**	**‡ TI (3253)**	
Three Port Register File (16 words x 9-bits)			
	TMC3200	TRW-LSI	
2 of 8 Keyboard to Binary Encoder			
4XXX	MC14419	Motorola	
3-/4-Input NAND/NOR Combination			
HC	SN74HC7006	TI	
4-Bit Binary Counter/Clock Generator			
5XXX	**TC5018B**	**Toshiba (3308)**	70
4x4x2 Crosspoint Switch			
	M22101	SGS	
	M22102	SGS	
6-Section Multifunction (Inverter, NOR, Flip-Flop)			
	SN74HC7076	TI	
6-Section Multifunction (NAND, Invert, Flip-Flop)			
	SN74HC7075	TI	
8/9-Bit Parity Check/Generator Bus Transceiver			
HC	SN74HC658	TI	75
	SN74HC659	TI	
	SN74HC664	TI	
	SN74HC665	TI	
HCT	SN74HCT658	◊ TI	
	SN74HCT659	◊ TI	80
	SN74HCT664	◊ TI	
	SN74HCT665	◊ TI	
8-Bit I/O Port	**CDP1852C**	**◊† GE/RCA (2642)**	
	CDP1874C	**† GE/RCA (2642)**	
	CDP1875C	**† GE/RCA (2642)**	85
	HMMP1852	† Hughes	
	HMMP1852C	† Hughes	
HC	HCMP1852	◊ Hughes	
	HCMP1852C	Hughes	
8-Bit Priority Encoder			
4XXX	F4532BC	Fairchild	90
	F4532BM	† Fairchild	
	CD4532B	† GE/RCA	
	CD4532BE	GE/RCA	
	GD4532B	**GoldStar (2698)**	
	MC14532BA	† Motorola	95
	MC14532BC	Motorola	
	HCC4532B	† SGS	
	HCF4532B	SGS	
	HEF4532B	Signetics	
	883C4532B	† Sprague	100
	TC4532B	**Toshiba (3308)**	

Function	Device	Source	Line
8-Bit Transceiver with Parity			
FCT	**IDT54FCT833A**	**† IDT (2809)**	
	IDT54FCT833B	**† IDT (2809)**	
	IDT54FCT834A	**† IDT (2809)**	
	IDT54FCT834B	**† IDT (2809)**	105
	IDT54FCT853A	**† IDT (2809)**	
	IDT54FCT853B	**† IDT (2809)**	
	IDT54FCT854A	**† IDT (2809)**	
	IDT54FCT854B	**† IDT (2809)**	
	IDT74FCT833A	**IDT (2809)**	110
	IDT74FCT833B	**IDT (2809)**	
	IDT74FCT834A	**IDT (2809)**	
	IDT74FCT834B	**IDT (2809)**	
	IDT74FCT853A	**IDT (2809)**	
	IDT74FCT853B	**IDT (2809)**	115
	IDT74FCT854A	**IDT (2809)**	
	IDT74FCT854B	**IDT (2809)**	
8-Channel Analog Multiplexer/Demultiplexer			
HC	**74HC4051**	**◊ Signetics (3003)**	
HCT	**74HCT4051**	**Signetics (3003)**	
9-Bit Bus Transceiver			
AC	**V54AC863**	**◊† VTC (3370)**	120
	V54AC864	**† VTC (3370)**	
	V74AC863	VTC	
BCT	SN54BCT29863	† TI	
FCT	**IDT54FCT863B**	**◊† IDT (2809)**	
	IDT54FCT864A	**◊† IDT (2809)**	125
	IDT54FCT864B	**◊† IDT (2809)**	
	IDT74FCT864A	**◊ IDT (2810)**	
	V54FCT863A	**◊† VTC (3370)**	
	V54FCT864A	**◊† VTC (3370)**	
	V74FCT863A	**◊† VTC (3370)**	130
	V74FCT864A	**◊† VTC (3370)**	
9-Bit Bus Transceiver, Inverting			
ACT	**74ACT11864**	**TI (3253)**	
	V54ACT864	**† VTC (3370)**	
	V74ACT864	**VTC (3370)**	
9-bit Bus Transceiver, Inverting (BiCMOS)			
BCT	**SN74BCT29864**	**TI (3249)**	135
9-Bit Bus Transceiver, Non-Inverting			
ACT	**74ACT11863**	**TI (3253)**	
	V54ACT863	**† VTC (3370)**	
	V74ACT863	**VTC (3370)**	
9-bit Bus Transceiver, Non-Inverting (BiCMOS)			
BCT	**SN74BCT29863**	**TI (3249)**	
9-Bit Bus Transceiver with Latch			
HC	**CD54HC7038**	**◊† GE/RCA (2631)**	140
	CD74HC7038	**◊ GE/RCA (2631)**	
HCT	**CD54HCT7038**	**◊† GE/RCA (2631)**	
	CD74HCT7038	**GE/RCA (2631)**	
9-Bit Bus Transceiver, Three-State, Inverting			
AC	**74AC11864**	**◊ TI (3253)**	
9-Bit Bus Transceiver, Three-State, Non-Inverting			
AC	**74AC11863**	**◊ TI (3253)**	145
9-Bit Odd/Even Parity Generator/Checker			
AC	SN54AC11280	† TI	
	74AC11280	**TI (3252)**	
AHCT	KS54AHCT280	† Samsung	
	KS74AHCT280	Samsung	
HC	**GD74HC280**	**GoldStar (2696)**	150
	HD74HC180	Hitachi	
	LR74HC280	◊ Sharp	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Miscellaneous (Cont'd)

Function	Device	Source		Line
9-Bit Odd/Even Parity Generator/Checker				
HC			(Cont'd)	
	SN54HC180	† TI		
	SN54HC280	† TI		
	SN74HC180	◇ TI		
	SN74HC280	TI		
	TC74HC280	**Toshiba**	**(3307)**	5
9-Bit Parity Generator/Checker with Parity I/O Port				
AC	**74AC11286**	**TI**	**(3252)**	
9-Bit Three-State, Non-Inverting				
AC	**V54AC823**	**† VTC**	**(3370)**	
	V74AC823	VTC		
FCT	**IDT54FCT823B ◇†**			
		IDT	**(2809)**	
	V54FCT823A ◇† VTC		**(3370)**	10
	V74FCT823A ◇† VTC		**(3370)**	
10-bit Bus Drivers, Inverting (BiCMOS)				
BCT	**SN74BCT29828**	**TI**	**(3249)**	
10-bit Bus Drivers, Non-Inverting (BiCMOS)				
BCT	**SN74BCT29827**	**TI**	**(3249)**	
10-Bit Bus Transceiver				
AC	**V54AC861 ◇† VTC**		**(3370)**	
	V54AC862 ◇† VTC		**(3370)**	15
	V74AC861	VTC		
	V74AC862	VTC		
BCT	SN54BCT29861 †			
		TI		
FCT	**IDT54FCT861A ◇†**			
		IDT	**(2809)**	
	IDT54FCT861B ◇†			
		IDT	**(2809)**	20
	IDT54FCT862A ◇†			
		IDT	**(2809)**	
	IDT54FCT862B ◇†			
		IDT	**(2809)**	
	IDT74FCT861A ◇ IDT		**(2810)**	
	IDT74FCT862A ◇ IDT		**(2810)**	
	V54FCT861A ◇† VTC		**(3370)**	25
	V54FCT862A ◇† VTC		**(3370)**	
	V74FCT861A ◇† VTC		**(3370)**	
	V74FCT862A ◇† VTC		**(3370)**	
10-Bit Bus Transceiver, Inverting				
ACT	**74ACT11862**	**TI**	**(3253)**	
	V54ACT862	**† VTC**	**(3370)**	30
	V74ACT862	**VTC**	**(3370)**	
10-bit Bus Transceiver, Inverting (BiCMOS)				
BCT	**SN74BCT29862**	**TI**	**(3249)**	
10-Bit Bus Transceiver, Non-Inverting				
ACT	**74ACT11861**	**TI**	**(3253)**	
	V54ACT861	**† VTC**	**(3370)**	
	V74ACT861	**VTC**	**(3370)**	35
10-bit Bus Transceiver, Non-Inverting (BiCMOS)				
BCT	**SN74BCT29861**	**TI**	**(3249)**	
10-Bit Bus Transceiver, Three-State, Inverting				
AC	**74AC11862**	**◇ TI**	**(3253)**	
10-Bit Bus Transceiver, Three-State, Non-Inverting				
AC	**74AC11861**	**◇ TI**	**(3253)**	
10-Bit Three-State, Inverting				
AC	**V54AC822**	**† VTC**	**(3370)**	
	V74AC822	VTC		40
FCT	**IDT54FCT822A ◇†**			
		IDT	**(2809)**	
	IDT54FCT822B ◇†			
		IDT	**(2809)**	

(Continued)

Function	Device	Source		Line
10-Bit Three-State, Inverting				
FCT			(Cont'd)	
	IDT74FCT822A ◇†			
		IDT	**(2809)**	
	IDT74FCT822B ◇			
		IDT	**(2809)**	
	V54FCT822A ◇† VTC		**(3370)**	45
	V74FCT822A ◇† VTC		**(3370)**	
10-Bit Three-State, Non-Inverting				
AC	**V54AC821**	**† VTC**	**(3370)**	
	V74AC821	VTC		
ACT	CA74ACT821	Calmos		
FCT	**IDT54FCT821A ◇†**			
		IDT	**(2809)**	50
	IDT54FCT821B ◇†			
		IDT	**(2809)**	
	IDT74FCT821A ◇ IDT		**(2809)**	
	IDT74FCT821B ◇			
		IDT	**(2809)**	
	IDT74FCT823B ◇			
		IDT	**(2809)**	
	V54FCT821A ◇† VTC		**(3370)**	55
	V74FCT821A ◇† VTC		**(3370)**	
10-Line to 4-Line DCD Priority Encoder				
HC	**TC74HC147**	**Toshiba**	**(3307)**	
4XXX	**CD40147B**	**† GE/RCA**	**(2633)**	
	CD40147BE	**GE/RCA**	**(2633)**	
12-Bit Parity Tree				
4XXX	F4531BC	Fairchild		60
	F4531BM	† Fairchild		
	MC14531BA	† Motorola		
	MC14531BC	Motorola		
	HEF4531B	Signetics		
	883C4531B	† Sprague		65
	TC4531B	**Toshiba**	**(3308)**	

DIGITAL

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—Digital Signal Processing

Arithmetic Functions

Function	Device	Source	Line
Add/Subtract Logic, 16-Bit			
	L4C381	◊† LogicDev	
	L4C381C	LogicDev	
	L4C381M	† LogicDev	
Adder/Subtractor, 3x8 Bit			
	MA364	† Marconi	
	MA364	‡ Marconi	5
Adder, 6-Bit High Speed			
	F100180	◊ Fairchild	
	100180	**Signetics (3020)**	
Adder, 9-Bit Wallace Tree			
	F100182	◊ Fairchild	
Address Generator			
	ADSP1410	**AD (2449)**	
Arithmetic Logic Unit, Cascade			
	MA7188	**‡ Marconi (2877)**	10
Arithmetic, Math Acceleration Unit			
	WE32106	**AT&T (2522)**	
Arithmetic Unit, Floating Point			
	ADSP3220	**◊ AD (2448)**	
	TDC1022	◊ TRW-LSI	
CMOS 32-Bit Floating Point Controller			
	MB86910	Fujitsu	
Correlator	L10C23	† LogicDev	15
	L10C23M	† LogicDev	
	L1023C	LogicDev	
	MA7170	**† Marconi (2874)**	
	TDC1023	◊† TRW-LSI	
	TMC2220	TRW-LSI	20
DSP, Multiplier/Accumulator, Serial			
	DSP135	Stantel-STC	
DSP, Processing Register			
	DSP134	Stantel-STC	
DSP, Programmable Multiplier			
	DSP135	Stantel-STC	
Floating Point Multiplier/ALU (10 MFLOPS)			
	UT1732	**UTMC (4331)**	
Math Acceleration Unit			
	WE32206	**AT&T (2524)**	25
Microprogram Sequencer			
	WS5910A	**◊ Waferscale (3376)**	
	WS5910B	**◊ Waferscale (3376)**	
Multiplier Accumulator (16x16)			
	LMA1043	◊ LogicDev	
	MA7010	**‡ Marconi (2873)**	
Multiplier/Accumulator (16x16); 33 MHz			
	WS59510	**Waferscale (3376)**	30
Multiplier Slice, Wallace Tree			
	SN54LS275	◊† TI	
Multiplier (2x8) Recode			
	F100183	◊ Fairchild	
Multiplier (8-Bit Serial)			
	NCR74HCT384	NCR	
	54HCT384	† Signetics	
Multiplier (8-Bit Serial) with Add/Subtract			
	74HCT784	◊ NCR	35
Multiplier (8-Bit Serial) with Add/Subtract, Quad			
	74HCT784X4	NCR	
Multiplier (8x8)			
	AM25S557	AMD	
	AM25S558	AMD	

(Continued)

Function	Device	Source	Line
Multiplier (8x8)		(Cont'd)	
	ADSP1080	† AD	
	ADSP1081	† AD	40
	MPY8	† IMI	
	LMU08	◊† LogicDev	
	LMU557	† LogicDev	
	LMU558	† LogicDev	
	LMU8U	◊† LogicDev	45
	SN54S557	† MMI	
	SN54S558	† MMI	
	SN74S557	◊ MMI	
	SN74S558	◊ MMI	
	57558	† MMI	50
	74F557	**Signetics (3024)**	
	74F558	**Signetics (3024)**	
	SPB9708	† TI	
	MPY008	† TRW-LSI	
	MPY08	† TRW-LSI	55
Multiplier (12x12)			
	ADSP1012	◊† AD	
	MPV12	IMI	
	MPY12	† IMI	
	LMU12	† LogicDev	
	LMU13	† LogicDev	60
	MPY012	† TRW-LSI	
	MPY112	TRW-LSI	
Multiplier (16x16)			
	AM29L516	AMD	
	AM29L517	AMD	
	AM29516	AMD	65
	AM29517	AMD	
	ADSP1016	◊ AD	
	ADSP7018	**AD (2450)**	
	ADSP8018	**AD (2450)**	
	CY7C516C	**Cypress (2569)**	70
	CY7C516M	**† Cypress (2569)**	
	CY7C517C	**◊ Cypress (2569)**	
	CY7C517M	**◊† Cypress (2569)**	
	MPY16	† IMI	
	LMU16	◊† LogicDev	75
	LMU17	◊† LogicDev	
	LMU18	† LogicDev	
	MA363	† Marconi	
	MA363	‡ Marconi	
	SN54S556	† MMI	80
	SN74S556	◊ MMI	
	MPY016	† TRW-LSI	
	WTL1016	Weitek	
	WTL2516	† Weitek	
	WTL2517	† Weitek	85
Multiplier (24x24)			
	ADSP1024	† AD	
	ADSP1024AS	† AD	
	ADSP1024AT	† AD	
Multiplier, 32-Bit			
	ADSP3210	**AD (2448)**	
Multiplier (32x32)			
	AM29323	◊ AMD	90
Multiplier-Accumulator, Complex Numbers			
	STI2003	**STI (3209)**	
Multiplier-Accumulator (8x8)			
	ADSP1008	AD	
	TDC1008	† TRW-LSI	
Multiplier-Accumulator (12x12)			
	AM29509	AMD	
	ADSP1009	◊† AD	95
	LMA1009	◊† LogicDev	

(Continued)

Function	Device	Source	Line
Multiplier-Accumulator (12x12)		(Cont'd)	
	TDC1009	† TRW-LSI	
	TMC2009	† TRW-LSI	
Multiplier-Accumulator (16x16)			
	AM29510	AMD	
	ADSP1110	† AD	100
	ADSP1110A	**AD (2450)**	
	ASDP1010	† AD	
	IDT7243	**◊† IDT (2806)**	
	LMA1010	◊† LogicDev	
	MP1010	MicroPwr	105
	TDC1010	† TRW-LSI	
	TDC1043	TRW-LSI	
	TMC2110	† TRW-LSI	
	TMC2210	† TRW-LSI	
	VL2010	VLSI Tech	110
	VL2044	VLSI Tech	
	WTL2010	† Weitek	
	WTL2245	† Weitek	
Multiplier-Accumulator (16x16), single port			
	NCR45CM16A	† GE/RCA	
	NCR45CM16	† NCR	115
Processor, Development System for Geometric Arithmetic Parallel Processor			
	NCRGDSI	NCR	
Shift Matrix, 8-Bit Barrel Shifter			
	F100158	◊ Fairchild	
	100158	**Signetics (3020)**	
Shifter, Barrel Shifter			
	AM25S10	† AMD	
	SN54S350	† AMD	120
	SN74S350	AMD	
	74F350	◊ Fairchild	
	LSH32	◊† LogicDev	
	LSH32C	LogicDev	
	LSH32M	† LogicDev	125
	MC74F350	Motorola	
	N25S10	Signetics	
	54S350	† Signetics	
	74F350	**Signetics (3023)**	
	74S350	**Signetics (3003)**	130
	SN74F350	TI	
	MC54F350	† Motorola	

Converters, Analog to Digital

4-Bit, 125 MSPS			
	TDC1034	◊ TRW-LSI	
4-Bit, 25 MSPS			
	TDC1021	◊† TRW-LSI	
4-Bit, 30 MSPS			
	UAB1005	Thomson	135
6-Bit, 100 MSPS			
	SDA5200	Siemens	
	TDC1029	◊† TRW-LSI	
6-Bit, 15 MSPS			
	CA3300	† GE/RCA	
	CA3306	**GE/RCA (2651)**	
6-Bit, 20 MSPS			
	TDC1046	† TRW-LSI	140
6-Bit, 25 MSPS			
	TDC1014	† TRW-LSI	
6-Bit, 50 MSPS			
	SDA6020	Siemens	
7-Bit, 15 MSPS			
	TDC1147	TRW-LSI	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Converters, Analog to Digital (Cont'd)

Function	Device	Source	Line
7-Bit, 20 MSPS	TDC1047	TRW-LSI	
7-Bit, 50 ns	**MC10319**	**Motorola (2937)**	
8-Bit Flash A/D Converter (250 MHz)	**VC008J**	**VTC (3373)**	
	VC008S	**† VTC (3373)**	
8-Bit, 1 MSPS, 8 dB Dynamic Range	TLC0820	TI	5
8-Bit, 100 MSPS	SDA8010	Siemens	
8-Bit, 20 MSPS	TDC1007	† TRW-LSI	
	TDC1048	◊† TRW-LSI	
	THC1068	TRW-LSI	
8-Bit, 50 MSPS	TDC1025	◊ TRW-LSI	10
9-Bit, 15 MSPS	TDC1019	◊† TRW-LSI	
9-Bit, 18 MSPS	TDC1019-1	◊† TRW-LSI	
10-Bit, with anti-aliasing filter	RT5640	EG&G-Reticon	
10-Bit, 800 ns	**ADC816**	**◊† Datel (2575)**	
12-Bit, 2000 ns	**ADC810**	**◊† Datel (2575)**	15
	ADC817	**◊† Datel (2575)**	
12-Bit, 3000 ns	AD578	† Maxim	
12-Bit, 500 ns	**ADC868**	**Datel (2575)**	
13-Bit ADC	**TC5092A**	**Toshiba (3308)**	
14-Bit A/D D/A for TMS320 DSP	TLC32040	† TI	20
16-Bit, 1.5 µs	**ADC803**	**◊ Burr-Brown (2541)**	
16-Bit, 100 ns	**ADC600**	**Burr-Brown (2541)**	
6-Bit, 75 MSPS	AD9001	AD	

Converters, Digital to Analog

Function	Device	Source	Line
4-Bit Triple Video DAC	AH8304T	† Analogic	
	HDAC34010	**HoneywellSPT (2997)**	25
	HDAC34020	**HoneywellSPT (2997)**	
4-Bit Triple Video DAC, 125 MSPS	TDC1334	TRW-LSI	
4-Bit, 4 ns	HDG0405	AD	
	DAC0405	**Datel (2576)**	
	ZN434	Ferranti	30
	VDAC444E	Intech	
	0405	Intech	
	TDC1034	◊ TRW-LSI	
6-Bit, Triple Video DAC, 20 MSPS	IMSG175-25	Inmos	
6-Bit, Triple Video DAC, 35 MSPS	IMSG170-35	Inmos	35
6-Bit, Triple Video DAC, 50 MSPS	IMSG170-50	Inmos	
	IMSG171-50	**Inmos (2795)**	
6-Bit, 6 ns	HDG0605	AD	
	DAC0605	**Datel (2576)**	
	0605	Intech	40
8-Bit Video DAC (200 MHz)	**VC108J**	**VTC (3373)**	
8-Bit Video DAC (250 MHz)	**VC108S**	**† VTC (3373)**	
8-Bit Video DAC (300 MHz)	**VC108K**	**VTC (3373)**	
8-Bit, Triple Video DAC	AH8308T	Analogic	
8-Bit, Triple Video DAC, 125 MSPS	TDC1318	TRW-LSI	45
8-Bit, 100 MSPS	AD9768	◊ AD	
8-Bit, 125 MSPS	AD9700	◊ AD	
	TDC1018	† TRW-LSI	
8-Bit, 165 MSPS	**HDAC10181B**	**HoneywellSPT (2997)**	
8-Bit, 20 MSPS	TDC1016	TRW-LSI	50
8-Bit, 200 MSPS	**HDAC97000**	**† HoneywellSPT (2997)**	
8-Bit, 275 MSPS	**HDAC10180A**	**HoneywellSPT (2997, 2999)**	
	HDAC10181A	**HoneywellSPT (2997)**	
8-Bit, 5 MSPS, 8 dB Dynamic Range	TLC7524	TI	
8-Bit, 8 ns	HDG0805	AD	55
	DAC0805	**Datel (2576)**	
	0805	Intech	
	ADC0805	National	
9-Bit, 20 MSPS	TDC1016	† TRW-LSI	
10-Bit, 15 ns	HDD1015	† AD	60
10-Bit, 20 MSPS	TDC1016	TRW-LSI	
10-Bit, 25 ns	**DACHF10**	**† Datel (2576)**	
10-Bit, 75 MSPS	SP9770	Plessey	
12-Bit DAC (125 ns settling time)	**VC512J**	**VTC (3373)**	
	VC512S	**† VTC (3373)**	65
12-Bit, 20 MSPS	TDC1012	TRW-LSI	
12-Bit, 40 ns	**DAC63**	**Burr-Brown (2542)**	
14-Bit D/A Converter	**HDAC50610**	**HoneywellSPT (2998)**	
	HDAC50810	**HoneywellSPT (2998)**	

Processors

Function	Device	Source	Line
ALU, 4-Bit Binary/BCD	F100181	◊ Fairchild	70
	100181	**Signetics (3020)**	
CMOS 32-Bit RISC Processor	MB86900	Fujitsu	
Digital Signal Processor, 32-Bit DSP Modem	TMS320A2400	◊ TI	
Filter, CAFIR (Cascadable Adaptive Finite Impulse Response)	**DSP56200**	**Motorola (2894)**	
FIR Filter	TMC2243	TRW-LSI	75
Multiplier and ALU, 22-Bits, Floating Point	TDC1033	◊ TRW-LSI	
	TDC1042	TRW-LSI	
Multiplier Set, 32 and 64-Bit IEEE Floating Point Multiplier and ALU	**IDT721264**	**IDT (2806, 2831)**	
	IDT72265	◊ IDT	
	WTL1064	† Weitek	80
	WTL1065	† Weitek	
	WTL1164	† Weitek	
	WTL1165	† Weitek	
	WTL1264	† Weitek	
	WTL1265	† Weitek	85
Multiplier Set, 32-Bit IEEE Floating Point Multiplier and ALU	TMC3200	TRW-LSI	
	TMC3201	TRW-LSI	
	WTL1032	◊† Weitek	
	WTL1033	◊† Weitek	
Processor, Adaptive Differential Pulse Code Modulation (ADPCM)	DS2167	Dallas	90
	DS2168	Dallas	
	TEL721	Stantel-STC	
Processor, Advanced Signal Processor (ASP)	µPD77C20	NEC	
Processor, Concurrent	Transputer	Inmos	
Processor, Digital Signal Peocessor	**ADSP2100K**	**AD (2451)**	95
Processor, Digital Signal Processor	**ADSP2100**	**AD (2451)**	
	ADSP2100J	**AD (2451)**	
	ADSP2100S	**† AD (2451)**	
	WEDSP16	**† AT&T (2459, 2465)**	
	WEDSP32	**† AT&T (2459)**	100
	WEDSP32C	**AT&T (2459, 2463)**	
	F9450	◊† Fairchild	
	MB87064	Fujitsu	
	MB8764	Fujitsu	
	DSP320C10	◊ GIM	105
	DSP32010	GIM	
	HD61810	Hitachi	
	DSP56000	**† Motorola (2893, 4754)**	
	LM32900	National	
	µPD77230	NEC	110
	SMJ32010	◊† TI	
	TMS320	◊ TI	
	TMS32010	**◊ TI (3221)**	
	TMS32020	**◊ TI (3221)**	
	TMS32025	TI	115
	MN1900	Thomson	
	TS68930	**Thomson (3287)**	
Processor, Geometric Arithmetic Pattern Processor	NCR45CG72	NCR	
Processor, High Performance External ROM Version of TS68930	**TS68931**	**Thomson (3287)**	
Processor, Image Pipeline (Data Flow)	µPD7281	◊ NEC	120

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—Digital Signal Processing (Cont'd)

Processors (Cont'd)

Function	Device	Source	Line
Processor, Programmable Signal Processor	AM29501	AMD	
Processor, Signal Processing Interface	S77C20	Gould	
	S7720	Gould	
	μPD77P20	NEC	
	μPD7720A	NEC	5
Processor, Signal Processor	LR3763	Sharp	
Processor Unit, Floating Point	AM8232	AMD	
	8232	Intel	
Processor, 22-Bit Floating Point	MSM6992	◊ OKI	
Program Sequencer	**ADSP1401**	**AD (2449)**	10
Signal Processor, Analog Real Time	2920	Intel	
	2921	Intel	
Stand Alone Microsequencer (SAM), 35 MHz	**SAM**	**Waferscale (3376)**	
4-Bit Slice	AM2901	◊† AMD	
	AM2903	† AMD	15
	AM29203	† AMD	
	CY2901	† Cypress	
	CY7C901	**◊† Cypress (2569)**	
	2901	° GE Semi	
	2901-Cell	° GE Semi	20
	2901	° GE/RCA	
	2901	° LSI Logic	
	2901-Cell	° LSI Logic	
	IDM2901	† National	
	NCR2901-Cell	◊° NCR	25
	SFC2901	Thomson	
	SFC2903	Thomson	
	2901	° Thomson	
	2901-Cell	° Thomson	
	2901	° Unicorn	30
	VSC2901-Cell	◊° VLSI Tech	
	2901	**° Waferscale (3376)**	
4-Bit Slice (43 MHz)	**WS5901C**	**Waferscale (3376)**	
	WS5901D	**Waferscale (3376)**	
8-Bit Slice	5908	◊° GE/RCA	35
	SN54AS888	† TI	
	SN74AS888	**TI (3226)**	
	SN74AS888-1	**TI (3226)**	
16 bit, 32 Stage, Cascadable Transversal Filter.	**IMSA100**	**◊ Inmos (2778)**	
16-Bit CMOS	SMJ320C25	† TI	40
16-Bit CMOS DSP with 4K EPROM	SMJ320E15	† TI	
16-Bit NMOS	SMJ32020	† TI	
16-Bit Slice	5916	° GE/RCA	
	5916-Cell	° GE/RCA	
16-Bit Slice (15 MHz)	**WS59016C**	**◊ Waferscale (3376)**	
16-Bit Slice (32 MHz)	**WS59016D**	**◊ Waferscale (3376)**	45
16-Bit Versions of 2901	4X2901B	IMI	
	L429C01	◊† LogicDev	
	WS59016	**† Waferscale (3376)**	
32-Bit Slice	59032-Cell	° GE/RCA	50
32-Bit Slice (1.35 MHz)	**WS59032D**	**Waferscale (3376)**	
32-Bit Slice (12 MHz)	**WS59032C**	**Waferscale (3376)**	
32-Bit Slice (20 MHz)	**WS59032E**	**Waferscale (3376)**	
56-Bit General Purpose Digital Signal Processor	**DSP56001**	**Motorola (2893)**	

Registers

Function	Device	Source	Line
Pipeline Register, Multilevel	AM29520	AMD	55
	AM29521	AMD	
	LPR520	◊† LogicDev	
	LPR521	◊† LogicDev	
	L29C520	◊† LogicDev	
	L29C521	◊† LogicDev	60
	WS59520	**Waferscale (3376)**	
	WS59521	**Waferscale (3376)**	
Pipeline Register, 8-Bit, 2-Level	SN54LS548	† MMI	
	SN74LS548	MMI	
Register File, 3-Port (8x8)	LRF07C	LogicDev	65
Register File, 5-Port (8x8)	LRF08	◊† LogicDev	
Register File, 6-Port (32x32)	WTL1066	Weitek	
Shift Register, 8-Bitx3, 18 Bits Long, Programmable	TDC1011	† TRW-LSI	

Miscellaneous

Function	Device	Source	Line
Array, Custom	QuickChip 2	Tektronix	
	QuickChip 2S	Tektronix	70
	QuickChip 3	Tektronix	
CMOS 16-Bit Digital Filter	MB86975	◊ Fujitsu	
Codec, Video A/D and D/A	UVC3100	ITT	
Coder/Decoder/Filter, Companding μ-LAW, 8-Bit, 12-Bit Dynamic Range, 8 MSPS	TCM29C18	TI	
	TCM29C19	TI	75
Coder/Decoder/Filter, 14-Bit, 14 dB Dynamic Range, 19.2 MSPS (Programmable)	TLC32040	TI	
Comparator, String Proximity Computer and Ranker	PF474C	Proximity	
Converter, Digital to Resolver	DRC10520	† ILC-DDC	
Converter, Digital to Synchro/Resolver	DSC11520	† ILC-DDC	
Converter, Resolver to Digital, 10/12/14/16 bits	2S80	AD	80
Converter, Resolver to Digital, 12-Bit	2S81	AD	
Convolver 1-D/2-D	**MA7180**	**‡ Marconi (2875)**	
Digital Filter, Programmable	FSP100	Fairchild	
Digitally Programmable Delay Generator (10 ps resolution)	**AD9500**	**AD (2445)**	
Ethernet/StarLAN Controller, IEEE 802.3	MB86950	Fujitsu	85
Filter, FIR Filter	NCR45CF8	NCR	
	TDC1028	◊† TRW-LSI	
Filter, Rank-Valve (15 MHz)	**L64220**	**LSI Logic (2870)**	
Filter, Rank-Valve (20 MHz)	**L64220A**	**LSI Logic (2870)**	
Filter, Transversal	R5601	EG&G-Reticon	90
Multi-Bit Filter (15 MHz)	**L64240**	**LSI Logic (2870)**	
Multi-Bit Filter (20 MHz)	**L64240A**	**LSI Logic (2870)**	
Numerically Controlled Modulated Oscillator, Waveform Map	DRFS2252	Digital RF	
	DRFS2253	Digital RF	
	DRFS2254	Digital RF	95
Numerically Controlled Modulated Oscillator, 15 MHz	**DRFS2250-15**	**◊ Digital RF (2586)**	
Numerically Controlled Modulated Oscillator, 20 MHz	**DRFS2250-20**	**◊ Digital RF (2586)**	
	DRFS2250-25	**◊ Digital RF (2586)**	
Numerically Controlled Modulated Oscillator, 30 MHz	**DRFS3250-30**	**◊ Digital RF (2586)**	
	DRFS3250-35	**◊ Digital RF (2586)**	100
Numerically Controlled Modulated Oscillator, 40 MHz	**DRFS3250-40**	**◊ Digital RF (2586)**	
Numerically Controlled Oscillator, 32-Bit Resolution, 25 MHz	**ST1172A**	**STI (3207)**	
Rank Order Filter	**MA7190**	**‡ Marconi (2878)**	
Sequencer, Programmable FFT Address Sequencer	AM29540	AMD	
Video Line Buffer, Multi-Function	**MA7186**	**‡ Marconi (2876)**	105
Video Shift Register	**L64211**	**LSI Logic (2870)**	
Video Shift Register (15 MHz)	**L64210**	**LSI Logic (2870)**	
Video Shift Register (20 MHz)	**L64210A**	**LSI Logic (2870)**	
	L64211A	**LSI Logic (2870)**	
Binary Filter and Template Matcher (15 MHz)	**L64230**	**LSI Logic (2870)**	110
Binary Filter and Template Matcher (20 MHz)	**L64230A**	**LSI Logic (2870)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

10K Series Arithmetic Functions

Function	Device	Source	Line
Barrel Shifter, 16-Bit Parallel/Serial with 10K Compatible Outputs.	**TIE10H897**	**TI (3226)**	
Fixed-Point Multiplier/Accumulator (16x16)	B3011	Bipolar	
Floating Point Multiplier and ALU (chipset)	B3110/20	◊ Bipolar	
Look-Ahead Carry Circuit	HD10179	Hitachi	
	MC10H179	Motorola	5
	MC10179	Motorola	
	MC10579	◊† Motorola	
	10179	**Signetics (3021)**	
Microsequencer with TTL Compatible Outputs	**TIET890**	**TI (3226)**	
Microsequencer with 10K Compatible Outputs	**TIE10H890**	**TI (3226)**	10
Multiplier (12x12)	MC10L951	◊ Motorola	
	MC10951	Motorola	
Multiplier (16x16)	**ADSP8018**	**AD (2450)**	
Multiplier (16x16), Integer	B3018	Bipolar	
Dual High Speed Adder/Subtractor	HD10180	Hitachi	15
	MC10H180	Motorola	
	MC10180	Motorola	
	MC10580	◊† Motorola	
	10180	**Signetics (3021)**	
2-Bit Logic Unit/Function Generator	MC10182	Motorola	20
	MC10582	◊† Motorola	
2-Bit Multiplier, High Speed	MC10287	Motorola	
	MC10687	Motorola	
4-Bit ALU Slice (microprocessor)	MC10800	Motorola	
4-Bit Logic Unit/Function Generator	HD10181	Hitachi	25
	MC10H181	Motorola	
	MC10181	Motorola	
	MC10581	◊† Motorola	
	10181	**Signetics (3021)**	
4x2-Bit Multiplier	MC10183	Motorola	30
5-Bit Comparator	MC10H166	◊ MMI	
	MC10H166	Motorola	
	MC10166	Motorola	
8-Bit ALU with Parity	MC10900	Motorola	
8-Bit Processor Slices with TTL Compatible Outputs	**TIET888**	**TI (3226)**	35
8-Bit Processor Slices with 10K Compatible Outputs	**TIE10H888**	**TI (3226)**	
8-Bit BCD/Binary ALU	MC10902	Motorola	
8x8-Bit Expandable Multiplier	MC10901	Motorola	

Buffers

Function	Device	Source	Line
Hex	MC10H188	Motorola	
	MC10188	◊ Motorola	40
	10188	**Signetics (3021)**	

Inverters

Function	Device	Source	Line
Hex	MC10H189	Motorola	
	MC10189	◊ Motorola	
	10189	**Signetics (3021)**	
Hex Inverter/Buffer	MC10195	◊ Motorola	45
	MC10595	◊† Motorola	

Counters, Binary

Function	Device	Source	Line
4-Bit	F10016C	Fairchild	
	F10016M	† Fairchild	
	MC10H016	MMI	
	MC10H016	Motorola	50
	MC10154	Motorola	
	MC10178	Motorola	
	MC10578	◊† Motorola	
4-Bit Universal	HD10136	Hitachi	
	MC10H136	◊ MMI	55
	MC10H136	Motorola	
	MC10136	◊ Motorola	
	10136	**Signetics (3021)**	

Counters, Decade

Function	Device	Source	Line
Bi-Quinary	MC10138	Motorola	
	MC10538	◊† Motorola	60
Universal	MC10137	Motorola	
	10137	**Signetics (3021)**	
Decade Counter	F10010C	Fairchild	
	F10010M	† Fairchild	

Decoders

Function	Device	Source	Line
Binary to 1–8 (high)	HD10162	Hitachi	65
	MC10H162	◊ MMI	
	MC10H162	Motorola	
	MC10162	Motorola	
	MC10562	† Motorola	
	10162	**Signetics (3021)**	70
Binary to 1–8 (low)	HD10161	Hitachi	
	MC10H161	◊ MMI	
	MC10H161	Motorola	
	MC10161	Motorola	
	MC10561	† Motorola	75
	10161	**Signetics (3021)**	
Dual Binary to 1–4 (high)	MC10H172	Motorola	
	MC10172	Motorola	
	MC10572	◊† Motorola	
	10172	**Signetics (3021)**	80
Dual Binary to 1–4 (low)	MC10H171	Motorola	
	MC10171	Motorola	
	MC10571	◊† Motorola	
	10171	**Signetics (3021)**	

Drivers

Function	Device	Source	Line
Dual TTL/MST Bus	MC10128	Motorola	85
Triple 3-Input Bus	MC10H423	Motorola	
Triple 4–3 Input Bus	MC10H123	Motorola	
	MC10123	Motorola	
	10123	**Signetics (3021)**	
Quad Bus	MC10192	◊ Motorola	90
	10192	**Signetics (3021)**	

Flip-Flops, D-Type

Function	Device	Source	Line
Dual Master-Slave	F10631	† Fairchild	
	HD10131	Hitachi	
	HD10231	Hitachi	
	MC10H131	◊ MMI	95
	MC10H131	Motorola	
	MC10131	Motorola	
	MC10231	Motorola	
	MC10531	◊† Motorola	
	MC10631	◊† Motorola	100
	10131	**Signetics (3021)**	
	10231	**Signetics (3021)**	
Hex Master-Slave	MC10H176	◊ MMI	
	MC10H176	Motorola	
	MC10176	Motorola	105
	MC10576	◊† Motorola	
	10176	**Signetics (3021)**	
Hex Master-Slave (with common reset)	MC10H186	Motorola	
	MC10186	Motorola	
	MC10586	◊† Motorola	110

Flip-Flops, J-K Type

Function	Device	Source	Line
Dual J–K Master-Slave	MC10H135	Motorola	
	MC10135	Motorola	
	MC10535	◊† Motorola	
	10135	**Signetics (3021)**	

Gates, AND

Function	Device	Source	Line
Dual 4-Input	**10108**	◊ **Signetics (3021)**	115
Quad 2-Input (3 AND, 1 AND/NAND)	HD10104	Fairchild	
	HD10104	Hitachi	
	MC10H104	◊ MMI	
	MC10H104	Motorola	
	MC10104	Motorola	120
	MC10504	◊† Motorola	
	10104	◊ **Signetics (3021)**	
Hex	MC10197	◊ Motorola	
	MC10597	◊† Motorola	

Gates, OR

Function	Device	Source	Line
Dual 3-Input 3-Output (line driver)	HD10110	Hitachi	125
	HD10210	Hitachi	
	MC10H210	◊ MMI	
	MC10H210	Motorola	
	MC10110	Motorola	
	MC10210	◊ Motorola	130

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—ECL (Cont'd)

10K Series

Gates, OR (Cont'd)

Function	Device	Source
Dual 3-Input 3-Output (line driver) (Cont'd)		
	MC10610	◊† Motorola
	10110	◊ **Signetics (3021)**
Quad 2-Input (3 OR, 1 OR/NOR)		
	MC10H103	◊ MMI
	MC10H103	Motorola
	MC10103	Motorola
	MC10503	◊† Motorola
	10103	◊ **Signetics (3021)**

Gates, NOR

Function	Device	Source
Dual 3-Input 3-Output (line driver)		
	HD10111	Hitachi
	HD10211	Hitachi
	MC10H211	◊ MMI
	MC10H211	Motorola
	MC10111	Motorola
	MC10211	Motorola
	MC10611	◊† Motorola
	10111	◊ **Signetics (3021)**
	10210	**Signetics (3021)**
	10211	**Signetics (3021)**
Dual 3-Input 3-Output (1 OR, 2 NOR) (line driver)		
	MC10212	Motorola
	MC10612	◊† Motorola
Triple 4–3–3 Input		
	HD10106	Hitachi
	MC10H106	◊ MMI
	MC10H106	Motorola
	MC10106	Motorola
	MC10506	◊† Motorola
	10106	◊ **Signetics (3021)**
Quad 2-Input (3 NOR, 1 OR/NOR)		
	HD10102	◊ Hitachi
	MC10H102	◊ MMI
	MC10H102	Motorola
	MC10102	Motorola
	MC10502	◊† Motorola
	10102	◊ **Signetics (3021)**
Quad 3-Input (one input common)		
	MC10H100	◊ MMI
	MC10H100	Motorola
	MC10100	Motorola
	MC10500	◊† Motorola
	10100	◊ **Signetics (3021)**

Gates, OR/NOR

Function	Device	Source
Dual 4–5 Input		
	HD10109	Hitachi
	HD10209	Hitachi
	MC10H109	◊ MMI
	MC10H109	Motorola
	MC10109	Motorola
	MC10509	◊† Motorola
	10109	◊ **Signetics (3021)**
Triple 2–3–2 Input		
	HD10105	Hitachi
	MC10H105	◊ MMI
	MC10H105	Motorola
	MC10105	Motorola
	MC10505	◊† Motorola
	DM10105	National
	10105	◊ **Signetics (3021)**
Quad 2-Input (one input common)		
	HD10101	◊ Hitachi
	MC10H101	◊ MMI
	MC10H101	Motorola
	MC10101	Motorola
	MC10501	◊† Motorola
	10101	◊ **Signetics (3021)**

Gates, OR-AND

Function	Device	Source
Dual 2-Wide 3-Input		
	HD10118	Hitachi
	MC10H118	◊ MMI
	MC10H118	Motorola
	MC10118	Motorola
	MC10518	◊† Motorola
	10118	**Signetics (3021)**
4-Wide 4–3–3–3 Input		
	HD10119	Hitachi
	MC10H119	◊ MMI
	MC10H119	Motorola
	MC10119	Motorola
	MC10519	◊† Motorola
	10119	**Signetics (3021)**

Gates, OR-AND/OR-AND Invert

Function	Device	Source
Dual 2-Wide 2–3 Input		
	HD10117	Hitachi
	MC10H117	◊ MMI
	MC10H117	Motorola
	MC10117	Motorola
	MC10517	◊† Motorola
	10117	**Signetics (3021)**
4-Wide 3-Input		
	HD10121	Hitachi
	MC10H121	◊ MMI
	MC10H121	Motorola
	MC10121	Motorola
	MC10521	† Motorola
	10121	**Signetics (3021)**

Gates, Exclusive OR

Function	Device	Source
Quad	MC10H113	Motorola
	MC10113	Motorola
	MC10513	◊† Motorola
	10113	◊ **Signetics (3021)**
1–8 or 2–4 Input	MC10H304	Motorola
2–4 or 1–6/1–4 Input	MC10H302	Motorola
2–4/1–2 Input	MC10H301	Motorola
2–5 Input	MC10H303	Motorola

Gates, Exclusive OR/NOR

Function	Device	Source
Triple 2-Input	HD10107	Hitachi
	MC10H107	◊ MMI
	MC10H107	Motorola
	MC10107	Motorola
	MC10507	◊† Motorola
	10107	◊ **Signetics (3021)**

Latches

Function	Device	Source
Quint	HD10175	Hitachi
	MC10H175	◊ MMI
	MC10H175	Motorola
Quint (Cont'd)		
	MC10175	Motorola
	MC10575	◊† Motorola
	10175	**Signetics (3021)**
Dual D Clocked		
	HD10130	Hitachi
	HD10230	Hitachi
	MC10H130	◊ MMI
	MC10H130	Motorola
	MC10130	Motorola
	MC10530	◊† Motorola
	10130	**Signetics (3021)**
Dual 2 to 1 Multiplexer-Latch		
	HD10134	Hitachi
	MC10134	Motorola
	10134	**Signetics (3021)**
Dual 2 to 1 Multiplexer-Latch, Common Reset		
	HD10132	Hitachi
	MC10132	Motorola
	10132	**Signetics (3021)**
Quad, Common Clock, Separate Output Enable		
	MC10168	Motorola
	MC10568	◊† Motorola
Quad D, Gated Output		
	HD10133	Hitachi
	MC10133	Motorola
	MC10153	Motorola
	MC10533	◊† Motorola
	MC10553	† Motorola
	10133	**Signetics (3021)**
Quad 2-Input Multiplexer-Latch		
	MC10H173	◊ MMI
	MC10H173	Motorola
	MC10173	Motorola
	10173	**Signetics (3021)**

Memories

Function	Device	Source
CAM (16-Bit content addressable)		
	10155	Signetics
PROM (32x8)	**MCM10139**	**Motorola (2918)**
PROM (256x4)		
	MCM10149	**Motorola (2918)**
	10149	**Signetics (3021, 3185)**
RAM (8x2) Simultaneous Read-Write		
	MCM10143	**Motorola (2918)**
RAM (16x4)	HD10145	Hitachi
	MC10H145	MMI
	MCM10145	**Motorola (2918)**
	MC10H145	**Motorola (2918)**
	10145	Signetics
RAM (64x1) 50 Ohm Drive		
	HD10148	Hitachi
RAM (128x1)	HD10147	Hitachi
	MCM10147	**Motorola (2918)**
RAM (256x1)	**MCM10144**	**Motorola (2918)**
	MCM10152	Motorola
	DM10414	National
RAM (256x4)	MBM10422A-5	Fujitsu
	MBM10422A-7	Fujitsu
	MBM10423LL-6	Fujitsu
	MB7072N	Fujitsu
	DM10422	National
RAM (256x16)	MB7700H	Fujitsu
RAM (1024x1)	**MCM10146**	**Motorola (2918)**
	MCM10415	**Motorola (2918)**

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

10K Series

Memories (Cont'd)

Function	Device	Source	Line
RAM (1024x1)		(Cont'd)	
	DM10415	National	
	10415	Signetics	
	10474	Signetics	
	10474A	Signetics	
RAM (1024x4)	MBM10470A-5	Fujitsu	5
	10474	Signetics	
	10474A	Signetics	
RAM (1024x16)			
	MB7750-10	Fujitsu	
RAM (4096x1)	MBM10470A-10	Fujitsu	
	MBM10470A-15	Fujitsu	10
	MBM10470A-20	Fujitsu	
	MBM10470A-7	Fujitsu	
	DM10470	National	
	DM10470A	National	
RAM (4096x4)	MBM10484-15	Fujitsu	15
	MBM10484A-10	**Fujitsu (2617)**	
	MBM10484A-8	Fujitsu	

Multiplexers (Digital)

Function	Device	Source	Line
Dual 4 to 1	HD10174	Hitachi	
	MC10H174	◊ MMI	
	MC10H174	Motorola	20
	MC10174	Motorola	
	MC10574	◊† Motorola	
	10174	**Signetics (3021)**	
Quad 2 to 1 (inverting with enable)			
	MC10H159	◊ MMI	
	MC10H159	Motorola	25
	MC10159	Motorola	
	10159	**Signetics (3021)**	
Quad 2 to 1 (non-inverting)			
	MC10H158	◊ MMI	
	MC10H158	Motorola	
	MC10158	Motorola	30
	MC10558	† Motorola	
	10158	**Signetics (3021)**	
8 to 1	HD10164	Hitachi	
	MC10H164	◊ MMI	
	MC10H164	Motorola	35
	MC10164	Motorola	
	MC10564	◊† Motorola	
	10164	**Signetics (3021)**	

Multivibrators

Function	Device	Source	Line
Monostable	MC10198	◊ Motorola	

Shift Registers

Function	Device	Source	Line
4-Bit	F10000C	Fairchild	
4-Bit Universal	MC10H141	◊ MMI	40
	MC10H141	Motorola	
	MC10141	Motorola	
	MC10541	◊† Motorola	
	10141	**Signetics (3021)**	45

Translators

Function	Device	Source	Line
Triple ECL to NMOS			
	MC10177	Motorola	
Quad Differential Receiver/MST to ECL			
	MC10190	◊ Motorola	
	MC10590	◊† Motorola	
Quad ECL to TTL			
	MC10H350	Motorola	
Quad ECL to TTL (differential input)			
	HD10125	Hitachi	50
	MC10H125	◊ MMI	
	MC10H125	Motorola	
	MC10125	Motorola	
	MC10525	◊† Motorola	
	10125	**Signetics (3021)**	55
Quad TTL to ECL			
	MC10H424	Motorola	
Quad TTL to ECL OR/NOR			
	HD10124	Hitachi	
	MC10H124	◊ MMI	
	MC10H124	Motorola	
	MC10124	Motorola	60
	MC10524	◊† Motorola	
	10124	**Signetics (3021)**	
Hex ECL to MST			
	MC10191	◊ Motorola	
	MC10591	◊† Motorola	
Octal 10KH ECL to TTL and TTL to 10KH ECL			
	BT501	◊ Brooktree	65
10K ECL to TTL with Latch			
	DP8480	National	
	DP8482	National	

Miscellaneous

Function	Device	Source	Line
Active Terminator			
	F10014C	Fairchild	
	F10014M	† Fairchild	
Analog Mixer, Double Balanced			
	MC12002	◊ Motorola	70
Error Detection/Correction Circuit			
	MC10163	Motorola	
	MC10193	◊ Motorola	
	MC10563	◊† Motorola	
	MC10593	◊† Motorola	
	MC10905	Motorola	75
Fiber Communications System Interface			
	MB881	**Fujitsu (2615)**	
	MB882	**Fujitsu (2615)**	
	MB883	**Fujitsu (2615)**	
	MB884	**Fujitsu (2615)**	
Interface for High-Speed Transmission Equipment			
	MB810A	**Fujitsu (2614)**	80
	MB811A	**Fujitsu (2614)**	
	MB813A	**Fujitsu (2614)**	
	MB814A	**Fujitsu (2614)**	
Micro-Code Sequencer			
	MC10904	Motorola	
Programmable Timing Delay, 20 ps resolution, 100 MHz Trigger Rate	BT601	Brooktree	85
Dual Bus Driver/Receiver with 4-to-1 Output Multiplexers	MC10H332	◊ Motorola	
Dual Simultaneous Bus Transceiver			
	MC10594	◊† Motorola	
Triple Differential Line Receiver			
	HD10116	Hitachi	
	MC10H116	◊ MMI	
	MC10H116	Motorola	90
	MC10114	Motorola	
	MC10116	Motorola	
	MC10216	Motorola	
	MC10514	◊† Motorola	
	MC10516	◊† Motorola	95

(Continued)

Function	Device	Source	Line
Triple Differential Line Receiver		(Cont'd)	
	MC10616	◊† Motorola	
	DM10116	National	
	10114	**Signetics (3021)**	
	10116	**Signetics (3021)**	
	10216	**Signetics (3021)**	100
Quad Bus Driver/Receiver with Transmit and Receiver Latches	MC10H334	◊ Motorola	
Quad Bus Driver/Receiver with 2-to–1 Output Multiplexers	MC10H330	◊ Motorola	
Quad Bus Receiver			
	MC10129	Motorola	
	10129	Signetics	
Quad Differential Line Receiver			
	MC10H115	◊ MMI	105
	MC10H115	Motorola	
	MC10115	Motorola	
	MC10515	◊† Motorola	
	10115	**Signetics (3021)**	
Two Modulus Prescaler, Divide by 20/21			
	MC12019	Motorola	110
8-Input Priority Encoder			
	MC10H165	Motorola	
	MC10165	Motorola	
	MC10565	◊† Motorola	
	10165	**Signetics (3021)**	
9-Bit Parity Circuit (2 carry inputs)			
	MC10170	Motorola	115
12-Bit Parity Generator/Checker			
	HD10160	Hitachi	
	MC10H160	◊ MMI	
	MC10H160	Motorola	
	MC10160	Motorola	
	MC10560	† Motorola	120
	10160	**Signetics (3021)**	
64x18 Five Port Register File			
	B3210	Bipolar	

100K Series

Arithmetic Functions

Function	Device	Source	Line
Barrel Shifter, 16-Bit Parallel/Serial with TTL Compatible Outputs.			
	TIET897	**TI (3226)**	
Barrel Shifter, 16-Bit Parallel/Serial with 100K Compatible Outputs.			
	TIE100897	**TI (3226)**	80
Look Ahead Carry Circuit			
	F100179	Fairchild	
	HD100179	◊ Hitachi	125
	100179	**Signetics (3020)**	
Multiplier (12x12)			
	MC100951	◊ Motorola	
2x8-Bit Recode Multiplier			
	HD100183	◊ Hitachi	
4-Bit Binary/Decade Logic Unit			
	HD100181	◊ Hitachi	130
8-Bit Processor Slices with 100K Compatible Outputs			
	TIE100888	**TI (3226)**	
9-Bit Comparator			
	F100166	◊ Fairchild	
	HD100166	◊ Hitachi	
	100166	**Signetics (3020)**	
9-Bit Wallace Tree Adder			
	HD100182	◊ Hitachi	135

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—ECL (Cont'd)

100K Series (Cont'd)

Function	Device	Source	Line
Buffers			
9-Bit	F100122	◊ Fairchild	
	HD100122	◊ Hitachi	
	100122	**Signetics (3020)**	
Inverters			
9-Bit	F100121	Fairchild	
Counters			
Divide by 4 Frequency Divider			
	SAF1534	Signetics	5
Multipurpose Counting Register			
	F100136	◊ Fairchild	
	HD100136	◊ Hitachi	
	100136	**Signetics (3020)**	
4-Bit Synchronous Counter			
	F100139	Fairchild	
4-Bit Decade Counter			
	F100140	Fairchild	10
Decoders			
Universal	F100170	Fairchild	
	HD100170	◊ Hitachi	
	100170	**Signetics (3020)**	
Drivers			
Backplane	F100126	◊ Fairchild	
	100126	**Signetics (3020)**	15
High Speed Line			
	F100113	◊ Fairchild	
	100113	**◊ Signetics (3020)**	
Quad	F100112	◊ Fairchild	
	HD100112	◊ Hitachi	
	100112	**◊ Signetics (3020)**	20
Hex Bus	F100123	◊ Fairchild	
	HD100123	◊ Hitachi	
	100123	**Signetics (3020)**	
Flip-Flops, D-Type			
Triple	F100131	◊ Fairchild	
	HD100131	◊ Hitachi	25
	100131	**Signetics (3020)**	
Hex	F100151	◊ Fairchild	
	HD100151	◊ Hitachi	
	100151	**Signetics (3020)**	
Flip-Flops, J-K Type			
Triple J-K Master-Slave			
	F100135	Fairchild	30
Gates, AND/NAND			
Quintuple with Function Output			
	F100104	Fairchild	
Gates, OR/NOR			
Quint 2-Input	F100102	◊ Fairchild	
	HD100102	◊ Hitachi	
	100102	**◊ Signetics (3020)**	
Triple 5-Input	F100101	◊ Fairchild	35
	HD100101	◊ Hitachi	
	100101	**◊ Signetics (3020)**	
Gates, OR-AND/OR-AND Invert			
Triple	F100117	◊ Fairchild	
	HD100117	◊ Hitachi	
	100117	**Signetics (3020)**	40
5-Wide	F100118	◊ Fairchild	
	HD100118	◊ Hitachi	
	100118	**Signetics (3020)**	
Gates, Exclusive OR/NOR			
Quint	F100107	◊ Fairchild	
	HD100107	◊ Hitachi	45
	100107	**◊ Signetics (3020)**	
Latches			
Triple D	F100130	◊ Fairchild	
	HD100130	◊ Hitachi	
Hex D	F100150	◊ Fairchild	
	HD100150	◊ Hitachi	50
	100150	**Signetics (3020)**	
Memories			
CAM (4x4)	F100142	◊ Fairchild	
	HD100142	◊ Hitachi	
PROM (256x4)			
	F100Z416	◊ Fairchild	
	100149	**Signetics (3020)**	55
RAM (16x4)	F100402	◊ Fairchild	
RAM (16x4 register file)			
	F100145	◊ Fairchild	
	HD100145	◊ Hitachi	
RAM (256x4)	F100422	◊ Fairchild	
	MBM100422A-5	Fujitsu	60
	MBM100422A-7	Fujitsu	
	MBM100423LL-6	Fujitsu	
RAM (1024x1)	F100415	◊ Fairchild	
RAM (1024x4)	F100474	◊ Fairchild	
	MBM100474A-10	◊ Fujitsu	65
	MBM100474A-15	◊ Fujitsu	
	MBM100474A-5	◊ Fujitsu	
	MBM100474A-7	◊ Fujitsu	
	100474	Signetics	
	100474A	Signetics	70
RAM (4096x1)	MBM100470A-10	Fujitsu	
	MBM100470A-15	Fujitsu	
	MBM100470A-20	Fujitsu	
	MBM100470A-7	Fujitsu	
	DM100470	National	75
	DM100470A	National	
RAM (4096x4)	MBM100484-15	◊ Fujitsu	
	MBM100484A-10	◊ Fujitsu	
	MBM100484A-8	◊ Fujitsu	
RAM (16384x1)			
	HM100480-15	Hitachi	80
Multiplexers (Digital)			
Dual 8-Input	F100163	◊ Fairchild	
	HD100163	Hitachi	
	100163	**Signetics (3020)**	
Triple 4-Input	F100171	Fairchild	
	HD100171	◊ Hitachi	85
	100171	**Signetics (3020)**	
Quad 2-Input with Latch			
	F100155	◊ Fairchild	
	HD100155	Hitachi	
	100155	**Signetics (3020)**	
16-Input	F100164	◊ Fairchild	90
	HD100164	Hitachi	
	100164	**Signetics (3020)**	
Shift Registers			
Mask-Merge	F100156	◊ Fairchild	
	HD100156	Hitachi	
8-Bit Matrix	HD100158	Hitachi	95
8-Bit Universal	F100141	◊ Fairchild	
	HD100141	◊ Hitachi	
	100141	**Signetics (3020)**	
Translators			
ECL to TTL Bidirectional, 100K in/10K out			
	F100128	Fairchild	
TTL–100K ECL			
	F100124	◊ Fairchild	100
	100124	**Signetics (3020)**	
Octal 100K ECL to TTL and TTL to 100K ECL			
	BT502	◊ Brooktree	
8-Bit Bidirectional ECL to TTL			
	F100128	Fairchild	
100K ECL-TTL	F100125	◊ Fairchild	
	HD100125	◊ Hitachi	105
	100125	**Signetics (3020)**	
100K ECL-TTL and TTL–100K ECL			
	100255	**Signetics (3020)**	
100K ECL–10K ECL			
	100175	**Signetics (3020)**	
100K ECL-TTL and TTL–100K ECL			
	F100255	Fairchild	
100K ECL–10K ECL			
	F100175	Fairchild	110
Miscellaneous			
Microsequencer with 100K Compatible Outputs.			
	TIE100890	**TI (3226)**	
Number Controlled Oscillator (300 MHz with 28-bit resolution)	STI2172	STI	
Numerically Controlled Oscillator (300 MHz with 28-bit resolution)	**STEL2172**	**STI (3208)**	
Universal Priority Encoder			
	F100165	◊ Fairchild	
	HD100165	◊ Hitachi	115
	100165	**Signetics (3020)**	
Dual 9-Bit Parity Generator/Checker			
	F100160	◊ Fairchild	
	HD100160	Hitachi	
	100160	**Signetics (3020)**	
Quintuple Line Receiver			
	F100114	◊ Fairchild	120
	HD100114	◊ Hitachi	
	100114	**◊ Signetics (3020)**	
Quintuple Line Transceiver			
	F100250	Fairchild	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
III and Other Series			
Counters			
Bi-Quinary	MC1678	Motorola	
Divide by 4 Prescaler (1 GHz)			
	MC1697	Motorola	
	MC1699	Motorola	
Divide by 4 (1 GHz)			
	11C05C	Fairchild	
	11C05M	† Fairchild	5
	CA3199	GE/RCA	
	SP8610	Plessey	
	SP8611A	Plessey	
	SP8611B	Plessey	
	SP8617B	Plessey	10
Divide by 5/6 Prescaler, 650 MHz			
	11C91C	Fairchild	
	11C91M	† Fairchild	
Divide by 10/11 Prescaler, 650 MHz			
	11C90C	Fairchild	
	11C90M	† Fairchild	
	SP8680	Plessey	15
Divide by 20 Prescaler			
	CA3232	GE/RCA	
Binary	MC1654	Motorola	
Flip-Flops, D-Type			
Master-Slave	11C70C	Fairchild	
	MC1670	Motorola	
	SP1670B	Plessey	20
Master-Slave (UHF prescaler)			
	11C06C	Fairchild	
	MC1690	Motorola	
Flip-Flops, R-S Type			
Dual, Clocked	MC1666	Motorola	
Gates, OR			
Quad 2-Input	MC1664	Motorola	
Gates, NOR			
Quad 2-Input	MC1662	Motorola	25
Gates, OR/NOR			
Dual 4-Input	MC1660	Motorola	
	SP16F60	Plessey	
	SP1660B	Plessey	
Dual 4–5 Input			
	11C01C	Fairchild	
	MC10H209	Motorola	30
	MC1688	Motorola	
Gates, Exclusive OR			
Triple 2-Input	MC1672	Motorola	
Gates, Exclusive NOR			
Triple 2-Input	MC1674	Motorola	
Latches			
Dual Clocked	MC1668	Motorola	

Function	Device	Source	Line
Multivibrators			
Voltage Controlled			
	MC1658	Motorola	35
	SP1658	Plessey	
Shift Registers			
4-Bit	MC1694	Motorola	
Miscellaneous			
Prescaler for Multiband Digital Tuning System			
	TD6109	Toshiba	
Voltage Controlled Oscillator			
	MC1648	◊ Motorola	
	MC1648M	† Motorola	40
	SP1648	Plessey	
Dual Analog/Digital Comparator			
	MC1650	Motorola	
	MC1651	Motorola	
	SP1650B	Plessey	
Quad Line Receiver			
	MC1692	Motorola	45
	SP1692B	Plessey	

DIGITAL

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—Gallium Arsenide

Function	Device	Source	Line
Arithmetic Functions			
Carry Look-Ahead Generator	**10G101**	**GigaBit (2689)**	
4-bit Adder (high-speed)	**10G100**	**GigaBit (2689)**	
Buffers			
Dual Fanout Buffer with 2:1 Multiplexer Inputs (1.6 GHz data rate)	**10G010-2**	**GigaBit (2689)**	
	10G010-3	**GigaBit (2689)**	
	10G010M-2	**† GigaBit (2689)**	5
	10G010M-3	**† GigaBit (2689)**	
Dual, 1–4 Fanout Buffer	**10G011**	**GigaBit (2689)**	
Counters, Binary			
Counter, Divider, 7-Stage, Divide by 2, 4—64	**10G065**	**GigaBit (2689)**	
Divider, Divide by 2	**HMD11301-2**	**Harris (2724)**	
Divider, Divide by 2/4/8	**HMD11016-1**	**Harris (2726)**	10
Divider, divide by 4/5 (1.5 GHz)	TQ1121-15	TriQuint	
Divider, divide by 4/5 (2 GHz)	TQ1121-20	TriQuint	
	TQ1121-23	TriQuint	
Divider, Divide by 5/6, 10/11, 20/21, 40/41	**10G070**	**GigaBit (2689)**	
Divider, Divide by 10/11	**HMD11011-2**	**Harris (2725)**	15
Divider, 2-Stage, Divide by 2, 4	**10G060**	**◊ GigaBit (2689)**	
Four-Stage Synchronous Programmable Counter (1.6 GHz clock rate)	**10G061**	**◊ GigaBit (2689)**	
Counters, Binary Count Up			
4-Bit Ripple Counter, 2 GHz	TQ1111-20	TriQuint	
4-Bit Ripple Counter, 2.5 GHz	TQ1111-25	TriQuint	
4-Bit Ripple Counter, 3 GHz	TQ1111-30	TriQuint	20
Counters, Binary Count Up/Down			
4-Bit Synchronous, 1 GHz	TQ1112-10	TriQuint	
Decoders			
Dual 2-Line to 4-Line Decoder/Demultiplexer and Single 3-Line to 8-Line Decoder/Demultiplexer	**10G044**	**◊ GigaBit (2689)**	
1:4 Demultiplexer (1.5G bps data rate)	TQ1134-15M	◊ TriQuint	
1:4 Demultiplexer (1.8G bps data rate)	TQ1134-18M	◊ TriQuint	
1:4 Demultiplexer (2G bps data rate)	TQ1134-20M	◊ TriQuint	25
1:8/1:16 Demultiplexer (1.5G bps data rate)	TQ1132-15M	◊ TriQuint	
1:8/1:16 Demultiplexer (1.8G bps data rate)	TQ1132-18M	◊ TriQuint	
1:8/1:16 Demultiplexer (2G bps data rate)	TQ1132-20M	◊ TriQuint	
4:1 Demultiplexer	TQ1134	◊ TriQuint	
8:1/16:1 Demultiplexer	TQ1132	◊ TriQuint	30
Drivers			
Dual Complementary Driver/Comparator (1.5 GHz data rate)	**10G012B-3**	**GigaBit (2689)**	
Dual Complementary Driver/Comparator (1.75 GHz data rate)	**10G012B**	**GigaBit (2689)**	
Flip-Flops, D-Type			
Single	**HMD11131-2**	**◊ Harris (2724)**	
Dual Precision D-Type (1.8 GHz clock rate)	**10G021A-3**	**GigaBit (2689)**	
Dual Precision D-Type (2.3 GHz clock rate)	**10G021A**	**GigaBit (2689)**	35
Dual Precision D-Type (2.7 GHz clock rate)	**10G021A-2**	**GigaBit (2689)**	
Quad D-Type with Exclusive-OR Inputs (1.6 GHz data rate)	**10G024-3**	**GigaBit (2689)**	
Quad D-Type with Exclusive-OR Inputs (1.9 GHz data rate)	**10G024-2**	**GigaBit (2689)**	
Quad D-Type with 2:1 Mulptiplexer Inputs (1.6 GHz data rate)	**10G023-3**	**GigaBit (2689)**	
Quad D-Type with 2:1 Multiplexer Inputs (1.9 GHz data rate)	**10G023-2**	**GigaBit (2689)**	40
Gates, AND/NAND			
AND-OR/AND-OR Invert Gate, Dual (1.4 GHz data rate)	**10G003M**	**† GigaBit (2689)**	
AND-OR/AND-OR-Invert Gate, Dual (1.4 GHz data rate)	**10G003**	**GigaBit (2689)**	
5-Input	**HMD11104-2**	**Harris (2724)**	
Gates, NOR			
Quad 2-Input (290 ps gate delay)	**10G001**	**GigaBit (2689)**	
Quad 2-Input (360 ps gate delay)	**10G001-4**	**GigaBit (2689)**	45
Quad 3-Input (290 ps gate delay)	**10G000A**	**GigaBit (2689)**	
Quad 3-Input (360 ps gate delay)	**10G000A-4**	**GigaBit (2689)**	
Gates, OR/NOR			
5-Input	**HMD11101-2**	**Harris (2724)**	
Gates, Exclusive OR			
Dual, 2-Input	**HMD11113-2**	**Harris (2724)**	
Gates, Exclusive OR/NOR			
Quad 2-Input Exclusive-OR/Exclusive-NOR Gate (1.8 GHz data rate)	**10G002M**	**† GigaBit (2689)**	50
Multiplexers			
Time Division Demultiplexer (1.5 Gbps)	**10G041A**	**◊ GigaBit (2689)**	
Time Division Multiplexer (1.5 Gbps)	**10G040A**	**GigaBit (2689)**	
Quad 2:1 Multiplexer (1.5 GHz data rate)	**10G004-3**	**GigaBit (2689)**	
Quad 2:1 Multiplexer (1.8 GHz data rate)	**10G004-2**	**GigaBit (2689)**	
Quad 4:1/Dual 8:1 Multiplexer (1.5 GHz data rate)	**10G046**	**◊ GigaBit (2689)**	55
4:1 Multiplexer / Laser Driver	TQ1133	◊ TriQuint	
4:1 Multiplexer (1.5G bps data rate)	TQ1133-15M	◊ TriQuint	
4:1 Multiplexer (1.8G bps data rate)	TQ1133-18M	◊ TriQuint	
4:1 Multiplexer (2G bps data rate)	TQ1133-20M	◊ TriQuint	
8:1/16:1 Multiplexer	TQ1131	◊ TriQuint	60
8:1/16:1 Multiplexer (1.5G bps data rate)	TQ1131-15M	◊ TriQuint	
8:1/16:1 Multiplexer (1.8G bps data rate)	TQ1131-18M	◊ TriQuint	
8:1/16:1 Multiplexer (2G bps data rate)	TQ1131-20M	◊ TriQuint	
Shift Registers			
Octal Shift/Storage, PN Code Generator (1.5 GHz clock rate)	**10G022**	**GigaBit (2689)**	
4-Bit Universal	**HMD12141-1**	**Harris (2726)**	65
16x4-bit 3-Port Register File (1 GHz data rate)	**10G030**	**GigaBit (2689)**	
Miscellaneous			
Amplifier, 1–8 GHz	TQ9111	◊ TriQuint	
Arrays, Diode, Schottky 14 Single, 1 full-wave rectifier	**16G010**	**GigaBit (2689)**	
	16G011	**GigaBit (2689)**	
Arrays, Transistor, Single-gate D-MESFETS, 9-Single, 1 dual	**16G020**	**GigaBit (2689)**	70
Arrays, Transistor, Dual-Gate D-MESFETS, 8 Single	**16G021**	**GigaBit (2689)**	
Attenuator, 10dB variable	TQ9161	TriQuint	
Clock/Driver Fanout Buffer, Dual (data rate to 1.8 GHz)	**HMD11188-2**	**Harris (2725)**	
Comparator, Phase	**HMD11685-2**	**Harris (2724)**	
Digital to Analog Converter, 600 MSPS Conversion Rate	TQ6111	TriQuint	75
Digital to Analog Converter, 1000 MSPS Conversion Rate	TQ6112	TriQuint	
Gate Array (1950 Equivalent Logic Gates)	HGG2020	◊ Honeywell	
Line Receiver (3 GHz data rate)	TQ6331-M	TriQuint	
Multi-Project Test Chip (Foundry Designed For Development Purposes)	HGF1000	Honeywell	
Pin/Line Driver (3 GHz data rate)	TQ6330-M	TriQuint	80
Power Divider (Active signal splitter)	TQ9141	TriQuint	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Miscellaneous (Cont'd)			
Programmable Pulse Driver/Formatter	**HMD11502-2**	**Harris** (2725)	
Standard Cell, GaAs, for custom circuits	Q-LOGIC	TriQuint	
Switch, SPSD, Microwave	TQ9151	TriQuint	
Dual Complementary Driver/Comparator (2 GHz data rate)	**10G012B**	**GigaBit** (2689)	
	10G013	**GigaBit** (2689)	5
Dual 9-bit Parity Generator and Checker, 8-bit Word Comparator	**10G045**	◊ **GigaBit** (2689)	
Quad 2-Input XOR/XNOR/Line Receiver (600 ps delay)	**10G002**	**GigaBit** (2689)	
0.5–5 GHz MMIC Amplifier	**HMR10502**	◊ **Harris** (2723)	
1–5 GHz MMIC Amplifier	**HMR10503**	◊ **Harris** (2723)	
2–6 GHz Monolithic Microwave IC Amplifier	**HMM10610**	**Harris** (2723)	10
4-bit ALU	**10G181**	**GigaBit** (2689)	
6–18 GHz MMIC Amplifier	**HMM11810**	**Harris** (2723)	
512x8 Mask Programmable ROM (1.5 ns access time)	**14GD048**	**GigaBit** (2690)	
	14GM048	**GigaBit** (2690)	

DIGITAL

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—HNIL/HTL

Function	Device	Source	Line
Arithmetic Functions			
4-Bit Comparator			
	343A/C	◊ TeledyneS	
	343B/M	◊† TeledyneS	
Buffers/Inverters			
Hex	MC680	Motorola	
	MC690	Motorola	
	332A/C	TeledyneS	5
	332B/M	† TeledyneS	
Hex Open Collector			
	MC678	Motorola	
	MC681	Motorola	
	MC689	Motorola	
Hex Strobed	MC677	Motorola	10
	335A/C	TeledyneS	
Hex Strobed, Open Collector			
	334A/C	TeledyneS	
Counters, Binary			
Binary	MC685	Motorola	
	372A/C	TeledyneS	
	372B/M	† TeledyneS	15
Binary Up/Down			
	374A/C	TeledyneS	
Counters, Decade			
Decade	MC684	Motorola	
	371A/C	TeledyneS	
	371B/M	† TeledyneS	
Decade Up/Down			
	373A/C	† TeledyneS	20
	373B/M	† TeledyneS	
Decoders			
BCD to Decimal, Open Collector			
	381A/C	TeledyneS	
	381B/M	† TeledyneS	
Decoders/Drivers			
BCD to Decimal Decoder/Lamp Driver, Open Collector			
	380B/M	† TeledyneS	
BCD to Decimal (for gas discharge display tubes)			
	382A/C	TeledyneS	25
	382B/M	† TeledyneS	
BCD to Seven Segment			
	383A/C	TeledyneS	
	383B/M	† TeledyneS	
Quad 2-Input Power, Open Collector			
	302A/C	TeledyneS	
	302B/M	† TeledyneS	30
Drivers			
BCD to Decimal Decoder/Lamp Driver, Open Collector			
	380A/C	TeledyneS	
Dual 4-Input Line Driver, Expandable			
	MC662	◊ Motorola	
Dual 5-Input Power NAND Driver			
	301A/C	TeledyneS	
	301B/M	† TeledyneS	

Function	Device	Source	Line
Flip-Flops, D-Type			
Quad	370A/C	TeledyneS	35
	370B/M	† TeledyneS	
Flip-Flops, J-K Type			
Master-Slave or Reset			
	311A/C	TeledyneS	
	311B/M	† TeledyneS	
Dual or Set-Reset			
	MC688	Motorola	
	312A/C	TeledyneS	40
	312B/M	† TeledyneS	
	313A/C	TeledyneS	
	313B/M	† TeledyneS	
Dual with Reset			
	MC663	◊ Motorola	
Flip-Flops, R-S Type			
Master-Slave	MC664	◊ Motorola	45
Gates, AND			
Dual 2-Input Interface Buffer			
	391	TeledyneS	
Dual 4-Input Interface Buffer			
	390	TeledyneS	
Gates, NAND			
Dual 2-Input Interface Buffer			
	392	TeledyneS	
Dual 4-Input	MC660	◊ Motorola	
	MC661	◊ Motorola	50
Dual 4-Input Interface Buffer			
	395	TeledyneS	
Dual 5-Input	322A/C	TeledyneS	
	322B/M	† TeledyneS	
Triple 3-Input	MC670	Motorola	
	MC671	Motorola	55
Quad 2-Input	MC668	Motorola	
	MC672	Motorola	
	303A/C	TeledyneS	
	303B/M	† TeledyneS	
	321A/C	TeledyneS	60
	321B/M	† TeledyneS	
	324A/C	TeledyneS	
	324B/M	† TeledyneS	
Quad 2-Input, Open Collector			
	323A/C	TeledyneS	
	323B/M	† TeledyneS	65
2,2,3,3-Input	325A/C	TeledyneS	
	325B/M	TeledyneS	
	326A/C	TeledyneS	
	326B/M	TeledyneS	
4, 3, 4-Input	304A/C	TeledyneS	70
	304B/M	† TeledyneS	
Gates, AND-OR-Invert			
Expandable	344A/C	◊ TeledyneS	
Dual 2-Wide, 2-Input			
	MC673	Motorola	
	MC674	Motorola	
	341A/C	◊ TeledyneS	75
	341B/M	◊† TeledyneS	

Function	Device	Source	Line
Gates, OR			
Dual 2-Input Interface Buffer			
	393	TeledyneS	
Gates, NOR			
Dual 2-Input Interface Buffer			
	394	TeledyneS	
Quad 2-Input	306A/C	TeledyneS	
Quad 2-Input, Open Collector			
	307A/C	TeledyneS	80
Gates, Exclusive OR			
Dual 2-Wide, 2-Input AND-OR-Invert, Expandable			
	MC683	Motorola	
Gates, Miscellaneous			
Dual 4-Input Expander (for 600 series)			
	MC669	Motorola	
Dual 5-Input Expander (for 300 series)			
	331A/C	TeledyneS	
	331B/M	† TeledyneS	
Hex Inverter/Gate (quad inverter, dual NAND)			
	333A/C	TeledyneS	85
	333B/M	† TeledyneS	
Latches			
Quad	MC682	Motorola	
Multiplexers (Digital)			
Dual 4-Bit	351A/C	◊ TeledyneS	
8-Bit	350A/C	◊ TeledyneS	
Multivibrators			
Dual Monostable			
	MC667	Motorola	90
	342A/C	◊ TeledyneS	
	342B/M	◊† TeledyneS	
Dual Retriggerable Monostable			
	347A/C	◊ TeledyneS	
	347B/M	◊† TeledyneS	
Shift Registers			
4-Bit Parallel-In Parallel-Out			
	MC686	Motorola	95
	375A/C	TeledyneS	
	375B/M	† TeledyneS	
Translators			
Dual High to Low Interface (HNL to DTL, TTL)			
	361A/C	TeledyneS	
	361B/M	† TeledyneS	
Dual Interface Element, (line driver, receiver, ECL to TTL, MOS to TTL, Schmitt trigger)			
	396AC	TeledyneS	100
Dual Low to High Interface (TTL to HNL)			
	362A/C	TeledyneS	
	362B/M	† TeledyneS	
Triple High to Low (HTL to TTL)			
	MC665	◊ Motorola	
Triple Low to High (TTL to HTL)			
	MC666	Motorola	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Translators (Cont'd)			
Quad Low to High Interface (TTL to HNL)			
	363A/C	TeledyneS	
	363B/M	† TeledyneS	
Miscellaneous			
Timer (see also linear-timers)			
	355A/C	◊ TeledyneS	
Dual Pulse Stretcher			
	MC675	Motorola	
	349A/C	◊ TeledyneS	5
Quad Schmitt Trigger/Line Receiver			
	367A/C	TeledyneS	
	367B/M	† TeledyneS	
Quad Schmitt Trigger/Line Receiver, Open Collector			
	368A/C	TeledyneS	

© IC MASTER 1988

Arithmetic Functions

Function	Device	Source
Adder (natural binary coded decimal)		
TTL	MC4056	Motorola
	MC4356	† Motorola
Adder/Subtractor Quad Serial		
TTL-F	54F385	† Fairchild
	74F385	◊ Fairchild
	74F385	◊ **Signetics (3024)**
TTL-LS	AM25LS15C	AMD
	AM25LS15M	† AMD
	SN54LS385	† AMD
	SN74LS385	AMD
	SN54LS385	† Motorola
	SN74LS385	Motorola
	SN54LS385	◊† TI
Adder, 4-Bit BCD		
TTL-S	**N82S83**	† **Signetics (3022)**
Arithmetic Logic/Multiplier, Floating Point Set/TTL(N)		
	WTL104A	Weitek
	WTL1064A	† Weitek
	WTL1065A	† Weitek
	WTL1164A	† Weitek
	WTL1165A	† Weitek
	WTL1264A	† Weitek
	WTL1265A	† Weitek
Arithmetic Logic Unit, Fixed/Floating Point		
TTL(N)	WTL1033AC	◊ Weitek
	WTL1033AM	◊† Weitek
Arithmetic Logic Unit, Floating Point		
TTL(N)	WTL1032A	◊† Weitek
	WTL1032AC	◊ Weitek
	WTL1032AM	◊† Weitek
	WTL1033A	◊† Weitek
Barrel Shifter, 16-Bit, Expandable		
TTL-AS	SN54AS897	† TI
	SN74AS897A	**TI (3226)**
Barrel Shifter, 32-Bit		
TTL-AS	**SN74AS8838**	**TI (3224, 3226)**
	SN74AS8839	**TI (3224)**
Comparator, Address		
TTL-ALS	SN74ALS677	TI
	SN74ALS678	TI
	SN74ALS679	TI
	SN74ALS680	TI
Comparator, Registered		
TTL-F	74F524	◊ Fairchild
	74F524	**Signetics (3024)**
Comparator, Dual 4-Bit Magnitude		
TTL	MC4021	Motorola
	MC4022	Motorola
	MC4321	† Motorola
	MC4322	† Motorola
Comparator, 4-Bit Magnitude		
TTL	TD3502A	Toshiba
Comparator, 4-Bit Magnitude, Separate A = B Output		
TTL	54LS85	† Fairchild
	5485	◊† Fairchild
	74LS85	◊ Fairchild
	7485	Fairchild
	9324C	Fairchild
	9324M	† Fairchild
	GD74LS85	**GoldStar (2693)**
	HD74LS85	Hitachi
	SN54LS85	† Motorola
	SN74LS85	Motorola
	DM54LS85	◊† National

(Continued)

Function	Device	Source
Comparator, 4-Bit Magnitude, Separate A = B Output (Cont'd)		
TTL	DM5485	† National
	DM74LS85	National
	DM7485	◊ National
	DN74LS85	◊ Panasonic
	N9324	**Signetics (3022)**
	54LS85	† Signetics
	5485	† Signetics
	74LS85	**Signetics (3003)**
	7485	**Signetics (3003)**
	SN54LS85	◊† TI
	SN5485	† TI
	SN74LS85	TI
	SN7485	TI
TTL-F	74F85	Signetics
TTL-LS	M74LS85	Mitsubishi
TTL-S	**GD74S85**	**GoldStar (2694)**
	54S85	† Signetics
	74S85	**Signetics (3003)**
	SN54S85	† TI
	SN74S85	TI
Comparator, 6-Bit Identity		
TTL	DM7160	† National
	DM8160	National
TTL-ALS	SN74ALS29806	◊ TI
TTL-S	93S46C	Fairchild
Comparator, 6-Bit Identity, Open Collector		
TTL-S	93S47C	Fairchild
	93S47M	† Fairchild
Comparator, 6-Bit, Unified Bus, Active Pull Up		
TTL	DM7131	† National
	DM8131	National
Comparator, 6-Bit, Unified Bus, Open Collector		
TTL	DM7136	† National
	DM8136	National
Comparator, 8-Bit		
TTL-ALS	DM54ALS520	† National
	DM54ALS521	† National
	DM54ALS522	† National
	DM74ALS520	National
	DM74ALS521	National
	DM74ALS522	National
	SN54ALS520	† TI
	SN74ALS520	TI
	SN74ALS521	TI
	SN74ALS522	TI
TTL-F	54F521	† Fairchild
	74F521	◊ Fairchild
	MC54F521	◊ Motorola
	MC74F521	Motorola
	54F521	† Signetics
	74F521	**Signetics (3024)**
	SN74F520	◊ TI
	SN74F521	◊ TI
TTL-LS	AM25LS2521C	AMD
	AM25LS2521M	† AMD
Comparator, 8-Bit Identity, Fuse Programmable plus 4-Bit Comparator		
TTL-ALS	SN74ALS527	TI
Comparator, 8-Bit Magnitude, Enable Input, Open-Collector		
TTL-LS	M74LS689	◊ Mitsubishi
Comparator, 8-Bit Magnitude, Enable Input, Totem-Pole		
TTL-LS	M74LS688	◊ Mitsubishi

Function	Device	Source
Comparator, 8-Bit Magnitude Open Collector		
TTL-ALS	DM54ALS518	† National
	DM54ALS689	† National
	DM74ALS518	National
	DM74ALS519	National
	DM74ALS689	National
	SN74ALS518	TI
	SN74ALS519	TI
	SN74ALS689	TI
TTL-F	SN74F518	◊ TI
	SN74F519	◊ TI
TTL-LS	M74LS683	Mitsubishi
	M74LS685	Mitsubishi
	SN74LS683	Motorola
	SN74LS685	Motorola
	SN74LS687	Motorola
	SN74LS689	Motorola
	SN54LS683	◊† TI
	SN54LS685	◊† TI
	SN54LS689	◊† TI
Comparator, 8-Bit Magnitude Totem Pole		
TTL-LS	M74LS682	Mitsubishi
Comparator, 8-Bit Magnitude Totem-Pole		
TTL-ALS	SN54ALS688	† TI
	SN74ALS688	TI
TTL-AS	SN54AS885	† TI
	SN74AS885	TI
TTL-LS	M74LS684	Mitsubishi
	SN74LS682	Motorola
	SN74LS684	Motorola
	SN74LS686	Motorola
	SN74LS688	Motorola
	SN54LS682	◊† TI
	SN54LS684	◊† TI
	SN54LS688	◊† TI
	SN74LS682	TI
	SN74LS684	TI
	SN74LS688	TI
Comparator, 9-Bit Equal to		
TTL-S	AM29809C	AMD
	AM29809M	† AMD
Comparator, 9-Bit Identity		
TTL-ALS	SN74ALS29809	◊ TI
Comparator, 10-Bit Identity		
TTL	DM7130	† National
	DM8130	National
Comparator, 12 Bit		
	NE5105A	Signetics
	SA5105A	Signetics
	SE5105A	Signetics
Comparator, 8-Bit		
TTL-F	SN54F520	† TI
	SN54F521	† TI
Comparator, 8-Bit Magnitude Open Collector		
TTL-F	SN54F518	† TI
	SN54F519	† TI
Comparator, 8-Bit Magnitude Totem Pole		
TTL-LS	**GD74LS688**	◊ **GoldStar (2693)**
Cycle Redundancy Check (CRC) Generator/Checker		
TTL-F	74F401	◊ Fairchild
Fixed-Point Multiplier/Accumulator (16x16)		
	B2011	Bipolar
Floating Point Multiplier and ALU (chipset)		
	B2110/20	Bipolar

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Arithmetic Functions (Cont'd)

Function	Device	Source
Full Adder, BCD with Fast Carry		
	54F583	† Fairchild
	74F583	◊ Fairchild
	74F583	**Signetics (3024)**
Full Adder, Dual		
TTL-LS	SN74LS183	Motorola
	SN54LS183	◊† TI
Full Adder, 2-Bit Binary		
TTL	SN5482	† TI
Full Adder, 4-Bit with Output Latch		
TTL	AM2506M	† AMD
Logic Element		
TTL	RM8260	† Raytheon
Logic Unit/Function Generator		
TTL	DM54181	† National
	54181	† Signetics
	74181	**Signetics (3003)**
	SN54181	† TI
TTL-AS	DM54AS181B	◊† National
	DM54AS881B	† National
	DM74AS181B	National
	DM74AS881B	National
	SN54AS181B	† TI
	SN74AS1181	TI
	SN74AS181B	TI
	SN74AS881A	TI
TTL-F	54F181	◊† Fairchild
	74F181	◊ Fairchild
	74F381	◊ Fairchild
	74F382	◊ Fairchild
	MC54F181	† Motorola
	MC54F381	† Motorola
	MC74F181	Motorola
	MC74F381	Motorola
	MC74F382	Motorola
	54F181	◊† Signetics
	74F181	**Signetics (3023)**
	74F381	**◊ Signetics (3024)**
	74F382	**◊ Signetics (3024)**
	74F881	**Signetics (3025)**
	SN54F381	† TI
	SN54F382	† TI
	SN74F381	TI
	SN74F382	TI
TTL-LS	AM25LS2517C	AMD
	AM25LS2517M	AMD
	54LS181	† Fairchild
	74LS181	◊ Fairchild
	HD74LS181	Hitachi
	SN54LS181	† Motorola
	SN74LS181	Motorola
	74LS181	SGS
	54LS181	† Signetics
	74LS181	**Signetics (3003)**
	SN54LS181	◊† TI
	SN54LS381A	◊† TI
	SN54LS382A	◊† TI
	SN74LS181	TI
	SN74LS381A	TI
	SN74LS382A	TI
TTL-S	93S41C	Fairchild
	93S41M	† Fairchild
	SN54S381	† MMI
	SN74S381	MMI
	54S181	† Signetics

(Continued)

Function	Device	Source
Logic Unit/Function Generator		
TTL-S		(Cont'd)
	74S181	**Signetics (3003)**
	SN54S181	† TI
	SN54S381	† TI
	SN74S181	TI
	SN74S381	TI
Look-Ahead Carry Generator		
TTL	AM2902AC	AMD
	AM2902AM	† AMD
	MC74182	◊ Motorola
	SN54182	† TI
TTL-AS	DM54AS182	◊† National
	DM54AS264	† National
	DM54AS282	† National
	DM74AS182	National
	DM74AS264	National
	DM74AS282	National
	SN54AS882	† TI
	SN74AS282	TI
	SN74AS882A	TI
TTL-F	74F182	◊ Fairchild
	MC54F182	† Motorola
	MC74F182	Motorola
	74F182	**Signetics (3023)**
	74F882	**Signetics (3025)**
TTL-LS	SN54LS182	† Motorola
	SN74LS182	Motorola
TTL-S	SN74S182	AMD
	SN54S182	† MMI
	SN54S382	† MMI
	SN74S382	MMI
	DM74S182	National
	54S182	† Signetics
	74S182	**Signetics (3003)**
	SN54S182	† TI
	SN74S182	TI
Microsequencer		
TTL-AS	**SN74AS890-1**	**TI (3226)**
Multiplier/Divider, (8x8) Microprocessor Co-processor		
TTL-S	SN54S508	† MMI
	SN74S508	MMI
Multiplier/Divider, (16x16)		
	SN74S516	MMI
TTL-S	SN54S516	† MMI
Multiplier, Unsigned Magnitude, 2's Complement or Mixed Operands, (8x8)		
TTL-S	AM25S557C	AMD
Multiplier (2x4, Binary Parallel, Serial Output		
TTL-LS	54LS261	† Signetics
	SN54LS261	◊† TI
Multiplier, 4-Bit Three-State (two ICs to a set, 7875A and 7875B)		
TTL	DM7875	† National
	DM8875	National
Multiplier (4x2), 2's Complement		
TTL	RM2505	† Raytheon
TTL-S	AM25S05C	AMD
	AM25S05M	† AMD
	93S43C	Fairchild
	93S43M	† Fairchild
Multiplier (4x4), Binary Parallel (used with 54/74284)		
TTL	DM54284	† National
Multiplier (8x1) Serial/Parallel 2's Complement		
TTL-LS	AM25LS14AC	AMD
	AM25LS14AM	† AMD
	AM25LS14C	AMD

(Continued)

Function	Device	Source
Multiplier (8x1) Serial/Parallel 2's Complement		
TTL-LS		(Cont'd)
	AM25LS14M	† AMD
	SN54LS384	† AMD
	SN74LS384	AMD
Multiplier (8x8), Unsigned Magnitude		
TTL	MPY08HU	† TRW-LSI
Multiplier (8x8), 2's Complement		
TTL	57558-1	† MMI
	MPY008H	† TRW-LSI
	MPY008H-1	† TRW-LSI
Multiplier (12x12), 2's Complement & Unsigned Magnitude, 16-Bit Product		
TTL	MPY112K	† TRW-LSI
Multiplier (12x12), 2's Complement, Unsigned Magnitude		
TTL	MPY012H	TRW-LSI
Multiplier (16x16)		
	ADSP7018	**AD (2450)**
Multiplier (16x16), High Speed		
TTL-S	**CY7C516**	**◊† Cypress (2569)**
	CY7C517	**◊† Cypress (2569)**
Multiplier (16x16), Integer		
	B2018	Bipolar
Multiplier (16x16), 2's Complement and Unsigned Magnitude		
TTL	MPY016H	† TRW-LSI
	MPY016K	† TRW-LSI
	MPY016K-1	† TRW-LSI
Multiplier-Accumulator (12x12)		
TTL	AM29L509	AMD
Multiplier-Accumulator (16x16)		
TTL	AM29L510	AMD
	MP1010C	† MicroPwr
Register/Arithmetic Logic Unit		
TTL-LS	SN54LS681	◊† TI
	SN74LS681	TI
TTL-S	DM74S281	National
	SN74S281	◊ TI
Shifter, Barrel Shifter		
TTL-F	SN54F350	† TI
4-Bit Microprocessor Slice (ALU)		
TTL-S	AM2901AC	AMD
	AM2901AM	† AMD
	AM2901BC	AMD
	AM2901BM	† AMD
	AM2901C	AMD
	AM2901M	† AMD
	AM2903C	AMD
	AM2903M	† AMD
	3002	Intel
	ADM2901AC	National
	N3002	Signetics
	S3002	† Signetics
	SFC2901B	Thomson
4-Bit ALV		
TTL-LS	T74LS181	SGS
4-Bit Binary Full Adder, Look-Ahead Carry		
TTL	54283	† Fairchild
	5483	◊† Fairchild
	74283	Fairchild
	DM5483	† National
	DM7483	National
	5483	† Signetics
	7483	**Signetics (3003)**
	SN54283	† TI
	SN5483A	† TI

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—TTL (Cont'd)

Arithmetic Functions (Cont'd)

Function	Device	Source
4-Bit Binary Full Adder, Look-Ahead Carry		
TTL (Cont'd)		
	SN74283	TI
	SN7483A	TI
TTL-F	54F283	◊† Fairchild
	74F283	◊ Fairchild
	MC54F283	† Motorola
	MC74F283	Motorola
	74F283	**Signetics (3023)**
	SN54F283	† TI
	SN74F283	TI
TTL-LS	54LS283	† Fairchild
	54LS83A	† Fairchild
	74LS283	◊ Fairchild
	74LS83	Fairchild
	GD74LS283	**GoldStar (2693)**
	HD74LS283A	Hitachi
	HD74LS83A	Hitachi
	M74LS83A	Mitsubishi
	SN54LS283	◊† Motorola
	SN54LS83A	† Motorola
	SN74LS283	Motorola
	SN74LS83A	Motorola
	DM54LS283	† National
	DM54LS83A	◊† National
	DM74LS283	National
	DM74LS83A	National
	DN74LS283	◊ Panasonic
	DN74LS83A	◊ Panasonic
	54LS283	† SGS
	54LS83A	† SGS
	74LS283	SGS
	74LS83A	SGS
	54LS283	† Signetics
	54LS83A	† Signetics
	74LS283	**Signetics (3003)**
	74LS83A	**Signetics (3003)**
	SN54LS283	◊† TI
	SN54LS83A	† TI
	SN74LS283	TI
	SN74LS83A	TI
TTL-S	SN54S283	† TI
	SN74S283	◊ TI
4-Bit BCD (add, subtract, compare)		
TTL-S	**N82S82**	**Signetics (3022)**
8-Bit Magnitude		
TTL-AS	SN74AS866	TI
8-Bit Serial/Parallel Register (for use with 25LS14/74LS384)		
TTL-LS	AM25LS22C	AMD
	AM25LS22M	† AMD
	SN54LS322	† AMD
	SN74LS322	AMD
	54LS322	† Fairchild
	GD74LS322	**GoldStar (2693)**
	SN74LS322A	Motorola
	SN54LS322A	◊† TI
	SN74LS322A	TI
9-Bit Odd/Even Parity Generator		
TTL-LS	54LS280	† SGS
	74LS280	SGS
9-Bit Parity Generator/Checker with Parity I/O Port		
TTL-F	SN54F286	† TI
64-Bit Floating Point Processor		
TTL-AS	SN74AS8837	TI

Buffers

Function	Device	Source
Dual 4-Input NAND Buffer		
TTL-LS	T54LS40	◊† SGS
Quad Gated, Three-State		
TTL	54125	† Fairchild
	74125	◊ Fairchild
	DM54125	† National
	DM7093	† National
	DM74125	National
	DM8093	National
	54125	† Signetics
	74125	**Signetics (3003)**
	SN54125	† TI
	SN74125	TI
TTL-F	**74F125**	**◊ Signetics (3023)**
TTL-LS	54LS125A	† Fairchild
	74LS125	◊ Fairchild
	GD74LS125A	**GoldStar (2693)**
	HD74LS125A	Hitachi
	M74LS125	◊ Mitsubishi
	SN54LS125A	† Motorola
	SN74LS125A	Motorola
	DM54LS125A	† National
	DM74LS125A	National
	DN74LS125A	Panasonic
	54LS125A	† SGS
	74LS125A	SGS
	54LS125A	† Signetics
	74LS125A	**Signetics (3003)**
	SN54LS125A	◊† TI
	SN74LS125A	TI
Quad Gated, Three-State (inverted control)		
TTL	DM7094	† National
	DM8094	National
	54126	† Signetics
	74126	**Signetics (3003)**
	SN54126	† TI
	SN74126	TI
TTL-F	**74F126**	**◊ Signetics (3023)**
TTL-LS	54LS126	† Fairchild
	74LS126	◊ Fairchild
	HD74LS126A	Hitachi
	M74LS126	Mitsubishi
	SN54LS126A	† Motorola
	SN74LS126A	Motorola
	DM54LS126	† National
	DM74LS126	National
	54LS126	† SGS
	74LS126	SGS
	54LS126A	† Signetics
	74LS126A	**Signetics (3003)**
	SN54LS126A	◊† TI
	SN74LS126A	TI
Quad, Three State		
TTL-LS	T74LS126	SGS
Quad, Three-State		
TTL-LS	T74LS125	SGS
Quad 2-Input NAND Buffer		
TTL-LS	T54LS37	◊† SGS
	T54LS38	◊† SGS
Quad 2-Input NOR Buffer		
TTL-LS	74LS28	SGS
	74LS33	SGS
Hex		
TTL-LS	T54LS365A	† SGS
	T54LS367A	† SGS

Function	Device	Source
Hex Driver, Non-inverting		
TTL-AS	DM54AS1034	† National
	DM74AS1034	National
	SN54AS1034A	◊† TI
	SN74AS1034A	◊ TI
Hex, Non-Inverting		
TTL-ALS	SN74ALS34	TI
TTL-AS	DM54AS34	◊† National
	DM74AS34	National
	SN54AS34	† TI
	SN74AS34	TI
Hex, Open Collector		
TTL-ALS	M74ALS1035	Mitsubishi
	DM54ALS1035	† National
	DM74ALS1035	National
	SN54ALS1035	† TI
	SN74ALS1035	TI
TTL-LS	**GD74LS07**	**GoldStar (2693)**
	GD74LS17	**GoldStar (2693)**
Hex, Open Collector, Non-Inverting		
TTL-ALS	SN74ALS35A	TI
Hex, Three-State		
TTL	DM54365	† National
	DM54367	† National
	DM7095	† National
	DM7097	† National
	DM74366	National
	DM74367	National
	DM8095	National
	DM8097	National
	54365A	◊† Signetics
	54367A	◊† Signetics
	74365	**Signetics (3003)**
	74367	**Signetics (3003)**
	SN54365A	† TI
	SN54367A	† TI
	SN74365A	TI
	SN74367A	TI
TTL-ALS	M74ALS1034	Mitsubishi
	DM54ALS1034	† National
	DM74ALS1034	National
	SN54ALS1034	† TI
	SN74ALS1034	TI
TTL-AS	DM54AS1034	† National
	DM74AS1034	National
	SN54AS1034A	◊† TI
	SN74AS1034A	◊ TI
TTL-F	74F365	◊ Fairchild
	54F365	† Signetics
	54F367	† Signetics
	74F365	**Signetics (3023)**
	74F367	**Signetics (3023)**
TTL-LS	54LS365	† Fairchild
	54LS367	† Fairchild
	74LS365	Fairchild
	74LS367	Fairchild
	GD74LS365A	**GoldStar (2693)**
	GD74LS367A	**GoldStar (2693)**
	HD74LS365A	Hitachi
	HD74LS367A	Hitachi
	SN54LS365A	† Motorola
	SN54LS367A	† Motorola
	SN74LS365A	Motorola
	SN74LS367A	Motorola
	DM54LS365A	† National
	DM54LS367A	† National
	DM74LS365A	National

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Buffers (Cont'd)

Function	Device	Source
Hex, Three-State		
TTL-LS		(Cont'd)
	DM74LS367A	National
	DN74LS365A	◊ Panasonic
	DN74LS367A	◊ Panasonic
	T74LS365A	SGS
	T74LS367A	SGS
	54LS365	† SGS
	54LS367	† SGS
	74LS365A	SGS
	74LS367A	SGS
	54LS365A	† Signetics
	54LS367A	† Signetics
	74LS365A	**Signetics (3003)**
	74LS367A	**Signetics (3003)**
	SN54LS365A	◊† TI
	SN54LS367A	◊† TI
	SN74LS365A	TI
	SN74LS367A	TI
TTL-S	**MC8T95**	**Motorola (2951)**
	MC8T97	**Motorola (2951)**
	N8T95	**Signetics (3022)**
	N8T97	**Signetics (3022)**
	S8T97	† Signetics
Octal		
TTL-LS	T74LS240	SGS
	T74LS241	SGS
	T74LS244	SGS
	54LS240	† SGS
	74LS240	SGS
	74LS241	SGS
	74LS244	SGS
Octal Buffer		
TTL-LS	T54LS240	† SGS
Octal Buffer/Driver, Inverting		
TTL-ALS	SN74ALS763	TI
Octal Bus Driver, Inverting with Pull-Up Resistors		
TTL-ALS	SN74ALS746	TI
	SN74ALS746-1	TI
Octal Bus Driver, Non-Inverting with Pull-Up Resistors		
TTL-ALS	SN74ALS747	TI
	SN74ALS747-1	TI
Octal, with Parity Generator-Checker		
TTL-F	54F656	† Signetics
	74F656A	**◊ Signetics (3024, 3032)**
Octal, Three-State		
TTL-ALS	M74ALS465A	Mitsubishi
	M74ALS467A	Mitsubishi
	DM54ALS465	† National
	DM54ALS467	† National
	DM74ALS465	National
	DM74ALS467	National
	SN74ALS465A	TI
	SN74ALS467A	TI
TTL-LS	AM81LS95	AMD
	AM81LS97	AMD
	SN74LS795	Motorola
	SN74LS796	Motorola
	SN74LS797	Motorola
	SN74LS798	Motorola
	DM71LS95	† National
	DM71LS97	† National
	DM81LS95	National
	DM81LS97	National
	SN74LS465	◊ TI
10-Bit (bus interface)		
TTL-F	**74F827**	**Signetics (3025)**
TTL-S	AM29827	◊ AMD
	AM29828	◊ AMD

Inverters

Function	Device	Source
Dual 4-Input Schmitt Trigger		
TTL-F	MC54F13	◊† Motorola
	MC74F13	Motorola
TTL-LS	74LS13	◊ SGS
Quad 2-Input Schmitt Trigger		
TTL-LS	T54LS132	† SGS
	T74LS132	SGS
Hex		
TTL	5404	† Fairchild
	7404	Fairchild
	DM5404	† National
	DM7404	National
	RG370	Raytheon
	RG380	Raytheon
	N8890	**Signetics (3022)**
	N8891	**Signetics (3022)**
	S8891	† Signetics
	5404	† Signetics
	7404	**Signetics (3003)**
	SN5404	† TI
	SN7404	TI
	TC7404B	Toshiba
TTL-ALS	M74ALS1004	Mitsubishi
	DM54ALS04	† National
	DM54ALS1004	† National
	DM74ALS04	National
	DM74ALS1004	National
	SN54ALS04B	† TI
	SN54AS04	† TI
	SN74ALS04B	TI
	SN74ALS1004	TI
TTL-AS	DM54AS04	† National
	DM54AS1004	† National
	DM74AS04	National
	DM74AS1004	National
	SN54AS1004A	† TI
	SN74AS04	TI
	SN74AS1004A	TI
TTL-F	54F04	◊ Fairchild
	74F04	◊ Fairchild
	MC54F04	◊ Motorola
	MC54F14	† Motorola
	MC74F04	Motorola
	MC74F14	Motorola
	54F04	Signetics
	74F04	**Signetics (3023)**
	SN54F04	† TI
	SN74F04	TI
TTL-H	DM54H04	† National
	DM74H04	National
TTL-LS	54LS04	† Fairchild
	74LS04	◊ Fairchild
	GD74LS04	**GoldStar (2693)**
	HD74LS04	Hitachi
	M74LS04	Mitsubishi
	M74LS05	Mitsubishi
	SN54LS04	† Motorola
	SN74LS04	Motorola
	DM54LS04	† National
	DM74LS04	National
	DN74LS04	◊ Panasonic
	T54LS04	† SGS
	T54LS05A	† SGS
	T54LS366A	† SGS
	T54LS368A	† SGS
	T74LS04	SGS
	T74LS05A	SGS
	54LS04	† SGS
	74LS04	◊ SGS
	54LS04	† Signetics
	74LS04	**Signetics (3003)**
	SN54LS04	† TI
	SN74LS04	TI
TTL-S	74S04	Fairchild
	GD74S04	**GoldStar (2694)**
	DM54S04	† National
	DM74S04	National
	54S04	† Signetics
	74S04	**Signetics (3003)**
	SN54S04	† TI
	SN74S04	TI
Hex, Open Collector		
TTL	7405	Fairchild
	DM5405	† National
	DM7405	National
	S8T90	† Signetics
	5405	† Signetics
	7405	**Signetics (3003)**
	SN5405	† TI
	SN7405	TI
TTL-ALS	DM54ALS05	† National
	DM54ALS1005	† National
	DM74ALS05	National
	DM74ALS1005	National
	SN54ALS05A	† TI
	SN74ALS05A	TI
	SN74ALS1005	TI
TTL-LS	54LS05	† Fairchild
	74LS05	◊ Fairchild
	GD74LS05	**GoldStar (2693)**
	GD74LS06	**GoldStar (2693)**
	GD74LS16	**GoldStar (2693)**
	HD74LS05	Hitachi
	SN54LS05	† Motorola
	SN74LS05	Motorola
	DM54LS05	† National
	DM74LS05	National
	DN74LS05	◊ Panasonic
	54LS05	† SGS
	74LS05	◊ SGS
	54LS05	† Signetics
	74LS05	**Signetics (3003)**
	SN54LS05	◊† TI
	SN74LS05	TI
TTL-S	74S05	Fairchild
	GD74S05	**GoldStar (2694)**
	DM54S05	† National
	DM74S05	National
	54S05	† Signetics
	74S05	**Signetics (3003)**
	SN54S05	† TI
	SN74S05	TI
Hex, Open-Collector		
TTL-ALS	M74ALS1005	Mitsubishi
Hex Schmitt Trigger		
TTL-LS	T54LS14	† SGS

(Continued)

DIGITAL

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—TTL (Cont'd)

Inverters (Cont'd)

Function	Device	Source	Line
Hex Schmitt Trigger Inverter			
TTL-LS	T74LS14	SGS	
Hex, Unbuffered			
TTL-S	HCU04	◊ GoldStar	
Hex, Three-State			
TTL	DM54366	† National	
	DM54368	† National	
	DM7096	† National	5
	DM7098	† National	
	DM74365	National	
	DM74368	National	
	DM8096	National	
	DM8098	National	10
	54366A	◊† Signetics	
	54368A	† Signetics	
	74366	**Signetics (3003)**	
	74368	**Signetics (3003)**	
	SN54366A	† TI	15
	SN54368A	† TI	
	SN74366A	TI	
	SN74368A	TI	
TTL-F	54F366	† Signetics	
	54F368	† Signetics	20
	74F366	**Signetics (3023)**	
	74F368	**Signetics (3023)**	
TTL-LS	54LS366	† Fairchild	
	54LS368	† Fairchild	
	74LS366	Fairchild	25
	74LS368	Fairchild	
	GD74LS366	**GoldStar (2693)**	
	GD74LS368	**GoldStar (2693)**	
	HD74LS368A	Hitachi	
	SN54LS366A	† Motorola	30
	SN54LS368A	† Motorola	
	SN74LS366A	Motorola	
	SN74LS368A	Motorola	
	DM54LS366A	† National	
	DM54LS368A	† National	35
	DM74LS366A	National	
	DM74LS368A	National	
	DN74LS366A	◊ Panasonic	
	DN74LS368A	◊ Panasonic	
	T74LS366A	SGS	40
	T74LS368A	SGS	
	54LS366	† SGS	
	54LS368	† SGS	
	74LS366A	SGS	
	74LS368A	SGS	45
	54LS366A	◊† Signetics	
	54LS368A	† Signetics	
	74LS366A	**Signetics (3003)**	
	74LS368A	**Signetics (3003)**	
	SN54LS366A	† TI	50
	SN54LS368A	◊† TI	
	SN74LS366A	TI	
	SN74LS368A	TI	
TTL-S	**MC8T96**	**Motorola (2951)**	
	MC8T98	**Motorola (2951)**	55
	N8T96	**Signetics (3022)**	
	N8T98	**Signetics (3022)**	
	S8T98	† Signetics	
Octal, with Parity Generator-Checker			
TTL-F	54F655	† Signetics	
	74F655A	◊ **Signetics (3024, 3032)**	60
Octal, Three-State			
TTL-ALS	M74ALS466A	Mitsubishi	
	M74ALS468A	Mitsubishi	
	DM54ALS466	† National	
	DM54ALS468	† National	
	DM74ALS466	National	65
	DM74ALS468	National	
	SN74ALS466A	TI	
	SN74ALS468A	† TI	
TTL-LS	AM81LS96	AMD	
	AM81LS98	AMD	70
	DM81LS96	National	
	DM81LS98	National	
	SN74LS466	◊ TI	
TTL-S	SN54S210	† MMI	
	DM71S96	† National	75
	DM71S98	† National	
10-Bit (bus interface)			
	74F828	**Signetics (3025)**	

Counters, Binary Count Up

Function	Device	Source	Line
Counter/Latch (divide-by-2, 4, 8, 16), Preset Input			
TTL	74197	Fairchild	
	DM54177	† National	
	DM54197	† National	80
	DM7281	† National	
	DM7291	† National	
	DM74177	National	
	DM74197	National	
	DM8281	National	85
	DM8291	National	
	RM8281	† Raytheon	
	RM8291	† Raytheon	
	SN54177	† TI	
	SN54197	† TI	90
	SN74177	TI	
	SN74197	TI	
TTL-LS	74LS197	Fairchild	
	M74LS197	Mitsubishi	
	SN54LS197	† Motorola	95
	SN74LS197	Motorola	
	DM54LS197	† National	
	DM74LS197	National	
	DN74LS197	Panasonic	
	74LS197	SGS	100
	54LS197	† Signetics	
	74LS197	**Signetics (3003)**	
	SN54LS197	◊† TI	
	SN74LS197	◊ TI	
TTL-S	SN54S197	† TI	105
	SN74S197	TI	
Counter/Register with Multiplexed Output, Three-State			
TTL-LS	SN54LS691	◊† TI	
	SN54LS693	◊† TI	
Modulo-16			
TTL-LS	T54LS293	† SGS	
Modulo-16 Binary Counter			
TTL-LS	74LS169	SGS	110
Synchronous (both conventional and three-state outputs) Preset Input			
TTL	DM7556	National	
	DM8556	National	
Synchronous, Preset Input (asynchronous clear)			
TTL	54161	† Fairchild	
	74161	Fairchild	
	9316C	Fairchild	115
	9316M	† Fairchild	

(Continued)

Function	Device	Source	Line
Synchronous, Preset Input (asynchronous clear)			
TTL		(Cont'd)	
	DM54161A	† National	
	DM74161A	National	
	DM8316	† National	
	DM9316	National	120
	N9316	**Signetics (3022)**	
	54161	† Signetics	
	74161	**Signetics (3003)**	
	SN54161	† TI	
	SN74161	TI	125
TTL-ALS	DM54ALS161	† National	
	DM74ALS161	National	
	SN54ALS161B	† TI	
	SN74ALS161B	TI	
TTL-AS	DM54AS161	† National	130
	DM54AS162	† National	
	DM74AS161	National	
	DM74AS162	National	
	SN54AS161	† TI	
	SN74AS161	TI	135
TTL-F	54F161A	◊† Fairchild	
	74F161A	◊ Fairchild	
	MC54F161A	† Motorola	
	MC74F161A	Motorola	
	74F161A	**Signetics (3023)**	140
	SN54F161A	† TI	
	SN74F161A	◊ TI	
TTL-LS	54LS161	† Fairchild	
	74LS161	Fairchild	
	GD74LS161A	**GoldStar (2693)**	145
	HD74LS161A	Hitachi	
	M74LS161A	Mitsubishi	
	SN54LS161A	† Motorola	
	SN74LS161A	Motorola	
	DM54LS161A	◊† National	150
	DM74LS161A	National	
	DN74LS161A	◊ Panasonic	
	54LS161A	◊† Signetics	
	74LS161A	**Signetics (3003)**	
	SN54LS161A	◊† TI	155
	SN74LS161A	TI	
TTL-S	AM93S16C	AMD	
	AM93S16M	† AMD	
	SN54S161	† AMD	
	SN74S161	AMD	160
	93S16C	Fairchild	
Synchronous, Preset Input (synchronous clear)			
TTL	74163	Fairchild	
	DM54163	† National	
	DM74163	National	
	54163	Signetics	165
	74163	**Signetics (3003)**	
	SN54163	† TI	
	SN74163	TI	
TTL-ALS	M74ALS163A	Mitsubishi	
	DM54ALS163	† National	170
	DM74ALS163	National	
	SN54ALS163B	† TI	
	SN74ALS163B	TI	
TTL-AS	DM54AS163	◊† National	
	DM74AS163	National	175
	SN54AS163	† TI	
	SN74AS163	TI	
TTL-F	54F163A	◊† Fairchild	
	74F163A	◊ Fairchild	
	MC54F163A	† Motorola	180

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Counters, Binary Count Up (Cont'd)

Function	Device	Source
Synchronous, Preset Input (synchronous clear)		
TTL-F (Cont'd)	MC74F163A	Motorola
	74F163A	**Signetics (3023)**
	SN54F163A	† TI
	SN74F163A	◊ TI
TTL-LS	54LS163A	† Fairchild
	74LS163	Fairchild
	GD74LS163A	**GoldStar (2693)**
	HD74LS163A	Hitachi
	SN54LS163A	† Motorola
	SN74LS163A	Motorola
	DM54LS163A	◊† National
	DM74LS163A	National
	DN74LS163A	◊ Panasonic
	54LS163A	◊† Signetics
	74LS163A	**Signetics (3003)**
	SN54LS163A	† TI
	SN74LS163A	TI
TTL-S	SN74S163	AMD
	GD74S163	**GoldStar (2694)**
	SN54S163	† TI
	SN74S163	TI
Dual 4-Bit, Ripple (dual 54/7493A)		
TTL	SN54393	† TI
	SN74393	TI
TTL-LS	AM25LS299	AMD
	74LS393	◊ Fairchild
	GD74LS393	**GoldStar (2693)**
	HD74LS393	Hitachi
	SN54LS393	† Motorola
	SN74LS393	Motorola
	DM54LS393	† National
	DM74LS393	◊ National
	DN74LS393	◊ Panasonic
	T54LS393	† SGS
	T74LS393	SGS
	54LS393	† Signetics
	74LS393	**◊ Signetics (3003)**
	SN54LS393	◊† TI
	SN74LS393	TI
Dual 4-Stage		
TTL-LS	74LS393	SGS
4-Bit, Ripple		
TTL	7493	Fairchild
	DM5493A	† National
	DM7493A	◊ National
	5493	† Signetics
	7493	**Signetics (3003)**
	SN54293	† TI
	SN5493A	† TI
	SN74293	TI
	SN7493A	TI
	TD3505A	Toshiba
TTL-LS	74LS293	◊ Fairchild
	GD74LS93	**GoldStar (2693)**
	HD74LS293	Hitachi
	HD74LS93	Hitachi
	M74LS293	Mitsubishi
	M74LS93	Mitsubishi
	SN54LS293	† Motorola
	SN54LS93	† Motorola
	SN74LS293	Motorola
	SN74LS93	Motorola
	DM54LS293	† National

(Continued)

Function	Device	Source
4-Bit, Ripple		
TTL-LS (Cont'd)	DM54LS93	◊† National
	DM74LS293	National
	DM74LS93	National
	DN74LS293	◊ Panasonic
	DN74LS93	◊ Panasonic
	54LS293	† SGS
	54LS93	† SGS
	74LS293	SGS
	74LS93	SGS
	54LS293	† Signetics
	54LS93	† Signetics
	74LS293	**Signetics (3003)**
	74LS93	**Signetics (3003)**
	SN54LS293	◊† TI
	SN54LS93	† TI
	SN74LS293	TI
	SN74LS93	TI
4-Bit Binary		
TTL-ALS	SN74ALS561A	◊ TI
8-bit Synchronous		
TTL-ALS	SN74ALS8161	TI
TTL-LS	SN54LS461	† MMI
	SN74LS461	MMI
	DM54LS461	† National
	DM74LS461	National
8-Bit with Input Registers		
TTL-LS	SN54LS592	◊† TI
	SN54LS593	† TI
	SN74LS592	TI
8-Bit with Output Registers		
TTL-LS	**GD74LS590**	**GoldStar (2693)**
	SN54LS590	† TI
	SN74LS590	TI
	SN74LS591	TI

Counters, Binary Count Up/Down

Function	Device	Source
Counter/Register with Multiplexed Three-State Output		
TTL-LS	SN54LS697	◊† TI
	SN54LS699	◊† TI
	SN74LS697	TI
	SN74LS699	TI
Divide by 16 Counter		
TTL-LS	T54LS93	† SGS
Presettable BCD/Decade Up/Down Counter		
TTL-LS	T54LS192	† SGS
Synchronous		
TTL-ALS	SN54AS867	† TI
	SN54AS869	◊† TI
	SN74AS867	TI
	SN74AS869	TI
TTL-F	74F569	◊ Fairchild
	74F779	**Signetics (3024, 3041)**
	SN74F569	TI
Synchronous, Parallel load		
	SN54LS469	† MMI
	SN74LS469	◊ MMI
Synchronous, Preset Input, Mode Control, Look-Ahead Carry		
TTL-ALS	M74ALS169A	Mitsubishi
	DM54ALS169	† National
	DM74ALS169	National
	SN54ALS169B	TI
	SN74ALS169B	TI

(Continued)

Function	Device	Source
Synchronous, Preset Input, Mode Control, Look-Ahead Carry (Cont'd)		
TTL-AS	DM54AS169	◊† National
	DM74AS169	National
	SN54AS169A	† TI
	SN74AS169	TI
TTL-F	74F169	◊ Fairchild
	MC54F169	† Motorola
	MC74F169	Motorola
	54F269	† Signetics
	74F169	**Signetics (3023)**
	74F269	**Signetics (3023, 3038)**
	SN54F169	† TI
	SN74F169	◊ TI
TTL-LS	54LS169	† Fairchild
	74LS169	Fairchild
	M74LS669	Mitsubishi
	SN54LS169	† Motorola
	SN74LS169	Motorola
	DM54LS169A	◊† National
	DM74LS169A	National
	T54LS169	† SGS
	T74LS169	SGS
	54LS169A	◊† Signetics
	74LS169A	**Signetics (3003)**
	SN54LS169B	◊† TI
	SN54LS669	◊† TI
	SN74LS169B	TI
	SN74LS669	TI
TTL-S	**GD74S169**	**GoldStar (2694)**
	54S169A	Signetics
	74S169A	**Signetics (3003)**
	SN54S169	† TI
	SN74S169	TI
Synchronous, Preset Input with Mode Control		
TTL	54191	† Fairchild
	DM54191	† National
	DM74191	National
	54191	† Signetics
	74191	**Signetics (3003)**
	SN54191	† TI
	SN74191	TI
TTL-ALS	M74ALS191	Mitsubishi
	DM54ALS191	† National
	DM74ALS191	National
	SN54ALS191	† TI
	SN74ALS191	TI
TTL-F	54F191	† Fairchild
	74F191	◊ Fairchild
	MC54F191	† Motorola
	MC74F191	Motorola
	74F191	**Signetics (3023)**
TTL-LS	74LS191	Fairchild
	GD74LS191	**GoldStar (2693)**
	HD74LS191	Hitachi
	M74LS191	◊ Mitsubishi
	SN54LS191	† Motorola
	SN74LS191	Motorola
	DM54LS191	† National
	DM74LS191	National
	DN74LS191	◊ Panasonic
	74LS191	SGS
	54LS191	† Signetics
	74LS191	**Signetics (3003)**
	SN54LS191	◊† TI
	SN74LS191	TI

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—TTL (Cont'd)

Counters, Binary Count Up/Down (Cont'd)

Function	Device	Source	Line
Synchronous, Preset Input, Three-State			
TTL-ALS	SN54ALS569A	◊† TI	
	SN74ALS569A	◊ TI	
TTL-LS	AM25LS2569C	AMD	
	AM25LS2569M	† AMD	
	SN54LS569	† Motorola	5
	SN74LS569	Motorola	
	74LS569A	**Signetics (3003)**	
Synchronous, Preset Input (2 clocks)			
TTL	DM54193	† National	
	DM74193	National	
	DM7563	† National	10
	DM8563	National	
	54193	† Signetics	
	74193	**Signetics (3003)**	
	SN54193	† TI	
	SN74193	TI	15
TTL-ALS	M74ALS193	Mitsubishi	
	DM54ALS193	† National	
	DM74ALS193	National	
	SN54ALS193	† TI	
	SN74ALS193	TI	20
TTL-F	54F193	◊† Fairchild	
	74F193	◊ Fairchild	
	MC54F193	† Motorola	
	MC74F193	Motorola	
	74F193	**Signetics (3023)**	25
TTL-LS	54LS193	† Fairchild	
	74LS193	Fairchild	
	GD74LS193	**GoldStar (2693)**	
	HD74LS193	Hitachi	
	SN54LS193	† Motorola	30
	SN74LS193	Motorola	
	DM54LS193	† National	
	DM74LS193	National	
	DN74LS193	◊ Panasonic	
	54LS193	† SGS	35
	74LS193	SGS	
	54LS193	Signetics	
	74LS193	**Signetics (3003)**	
	SN54LS193	◊† TI	
	SN74LS193	◊ TI	40
Synchronous, Preset Input (2 clocks)			
TTL-LS	M74LS193	◊ Mitsubishi	
Synchronous with Mode Control			
TTL	RM8284	† Raytheon	
	S8284	† Signetics	
Synchronous 4-Bit, Look-Ahead Carry			
TTL-LS	HD74LS669	Hitachi	
	SN74LS669	Motorola	45
Up/Down Binary Counter			
TTL-LS	T54LS193	† SGS	
Dual, Synchronous, Preset Input			
TTL	MC4355	† Motorola	
4-Bit Binary Up/Down Counter			
TTL-LS	T74LS191	◊ SGS	
	T74LS193	◊ SGS	
8-Bit Synchronous			
TTL-ALS	SN74ALS8163	TI	50
	SN74ALS8169	TI	

Counters, Decade

Function	Device	Source	Line
BCD Decade Counter			
TTL-LS	74LS168	SGS	
Dual			
TTL-LS	54LS390	† SGS	
Dual, Ripple (dual 54/7490A)			
	T74L5490	SGS	
Dual Decade Counter			
TTL-LS	74LS390	SGS	55
	74LS490	SGS	
Decade Counter			
TTL-LS	T54LS280	† SGS	

Counters, Decade Count Up

Function	Device	Source	Line
Divide-by-2 and by-5			
TTL	5490	◊† Fairchild	
	7490	Fairchild	
	DM5490	† National	60
	DM7490	◊ National	
	5490	† Signetics	
	7490	**Signetics (3003)**	
	SN54290	† TI	
	SN5490A	† TI	65
	TD3501A	Toshiba	
TTL-LS	74LS290	◊ Fairchild	
	GD74LS90	**GoldStar (2693)**	
	HD74LS290	Hitachi	
	HD74LS90	Hitachi	70
	M74LS290	Mitsubishi	
	SN54LS290	† Motorola	
	SN54LS90	† Motorola	
	SN74LS290	Motorola	
	SN74LS90	Motorola	75
	DM54LS290	† National	
	DM54LS90	◊† National	
	DM74LS290	National	
	DM74LS90	National	
	DN74LS290	◊ Panasonic	80
	DN74LS90	◊ Panasonic	
	54LS290	† SGS	
	74LS90	SGS	
	54LS290	† Signetics	
	54LS90	† Signetics	85
	74LS290	**Signetics (3003)**	
	74LS90	**Signetics (3003)**	
	SN54LS290	◊† TI	
	SN54LS90	† TI	
	SN74LS290	TI	90
	SN74LS90	TI	
(Divide-by-2 and divide-by-5) Counter/Latch, Ripple, Preset Input			
TTL	DM54176	† National	
	DM7280	† National	
	DM74176	National	
	DM8280	National	95
	RM8280	† Raytheon	
	RM8290	† Raytheon	
	SN54176	† TI	
	SN54196	† TI	
	SN74176	TI	100
	SN74196	TI	
TTL-LS	74LS196	Fairchild	
	M74LS196	Mitsubishi	
	SN54LS196	† Motorola	
	SN74LS196	Motorola	105
	DM54LS196	† National	
	DM74LS196	National	
	DN74LS196	◊ Panasonic	
	74LS196	SGS	
	SN54LS196	◊† TI	110
	SN74LS196	◊ TI	

(Continued)

Function	Device	Source	Line
(Divide-by-2 and divide-by-5) Counter/Latch, Ripple, Preset Input (Cont'd)			
TTL-S	SN54S196	† TI	
	SN74S196	TI	
Divide-by-2 and by-5			
TTL-LS	M74LS90	Mitsubishi	
Synchronous, Preset Input (asynchronous clear)			
TTL	DM54160A	† National	115
	DM74160A	National	
	DM8310	National	
	DM9310	† National	
	N9310	**Signetics (3022)**	
	54160	† Signetics	120
	74160	**Signetics (3003)**	
	SN54160	† TI	
	SN74160	TI	
TTL-ALS	DM54ALS160	† National	
	DM74ALS160	National	125
	SN74ALS160B	TI	
TTL-AS	DM54AS160	† National	
	DM74AS160	National	
	SN74AS160	TI	
TTL-F	54F160A	◊† Fairchild	130
	74F160A	◊ Fairchild	
	MC54F160A	† Motorola	
	MC74F160A	Motorola	
	74F160A	**Signetics (3023)**	
	SN54F160A	† TI	135
	SN74F160A	◊ TI	
TTL-LS	54LS160A	† Fairchild	
	74LS160	Fairchild	
	HD74LS160A	Hitachi	
	M74LS160A	Mitsubishi	140
	SN54LS160A	† Motorola	
	SN74LS160A	Motorola	
	DM54LS160A	◊† National	
	DM74LS160A	National	
	DN74LS160A	◊ Panasonic	145
	54LS160A	◊† Signetics	
	74LS160A	**Signetics (3003)**	
	SN54LS160A	◊† TI	
	SN74LS160A	TI	
TTL-S	SN54S160	† AMD	150
	SN74S160	AMD	
	93S10C	Fairchild	
Synchronous, Preset Input (synchronous clear)			
TTL	DM54162A	† National	
	DM74162A	National	
	SN54162	† TI	155
TTL-ALS	DM54ALS162	† National	
	DM74ALS162	National	
	SN54ALS162B	† TI	
	SN74ALS162B	TI	
TTL-AS	SN74AS162	TI	160
TTL-F	54F162A	◊† Fairchild	
	74F162A	◊ Fairchild	
	MC54F162A	† Motorola	
	MC74F162A	Motorola	
	74F162A	**Signetics (3023)**	165
	SN54F162A	† TI	
	SN74F162A	◊ TI	
TTL-LS	54LS162A	† Fairchild	
	74LS162	Fairchild	
	HD74LS162A	Hitachi	170
	M74LS162A	Mitsubishi	
	SN54LS162A	† Motorola	
	SN74LS162A	Motorola	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Counters, Decade Count Up (Cont'd)

Function	Device	Source
Synchronous, Preset Input (synchronous clear)		
TTL-LS		(Cont'd)
	DM54LS162	◊† National
	DM74LS162	National
	DN74LS162	◊ Panasonic
	54LS162A	◊† Signetics
	74LS162A	**Signetics (3003)**
	SN54LS162A	† TI
	SN74LS162A	TI
TTL-S	SN54S162	† TI
	SN74S162	◊ TI
Dual, Ripple (dual 54/7490A)		
TTL-LS	M74LS490	Mitsubishi
TTL	SN54390	† TI
	SN74390	TI
TTL-LS	54LS490	† Fairchild
	74LS390	◊ Fairchild
	74LS490	◊ Fairchild
	GD74LS390	**GoldStar (2693)**
	HD74LS390	Hitachi
	HD74LS490	Hitachi
	SN54LS390	† Motorola
	SN54LS490	† Motorola
	SN74LS390	Motorola
	SN74LS490	Motorola
	DM54LS390	† National
	DM74LS390	◊ National
	DN74LS390	◊ Panasonic
	DN74LS490	◊ Panasonic
	T54LS390	† SGS
	T54LS490	◊† SGS
	T74LS390	SGS
	T74LS490	SGS
	54LS390	† Signetics
	54LS490	† Signetics
	74LS390	**◊ Signetics (3003)**
	74LS490	**Signetics (3003)**
	SN54LS390	◊† TI
	SN54LS490	◊† TI
	SN74LS390	TI
Dual, Ripple (54/7490A)		
TTL-LS	M74LS390	Mitsubishi
4-Bit, Three-State		
TTL-ALS	SN74ALS560A	◊ TI

Counters, Decade Count Up/Down

Function	Device	Source
Counter/Register with Multiplexed Three-State Output		
TTL-LS	SN54LS696	◊† TI
Synchronous		
TTL	RM8285	† Raytheon
TTL-ALS	SN74ALS568A	◊ TI
TTL-F	74F568	◊ Fairchild
	54F579	† Signetics
	74F568	**Signetics (3024)**
	74F569	**Signetics (3024)**
	74F579	**Signetics (3024, 3039)**
	SN74F568	TI
TTL-LS	**74LS568A**	**Signetics (3003)**
Synchronous, Preset Input, Mode Control, Look-Ahead Carry		
TTL-ALS	M74ALS168A	Mitsubishi
	DM54ALS168	† National
	DM74ALS168	National
	SN74ALS168B	TI
TTL-AS	DM54AS168	◊† National
	DM74AS168	National
	SN74AS168	TI
TTL-F	74F168	Fairchild
	MC54F168	† Motorola
	MC74F168	Motorola
	74F168	**Signetics (3023)**
	SN54F168	† TI
	SN74F168	◊ TI
TTL-LS	AM25LS168AC	AMD
	AM25LS168AM	† AMD
	54LS168	† Fairchild
	M74LS668	Mitsubishi
	SN54LS168	† Motorola
	SN74LS168	Motorola
	SN74LS668	Motorola
	DM54LS168A	◊ National
	DM74LS168A	National
	T54LS168	† SGS
	T74LS168	SGS
	54LS168A	◊† Signetics
	54S168A	Signetics
	74LS168A	**Signetics (3003)**
	74S168A	**Signetics (3003)**
	SN54LS668	◊† TI
TTL-S	SN54S168	† TI
Synchronous, Preset Input, Three-State		
TTL-LS	AM25LS2568C	AMD
	AM25LS2568M	† AMD
	SN54LS568	† Motorola
	SN74LS568	Motorola
Synchronous, Preset Input (2 clocks)		
TTL	DM54192	† National
	DM74192	National
	DM7560	† National
	DM8560	National
	54192	† Signetics
	74192	**Signetics (3003)**
	SN54192	† TI
	SN74192	TI
TTL-ALS	M74ALS192	Mitsubishi
	DM54ALS192	† National
	DM74ALS192	National
	SN74ALS192	TI
TTL-F	54F192	◊† Fairchild
	74F192	◊ Fairchild
	MC54F192	† Motorola
	MC74F192	Motorola
	74F192	**Signetics (3023)**
TTL-LS	AM25LS192C	AMD
	AM25LS192M	† AMD
	54LS192	† Fairchild
	74LS192	Fairchild
	HD74LS192	Hitachi
	SN54LS192	† Motorola
	SN74LS192	Motorola
	DM54LS192	† National
	DM74LS192	National
	DN74LS192	◊ Panasonic
	54LS192	† SGS
	74LS192	SGS

(Continued)

Function	Device	Source
Synchronous, Preset Input (2 clocks)		
TTL-LS		(Cont'd)
	54LS192	† Signetics
	74LS192	**Signetics (3003)**
	SN54LS192	◊† TI
	SN74LS192	◊ TI
Synchronous, Preset Input (2 clocks)		
TTL-LS	M74LS192	◊ Mitsubishi
Synchronous, Preset, with Mode Control		
TTL	DM54190	† National
	54190	† Signetics
	74190	**Signetics (3003)**
	SN54190	† TI
	SN74190	TI
TTL-ALS	M74ALS190	Mitsubishi
	DM54ALS190	† National
	DM74ALS190	National
	SN74ALS190	TI
TTL-F	54F190	† Fairchild
	74F190	◊ Fairchild
	MC54F190	† Motorola
	MC74F190	Motorola
	74F190	**Signetics (3023)**
TTL-LS	AM25LS190C	◊ AMD
	AM35LS190M	† AMD
	74LS190	Fairchild
	HD74LS190	Hitachi
	M74LS190	◊ Mitsubishi
	SN54LS190	† Motorola
	SN74LS190	Motorola
	DM54LS190	† National
	DM74LS190	National
	DN74LS190	◊ Panasonic
	74LS190	SGS
	54LS190	† Signetics
	SN54LS190	◊† TI
	SN74LS190	TI
BCD/Decade Up/Down Counter		
TTL-LS	T74LS190	◊ SGS
	T74LS192	◊ SGS
Four Counter/Latch/Display Driver (synchronous, BCD and segment drives)		
TTL	ZN1040E-RED	Ferranti

Counters, Miscellaneous

Function	Device	Source
Divide-by-4		
TTL	TD6100	Toshiba
Divide-by-12 (divide by 2 and 6), Ripple		
TTL	DM5492A	† National
	DM7492A	◊ National
	5492	† Signetics
	7492	**Signetics (3003)**
	SN5492A	† TI
	SN7492A	TI
TTL-LS	**GD74LS92**	**GoldStar (2693)**
	HD74LS92	Hitachi
	SN54LS92	† Motorola
	SN74LS92	Motorola
	DM54LS92	◊† National
	DM74LS92	National
	DN74LS92	◊ Panasonic
	54LS92	† Signetics
	74LS92	**Signetics (3003)**
	SN54LS92	† TI
	SN74LS92	TI
Divide-by-2 (divide by 2 and 6), Ripple		
TTL-LS	M74LS92	Mitsubishi

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—TTL (Cont'd)

Counters, Miscellaneous (Cont'd)

Function	Device	Source
Programmable Counter (16-Bit Countdown)		
	74F525	◊ Fairchild
Programmable Modulo-N Binary		
TTL	MC4018	Motorola
	MC4019	Motorola
	MC4318	† Motorola
	MC4319	† Motorola
TTL-LS	SN74LS718	Motorola
Programmable Modulo-N Decade		
TTL	MC4016	Motorola
	MC4017	Motorola
	MC4316	† Motorola
	MC4317	† Motorola
TTL-LS	SN74LS716	Motorola
Decade Counter/Latch, LED/Lamp Driver (constant current output)		
TTL	SN74143	TI
Decade Counter/Latch LED/Lamp Driver (high current output)		
TTL	SN54144	† TI
Decade Counter/Latch/7 Segment Decoder		
TTL	MC4050	Motorola
	MC4350	† Motorola
4-Bit Universal		
TTL	MC4023	Motorola
6-Bit Universal		
TTL	DM75S50	National
8-Bit Binary Counter/Latch		
TTL-LS	SN74LS593	TI
10-Bit Up/Down (provides CRT vertical and horizontal timing generation)		
TTL-LS	SN54LS491	◊† MMI
	SN74LS491	MMI
	DM54LS491	† National
	DM74LS4891	◊ National
16-Bit Programmable Modulo		
TTL-LS	SN74LS294	TI
32-Bit Programmable Modulo		
TTL-LS	SN74LS292	TI

Decoders

Function	Device	Source
Binary to Octal, Inverting/Non-Inverting, Open Collector		
TTL	MC4038	Motorola
Binary to Octal, Non-Inverting		
TTL	MC4048	Motorola
Binary to Octal (1 of 8)		
TTL	MC4006	Motorola
	MC4306	† Motorola
	RM8250	† Raytheon
TTL-S	**N82S50**	**Signetics (3022)**
Binary to Octal (1 of 8), Polarity Control, Three-State		
TTL-LS	AM2921C	AMD
	AM2921M	† AMD
Binary to 2-of-8, Open Collector		
TTL	MC4040	Motorola
BCD to Decimal Decoder/Driver, Open Collector, 15 V		
TTL-LS	M74LS145	Mitsubishi
BCD-to-Binary and Binary-to-BCD Converter, Open Collector		
TTL	MC4001	Motorola
BCD-to-Decimal Decoder/Driver, Open Collector		
TTL-F	**74F445**	**Signetics (3024)**
TTL-LS	54LS445	† Signetics
	74LS445	**Signetics (3003)**
BCD-to-Decimal Decoder/Driver, Open Collector to 30 V Output		
TTL	7445	Fairchild
	DM5445	◊† National
	DM7445	National
	5445	† Signetics
	7445	**Signetics (3003)**
	SN5445	† TI
	SN7445	TI
BCD-to-Decimal Decoder/Driver, Open Collector, 15 V		
TTL	74145	Fairchild
	DM54145	† National
	DM74145	National
	54145	† Signetics
	74145	**Signetics (3003)**
	SN74145	TI
TTL-LS	**GD74LS145**	**GoldStar (2693)**
	HD74LS145	Hitachi
	SN74LS145	Motorola
	DN74LS145	◊ Panasonic
	SN54LS145	◊† TI
	SN74LS145	TI
BCD-to-Decimal (1 of 10)		
TTL	5442	† Fairchild
	7442	Fairchild
	9301C	Fairchild
	9301M	† Fairchild
	DM5442	◊† National
	DM7442	National
	DM8301	National
	DM9301	◊† National
	5442	† Signetics
	7442	**Signetics (3003)**
	SN5442A	† TI
	SN7442A	TI
TTL-LS	54LS42	† Fairchild
	74LS42	◊ Fairchild
	GD74LS42	**GoldStar (2693)**
	HD74LS42	◊ Hitachi
	SN54LS42	† Motorola
	SN74LS42	Motorola
	DM54LS42	† National
	DM74LS42	National
	DN74LS42	◊ Panasonic
	54LS42	† SGS
	74LS42	SGS
	54LS42	† Signetics
	74LS42	**Signetics (3003)**
	SN54LS42	◊† TI
	SN74LS42	TI
TTL-S	**N82S52**	**Signetics (3022)**
BCD-to-Decimal (1 of 10), Three-State		
TTL-F	74F537	◊ Fairchild
	74F537	**Signetics (3024)**
TTL-LS	AM25LS2537C	AMD
	AM25LS2537M	† AMD
BCD-to-Decimal (1 of 10)		
TTL-LS	M74LS42	Mitsubishi
Dual Binary to One-of-Four Line Gated		
TTL	MC4007	Motorola
	MC4307	† Motorola
Dual 1-of-4 Decoder		
TTL-LS	T54LS139	† SGS
	T74LS139	SGS
Dual 1-of-4 Decoder/Demultiplexer		
TTL-LS	T54LS155	† SGS
	T54LS156	† SGS
	T74LS155	SGS
	T74LS156	SGS
Dual 1-of-4 Decoder/Demultiplexer (independent address)		
TTL	9321C	Fairchild
	9321M	† Fairchild
Dual 1-of-4 Decoder, Three-State		
TTL-F	MC54F539	† Motorola
	MC74F539	Motorola
Dual 2-Line to 4-Line Decoder/Demultiplexer, Totem Pole Output (or 3-line to 8-line decoder/demultiplexer)		
TTL	74155	Fairchild
	DM54155	† National
	DM54156	† National
	DM74155	National
	DM74156	National
	54155	Signetics
	54156	† Signetics
	74155	**Signetics (3003)**
	74156	**Signetics (3003)**
	SN54155	† TI
	SN54156	† TI
	SN74155	TI
	SN74156	TI
TTL-AS	SN74ALS139	TI
TTL-F	54F139	◊† Fairchild
	74F139	◊ Fairchild
	74F539	◊ Fairchild
	MC54F139	† Motorola
	MC74F139	Motorola
	54F139	† Signetics
	74F139	◊ **Signetics (3023)**
	74F539	**Signetics (3024)**
TTL-LS	AM25LS139C	AMD
	AM25LS139M	AMD
	AM25LS2539C	AMD
	AM25LS2539M	† AMD
	54LS139	† Fairchild
	54LS155	† Fairchild
	54LS156	† Fairchild
	74LS139	◊ Fairchild
	74LS155	◊ Fairchild
	74LS156	◊ Fairchild
	GD74LS139	**GoldStar (2693)**
	GD74LS155	**GoldStar (2693)**
	HD74LS139	Hitachi
	HD74LS155	Hitachi
	HD74LS156	Hitachi
	M74LS139	Mitsubishi
	SN54LS139	† Motorola
	SN54LS155	† Motorola
	SN54LS156	† Motorola
	SN74LS139	Motorola
	SN74LS155	Motorola
	SN74LS156	Motorola
	DM54LS139	† National
	DM54LS155	† National
	DM54LS156	† National
	DM74LS139	◊ National
	DM74LS155	◊ National
	DM74LS156	National
	DN74LS139	◊ Panasonic

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Decoders (Cont'd)

Function	Device	Source
Dual 2-Line to 4-Line Decoder/Demultiplexer, Totem Pole Output (or 3-line to 8-line decoder/demultiplexer)		
TTL-LS		(Cont'd)
	DN74LS155	◊ Panasonic
	DN74LS156	◊ Panasonic
	54LS139	† SGS
	54LS155	† SGS
	54LS156	† SGS
	74LS139	SGS
	74LS155	SGS
	74LS156	SGS
	54LS139	† Signetics
	54LS155	◊† Signetics
	54LS156	◊† Signetics
	74LS139	◊ **Signetics (3003)**
	74LS155	**Signetics (3003)**
	74LS156	**Signetics (3003)**
	SN54LS139A	◊† TI
	SN54LS155A	◊† TI
	SN54LS156	◊† TI
	SN74LS139A	TI
	SN74LS155A	TI
	SN74LS156	TI
TTL-S	74S139	Fairchild
	GD74S139	**GoldStar (2694)**
	DM54S139	† National
	DM74S139	National
	54S139	† Signetics
	74S139	**Signetics (3003)**
	SN54S139	† TI
	SN74S139	TI
Dual 2-Line to 4-Line Decoder/Multiplexer		
TTL-ALS	SN54ALS139	† TI
Dual 2-Line to4-Line Decoder/Demultiplexer with Open-Collector Outputs		
TTL-ALS	SN74ALS156	TI
One-of-Ten Decoder/Demultiplexer, Three-State		
	MC74F537	Motorola
TTL-F	MC54F537	† Motorola
1-Line to 8-Line Decoder/Demultiplexer		
	54F547	† Fairchild
	54F548	◊† Fairchild
	74F547	◊ Fairchild
	74F548	◊ Fairchild
	74F547	**Signetics (3024)**
	74F548	**Signetics (3024)**
1-of-8 Decoder/Demultiplexer		
TTL-LS	T54LS138	† SGS
	T74LS138	SGS
1-of-10 Decoder		
TTL-LS	T54LS42	◊† SGS
3-Line to 8-Line Decoder/Demultiplexer		
TTL-F	SN54F138	† TI
3-Line to 8-Line Decoder/Demultiplexer		
TTL-ALS	DM54ALS138	† National
	DM74ALS138	National
	SN54ALS138	† TI
	SN74ALS138	TI
TTL-AS	AM2924C	AMD
	AM2924M	† AMD
	SN54AS138	† TI
	SN74AS138	TI
TTL-F	54F138	◊† Fairchild
	74F138	◊ Fairchild
	MC54F138	† Motorola

(Continued)

Function	Device	Source
3-Line to 8-Line Decoder/Demultiplexer		
TTL-F		(Cont'd)
	MC74F138	Motorola
	74F138	◊ **Signetics (3023)**
	SN74F138	◊ TI
TTL-LS	AM25LS2548C	AMD
	54LS138	† Fairchild
	74LS138	◊ Fairchild
	GD25LS2548	**GoldStar (2694)**
	GD74LS138	**GoldStar (2693)**
	HD74LS138	Hitachi
	SN54LS138	† Motorola
	SN74LS138	Motorola
	DM54LS138	† National
	DM74LS138	◊ National
	DN74LS138	◊ Panasonic
	54LS138	† SGS
	74LS138	SGS
	54LS138	† Signetics
	74LS138	◊ **Signetics (3003)**
	SN54LS138	◊† TI
	SN74LS138	TI
TTL-S	SN74S138	AMD
	74S138	Fairchild
	GD74S138	**GoldStar (2694)**
	DM54S138	† National
	DM74S138	◊ National
	54S138	† Signetics
	74S138	**Signetics (3003)**
	SN54S138	† TI
	SN74S138	TI
3-Line to 8-Line Decoder/Demultiplexer, Inverting/Non-Inverting, Three-State		
TTL-F	74F538	◊ Fairchild
	MC54F538	† Motorola
	MC74F538	Motorola
	74F538	**Signetics (3024)**
TTL-LS	AM25LS2536C	AMD
	AM25LS2536M	† AMD
	AM25LS2538C	AMD
	AM25LS2538M	† AMD
3-Line to 8-Line Decoder/Demultiplexer with Input Latches		
TTL-ALS	DM54ALS137	† National
	DM74ALS137	National
	SN74ALS137	TI
TTL-AS	SN74AS137	TI
TTL-LS	M74LS137	Mitsubishi
	SN74LS137	Motorola
	SN54LS137	◊† TI
	SN74LS137	TI
3-Line to 8-Line Decoders/Demultiplexer with Address Registers		
TTL-ALS	DM54ALS131	† National
	DM74ALS131	National
	SN74ALS131	TI
TTL-AS	SN74AS131A	TI
4-Line to 16-Line Decoder/Demultiplexer		
TTL	54154	† Fairchild
	9311C	Fairchild
	9311M	† Fairchild
	DM54154	† National
	DM74154	National
	DM8311	National
	DM9311	† National
	54154	† Signetics
	74154	**Signetics (3003)**

(Continued)

Function	Device	Source
4-Line to 16-Line Decoder/Demultiplexer		
TTL		(Cont'd)
	SN54154	† TI
	SN74154	TI
TTL-ALS	SN74ALS154	TI
TTL-LS	**GD74LS154**	**GoldStar (2693)**
	HD74LS154	Hitachi
	DM54LS154	† National
	DM74LS154	◊ National
	54LS154	◊† Signetics
	74LS154	**Signetics (3003)**
4-Line to 16-Line Decoder/Demultiplexer, Open Collector Output		
TTL	SN74159	TI
6-Bit Chip Select Decoder		
TTL-S	AM29806C	AMD
	AM29806M	† AMD
8-Line to 3-Line Priority Encoder		
TTL-LS	**GD74LS148**	**GoldStar (2693)**

Drivers

Function	Device	Source
Dual 4-Input Positive NAND 50 Ohm Line Driver		
TTL-S	DM54S140	† National
	DM74S140	National
	54S140	† Signetics
	74S140	**Signetics (3003)**
	SN54S140	† TI
	SN74S140	TI
Quad Bus Driver, Three-State		
TTL	RM8T09	† Raytheon
	N8T09	**Signetics (3022)**
	S8T09	† Signetics
Quad NAND Power Driver (to 60 V, sinks 1.5 A)		
	UDN2540B	**Sprague (3203)**
Quad Predriver, Open Collector		
TTL	MC4042	Motorola
Quad 2-Input AND Buffer, Open Collector, to 15 V Output (high voltage 54/74109)		
TTL	DS7819	† National
	DS8819	National
Quad 2-Input AND Power Driver, Open Collector (to 100 V, sinks 500 mA)		
TTL	UHC/D-400	† Sprague
	UHC/D-406	† Sprague
	UHC/D-500	† Sprague
	UHC/D-506	† Sprague
	UHP400	**Sprague (3203)**
	UHP406	**Sprague (3203)**
Quad 2-Input AND Power Driver (to 80 V, sinks 600ma)		
TTL	**UDN5706A**	◊ **Sprague (3203)**
	UDS5706H	† Sprague
Quad 2-Input NAND Buffer, Open Collector, to 15 V Output		
TTL	DM5426	† National
	DM7426	National
	DS7810	† National
	DS7811	† National
	DS8810	National
	DS8811	National
	S8T80	◊† Signetics
	5426	† Signetics
	7426	◊ **Signetics (3003)**
	SN5426	† TI
	SN7426	TI
Quad 2-Input NAND Bus Driver, Open Collector, 80ma		
TTL	96101	Fairchild

DIGITAL

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—TTL (Cont'd)

Drivers (Cont'd)

Function	Device	Source	Line
Quad 2-Input NAND Power Driver, Open Collector (to 100 V, sinks 500 mA)			
TTL	UHC/D-407	† Sprague	
	UHC/D-408	† Sprague	
	UHC/D-507	† Sprague	
	UHC/D-508	† Sprague	
	UHP407	**Sprague (3203)**	5
	UHP408	**Sprague (3203)**	
Quad 2-Input NOR Driver			
TTL-AS	DM54AS1036	† National	
	DM74AS1036	National	
	SN74AS1036A	TI	
Quad 2-Input NOR Power Driver, Open Collector (to 100 V, sinks 500 mA)			
TTL	UHC/D-432	† Sprague	10
	UHC/D-433	† Sprague	
	UHC/D-532	† Sprague	
	UHC/D-533	† Sprague	
Quad 2-Input NOR 74-Ohm/50-Ohm Line Driver			
TTL	**74128**	**Signetics (3003)**	
	SN54128	† TI	15
	SN74128	TI	
Quad 2-Input OR Power Driver, Open Collector (to 100 V, sinks 500 mA)			
TTL	UHC/D-402	† Sprague	
	UHC/D-403	† Sprague	
	UHC/D-502	† Sprague	
	UHC/D-503	† Sprague	20
	UHP402	**Sprague (3203)**	
	UHP403	**Sprague (3203)**	
Quad 2-Input NOR Driver			
TTL-AS	SN54AS1036A	◊† TI	
Hex Buffer/Driver, Open Collector High Voltage Output, to 30 V			
TTL	7407	Fairchild	
	7417	Fairchild	25
	DM5407	† National	
	DM5417	† National	
	DM7407	National	
	DM7417	National	
	5407	† Signetics	30
	5417	† Signetics	
	7407	**Signetics (3003)**	
	7417	**◊ Signetics (3003)**	
	SN5407	† TI	
	SN5417	† TI	35
	SN7407	TI	
	SN7417	TI	
TTL-LS	M74LS07	Mitsubishi	
Hex Inverter Buffer/Driver Open Collector High Voltage Output, to 30 V			
TTL	7406	Fairchild	
	7416	Fairchild	40
	DM5406	† National	
	DM5416	† National	
	DM7406	National	
	DM7416	National	
	DS7812	† National	45
	DS8812	National	
	5406	† Signetics	
	5416	† Signetics	
	7406	**Signetics (3003)**	
	7416	**◊ Signetics (3003)**	50
	SN5406	† TI	
	SN5416	† TI	

(Continued)

Function	Device	Source	Line
Hex Inverter Buffer/Driver Open Collector High Voltage Output, to 30 V			
TTL		(Cont'd)	
	SN7406	TI	
	SN7416	TI	
TTL-LS	M74LS06	Mitsubishi	55
Hex Inverter/MOS Memory Driver			
TTL	DS16149	† National	
	DS16179	† National	
	DS36149	National	
	DS36179	National	
Hex, Three-State			
TTL	**74366**	**Signetics (3003)**	60
	74367	**Signetics (3003)**	
TTL-F	54F366	† Signetics	
	74F366	**Signetics (3023)**	
TTL-LS	HD74LS366A	Hitachi	
	HD74LS367A	Hitachi	65
Hex, Three-State Driver			
TTL	DM54366	† National	
	DM54367	† National	
	DM74366	National	
	DM74367	National	
	54366A	◊† Signetics	70
	54367A	◊† Signetics	
	SN54366A	† TI	
	SN54367A	† TI	
	SN74367A	TI	
Hex 2-Input AND Driver			
TTL-ALS	DM54ALS808	† National	75
	DM74ALS808	National	
	SN54ALS808	◊† TI	
	SN74ALS1808A	TI	
TTL-AS	DM74AS808A	National	
	SN54AS808B	† TI	80
	SN74AS1808	TI	
	SN74AS808B	TI	
Hex 2-Input NAND Driver			
TTL-ALS	DM54ALS804	† National	
	DM74ALS804	National	
	SN54ALS804A	† TI	85
	SN74ALS1804A	TI	
	SN74ALS804A	◊ TI	
TTL-AS	DM74AS804A	National	
	SN54AS804B	† TI	
	SN74AS1804	◊ TI	90
	SN74AS804B	TI	
Hex 2-Input NOR Driver			
TTL-ALS	DM54ALS805	† National	
	DM74ALS805	National	
	SN54ALS805A	† TI	
	SN74ALS1805A	TI	95
	S74ALS1805A	TI	
TTL-AS	DM74AS805A	National	
	SN54AS805B	◊† TI	
	SN74AS1805	◊ TI	
	SN74AS805B	TI	100
Hex 2-Input OR Driver			
TTL-ALS	DM54ALS832	† National	
	DM74ALS832	National	
	SN54ALS832	† TI	
	SN74ALS1832A	◊ TI	
TTL-AS	DM74AS832A	National	105
	SN54AS832B	† TI	
	SN74AS1832	TI	
	SN74AS832B	TI	

Function	Device	Source	Line
Octal Trapezoidal Driver			
TTL	DS3890	National	
10-Bit Buffer/Driver, Three-State, Inverting			
TTL-ALS	SN74ALS29828	TI	110
10-Bit Buffer/Driver, Three-State, Non-Inverting			
TTL-ALS	SN74ALS29827	TI	

Flip-Flops, D-Type

Dual Edge-Triggered			
TTL-ALS	DM54ALS876	◊† National	
	DM74ALS874	◊ National	
	DM74ALS876	◊ National	
	SN74ALS874A	TI	115
	SN74ALS876A	TI	
	SN74ALS878A	TI	
	SN74ALS879A	TI	
	54ALS874B	† TI	
TTL-AS	DM54AS874	† National	120
	DM54AS876	† National	
	DM54AS878	† National	
	DM54AS879	† National	
	DM74AS874	National	
	DM74AS876	National	125
	DM74AS878	National	
	DM74AS879	National	
	SN54AS874	◊† TI	
	SN74AS874	TI	
	SN74AS876	TI	130
	SN74AS878	TI	
	SN74AS879	TI	
Dual Edge-Triggered, Inverting, Three-State			
TTL-ALS	M74ALS876	◊ Mitsubishi	
Dual Edge-Triggered, Non-Inverting, Three-State			
TTL-ALS	M74ALS874	◊ Mitsubishi	
Dual Edge-Triggered, Three-State and Synchronous Reset, Non-Inverting			
TTL-ALS	M74ALS878	◊ Mitsubishi	135
	M74ALS879	◊ Mitsubishi	
Dual Flip			
TTL-LS	T54LS74A	† SGS	
Dual Gated			
TTL	DM7613	† National	
	DM8613	National	
Dual Positive Edge-Triggered with Preset			
TTL-F	MC54F74	Motorola	140
Dual Positive Edge-Triggered with Preset and Clear			
TTL	5474	† Fairchild	
	7474	Fairchild	
	DM5474	† National	
	DM7474	National	
	5474	† Signetics	145
	7474	**Signetics (3003)**	
	SN5474	† TI	
	SN7474	TI	
TTL-ALS	DM54ALS74	◊† National	
	DM74ALS74	National	150
	SN54ALS74A	† TI	
	SN74ALS74A	TI	
TTL-AS	DM54AS74	† National	
	DM74AS74	National	
	SN54AS74	◊† TI	155
	SN74AS74	TI	
TTL-F	54F74	◊† Fairchild	
	74F74	◊ Fairchild	
	MC74F74	Motorola	
	74F74	Signetics	160

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Flip-Flops, D-Type (Cont'd)

Function	Device	Source
Dual Positive Edge-Triggered with Preset and Clear		
TTL-F (Cont'd)	SN54F74	◊† TI
	SN74F74	◊ TI
TTL-H	MC3060	◊ Motorola
	MC3160	† Motorola
	DM74H74	National
TTL-LS	54LS74	† Fairchild
	74LS74	Fairchild
	GD74LS74A	**GoldStar (2693)**
	HD74LS74A	Hitachi
	SN54LS74A	† Motorola
	SN74LS74A	◊ Motorola
	DM54LS74	◊† National
	DM74LS74	National
	DN74LS74A	◊ Panasonic
	54LS74	† SGS
	74LS74	SGS
	54LS74A	† Signetics
	74LS74A	**Signetics (3003)**
	SN54LS74A	◊† TI
	SN74LS74A	TI
TTL-S	74S74	Fairchild
	GD74S74	**GoldStar (2694)**
	DM74S74	National
	54S74	◊† Signetics
	74S74	**Signetics (3003)**
	SN54S74	† TI
	SN74S74	TI
Quad		
TTL-LS	T54LS175	† SGS
	T74LS175	SGS
Quad, Common Clock		
TTL	MC4015	Motorola
Quad Edge-Triggered with Clear, Complementary Output		
TTL	54175	† Fairchild
	74175	Fairchild
	DM54175	† National
	DM74175	National
	54175	† Signetics
	74175	**Signetics (3003)**
	SN54175	† TI
	SN74175	TI
TTL-ALS	M74ALS175	Mitsubishi
	DM54ALS175	† National
	DM74ALS175	National
	SN54ALS175	† TI
	SN74ALS175	TI
TTL-AS	DM54AS175	◊† National
	DM74AS175	National
	SN54AS175A	† TI
	SN74AS175A	TI
TTL-F	54F175	◊† Fairchild
	74F175	◊ Fairchild
	MC54F175	† Motorola
	MC74F175	Motorola
	74F175	**Signetics (3023)**
	SN54F175	† TI
	SN74F175	◊ TI
TTL-LS	54LS175	† Fairchild
	74LS175	◊ Fairchild
	GD74LS175	**◊ GoldStar (2693)**
	HD74LS175	Hitachi
	SN54LS175	† Motorola

(Continued)

Function	Device	Source
Quad Edge-Triggered with Clear, Complementary Output		
TTL-LS (Cont'd)	SN74LS175	Motorola
	DM54LS175	◊† National
	DM74LS175	National
	DN74LS175	Panasonic
	54LS175	† SGS
	74LS175	SGS
	54LS175	◊† Signetics
	74LS175	**Signetics (3003)**
	SN54LS175	◊† TI
	SN74LS175	TI
TTL-S	SN74S175	AMD
	74S175	Fairchild
	GD74S175	**GoldStar (2694)**
	DM54S175	◊† National
	DM74S175	National
	54S175	† Signetics
	74S175	**Signetics (3003)**
	SN54S175	† TI
	SN74S175	TI
Quad I/O Register, Three-State (two terminals per flip-flop can be used as input or output)		
TTL	DM7542	† National
	DM8542	National
Quad Register with Dual Three-Stete Outputs		
TTL	AM2919C	AMD
	AM2919M	† AMD
Quad, Standard TTL and Three-State Outputs		
TTL	AM2918C	AMD
	AM2918M	† AMD
	SFC2918	Thomson
TTL-LS	AM25LS2518C	AMD
	AM25LS2518M	† AMD
	AM29LS18	◊ AMD
	SN54LS388	† AMD
	SN74LS388	AMD
TTL-S	AM25S18C	AMD
	AM25S18M	† AMD
	SN54S388	† AMD
	SN74S388	AMD
Quad with Common Clock Enable		
TTL-F	54F379	† Fairchild
	74F379	◊ Fairchild
	MC74F379	Motorola
	74F379	**Signetics (3023)**
	SN74F379	TI
TTL-LS	AM25LS08C	AMD
	AM25LS08M	† AMD
	AM25LS379C	AMD
	AM25LS379M	† AMD
	SN54LS379	† AMD
	SN74LS379	AMD
	54LS379	† Fairchild
	74LS379	◊ Fairchild
	SN54LS379	† Motorola
	SN74LS379	Motorola
	T54LS379	† SGS
	T74LS379	SGS
	SN54LS379	◊† TI
	SN74LS379	TI
TTL-S	AM25S08C	AMD
	AM25S08M	† AMD
	SN54S379	† AMD
	SN74S379	AMD

Function	Device	Source
Quad, Dual Three-State Outputs		
TTL-LS	AM25LS2519C	AMD
	AM25LS2519M	† AMD
Quad Three-State		
TTL	54173	† Fairchild
	74173	Fairchild
	DM54173	† National
	DM74173	National
	DM7551	† National
	DM8551	National
	N8T10	**Signetics (3022)**
	S8T10	† Signetics
	54173	† Signetics
	74173	**Signetics (3003)**
	SN54173	† TI
	SN74173	TI
TTL-LS	54LS173A	† Fairchild
	74LS173A	Fairchild
	M74LS173A	◊ Mitsubishi
	SN54LS173A	† Motorola
	SN74LS173A	Motorola
	DM54LS173	◊† National
	DM74LS173	National
	DN74LS173	Panasonic
	54LS173	◊† Signetics
	74LS173	**Signetics (3003)**
	SN54LS173A	◊† TI
	SN74LS173A	TI
Hex		
TTL-LS	T54LS174	† SGS
	T74LS174	SGS
Hex Edge-Triggered with Clear		
TTL	54174	† Fairchild
	74174	Fairchild
	DM54174	† National
	DM74174	National
	54174	† Signetics
	74174	**Signetics (3003)**
	SN54174	† TI
	SN74174	TI
TTL-ALS	M74ALS174	Mitsubishi
	DM54ALS174	† National
	DM74ALS174	National
	SN54ALS174	† TI
	SN74ALS174	TI
TTL-AS	DM54AS174	◊† National
	DM74AS174	National
	SN54AS174	† TI
	SN74AS174	TI
TTL-F	54F174	◊† Fairchild
	74F174	◊ Fairchild
	MC54F174	† Motorola
	MC74F174	Motorola
	74F174	**Signetics (3023)**
	SN54F174	† TI
	SN74F174	◊ TI
TTL-LS	AM25LS174C	◊ AMD
	AM25LS174M	◊† AMD
	54LS174	† Fairchild
	74LS174	◊ Fairchild
	GD74LS174	**◊ GoldStar (2693)**
	HD74LS174	Hitachi
	SN54LS174	† Motorola
	SN74LS174	Motorola
	DM54LS174	◊† National
	DM74LS174	National
	DN74LS174	Panasonic
	54LS174	† SGS

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL–TTL (Cont'd)

Flip-Flops, D-Type (Cont'd)

Function	Device	Source	Line
Hex Edge-Triggered with Clear			
TTL-LS		(Cont'd)	
	74LS174	SGS	
	54LS174	◊† Signetics	
	74LS174	**Signetics (3003)**	
	SN54LS174	◊† TI	
	SN74LS174	TI	5
TTL-S	SN74S174	AMD	
	74S174	Fairchild	
	GD74S174	**GoldStar (2694)**	
	DM54S174	◊† National	
	DM74S174	National	10
	54S174	† Signetics	
	74S174	**Signetics (3003)**	
	SN54S174	† TI	
	SN74S174	TI	
Hex with Common Enable			
TTL-F	54F378	† Fairchild	15
	74F378	◊ Fairchild	
	MC74F378	Motorola	
	74F378	**Signetics (3023)**	
	SN74F378	TI	
TTL-LS	AM25LS07C	AMD	20
	AM25LS07M	† AMD	
	AM25LS378C	AMD	
	AM25LS378M	† AMD	
	SN54LS378	† AMD	
	SN74LS378	AMD	25
	54LS378	† Fairchild	
	74LS378	◊ Fairchild	
	SN54LS378	† Motorola	
	SN74LS378	Motorola	
	T54LS378	† SGS	30
	T74LS378	SGS	
	54LS378	† Signetics	
	74LS378	**Signetics (3003)**	
	SN54LS378	◊† TI	
	SN74LS378	TI	35
TTL-S	AM25S07C	AMD	
	AM25S07M	† AMD	
	SN54S378	† AMD	
	SN74S378	AMD	
Octal			
TTL-LS	T54LS374	† SGS	40
	T54LS377	† SGS	
	54LS374	† SGS	
	54LS377	† SGS	
	74LS374	SGS	
	74LS377	SGS	45
Octal Common Clear and Enable, Three-State			
TTL-LS	AM25LS2520C	AMD	
	AM25LS2520M	† AMD	
	AM2920C	AMD	
	AM2920M	† AMD	
	N8TS806	Signetics	50
	N8TS808	Signetics	
Octal, D-Type			
TTL-LS	**GD74LS273**	**GoldStar (2693)**	
Octal Edge-Triggered, Common Clock and Enable, Three-State	54LS364	† Signetics	
	74LS364	**Signetics (3003)**	
Octal Edge-Triggered, Inverting, Three-State			
TTL-ALS	M74ALS534	Mitsubishi	55
	DM54ALS534	† National	
	DM54ALS564	† National	
	DM54AS534	† National	

(Continued)

Function	Device	Source	Line
Octal Edge-Triggered, Inverting, Three-State			
TTL-ALS		(Cont'd)	
	DM74ALS534	National	
	DM74ALS564	National	60
	DM74AS534	National	
	SN54ALS534	† TI	
	SN54ALS564A	◊† TI	
	SN54ALS576A	† TI	
	SN74ALS534	TI	65
	SN74ALS564A	◊ TI	
	SN74ALS576A	TI	
	SN74AS534	TI	
TTL-AS	DM54AS576	† National	
	DM74AS576	National	70
	SN54AS576	◊† TI	
	SN74AS576	TI	
TTL-F	54F534	◊† Fairchild	
	54F564	† Fairchild	
	74F534	◊ Fairchild	75
	74F564	Fairchild	
	MC54F534	† Motorola	
	MC74F534	Motorola	
	54F534	† Signetics	
	74F534	**Signetics (3024)**	80
	74F564	**Signetics (3024)**	
	SN54F534	† TI	
	SN74F534	TI	
TTL-LS	74LS534	◊ Fairchild	
	SN54LS534	† MMI	85
TTL-S	AM25S534	AMD	
	SN74S534	AMD	
	SN54S534	MMI	
	54S534	† Signetics	
	74S534	**Signetics (3003)**	90
Octal Edge-Triggered, with Clear			
TTL	SN74273	◊ TI	
TTL-ALS	M74ALS273	Mitsubishi	
	DM54ALS273	† National	
	DM74ALS273	National	
	SN54ALS273	† TI	95
	SN74ALS273	TI	
TTL-F	54F273	† Signetics	
	74F273	**Signetics (3023)**	
	SN54F273	† TI	
	SN74F273	TI	100
TTL-LS	AM25LS273	AMD	
	54LS273	† Fairchild	
	74LS273	◊ Fairchild	
	HD74LS273	Hitachi	
	SN54LS273	† MMI	105
	SN54LS273	◊† Motorola	
	SN74LS273	Motorola	
	T74LS273	SGS	
	54LS273	† Signetics	
	74LS273	**Signetics (3003)**	110
	SN54LS273	◊† TI	
	SN74LS273	TI	
TTL-S	SN54S273	† MMI	
	54S273	† Signetics	
	74S273	**Signetics (3003)**	115
Octal Edge-Triggered, Three-State			
TTL-ALS	M74ALS374	Mitsubishi	
	M74ALS575	Mitsubishi	
	M74ALS577	Mitsubishi	
	DM54ALS374	† National	
	DM54ALS574	† National	120
	DM74ALS374	National	

(Continued)

Function	Device	Source	Line
Octal Edge-Triggered, Three-State			
TTL-ALS		(Cont'd)	
	DM74ALS574	National	
	SN54ALS374	† TI	
	SN54ALS574A	† TI	
	SN74ALS374	TI	125
	SN74ALS574A	TI	
	SN74ALS575A	TI	
	SN74ALS577A	TI	
TTL-AS	DM54AS374	† National	
	DM54AS574	† National	130
	DM54AS575	† National	
	DM54AS577	† National	
	DM74AS374	National	
	DM74AS574	National	
	DM74AS575	National	135
	DM74AS577	National	
	SN54AS374	◊† TI	
	SN54AS574	† TI	
	SN54AS575	◊† TI	
	SN74AS374	TI	140
	SN74AS574	TI	
	SN74AS575	TI	
	SN74AS577	TI	
TTL-F	54F374	◊† Fairchild	
	74F374	◊ Fairchild	145
	74F574	Fairchild	
	MC54F374	† Motorola	
	MC74F374	Motorola	
	54F374	† Signetics	
	74F374	**Signetics (3023)**	150
	SN54F374	† TI	
	SN54F379	† TI	
	SN74F374	TI	
	SN74F574	TI	
TTL-LS	54LS374	† Fairchild	155
	74LS374	◊ Fairchild	
	74LS574	◊ Fairchild	
	GD74LS374	**GoldStar (2693)**	
	HD74LS374	Hitachi	
	SN54LS374	† MMI	160
	SN54LS374	† Motorola	
	SN74LS374	Motorola	
	DM54LS374	† National	
	DM74LS374	National	
	T74LS374	SGS	165
	54LS374	† Signetics	
	74LS374	**Signetics (3003)**	
	SN54LS374	◊† TI	
	SN74LS374	TI	
TTL-S	AM24S374	AMD	170
	AM25S374	AMD	
	SN74S374	AMD	
	GD74S374	GoldStar	
	SN54S374	† MMI	
	DM54S374	† National	175
	DM74S374	◊ National	
	54S374	† Signetics	
	74S374	**Signetics (3003)**	
	SN54S374	† TI	
	SN74S374	TI	180
Octal Edge-triggeredTriggered, Inverting, Three-State			
TTL-F	SN74F564	TI	
Octal Register, Inverting, Three-State			
TTL-S	AM2955C	◊ AMD	
	AM2955M	◊† AMD	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Flip-Flops, D-Type (Cont'd)

Function	Device	Source
Octal Register, Non-Inverting, Three-State		
TTL-S	AM2954C	◊ AMD
	AM2954M	◊† AMD
Octal with Enable		
TTL-F	54F377	† Signetics
	74F377	**Signetics (3023)**
	SN74F377	TI
TTL-LS	54LS377	† Fairchild
	74LS377	◊ Fairchild
	GD74LS377	**GoldStar (2693)**
	SN54LS377	† MMI
	SN54LS377	† Motorola
	SN74LS377	Motorola
	T74LS377	SGS
	54LS377	† Signetics
	74LS377	**Signetics (3003)**
	SN54LS377	◊† TI
	SN74LS377	TI
TTL-S	SN54S377	† MMI
8-Bit Parallel, Inverting		
TTL-AS	SN54AS826	† TI
	SN74AS826	TI
TTL-F	**74F826**	**Signetics (3025)**
8-Bit Parallel, Non-inverting		
TTL-AS	SN54AS825	† TI
	SN74AS825	TI
TTL-F	74F825	Fairchild
	74F825	**Signetics (3025)**
9-Bit Parallel, Inverting		
TTL-AS	SN74AS824	TI
TTL-F	**74F824**	**Signetics (3025)**
9-Bit Parallel, Non-Inverting		
TTL-AS	SN54AS823	† TI
	SN74AS823	TI
TTL-F	74F823	Fairchild
	74F823	**Signetics (3025)**
10-Bit Parallel, Inverting		
F	**74F822**	**Signetics (3025)**
TTL-AS	SN54AS822	† TI
	SN74AS822	TI
10-Bit Parallel, Non-inverting		
TTL-AS	SN54AS821	† TI
	SN74AS821	TI
TTL-F	74F821	Fairchild
	74F821	**Signetics (3025)**

Flip-Flops, J-K Type

Function	Device	Source
AND Gated, Edge-Triggered with Preset and Clear		
TTL	DM5470	† National
	DM7470	National
	SN5470	† TI
	SN7470	TI
AND Gated Master-Slave with Preset and Clear		
TTL	DM5472	† National
	DM7472	National
	SN5472	† TI
J-K Flip-Flop (30 MHz)		
TTL	RF250	Raytheon
	RF260	Raytheon
J-K Flip-Flop (50 MHz)		
TTL	RF200	Raytheon
	RF210	Raytheon
Dual J-K Flip-Flop (35 and 50 MHz)		
TTL	RF100	Raytheon
Dual J-K Positive Edge-Triggered, Preset and Clear		
TTL-F	SN54F109	† TI
Dual J–K Positive Edge-Triggered, Preset and Clear		
TTL	DM54109	† National
	DM74109	National
	54109	† Signetics
	74109	**Signetics (3003)**
	SN54109	† TI
	SN74109	TI
TTL-ALS	DM54ALS109	◊† National
	DM74ALS109	National
	SN54ALS109A	† TI
	SN74ALS109	TI
TTL-AS	DM54AS109	† National
	DM74AS109	National
	SN54AS109	◊† TI
	SN74AS109	TI
TTL-F	54F109	◊† Fairchild
	74F109	◊ Fairchild
	MC54F109	† Motorola
	MC74F109	Motorola
	74F109	**Signetics (3023)**
	SN74F109	TI
TTL-LS	54LS109	† Fairchild
	74LS109	Fairchild
	GD74LS109	**GoldStar (2693)**
	HD74LS109A	Hitachi
	SN54LS109A	† Motorola
	SN74LS109A	Motorola
	DM54LS109	† National
	DM74LS109	National
	DN74LS109	◊ Panasonic
	54LS109	† Signetics
	74LS109	**Signetics (3003)**
	SN54LS109A	◊† TI
	SN74LS109A	TI
TTL-S	74S109	Fairchild
Dual J–K with Preset, Common Clock and Common Clear		
TTL-LS	HD74LS78A	Hitachi
	SN54LS78A	† Motorola
	SN74LS78A	Motorola
	DM54LS78	◊† National
	DM74LS78	National
	DN74LS78	◊ Panasonic
	SN54LS78A	† TI
	SN74LS78A	TI
Dual Master/Slave with Preset and Clear		
TTL	TC7476B	Toshiba
Dual Master-Slave with Clear		
TTL	5473	† Fairchild
	7473	Fairchild
	DM54107	† National
	DM5473	† National
	DM74107	National
	DM7473	National
	54107	† Signetics
	5473	† Signetics
	74107	**Signetics (3003)**
	7473	**Signetics (3003)**
	SN54107	† TI
	SN5473	† TI
	SN74107	TI
	SN7473	TI
TTL-H	MC3061	◊ Motorola
	MC3062	◊ Motorola

(Continued)

Function	Device	Source
Dual Master-Slave with Clear		
TTL-H		(Cont'd)
	MC3161	† Motorola
	MC3162	† Motorola
TTL-LS	**GD74LS107**	**GoldStar (2693)**
	GD74LS73	**GoldStar (2693)**
	HD74LS107A	Hitachi
	HD74LS73A	Hitachi
	SN54LS107A	† Motorola
	SN74LS107A	Motorola
	SN74LS73A	◊ Motorola
	DM54LS107A	† National
	DM54LS73A	◊† National
	DM74LS107A	National
	DM74LS73A	National
	DN74LS107	◊ Panasonic
	DN74LS73	◊ Panasonic
	54LS107	† Signetics
	54LS73	† Signetics
	74LS107	**Signetics (3003)**
	74LS73	**Signetics (3003)**
	SN54LS107A	◊† TI
	SN54LS73A	† TI
	SN74LS107A	TI
	SN74LS73A	TI
Dual Master-Slave with Data Lockout		
TTL	SN54111	† TI
Dual Master-Slave with Preset and Clear		
TTL	5476	◊† Fairchild
	7476	Fairchild
	DM5476	† National
	DM7476	National
	5476	† Signetics
	7476	**Signetics (3003)**
	SN5476	† TI
	SN7476	TI
TTL-LS	HD74LS76A	Hitachi
	SN54LS76A	† Motorola
	SN74LS76A	◊ Motorola
	DM54LS76	◊† National
	DM74LS76	National
	DN74LS76	◊ Panasonic
	54LS76	† Signetics
	74LS76	**Signetics (3003)**
	SN54LS76A	† TI
	SN74LS76A	TI
Dual Negative Edge-Triggered, Separate Preset and Clock, (no clear)		
TTL-ALS	DM54ALS113	† National
	SN54ALS113A	† TI
	SN74ALS113A	TI
TTL-F	74F113	◊ Fairchild
	MC54F113	† Motorola
	MC74F113	Motorola
	74F113	**Signetics (3023)**
	SN54F113	† TI
	SN74F113	TI
TTL-LS	54LS113	† Fairchild
	HD74LS113	Hitachi
	SN54LS113A	† Motorola
	SN74LS113A	Motorola
	DM54LS113A	† National
	DM74LS113A	National
	DN74LS113	◊ Panasonic
	54LS113	† Signetics
	74LS113	**Signetics (3003)**
	SN74LS113A	TI

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—TTL (Cont'd)

Flip-Flops, J-K Type (Cont'd)

Function	Device	Source	Line
Dual Negative Edge-Triggered, Separate Preset and Clock, (no clear) (Cont'd)			
TTL-S	DM54S113	† National	
	DM74S113	National	
	54S113	† Signetics	
	74S113	**Signetics (3003)**	
	SN54S113	† TI	5
	SN74S113	TI	
Dual Negative Edge-Triggered with Preset and Clear			
TTL-ALS	SN54ALS112A	† TI	
	SN74ALS112A	TI	
TTL-F	74F112	◊ Fairchild	
	MC54F112	† Motorola	10
	MC74F112	Motorola	
	74F112	**Signetics (3023)**	
	SN54F112	† TI	
	SN74F112	TI	
TTL-H	DM54H106	† National	15
	DM74H106	National	
TTL-LS	54LS112	† Fairchild	
	74LS112	◊ Fairchild	
	GD74LS112	**GoldStar (2693)**	
	HD74LS112	Hitachi	20
	SN54LS112A	† Motorola	
	SN74LS112A	Motorola	
	DM54LS112	† National	
	DM74LS112	National	
	DN74LS112	◊ Panasonic	25
	54LS112	Signetics	
	74LS112	**Signetics (3003)**	
	SN74LS112A	TI	
TTL-S	74S112	Fairchild	
	GD74S112	**GoldStar (2694)**	30
	DM54S112	† National	
	DM74S112	National	
	54S112	† Signetics	
	74S112	**Signetics (3003)**	
	SN54S112	† TI	35
	SN74S112	TI	
Dual Negative Edge-Triggered with Preset, Common Clock and Common Clear			
TTL-ALS	SN54ALS114A	† TI	
	SN74ALS114A	TI	
TTL-F	74F114	◊ Fairchild	
	MC54F114	† Motorola	40
	MC74F114	Motorola	
	74F114	**Signetics (3023)**	
	SN54F114	† TI	
	SN74F114	TI	
TTL-LS	54LS114	† Fairchild	45
	HD74LS114	Hitachi	
	SN54LS114A	† Motorola	
	SN74LS114A	Motorola	
	DM54LS114A	† National	
	DM74LS114A	National	50
	DN74LS114	◊ Panasonic	
	T54LS114	† SGS	
	T74LS114	SGS	
	SN74LS114A	TI	
TTL-S	SN54S114	† TI	55
	SN74S114	TI	
Quad J-K Edge-Triggered with Clear			
TTL	SN54376	† TI	
	SN74376	TI	
Quad J-K Edge-Triggered with Preset and Clear			
TTL	SN74276	◊ TI	

Gates, AND

Function	Device	Source	Line
Expandable AND/NOR Gates			
TTL	RG210	Raytheon	60
Dual 4-Input			
TTL	5421	† Signetics	
	7421	◊ **Signetics (3003)**	
TTL-ALS	DM54ALS21	† National	
	DM54ALS22	† National	
	DM74ALS21	National	65
	DM74ALS22	National	
	SN54ALS21A	† TI	
	SN74ALS21A	TI	
TTL-AS	DM54AS21	◊† National	
	DM74AS21	National	70
	SN54AS21	◊† TI	
	SN74AS21	TI	
TTL-F	MC54F21	† Motorola	
	MC74F21	Motorola	
	MV74F21	Motorola	75
TTL-H	DM54H21	† National	
	DM74H21	National	
TTL-LS	54LS21	† Fairchild	
	74LS21	◊ Fairchild	
	GD74LS21	**GoldStar (2693)**	80
	HD74LS21	Hitachi	
	SN54LS21	† Motorola	
	SN74LS21	Motorola	
	DM54LS21	† National	
	DM74LS21	◊ National	85
	DN74LS21	◊ Panasonic	
	T74LS21	SGS	
	74LS21	SGS	
	54LS21	† Signetics	
	74LS21	**Signetics (3003)**	90
	SN54LS21	◊† TI	
	SN74LS21	TI	
Dual 4-Input AND Expander			
TTL	RG180	Raytheon	
Dual 4-Input AND/NOR Expander			
TTL	RG270	Raytheon	
Dual 4-Input Power			
TTL-H	MC3026	Motorola	95
	MC3126	† Motorola	
Triple 3-Input			
TTL	7411	Fairchild	
	HD74LS11	Hitachi	
	DM5411	† National	
	DM7411	National	100
	7411	**Signetics (3003)**	
TTL-ALS	M74ALS1011A	Mitsubishi	
	DM54ALS1011	† National	
	DM54ALS11	† National	
	DM74ALS1011	National	105
	DM74ALS11	National	
	SN54ALS11A	† TI	
	SN74ALS1011A	TI	
	SN74ALS11A	TI	
TTL-AS	DM54AS11	† National	110
	DM74AS11	National	
	SN54AS11	◊† TI	
	SN74AS11	TI	
TTL-F	54F11	◊† Fairchild	
	74F11	◊ Fairchild	115

(Continued)

Function	Device	Source	Line
Triple 3-Input			
TTL-F		(Cont'd)	
	MC54F11	◊† Motorola	
	MC74F11	Motorola	
	74F11	**Signetics (3023)**	
	SN54F11	† TI	
	SN74F11	TI	120
TTL-H	DM54H11	† National	
	DM74H11	National	
TTL-LS	54LS11	† Fairchild	
	74LS11	◊ Fairchild	
	GD74LS11	**GoldStar (2693)**	125
	SN54LS11	† Motorola	
	SN74LS11	Motorola	
	DM54LS11	† National	
	DM74LS11	National	
	DN74LS11	◊ Panasonic	130
	T54LS11	† SGS	
	T74LS11	SGS	
	T74LS15	SGS	
	54LS11	† SGS	
	74LS11	◊ SGS	135
	54LS11	† Signetics	
	74LS11	**Signetics (3003)**	
	SN54LS11	◊† TI	
	SN74LS11	TI	
TTL-S	74S11	Fairchild	140
	DM54S11	† National	
	DM74S11	National	
	54S11	† Signetics	
	74S11	**Signetics (3003)**	
	SN54S11	† TI	145
	SN74S11	TI	
Triple 3-Input, Open Collector			
TTL-ALS	DM54ALS15	† National	
	DM74ALS15	National	
	SN54ALS15A	† TI	
	SN74ALS15A	TI	150
TTL-LS	54LS15	† Fairchild	
	74LS15	◊ Fairchild	
	HD74LS15	Hitachi	
	SN54LS15	† Motorola	
	SN74LS15	Motorola	155
	DM54LS15	† National	
	DM74LS15	National	
	DN74LS15	◊ Panasonic	
	54LS15	† SGS	
	74LS15	◊ SGS	160
	SN54LS15	◊† TI	
	SN74LS15	TI	
TTL-S	DM54S15	† National	
	DM74S15	National	
	SN54S15	† TI	165
	SN74S15	TI	
Quad 2-Input			
TTL	5408	† Fairchild	
	7408	Fairchild	
	DM5408	† National	
	DM7408	National	170
	5408	Signetics	
	7408	**Signetics (3003)**	
	SN5408	† TI	
	SN7408	TI	
TTL-ALS	M74ALS1008A	Mitsubishi	175
	M74ALS576	Mitsubishi	
	DM54ALS08	† National	
	DM54ALS1008	† National	
	DM54ALS576	† National	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Gates, AND (Cont'd)

Function	Device	Source
Quad 2-Input		
TTL-ALS (Cont'd)		
	DM74ALS08	National
	DM74ALS1008	National
	DM74ALS576	National
	SN54ALS08	† TI
	SN74ALS08	TI
	SN74ALS1008A	TI
TTL-AS	DM54AS08	† National
	DM54AS1008	† National
	DM74AS08	National
	DM74AS1008	National
	SN54AS08	◊† TI
	SN74AS08	TI
	SN74AS1008A	TI
TTL-F	54F08	◊† Fairchild
	74F08	◊ Fairchild
	MC54F08	◊† Motorola
	MC74F08	Motorola
	74F08	**Signetics (3023)**
	SN54F08	† TI
TTL-H	MC3001	Motorola
	MC3101	† Motorola
	DM54H08	† National
	DM74H08	National
TTL-LS	54LS08	† Fairchild
	74LS08	◊ Fairchild
	GD74LS08	**GoldStar (2693)**
	HD74LS08	Hitachi
	M74LS08	Mitsubishi
	M74LS09	Mitsubishi
	SN54LS08	† Motorola
	SN74LS08	Motorola
	DM54LS08	† National
	DM74LS08	National
	DN74LS08	◊ Panasonic
	T54LS09	† SGS
	T74LS08	SGS
	T74LS09	SGS
	74LS08	◊ SGS
	54LS08	† Signetics
	74LS08	**Signetics (3003)**
	SN54LS08	◊† TI
	SN74LS08	TI
TTL-S	74S08	Fairchild
	GD74S08	**GoldStar (2694)**
	DM54S08	† National
	DM74S08	National
	54S08	† Signetics
	74S08	**Signetics (3003)**
	SN54S08	† TI
	SN74S08	TI
Quad 2-Input AND/NOR Expander		
TTL	RG230	Raytheon
Quad 2-Input, Open Collector		
TTL	5409	† Fairchild
	7409	Fairchild
	DM5409	† National
	DM7409	National
	SN5409	† TI
	SN7409	TI
TTL-ALS	DM54ALS09	† National
	DM74ALS09	National
	SN54ALS09	† TI
	SN74ALS09A	TI

(Continued)

Function	Device	Source
Quad 2-Input, Open Collector (Cont'd)		
TTL-LS	54LS09	† Fairchild
	74LS09	◊ Fairchild
	GD74LS09	**GoldStar (2693)**
	HD74LS09	Hitachi
	SN54LS09	† Motorola
	SN74LS09	Motorola
	DM54LS09	† National
	DM74LS09	National
	DM74S09	National
	DN74LS09	◊ Panasonic
	54LS09	† SGS
	74LS09	◊ SGS
	54LS09	† Signetics
	74LS09	**Signetics (3003)**
	SN54LS09	◊† TI
	SN74LS09	TI
TTL-S	DM54S09	† National
	SN54S09	† TI
	SN74S09	TI
Quad 2-Input		
TTL-F	SN74F08	TI
Hex 2-Input		
TTL-AS	DM54AS1808	† National
	DM74AS1808	National
Hex 2-Input AND Driver		
TTL-ALS	SN74ALS808A	◊ TI

Gates, NAND

Function	Device	Source
Expandable 8-Input NAND/NOR		
TTL	RG120	Raytheon
	RG200	Raytheon
Dual 2-Input		
TTL-ALS	SN74ALS8003A	◊ TI
Dual 4-Input		
TTL	5420	† Fairchild
	7420	Fairchild
	DM5420	† National
	DM7420	National
	5420	† Signetics
	7420	**◊ Signetics (3003)**
	SN5420	† TI
	SN7420	TI
TTL-ALS	M74ALS1020A	Mitsubishi
	DM54ALS1020	† National
	DM54ALS20	† National
	DM74ALS1020	National
	DM74ALS20	National
	SN54ALS20A	† TI
	SN74ALS1020A	TI
	SN74ALS20A	TI
TTL-AS	DM54AS20	† National
	DM74AS20	National
	SN54AS20	◊† TI
	SN74AS20	TI
TTL-F	54F20	◊† Fairchild
	74F20	◊ Fairchild
	MC54F20	† Motorola
	MC74F20	Motorola
	54F20	† Signetics
	74F20	**Signetics (3023)**
	SN54F20	† TI
	SN54F21	† TI
	SN74F20	TI
	SN74F21	TI
TTL-H	DM54H20	† National
	DM74H20	National

(Continued)

Function	Device	Source
Dual 4-Input (Cont'd)		
TTL-LS	54LS20	† Fairchild
	74LS20	◊ Fairchild
	GD74LS20	**GoldStar (2693)**
	HD74LS20	Hitachi
	SN54LS20	† Motorola
	SN74LS20	Motorola
	DM54LS20	† National
	DM74LS20	◊ National
	DN74LS20	◊ Panasonic
	T54LS20	† SGS
	T54LS22	† SGS
	T74LS20	SGS
	T74LS22	SGS
	54LS20	† SGS
	74LS20	SGS
	54LS20	† Signetics
	74LS20	**Signetics (3003)**
	SN54LS20	◊† TI
	SN74LS20	TI
TTL-S	74S20	Fairchild
	GD74S20	**GoldStar (2694)**
	DM54S20	† National
	DM74S20	National
	54S20	† Signetics
	74S20	**Signetics (3003)**
	SN54S20	† TI
	SN74S20	TI
Dual 4-Input Buffer		
TTL	5440	† Fairchild
	7440	Fairchild
	DM5440	◊† National
	DM7440	National
	5440	† Signetics
	7440	**Signetics (3003)**
	SN5440	† TI
	SN7440	TI
TTL-ALS	DM54ALS40	† National
	DM74ALS40	◊ National
	SN74ALS40A	TI
TTL-F	74F40	Fairchild
	74F40	Signetics
TTL-H	DM54H40	† National
	DM74H40	National
TTL-LS	54LS40	† Fairchild
	74LS40	◊ Fairchild
	HD74LS40	◊ Hitachi
	SN54LS40	† Motorola
	SN74LS40	Motorola
	DM54LS40	† National
	DM74LS40	◊ National
	DN74LS40	◊ Panasonic
	54LS40	† SGS
	74LS40	SGS
	54LS40	† Signetics
	74LS40	**Signetics (3003)**
	SN54LS40	◊† TI
	SN74LS40	TI
TTL-S	74S40	Fairchild
	DM54S40	† National
	DM74S40	National
	54S40	† Signetics
	74S40	**Signetics (3003)**
	SN54S40	† TI
	SN74S40	TI
Dual 4-Input NAND/NOR Driver		
TTL	RG130	Raytheon

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—TTL (Cont'd)

Gates, NAND (Cont'd)

Function	Device	Source	Line
Dual 4-Input NAND/NOR Gate			
TTL	RG40	Raytheon	
Dual 4-Input, Open Collector			
TTL	SN5422	† TI	
	SN7422	TI	
TTL-ALS	SN54ALS22B	† TI	
	SN74ALS22B	TI	5
TTL-LS	54LS22	† Fairchild	
	HD74LS22	Hitachi	
	SN54LS22	† Motorola	
	SN74LS22	Motorola	
	DM54LS22	† National	10
	DM74LS22	◊ National	
	DN74LS22	◊ Panasonic	
	54LS22	† SGS	
	74LS22	SGS	
	SN54LS22	◊† TI	15
TTL-S	DM54S22	† National	
	DM74S22	National	
	SN54S22	† TI	
	SN74S22	TI	
Triple 3-Input			
TTL	5410	† Fairchild	20
	7410	Fairchild	
	MC54F10	◊† Motorola	
	MC5410	† Motorola	
	DM5410	† National	
	DM7410	National	25
	5410	† Signetics	
	7410	**Signetics (3003)**	
	SN5410	† TI	
	SN7410	TI	
TTL-ALS	M74ALS1010A	Mitsubishi	30
	DM54ALS10	† National	
	DM54ALS1010	† National	
	DM74ALS10	National	
	DM74ALS1010	National	
	SN54ALS10A	† TI	35
	SN54ALS1010A	† TI	
	SN74ALS10A	TI	
	SN74ALS1010A	TI	
TTL-AS	DM54AS10	† National	
	DM74AS10	National	40
	SN54AS10	◊† TI	
	SN74AS10	TI	
TTL-F	54F10	◊† Fairchild	
	74F10	◊ Fairchild	
	MC74F10	Motorola	45
	74F10	**Signetics (3023)**	
	SN74F10	TI	
TTL-H	DM54H10	† National	
	DM74H10	National	
TTL-LS	54LS10	† Fairchild	50
	74LS10	◊ Fairchild	
	GD74LS10	**GoldStar (2693)**	
	HD74LS10	Hitachi	
	M74LS10	Mitsubishi	
	SN54LS10	† Motorola	55
	SN74LS10	Motorola	
	DM54LS10	† National	
	DM74LS10	National	
	DN74LS10	◊ Panasonic	
	T54LS10	† SGS	60
	T74LS10	SGS	
	T74LS12	SGS	

(Continued)

Function	Device	Source	Line
Triple 3-Input			
TTL-LS		(Cont'd)	
	54LS10	† SGS	
	74LS10	◊ SGS	
	74LS12	◊ SGS	65
	54LS10	† Signetics	
	74LS10	**Signetics (3003)**	
	SN54LS10	◊† TI	
	SN74LS10	TI	
TTL-S	74S10	Fairchild	70
	GD74S10	**GoldStar (2694)**	
	DM54S10	† National	
	DM74S10	National	
	54S10	† Signetics	
	74S10	**Signetics (3003)**	75
	SN54S10	† TI	
	SN74S10	TI	
Triple 3-Input NAND/NOR Gate			
TTL	RG190	Raytheon	
	RG320	Raytheon	
Triple 3-Input, Open Collector			
TTL	SN5412	† TI	80
	SN7412	TI	
TTL-ALS	DM54ALS12	† National	
	DM74ALS12	National	
	SN54ALS12A	† TI	
	SN74ALS12A	TI	85
TTL-LS	74LS12	Fairchild	
	HD74LS12	Hitachi	
	SN54LS12	† Motorola	
	SN74LS12	Motorola	
	DM54LS12	† National	90
	DM74LS12	National	
	DN74LS12	◊ Panasonic	
	SN54LS12	◊† TI	
	SN74LS12	TI	
Triple 3-Input			
TTL-F	SN54F10	† TI	95
Quad 2-Input			
TTL	5400	† Fairchild	
	7400	Fairchild	
	DM5400	† National	
	DM7400	National	
	DM9002C	National	100
	5400	† Signetics	
	7400	**Signetics (3003)**	
	SN5400	† TI	
	SN7400	TI	
	TC7400B	Toshiba	105
TTL-ALS	M74ALS1000A	Mitsubishi	
	DM54ALS00	† National	
	DM54ALS1000	† National	
	DM74ALS00	National	
	DM74ALS1000	National	110
	SN54ALS00A	† TI	
	SN74ALS00A	TI	
	SN74ALS1000A	TI	
TTL-AS	DM54AS00	† National	
	DM54AS1000	† National	115
	DM74AS00	National	
	DM74AS1000	National	
	SN54AS00	† TI	
	SN74AS00	TI	
	SN74AS1000A	TI	120
TTL-F	54F00	◊† Fairchild	
	74F00	◊ Fairchild	
	MC54F00	◊† Motorola	

(Continued)

Function	Device	Source	Line
Quad 2-Input			
TTL-F		(Cont'd)	
	MC74F00	Motorola	
	54F00	Signetics	125
	74F00	**Signetics (3023)**	
	SN74F00	TI	
TTL-H	DM54H00	† National	
	DM74H00	National	
TTL-LS	54LS00	† Fairchild	130
	74LS00	◊ Fairchild	
	GD74LS00	**GoldStar (2693)**	
	HD74LS00	Hitachi	
	M74LS00	Mitsubishi	
	M74LS03	Mitsubishi	135
	SN54LS00	† Motorola	
	SN74LS00	Motorola	
	DM54LS00	† National	
	DM74LS00	National	
	DN74LS00	◊ Panasonic	140
	T54LS00	† SGS	
	T74LS00	SGS	
	T74LS01	SGS	
	T74LS03A	SGS	
	54LS00	† SGS	145
	74LS00	◊ SGS	
	74LS01	◊† SGS	
	74LS26	SGS	
	54LS00	† Signetics	
	74LS00	**Signetics (3003)**	150
	SN54LS00	† TI	
	SN74LS00	TI	
TTL-S	74S00	Fairchild	
	GD74S00	**GoldStar (2694)**	
	DM54S00	† National	155
	DM74S00	National	
	54S00	† Signetics	
	74S00	**Signetics (3003)**	
	SN54S00	† TI	
	SN74S00	TI	160
Quad 2-Input Buffer			
TTL	5437	† Fairchild	
	7437	Fairchild	
	DM5437	◊† National	
	DM7437	National	
	5437	† Signetics	165
	7437	**Signetics (3003)**	
	SN5437	† TI	
	SN7437	TI	
TTL-ALS	DM54ALS37	† National	
	DM74ALS37	National	170
	SN54ALS37A	† TI	
	SN74ALS37A	TI	
TTL-F	74F37	Fairchild	
	74F37	**Signetics (3023)**	
TTL-LS	54LS37	† Fairchild	175
	74LS37	◊ Fairchild	
	HD74LS37	◊ Hitachi	
	SN54LS37	† Motorola	
	SN74LS37	Motorola	
	DM54LS37	† National	180
	DM74LS37	◊ National	
	DN74LS37	◊ Panasonic	
	54LS37	† SGS	
	74LS37	SGS	
	54LS37	† Signetics	185
	74LS37	Signetics	
	SN54LS37	◊† TI	
	SN74LS37	TI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Gates, NAND (Cont'd)

Function	Device	Source	Line
Quad 2-Input Buffer (Cont'd)			
TTL-S	54S37	† Signetics	
	74S37	**Signetics (3003)**	
	SN54S37	† TI	
	SN74S37	TI	
Quad 2-Input Buffer, Open Collector			
TTL	7438	Fairchild	5
	7439	Fairchild	
	DM5438	◊† National	
	DM7438	National	
	5438	† Signetics	
	5439	† Signetics	10
	7438	**Signetics (3003)**	
	7439	**Signetics (3003)**	
	SN5438	† TI	
	SN7438	TI	
	SN7439	TI	15
TTL-ALS	DM54ALS38	† National	
	DM74ALS38	National	
	SN54ALS38A	† TI	
	SN74ALS38A	TI	
TTL-F	74F38	Signetics	20
TTL-LS	54LS38	† Fairchild	
	74LS38	◊ Fairchild	
	GD74LS38	**GoldStar (2693)**	
	HD74LS38	◊ Hitachi	
	SN54LS38	† Motorola	25
	SN74LS38	Motorola	
	DM54LS38	† National	
	DM74LS38	◊ National	
	DN74LS38	◊ Panasonic	
	54LS38	† Signetics	30
	74LS38	**Signetics (3003)**	
	SN54LS38	◊† TI	
	SN74LS38	TI	
TTL-S	54S38	† Signetics	
	74S38	**Signetics (3003)**	35
	SN54S38	† TI	
	SN74S38	TI	
Quad 2-Input Buffer, Open Collector, to 15 V			
TTL-LS	54LS26	† Fairchild	
	74LS26	◊ Fairchild	
	HD74LS26	◊ Hitachi	40
	SN54LS26	† Motorola	
	SN74LS26	Motorola	
	DM54LS26	† National	
	DM74LS26	◊ National	
	DN74LS26	◊ Panasonic	45
	T74LS26	SGS	
	54LS26	† Signetics	
	74LS26	**Signetics (3003)**	
	SN54LS26	◊† TI	
	SN74LS26	TI	50
Quad 2-Input NAND/NOR Driver			
TTL	RG7510	Raytheon	
Quad 2-Input NAND/NOR Gate			
TTL	RG140	Raytheon	
Quad 2-Input, Open Collector			
TTL	7401	Fairchild	
	7403	Fairchild	
	DM5401	† National	55
	DM5403	† National	
	DM7401	National	
	DM7403	National	
	N8881	**Signetics (3022)**	
	5403	† Signetics	60
		(Continued)	

Function	Device	Source	Line
Quad 2-Input, Open Collector			
TTL		(Cont'd)	
	7403	**Signetics (3003)**	
	SN5401	† TI	
	SN5403	† TI	
	SN7401	TI	
	SN7403	TI	65
TTL-ALS	M74ALS1003A	Mitsubishi	
	DM54ALS01	† National	
	DM54ALS03	† National	
	DM54ALS1003	† National	
	DM74ALS01	National	70
	DM74ALS03	National	
	DM74ALS1003	National	
	SN54ALS01	† TI	
	SN54ALS03B	† TI	
	SN74ALS01	TI	75
	SN74ALS03B	TI	
	SN74ALS1003A	TI	
TTL-H	DM54H01	† National	
	DM74H01	National	
TTL-LS	54LS03	† Fairchild	80
	74LS03	◊ Fairchild	
	HD74LS01	Hitachi	
	HD74LS03	Hitachi	
	SN54LS01	† Motorola	
	SN54LS03	† Motorola	85
	SN74LS01	Motorola	
	SN74LS03	Motorola	
	DM54LS01	† National	
	DM54LS03	† National	
	DM74LS01	National	90
	DM74LS03	National	
	DN74LS01	◊ Panasonic	
	DN74LS03	◊ Panasonic	
	54LS03	† SGS	
	74LS03	◊ SGS	95
	54LS01	† Signetics	
	54LS03	† Signetics	
	74LS01	**Signetics (3003)**	
	SN54LS01	† TI	
	SN54LS03	† TI	100
	SN74LS01	TI	
	SN74LS03	TI	
TTL-S	74S03	Fairchild	
	DM54S03	† National	
	DM74S03	National	105
	54LS38	† SGS	
	74LS38	SGS	
	54S03	Signetics	
	74S03	**Signetics (3003)**	
	SN54S03	† TI	110
	SN74S03	TI	
Quad 2-Input			
TTL-AS	SN54AS1000A	† TI	
TTL-F	SN54F00	† TI	
Quad 2-Input Buffer, Open Collector, to 15 V			
TTL-LS	**GD74LS26**	**GoldStar (2693)**	
Hex 2-Input			
TTL-AS	DM54AS1804	† National	115
	DM74AS1804	National	
2-Input NAND/NOR Gate			
TTL	RG220	Raytheon	
8-Input			
TTL	5430	† Fairchild	
	7430	Fairchild	
	DM5430	◊† National	120
		(Continued)	

Function	Device	Source	Line
8-Input			
TTL		(Cont'd)	
	DM7430	National	
	5430	† Signetics	
	7430	**◊ Signetics (3003)**	
	SN5430	† TI	
	SN7430	TI	125
TTL-ALS	DM54ALS30	† National	
	DM74ALS30	National	
	SN54ALS30A	† TI	
	SN74ALS30A	TI	
TTL-AS	DM54AS30	◊† National	130
	DM74AS30	National	
	SN54AS30	† TI	
	SN74AS30	TI	
TTL-F	**74F30**	**Signetics (3023)**	
	SN54F30	† TI	135
	SN74F30	TI	
TTL-H	DM54H30	† National	
	DM74H30	National	
TTL-LS	54LS30	† Fairchild	
	74LS30	◊ Fairchild	140
	GD74LS30	**GoldStar (2693)**	
	HD74LS30	◊ Hitachi	
	SN54LS30	† Motorola	
	SN74LS30	Motorola	
	DM54LS30	† National	145
	DM74LS30	◊ National	
	DN74LS30	◊ Panasonic	
	T54LS30	◊† SGS	
	54LS30	† SGS	
	74LS30	◊ SGS	150
	54LS30	† Signetics	
	74LS30	**Signetics (3003)**	
	SN54LS30	◊† TI	
	SN74LS30	TI	
TTL-S	74S30	Fairchild	155
	GD74S30	**GoldStar (2694)**	
	DM54S30	† National	
	DM74S30	National	
	SN54S30	† TI	
	SN74S30	TI	160
12-Input, Three-State			
TTL-S	DM54S134	† National	
	DM74S134	◊ National	
	54S134	† Signetics	
	74S134	**Signetics (3003)**	
	SN54S134	† TI	165
	SN74S134	TI	
13-Input			
TTL-ALS	M74ALS133	Mitsubishi	
	DM54ALS133	† National	
	DM74ALS133	National	
	SN54ALS133	† TI	170
	SN74ALS133	TI	
TTL-LS	54LS133	† Fairchild	
	74LS133	◊ Fairchild	
	SN54LS133	† Motorola	
	SN74LS133	Motorola	175
	T74LS133	SGS	
	74LS133	SGS	
TTL-S	74S133	Fairchild	
	GD74S133	**GoldStar (2694)**	
	DM54S133	† National	180
	DM74S133	◊ National	
	54S133	† Signetics	
	74S133	**Signetics (3003)**	
		(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—TTL (Cont'd)

Gates, NAND (Cont'd)

Function	Device	Source	Line
13-Input			
TTL-S		(Cont'd)	
	SN54S133	† TI	
	SN74S133	TI	

Gates, AND-OR

Function	Device	Source	Line
Triple 3-Input AND/Or			
TTL-LS	T54LS15	† SGS	

Gates, AND-OR-Invert

Function	Device	Source	Line
Dual 2-Wide 2-Input			
TTL	7451	Fairchild	
	DM5451	◊† National	5
	DM7451	National	
	5451	† Signetics	
	7451	**Signetics (3003)**	
	SN5451	† TI	
	SN7451	TI	10
TTL-F	74F51	Signetics	
TTL-H	DM54H51	† National	
	DM74H51	National	
TTL-LS	54LS51	† Fairchild	
	74LS51	◊ Fairchild	15
	GD74LS51	**GoldStar (2693)**	
	HD74LS51	Hitachi	
	M74LS51	Mitsubishi	
	SN54LS51	† Motorola	
	SN74LS51	Motorola	20
	DM54LS51	† National	
	DM74LS51	National	
	DN74LS51	◊ Panasonic	
	LS5451	◊† SGS	
	LS7451	SGS	25
	T74LS51	SGS	
	54LS51	† Signetics	
	74LS51	**Signetics (3003)**	
	SN54LS51	◊† TI	
	SN74LS51	TI	30
TTL-S	74S51	Fairchild	
	GD74S51	**GoldStar (2694)**	
	DM54S51	† National	
	DM74S51	National	
	54S51	† Signetics	35
	74S51	**Signetics (3003)**	
	SN54S51	◊† TI	
	SN74S51	TI	
Dual 2-Wide 2-Input (one gate is expandable)			
TTL	7450	Fairchild	
	DM5450	◊† National	40
	DM7450	National	
	5450	† Signetics	
	7450	**Signetics (3003)**	
	SN5450	† TI	
	SN7450	TI	45
TTL-H	DM54H50	† National	
	DM74H50	National	
Dual 2-Wide, 2-Input/3-Input			
TTL-LS	74LS51	SGS	
Dual 4-Input Expander (for 54/7423, 54/7450, 54/7453)			
TTL	5460	† Signetics	
Dual 4-Input Extender (for 9005, 9008)			
TTL	DM9006C	National	50
2-Wide, 4-Input			
TTL-LS	54LS55	† Fairchild	
	74LS55	◊ Fairchild	
	HD74LS55	Hitachi	
	SN54LS55	† Motorola	
	SN74LS55	◊ Motorola	55
	DM54LS55	† National	
	DM74LS55	National	
	DN74LS55	◊ Panasonic	
	T54LS55	† SGS	
	54LS55	◊† SGS	60
	74LS55	SGS	
	SN74LS55	TI	
2–3–3–2 Input			
TTL-LS	T54LS54	† SGS	
4-Wide 2-Input			
TTL	DM5454	† National	
	DM7454	National	65
	SN5454	† TI	
	SN7454	TI	
4-Wide 2-Input, Expandable			
TTL	DM5453	† National	
	DM7453	National	
	SN5453	† TI	70
4-Wide 2–2–3–3-Input			
TTL-LS	54LS54	† Fairchild	
	74LS54	◊ Fairchild	
	HD74LS54	Hitachi	
	SN54LS54	† Motorola	
	SN74LS54	◊ Motorola	75
	DM54LS54	† National	
	DM74LS54	National	
	DN74LS54	◊ Panasonic	
	54LS54	◊† SGS	
	74LS54	SGS	80
	54LS54	† Signetics	
	74LS54	**Signetics (3003)**	
	SN54LS54	◊† TI	
	SN74LS54	TI	
4–2–3–2 Input			
TTL-F	MC54F64	Motorola	85
	54F64	◊† Fairchild	
	74F64	◊ Fairchild	
	MC74F64	Motorola	
	54F64	† Signetics	
	74F64	**Signetics (3024)**	90
TTL-S	74S64	Fairchild	
	GD74S64	**GoldStar (2694)**	
	DM54S64	† National	
	DM74S64	National	
	54S64	† Signetics	95
	74S64	**Signetics (3003)**	
	SN54S64	◊ TI	
	SN74S64	TI	
4–2–3–2-Input, Open Collector			
TTL-S	DM54S65	† National	
	DM74S65	National	100
	54S65	† Signetics	
	SN54S65	◊† TI	
	SN74S65	TI	
2-Wide, 4-Input			
TTL-LS	**GD74LS55**	**GoldStar (2693)**	

Gates, OR

Function	Device	Source	Line
Expandable Dual 4-Input			
TTL	RG110	◊ Raytheon	105
Expandable Triple 3-Input			
TTL	RG100	◊ Raytheon	
Expandable Triple 3-Input OR Gate			
TTL	RG300	Raytheon	
Expandable Quad 2-Input			
TTL	RG50	Raytheon	
Dual 4-Input OR Expander			
TTL	RG170	Raytheon	
Quad 2-Input			
TTL	5432	† Fairchild	110
	7432	Fairchild	
	DM5432	◊† National	
	DM7432	National	
	5432	† Signetics	
	7432	**◊ Signetics (3003)**	115
	SN5432	† TI	
	SN7432	TI	
TTL-ALS	M74ALS1032A	Mitsubishi	
	DM54ALS1032	† National	
	DM54ALS32	† National	120
	DM74ALS1032	National	
	DM74ALS32	National	
	SN54ALS32	† TI	
	SN74ALS1032A	TI	
	SN74ALS32	TI	125
TTL-AS	DM54AS1032	† National	
	DM54AS32	◊† National	
	DM74AS1032	National	
	DM74AS32	National	
	SN54AS1032A	◊† TI	130
	SN54AS32	† TI	
	SN74AS1032A	◊ TI	
	SN74AS32	TI	
TTL-F	54F32	◊† Fairchild	
	74F32	◊ Fairchild	135
	MC54F32	† Motorola	
	MC74F32	Motorola	
	74F32	**Signetics (3023)**	
	SN54F32	† TI	
	SN74F32	TI	140
TTL-H	MC3003	Motorola	
TTL-LS	54LS32	† Fairchild	
	74LS32	◊ Fairchild	
	GD74LS32	**GoldStar (2693)**	
	HD74LS32	◊ Hitachi	145
	SN54LS32	† Motorola	
	SN74LS32	Motorola	
	DM54LS32	† National	
	DM74LS32	◊ National	
	DN74LS32	◊ Panasonic	150
	T54LS32	◊† SGS	
	54LS32	† SGS	
	74LS32	SGS	
	54LS32	† Signetics	
	74LS32	**Signetics (3003)**	155
	SN54LS32	◊† TI	
	SN74LS32	TI	
TTL-S	74S32	Fairchild	
	GD74S32	**GoldStar (2694)**	
	DM54S32	† National	160
	DM74S32	National	
	54S32	† Signetics	
	74S32	**Signetics (3003)**	
	SN54S32	† TI	
	SN74S32	TI	165
Quad 2-Input OR Expander			
TTL	RG150	Raytheon	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Gates, OR (Cont'd)

Function	Device	Source
Hex 2-Input		
TTL-AS	DM54AS1832	† National
	DM74AS1832	National
Hex 2-Input Line Driver/Buffer		
TTL-ALS	DM54ALS832	† National
	DM74ALS832	National
	SN54ALS832	† TI
Hex 2-Input OR Driver		
TTL-ALS	SN74ALS832A	TI

Gates, NOR

Function	Device	Source
Expandable Dual Output, Dual 2-Input		
TTL	RG70	◊ Raytheon
Expandable Dual Output, Dual 2-Input AND/NOR Gate		
TTL	RG310	Raytheon
Dual 4-Input, with Strobe		
TTL	5425	† Fairchild
	7425	Fairchild
	DM5425	† National
	DM7425	National
	5425	† Signetics
	7425	◊ **Signetics (3003)**
	SN5425	† TI
	SN7425	TI
Dual 4-Input, with Strobe, Expandable (see 54/7460 expander)		
TTL	SN5423	† TI
	SN7423	TI
Dual 5-Input		
TTL-F	**74F260**	**Signetics (3023)**
TTL-LS	54LS260	† Fairchild
	74LS260	◊ Fairchild
	SN54LS260	† Motorola
	SN74LS260	Motorola
	DN74LS260	◊ Panasonic
	T54LS260	† SGS
	T74LS260	SGS
	74LS260	SGS
	54LS260A	† Signetics
	74LS260	**Signetics (3003)**
TTL-S	DM74S260	National
	54S260	† Signetics
	74S260	**Signetics (3003)**
	SN54S260	† TI
	SN74S260	TI
Triple 3-Input		
TTL	7427	Fairchild
	DM5427	† National
	DM7427	National
	5427	† Signetics
	7427	◊ **Signetics (3003)**
	SN5427	† TI
	SN7427	TI
TTL-ALS	DM54ALS27	† National
	DM74ALS27	National
	SN54ALS27	† TI
	SN74ALS27	TI
TTL-AS	DM54AS27	◊† National
	DM74AS27	National
	SN54AS27	† TI
	SN74AS27	TI
TTL-F	SN54F27	† TI
	SN74F27	TI
TTL-LS	54LS27	† Fairchild
	74LS27	◊ Fairchild

(Continued)

Function	Device	Source
Triple 3-Input		
TTL-LS		(Cont'd)
	GD74LS27	**GoldStar (2693)**
	HD74LS27	◊ Hitachi
	SN54LS27	† Motorola
	SN74LS27	Motorola
	DM54LS27	† National
	DM74LS27	◊ National
	DN74LS27	◊ Panasonic
	T54LS27	◊† SGS
	54LS27	† SGS
	74LS27	SGS
	54LS27	† Signetics
	74LS27	**Signetics (3003)**
	SN54LS27	◊† TI
	SN74LS27	TI
Quad 2-Input		
TTL-AS	SN54AS02	◊† TI
TTL-F	SN54F36	† TI
	SN74F36	TI
TTL-H	MC3002	Motorola
	MC3102	† Motorola
TTL-LS	M74LS02	Mitsubishi
	T54LS02	† SGS
	T74LS02	SGS
Quad 2-Input Buffer, Open Collector		
TTL	5433	† Signetics
	7433	◊ **Signetics (3003)**
	SN5433	† TI
	SN7433	TI
TTL-ALS	DM54ALS33	† National
	DM74ALS33	National
	SN54ALS33A	† TI
	SN74ALS33A	TI
TTL-LS	54LS33	† Fairchild
	74LS33	◊ Fairchild
	SN54LS33	† Motorola
	SN74LS33	Motorola
	DN74LS33	◊ Panasonic
	T54LS33	◊† SGS
	T74LS33	SGS
	54LS33	† Signetics
	74LS33	**Signetics (3003)**
	SN54LS33	◊† TI
	SN74LS33	TI
Quad 2-Input, Open Collector		
TTL-LS	**74LS266**	**Signetics (3003)**
Quad 2-Input (54/7428 devices are also buffers)		
	M74ALS1002A	Mitsubishi
TTL	5402	† Fairchild
	7402	Fairchild
	DM5402	† National
	DM7402	National
	5402	† Signetics
	5428	† Signetics
	7402	**Signetics (3003)**
	7428	◊ **Signetics (3003)**
	SN5402	† TI
	SN5428	† TI
	SN7402	TI
	SN7428	TI
TTL-ALS	DM54ALS02	† National
	DM54ALS1002	† National
	DM54ALS28	† National
	DM74ALS02	National
	DM74ALS1002	National
	DM74ALS28	National

(Continued)

Function	Device	Source
Quad 2-Input (54/7428 devices are also buffers)		
TTL-ALS		(Cont'd)
	SN54ALS02	† TI
	SN54ALS28A	† TI
	SN74ALS02	TI
	SN74ALS1002A	TI
	SN74ALS28A	TI
TTL-AS	DM54AS02	† National
	DM54AS1036	† National
	DM74AS02	National
	DM74AS1036	National
	SN74AS02	TI
	SN74AS1036A	TI
TTL-F	54F02	◊† Fairchild
	74F02	◊ Fairchild
	MC54F02	◊† Motorola
	MC74F02	Motorola
	74F02	**Signetics (3023)**
	SN74F02	TI
TTL-LS	54LS02	† Fairchild
	54LS28	† Fairchild
	74LS02	◊ Fairchild
	74LS28	◊ Fairchild
	GD74LS02	**GoldStar (2693)**
	HD74LS02	Hitachi
	SN54LS02	† Motorola
	SN54LS28	† Motorola
	SN74LS02	Motorola
	SN74LS28	Motorola
	DM54LS02	† National
	DM74LS02	National
	DN74LS02	◊ Panasonic
	DN74LS28	◊ Panasonic
	T54LS28	◊† SGS
	T74LS28	SGS
	54LS02	† SGS
	74LS02	◊ SGS
	54LS02	† Signetics
	54LS28	† Signetics
	74LS02	**Signetics (3003)**
	SN54LS02	† TI
	SN54LS28	◊† TI
	SN74LS02	TI
	SN74LS28	TI
TTL-S	74S02	Fairchild
	GD74S02	**GoldStar (2694)**
	DM54S02	† National
	DM74S02	National
	54S02	† Signetics
	74S02	**Signetics (3003)**
	SN54S02	† TI
	SN74S02	TI
Quad 2-Input (547/428 devices are also buffers)		
TTL-F	SN54F02	† TI
Hex 2-Input		
TTL-AS	DM54AS1805	† National
	DM74AS1805	National
Hex 2-Input NOR Driver		
TTL-ALS	SN74ALS805A	◊ TI
8-Input NAND/NOR Gate		
TTL	RG60	Raytheon

Gates, OR/NOR

Function	Device	Source
Quad 2-Input Exclusive OR/NOR		
TTL-S	DM54S135	† National
	DM74S135	◊ National
	54S135	† Signetics

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL–TTL (Cont'd)

Gates, OR/NOR (Cont'd)

Function	Device	Source	Line
Quad 2-Input Exclusive OR/NOR			
TTL-S		(Cont'd)	
	74S135	**Signetics (3003)**	
	SN54S135	† TI	
	SN74S135	TI	

Gates, Exclusive OR

Function	Device	Source	Line
Exclusive-OR with Complement			
TTL	RG90	Raytheon	
Quad 2-Input			
TTL-H	MC3021	Motorola	5
	MC3121	† Motorola	
TTL-LS	T54LS136	† SGS	
	T74LS136	SGS	
Quad 2-Input, Open Collector			
TTL	SN54136	† TI	
	SN74136	TI	10
TTL-ALS	DM54ALS136	† National	
	DM74ALS136	National	
	SN74ALS136	TI	
TTL-LS	54LS136	Fairchild	
	74LS136	◊ Fairchild	15
	HD74LS136	Hitachi	
	SN54LS136	† Motorola	
	SN74LS136	Motorola	
	DM54LS136	† National	
	DM74LS136	◊ National	20
	DN74LS136	◊ Panasonic	
	54LS136	† SGS	
	74LS136	SGS	
	54LS136	† Signetics	
	74LS136	◊ **Signetics (3003)**	25
	SN54LS136	◊† TI	
	SN74LS136	TI	
TTL-S	**N82S41**	**Signetics (3022)**	
Quad 2-Input, Totem Pole Outputs			
TTL	5486	◊† Fairchild	
	7486	Fairchild	30
	DM5486	National	
	DM74LS386	National	
	DM7486	◊ National	
	RM8241	† Raytheon	
	5486	† Signetics	35
	7486	**Signetics (3003)**	
	SN5486	† TI	
	SN7486	TI	
TTL-ALS	DM54ALS86	◊† National	
	DM74ALS86	National	40
	SN54ALS86	† TI	
	SN74ALS86	TI	
TTL-AS	DM54AS86	† National	
	DM74AS86	National	
TTL-F	54F86	◊† Fairchild	45
	74F86	◊ Fairchild	
	MC54F86	Motorola	
	MC74F86	Motorola	
	54F86	† Signetics	
	74F86	Signetics	50
TTL-LS	74LS386	◊ Fairchild	
	74LS86	◊ Fairchild	
	GD74LS86	**GoldStar (2693)**	
	HD74LS386	Hitachi	
	HD74LS86	Hitachi	55
	SN54LS386	† Motorola	
	SN54LS86	† Motorola	

(Continued)

Function	Device	Source	Line
Quad 2-Input, Totem Pole Outputs			
TTL-LS		(Cont'd)	
	SN74LS386	Motorola	
	SN74LS86	Motorola	
	DM54LS386	† National	60
	DM54LS86	◊† National	
	DM74LS86	National	
	DN74LS386	◊ Panasonic	
	DN74LS86	◊ Panasonic	
	74LS86	SGS	65
	54LS86	† Signetics	
	74LS86	**Signetics (3003)**	
	SN54LS386A	◊† TI	
	SN54LS86A	◊† TI	
	SN74LS86A	TI	70
TTL-S	74S86	Fairchild	
	GD74S86	**GoldStar (2694)**	
	DM74S86	National	
	54S86	† Signetics	
	74S86	**Signetics (3003)**	75
	SN54S86	† TI	
	SN74S86	TI	

Gates, Exclusive NOR

Function	Device	Source	Line
Quad			
TTL-LS	T54LS266	† SGS	
Quad 2-Input			
TTL-ALS	DM54ALS810	† National	
	DM74ALS810	National	80
	DM74AS810	National	
	SN74ALS810	◊ TI	
TTL-H	MC3022	Motorola	
	MC3122	† Motorola	
TTL-LS	T74LS266	SGS	85
Quad 2-Input, Open Collector			
TTL	9386C	Fairchild	
	9386M	† Fairchild	
	RM8242	† Raytheon	
	N8242	**Signetics (3022)**	
	N9386	**Signetics (3022)**	90
	S9386	† Signetics	
TTL-ALS	DM54ALS811	† National	
	DM74ALS811	National	
	DM74AS811	National	
	SN74ALS811	◊ TI	95
TTL-LS	54LS266	† Fairchild	
	74LS266	◊ Fairchild	
	HD74LS266	Hitachi	
	SN54LS266	◊† Motorola	
	SN74LS266	Motorola	100
	DM54LS266	† National	
	DM74LS266	National	
	DN74LS266	◊ Panasonic	
	54LS266	† SGS	
	74LS266	SGS	105
	N8242	**Signetics (3022)**	
	S8242	† Signetics	
	54LS266	† Signetics	
	SN54LS266	◊† TI	
	SN74LS266	TI	110

Latches

Function	Device	Source	Line
Dual 4-Bit			
TTL	SN54100	† TI	
TTL-ALS	DM54ALS873	◊† National	
	DM74ALS873	◊ National	

(Continued)

Function	Device	Source	Line
Dual 4-Bit			
TTL-ALS		(Cont'd)	
	SN54ALS873B	† TI	
	SN74ALS873B	TI	115
TTL-AS	DM54AS873	† National	
	DM74AS873	National	
	SN54AS873	◊† TI	
	SN74AS873	TI	
Dual 4-Bit Addressable			
TTL-F	MC74F256	Motorola	120
	74F256	**Signetics (3023)**	
TTL-LS	54LS256	† Fairchild	
	74LS256	◊ Fairchild	
	SN54LS256	† Motorola	
	SN74LS256	◊ Motorola	125
	T54LS256	† SGS	
	T74LS256	SGS	
	74LS256	**Signetics (3003)**	
Dual 4-Bit Addressable Latch			
TTL-LS	74LS256	SGS	
Dual 4-Bit with Clear			
TTL	9308C	Fairchild	130
	9308M	† Fairchild	
	54116	† Signetics	
	74116	**Signetics (3003)**	
	SN54116	† TI	
	SN74116	TI	135
Quad Bistable, Complementary Outputs			
TTL	5475	◊† Fairchild	
	7475	Fairchild	
	DM5475	† National	
	DM7475	National	
	5475	† Signetics	140
	7475	**Signetics (3003)**	
	SN5475	† TI	
	SN7475	TI	
TTL-LS	54LS375	† Fairchild	
	74LS375	◊ Fairchild	145
	GD74LS75	**GoldStar (2693)**	
	HD74LS375	Hitachi	
	HD74LS75	Hitachi	
	SN54LS375	† Motorola	
	SN54LS75	† Motorola	150
	SN74LS375	Motorola	
	SN74LS75	◊ Motorola	
	DM54LS75	◊† National	
	DM74LS75	National	
	DN74LS75	◊ Panasonic	155
	54LS375	† Signetics	
	54LS75	† Signetics	
	74LS375	**Signetics (3003)**	
	74LS75	**Signetics (3003)**	
	SN54LS375	◊† TI	160
	SN54LS75	† TI	
	SN74LS375	TI	
	SN74LS75	TI	
Quad Bistable, Single Output			
TTL-LS	HD74LS77	Hitachi	
	SN54LS77	† Motorola	165
	SN74LS77	Motorola	
	DM54LS377	† National	
	DM74LS77	National	
Quad Multifunction			
TTL	9314C	Fairchild	
	9314M	† Fairchild	170
	S9314	† Signetics	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Latches (Cont'd)

Function	Device	Source
Quad Set-Reset		
TTL	54279	† Fairchild
	74279	Fairchild
	54279	† Signetics
	74279	**Signetics (3003)**
	SN54279	† TI
	SN74279	TI
TTL-LS	54LS279	† Fairchild
	74LS279	◊ Fairchild
	HD74LS279	Hitachi
	SN54LS279	◊† Motorola
	SN74LS279	Motorola
	DM54LS279	† National
	DM74LS279	National
	DN74LS279	◊ Panasonic
	54LS279	† SGS
	74LS279	SGS
	54LS279	† Signetics
	SN54LS279A	◊† TI
	SN74LS279A	TI
Octal		
TTL-LS	T54LS373	† SGS
Octal, Transparent		
TTL-LS	74LS373	SGS
Octal Transparent, Inverting		
TTL-ALS	DM54ALS880	◊† National
	DM74ALS880	National
	SN74ALS880A	TI
TTL-AS	DM54AS880	† National
	DM74AS880	National
	SN74AS880	TI
Octal Transparent, Inverting, Three-State		
TTL-S	AM2957C	◊ AMD
Octal Transparent Latch		
TTL-LS	54LS373	† SGS
Octal Transparent, Non-Inverting, Three-State		
TTL-S	AM2956C	◊ AMD
	AM2956M	◊† AMD
Octal 2-Input Multiplexed, Three-State Outputs		
TTL-F	54F604	† Signetics
	54F605	† Signetics
	74F604	**Signetics (3024)**
	74F605	**Signetics (3024)**
TTL-LS	SN74LS604	Motorola
	SN74LS605	Motorola
	SN74LS606	Motorola
	SN74LS607	Motorola
	SN74LS607	TI
6-Bit (independent 2 and 4-Bit)		
TTL-S	**N8T3404**	**Signetics (3022)**
8-Bit Addressable Latch		
TTL-LS	T74LS259	SGS
8-Bit, Addressable, with Clear		
TTL	9334C	◊ Fairchild
	9334M	◊† Fairchild
	DM54259	◊† National
	DM74259	National
	DM8334	National
	DM9334	† National
	N9334	**Signetics (3022)**
	S9334	† Signetics
	SN54259	† TI
	SN74259	◊ TI
TTL-ALS	SN54ALS259	† TI
	SN74ALS259	TI

(Continued)

Function	Device	Source
8-Bit, Addressable, with Clear (Cont'd)		
TTL-F	MC74F259	Motorola
	74F259	**Signetics (3023)**
TTL-LS	54LS259	† Fairchild
	74LS259	◊ Fairchild
	GD74LS259	**GoldStar (2693)**
	HD74LS259	Hitachi
	SN54LS259	† Motorola
	SN74LS259	◊ Motorola
	DM54LS259	† National
	DM74LS259	National
	54LS259	† SGS
	74LS259	SGS
	54LS259	† Signetics
	74LS259	**Signetics (3003)**
	SN54LS259B	◊† TI
	SN74LS259B	TI
8-Bit, Edge-Triggered D-Type, Read-Back		
	SN74ALS996	TI
	SN74ALS996-1	TI
8-Bit, Inverting, Back-to-Back Configuration		
TTL-LS	SN54LS567	† MMI
	SN74LS567	MMI
8-Bit Latch		
TTL-LS	T54LS259	† SGS
8-Bit, Non-Inverting, Back-to-Back Configuration		
TTL-LS	SN54LS547	† MMI
	SN74LS547	MMI
8-Bit, Non-Inverting, Three-State, Readback		
TTL-LS	SN54LS793	† MMI
	SN74LS793	MMI
8-Bit, Transparent, D Type, Three-State		
TTL-ALS	DM54ALS373	† National
	DM54ALS573	† National
	DM74ALS373	National
	DM74ALS573	National
	SN54ALS373	† TI
	SN54ALS573B	† TI
	SN74ALS373	TI
TTL-AS	DM54AS373	† National
	DM54AS573	† National
	DM74AS373	National
	DM74AS573	National
	SN54AS373	◊† TI
	SN54AS573	† TI
	SN74AS373	TI
	SN74AS573	TI
TTL-F	54F373	◊† Fairchild
	54F412	◊† Fairchild
	54F573	† Fairchild
	74F373	◊ Fairchild
	74F412	◊ Fairchild
	74F432	Fairchild
	74F573	◊ Fairchild
	MC54F373	† Motorola
	MC74F373	Motorola
	54F373	† Signetics
	74F373	**Signetics (3023)**
	74F412	**Signetics (3024)**
	74F432	**Signetics (3024)**
	74F573	**Signetics (3024)**
	SN54F373	† TI
	SN54F573	† TI
	SN74F373	TI
	SN74F573	TI
TTL-LS	74LS373	◊ Fairchild
	74LS573	◊ Fairchild

(Continued)

Function	Device	Source
8-Bit, Transparent, D Type, Three-State		
TTL-LS		(Cont'd)
	GD74LS373	**GoldStar (2693)**
	HD74LS373	Hitachi
	SN54LS373	† MMI
	SN54LS373	† Motorola
	SN74LS373	Motorola
	DM54LS373	† National
	DM74LS373	National
	DN74LS373	◊ Panasonic
	T74LS373	SGS
	N8TS805	Signetics
	S8TS805	† Signetics
	S8TS806	† Signetics
	54LS363	† Signetics
	54LS373	† Signetics
	74LS363	**Signetics (3003)**
	74LS373	**Signetics (3003)**
	SN54LS373	◊† TI
	SN74LS373	TI
TTL-S	AM25S373	AMD
	SN74S373	AMD
	SN54S373	† MMI
	DM54S373	† National
	DM74S373	◊ National
	54S373	Signetics
	74S373	**Signetics (3003)**
	SN54S373	† TI
	SN74S373	TI
8-Bit, Transparent, D-Type, Inverting		
TTL-AS	SN74AS846	TI
TTL-F	**74F846**	**Signetics (3025)**
8-Bit, Transparent, D-Type, Inverting Three State		
TTL-ALS	SN74ALS563A	◊ TI
	SN74ALS580A	TI
	M74ALS533	Mitsubishi
	DM54ALS533	† National
	DM54ALS563	† National
	DM54ALS580	† National
	DM74ALS533	National
	DM74ALS563	National
	DM74ALS580	National
	SN54ALS563A	◊† TI
	SN54ALS580A	† TI
	SN74ALS533	TI
	S74ALS580A	TI
TTL-AS	DM54AS533	† National
	DM54AS580	† National
	DM74AS533	National
	DM74AS580	National
	SN74AS533	TI
	SN74AS580	TI
TTL-F	54F533	◊† Fairchild
	54F563	† Fairchild
	74F533	◊ Fairchild
	74F563	Fairchild
	MC54F533	† Motorola
	MC74F533	Motorola
	54F533	† Signetics
	74F533	**Signetics (3024)**
	74F563	**Signetics (3024)**
	SN54F533	† TI
	SN74F533	TI
TTL-LS	AM25LS533	AMD
	74LS533	◊ Fairchild
	74LS563	◊ Fairchild
	74LS564	◊ Fairchild

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—TTL (Cont'd)

Function	Device	Source	Line
Latches (Cont'd)			
8-Bit, Transparent, D-Type, Inverting Three-State			
TTL-LS (Cont'd)			
	SN54LS533	† MMI	
	N8TS807	Signetics	
TTL-S	AM25S533	AMD	
	SN74S533	AMD	
	SN54S533	† MMI	5
8-Bit, Transparent, D-Type, Non-inverting			
TTL-AS	SN74AS845	TI	
TTL-F	**74F845**	**Signetics (3025)**	
8-Bit, Transparent, D-Type, Three State			
TTL-ALS	SN74ALS573B	TI	
8-Bit, Transparent, D-Type, Three-State			
TTL-ALS	M74ALS373	◊ Mitsubishi	
8-Bit, Transparent D-Type, Three-State (bus interface)			
TTL	AM29845	AMD	10
	AM29846	AMD	
TTL-ALS	SN74ALS845	TI	
	SN74ALS845-1	TI	
	SN74ALS846	TI	
	SN74ALS846-1	TI	15
8-Bit Transparent, D-Type, Inverting Three-State			
TTL-F	SN74F563	TI	
8-Bit, Two-Stage Pipeline Configuration			
TTL-LS	SN54LS549	† MMI	
	SN74LS549	MMI	
9-Bit, Transparent, D-Type, Inverting			
TTL-AS	SN74AS844	TI	
TTL-F	**74F844**	**Signetics (3025)**	20
9-Bit, Transparent, D-Type, Inverting (bus interface)			
TTL-ALS	SN74ALS844	TI	
	SN74ALS844-1	TI	
9-Bit, Transparent, D-Type, Non-inverting			
TTL-ALS	SN74ALS843	TI	
	SN74ALS843-1	TI	
TTL-AS	SN74AS843	TI	25
TTL-F	**74F843**	**Signetics (3025)**	
9-Bit, Transparent D-Type Read-Back, Inverting			
TTL-ALS	SN74ALS991	TI	
9-Bit, Transparent D-Type Read-Back, Non-Inverting			
TTL-ALS	SN74ALS990	TI	
9-Bit, Transparent D-Type Read-Back, Three-State, Non-Inverting			
TTL-ALS	SN74ALS992	TI	
	SN74ALS993	TI	30
9-Bit, Transparent D-Type, Three-State (bus interface)			
TTL	AM29843	AMD	
	AM29844	AMD	
10-Bit Readback Latch, Inverting			
TTL-ALS	SN74ALS995	TI	
10-Bit Readback Latch, Non-Inverting			
TTL-ALS	SN74ALS994	TI	
10-Bit, Transparent, D-Type, Inverting			
TTL-ALS	SN74ALS842	TI	35
	SN74ALS842-1	TI	
TTL-AS	SN74AS842	TI	
TTL-F	**74F842**	**Signetics (3025)**	
10-Bit, Transparent, D-Type, Non-inverting			
TTL-AS	SN74AS841	TI	
TTL-F	**74F841**	**Signetics (3025)**	40
10-Bit, Transparent, D-Type, Non-Inverting (bus interface)			
TTL-ALS	SN74ALS841	TI	
	SN74ALS841-1	TI	
10-Bit, Transparent D-Type, Three-State (bus interface)			
TTL	AM29841	AMD	
	AM29842	AMD	

Memories

Asynchronous First-In, First-Out Memory (16x5)			
TTL-ALS	**SN74ALS229A**	**TI**	**(3229)** 45
Cache Address Comparator, with 512x9 RAM			
TTL(N)	**TMS2150**	◊ **TI**	**(3227)**
Data Access Register			
TTL-F	74F407	◊ Fairchild	
Diagnostic Register, 8-Bit			
TTL-S	SN54S818	† MMI	
	SN74S818	◊ MMI	
Memory Mapper (expands 4 address lines to 12)			
	UM74HCT612	**UMC**	**(3313)** 50
Memory Mappers			
TTL-LS	SN74LS610	TI	
	SN74LS611	TI	
	SN74LS612	TI	
	SN74LS613	TI	
SIPO Shift Register			
TTL-LS	T74LS164	SGS	55
Dual Rank 8-Bit Shift Register (8-Bit I/O buffer, "D" register, and serial "B" register)			
TTL-LS	DM74LS62	National	
	DM86LS52	◊ National	
	DM86LS62	National	
Dual 16-Word x 4-Bit Register File			
TTL-AS	**SN74AS870**	**TI**	**(3226)**
	SN74AS871	**TI**	**(3226)** 60
Octal Storage Register (two stage, 4-Bit wide shift register)			
TTL-LS	SN54LS396	◊† TI	
4x4 Register File			
TTL-LS	T74LS170	SGS	
8-Bit Feedback Register, Inverting			
TTL-ALS	SN74ALS667	TI	
8-Bit Feedback Register, Non-Inverting			
TTL-ALS	SN74ALS666	TI	
8-Bit Multiport Register (RAM with simultaneous read/write)			
TTL	9338C	◊ Fairchild	65
	9338M	◊† Fairchild	
16-Bit Active Element Memory			
TTL	MC4004	Motorola	
	MC4005	Motorola	
	MC4304	† Motorola	
	MC4305	† Motorola	70
16-Bit Scratch Pad Memory			
TTL	RL80	◊ Raytheon	
16-Bit (4x4) Register File, Simultaneous Read/Write, Open Collector			
TTL	54170	† Fairchild	
	74170	Fairchild	
	DM74170	National	
	54170	† Signetics	75
	74170	**Signetics (3003)**	
	SN54170	† TI	
	SN74170	TI	
TTL-LS	54LS170	† Fairchild	
	54LS670	† Fairchild	80
	74LS170	◊ Fairchild	
	74LS670	◊ Fairchild	
	GD74LS670	**GoldStar (2693)**	
	HD74LS170	Hitachi	

(Continued)

Function	Device	Source	Line
16-Bit (4x4) Register File, Simultaneous Read/Write, Three-State			
TTL-LS (Cont'd)			
	HD74LS670	Hitachi	85
	M74LS170	Mitsubishi	
	SN54LS170	† Motorola	
	SN54LS670	† Motorola	
	SN74LS170	Motorola	
	SN74LS670	Motorola	90
	DM54LS170	◊† National	
	DM54LS670	† National	
	DM74LS170	National	
	DM74LS670	National	
	DN74LS170	◊ Panasonic	95
	54LS170	† SGS	
	54LS670	† SGS	
	74LS170	SGS	
	74LS670	SGS	
	54LS670	◊† Signetics	100
	74LS170	**Signetics (3003)**	
	74LS670	**Signetics (3003)**	
	SN54LS170	◊† TI	
	SN54LS670	◊† TI	
	SN74LS170	TI	105
	SN74LS670	TI	
16-Bit (8x2) Multiport Register File, Simultaneous Read/Write, Three-State			
TTL	SN74172	TI	
TTL-S	54S172	† Signetics	
	74S172	**Signetics (3003)**	
64-Bit (16x4) First-In/First-Out Memory			
TTL-ALS	**SN74ALS232A**	**TI**	**(3229)** 110
64-Bit (16x4) RAM, Open Collector			
TTL	DM7489B	◊ National	
	DM7589	National	
	DM8589	National	
TTL-S	DM74S289	National	
64-Bit (16x4) RAM, Two Port, Open Collector			
TTL	AM29704C	AMD	115
	AM29704M	† AMD	
64-Bit (16x4) RAM, Two Port, Three-State			
TTL	AM29705C	AMD	
	AM29705M	† AMD	
TTL-S	IDM29705AC	National	
	IDM29705C	National	120
	IDM29705M	† National	
64-Bit (16x4) RAM, Three-State			
TTL	DM8599	National	
TTL-F	54F189	◊† Fairchild	
	54F219	† Fairchild	
	74F189	◊ Fairchild	125
	74F219	◊ Fairchild	
	MC54F189	† Motorola	
TTL-S	DM74S189	National	
64-Bit (16x4) Register File with Latch, Three-State			
TTL-S	DM85S68	National	
64-Bit (16x4) Simultaneous Read/Write RAM with Output Register			
TTL	74F410	◊ Fairchild	130
80-Bit (16x5) First-In/First-Out Memory			
TTL-ALS	**SN74ALS233A**	**TI**	**(3229)**
80-Bit (16x5) First-In/First-Out Memory, Asynchronous, Three-State			
TTL-S	**74S225**	**Signetics (3003)**	
	SN74S225	**TI**	**(3229)**
256-Bit (64x4) First-In/First-Out Memory			
TTL-ALS	S74ALS236	TI	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Memories (Cont'd)

Function	Device	Source
256-Bit (64x5) First-In/First-Out Memory		
TTL-ALS	**SN74ALS234**	**TI (3229)**
320-Bit (64x5) First-In/First-Out Memory		
TTL-ALS	**SN74ALS235**	**TI (3229)**
1024x10 ROM, Sine (0º to 90º) Look-Up Table		
TTL-S	5086	† MMI
	5087	† MMI

Multiplexers (Digital)

Function	Device	Source
Synchronous Address		
TTL-LS	SN74LS783	Motorola
Dual 2-Line to 4-Line Decoder/Demultiplexer, Totem Pole Output (or 3-line to 8-line decoder/demultiplexer)		
TTL-LS	M74LS155	Mitsubishi
	M74LS156	Mitsubishi
Dual 4-Input		
LS	T74LS153	SGS
TTL	54153	† Fairchild
	74153	Fairchild
	MC4000	Motorola
	MC4300	† Motorola
	DM54153	† National
	DM74153	National
	54153	† Signetics
	74153	**Signetics (3003)**
	SN54153	† TI
	SN74153	TI
TTL-ALS	M74ALS153	Mitsubishi
	DM54ALS153	† National
	DM74ALS153	National
	SN54ALS153	† TI
	SN74ALS153	TI
TTL-AS	SN74AS153	TI
TTL-F	54F153	◊† Fairchild
	74F153	◊ Fairchild
	MC54F153	† Motorola
	MC74F153	Motorola
	74F153	**Signetics (3023)**
	SN54F153	† TI
	SN74F153	TI
TTL-LS	54LS153	† Fairchild
	74LS153	◊ Fairchild
	GD74LS153	**GoldStar (2693)**
	HD74LS153	Hitachi
	SN54LS153	† Motorola
	SN74LS153	Motorola
	DM54LS153	◊† National
	DM74LS153	◊ National
	DN74LS153	◊ Panasonic
	T74LS253	SGS
	74LS153	SGS
	74LS352	SGS
	74LS353	SGS
	54LS153	◊† Signetics
	74LS153	**Signetics (3003)**
	SN54LS153	◊† TI
	SN74LS153	TI
TTL-S	74S153	Fairchild
	DM54S153	† National
	DM74S153	National
	54S153	† Signetics
	74S153	**Signetics (3003)**
	SN54S153	† TI
	SN74S153	TI
Dual 4-Input, Complementary Output		
TTL	9309C	Fairchild
	9309M	† Fairchild
	DM8309	National
	DM9309	National
	N9309	**Signetics (3022)**
	S9309	† Signetics
Dual 4-Input, Inverting		
TTL-ALS	M74ALS352	◊ Mitsubishi
	DM54ALS352	◊† National
	DM74ALS352	◊ National
	SN54ALS352	† TI
	SN74ALS352	TI
TTL-AS	SN74AS352	TI
TTL-F	54F352	◊† Fairchild
	74F352	◊ Fairchild
	MC54F352	† Motorola
	MC74F352	Motorola
	74F352	**Signetics (3023)**
	SN74F352	TI
TTL-LS	54LS352	† Fairchild
	74LS352	◊ Fairchild
	SN74LS352	Motorola
	DM54LS352	† National
	DM74LS352	National
	T54LS352	† SGS
	T74LS352	SGS
	54LS352	† Signetics
	74LS352	**Signetics (3003)**
	SN54LS352	† TI
	SN74LS352	TI
Dual 4-Input, Inverting, Three-State		
TTL-ALS	M74ALS353	◊ Mitsubishi
	DM54ALS353	◊† National
	DM74ALS353	◊ National
	SN54ALS353	† TI
	SN74ALS353	TI
	SN74AS353	TI
TTL-F	54F353	◊† Fairchild
	74F353	◊ Fairchild
	MC54F353	† Motorola
	MC74F353	Motorola
	74F353	**Signetics (3023)**
	SN54F353	† TI
	SN74F353	TI
TTL-LS	54LS353	† Fairchild
	74LS353	◊ Fairchild
	SN74LS353	Motorola
	DM54LS353	† National
	DM74LS353	National
	T54LS353	† SGS
	T74LS353	SGS
	54LS353	† Signetics
	74LS353	**Signetics (3003)**
	SN54LS353	◊† TI
	SN74LS353	TI
Dual 4-Input (three-state 54/75153)		
TTL	DM7214	† National
	DM8214	National
Dual 4-Input, Three-State		
TTL-ALS	M74ALS253	Mitsubishi
	DM74ALS253	National
	SN54ALS253	† TI
	SN74ALS253	TI
TTL-F	54F253	◊† Fairchild
	74F253	◊ Fairchild
	MC54F253	◊† Motorola

(Continued)

Function	Device	Source
Dual 4-Input, Three-State		
TTL-F		(Cont'd)
	MC74F253	Motorola
	74F253	**Signetics (3023)**
	SN54F253	† TI
	SN74F253	TI
TTL-LS	54LS253	† Fairchild
	74LS253	◊ Fairchild
	HD74LS253	Hitachi
	SN54LS253	† Motorola
	SN74LS253	◊ Motorola
	DM54LS253	† National
	DM74LS253	National
	DN74LS253	◊ Panasonic
	74LS253	SGS
	54LS253	† Signetics
	74LS253	**Signetics (3003)**
	SN54LS253	◊† TI
	SN74LS253	TI
TTL-S	SN74S253	AMD
	74S253	Fairchild
	DM54S253	† National
	DM74S253	National
	54S253	† Signetics
	74S253	**◊ Signetics (3003)**
	SN74S253	TI
Dual 4-to-1 Multiplexer		
TTL-S	**GD74S153**	**GoldStar (2694)**
Dual 8-Input (two 8-to-1 sections)		
TTL	SN54LS451	† MMI
	DM54LS451	† National
	DM74LS451	National
TTL-LS	SN74LS451	MMI
Dual 4-Input		
TTL-AS	SN54AS153	† TI
Dual4-Input, Inverting		
TTL-F	SN54F352	† TI
Quad 2-Input		
TTL-LS	T54LS157	† SGS
	T54LS158	† SGS
	T54LS258A	† SGS
	T74LS157	SGS
	T74LS158	SGS
	T74LS257	SGS
	T74LS258	SGS
Quad 2-Input Digital (suitable for driving adders, registers)		
TTL	RM8266	† Raytheon
	N8266	**Signetics (3022)**
	S8266	† Signetics
Quad 2-Input, Inverting		
TTL	54158	† Signetics
	74158	**Signetics (3003)**
TTL-ALS	M74ALS158	Mitsubishi
	SN74ALS158	TI
TTL-AS	DM54AS158	† National
	DM74AS158	◊ National
	SN74AS158	TI
TTL-F	54F158	◊† Fairchild
	74F158	◊ Fairchild
	MC54F158	† Motorola
	MC74F158	Motorola
	54F158	† Signetics
	74F158	**Signetics (3023)**
	SN54F158A	† TI
	SN74F158A	◊ TI

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—TTL (Cont'd)

Multiplexers (Digital) (Cont'd)

Function	Device	Source
Quad 2-Input, Inverting (Cont'd)		
TTL-LS	54LS158	† Fairchild
	74LS158	◊ Fairchild
	GD74LS158	**GoldStar (2693)**
	HD74LS158	Hitachi
	SN54LS158	† Motorola
	SN74LS158	Motorola
	DM54LS158	† National
	DM74LS158	National
	DN74LS158	◊ Panasonic
	54LS158	† SGS
	74LS158	SGS
	54LS158	◊† Signetics
	74LS158	**Signetics (3003)**
	SN54LS158	◊† TI
	SN74LS158	TI
TTL-S	74S158	Fairchild
	DM54S158	† National
	DM74S158	National
	54S158	† Signetics
	74S158	**Signetics (3003)**
	SN54S158	† TI
	SN74S158	TI
Quad 2-Input, Inverting, Open Collector		
TTL	RM8234	† Raytheon
	N8234	**Signetics (3022)**
	S8234	† Signetics
Quad 2-Input, Inverting Three-State		
TTL-ALS	M74ALS258	Mitsubishi
	DM54ALS258	† National
	DM74ALS258	National
	SN54ALS258	† TI
	SN74ALS258	TI
TTL-AS	DM54AS258	† National
	DM74AS258	National
	SN74AS258	TI
TTL-F	54F258	† Fairchild
	74F258	◊ Fairchild
	MC54F258	◊† Motorola
	MC74F258	Motorola
	54F258	† Signetics
	74F258	**Signetics (3023)**
	SN54F258	† TI
	SN74F258	TI
TTL-LS	54LS258A	† Fairchild
	74LS258	Fairchild
	GD74LS258	**GoldStar (2693)**
	HD74LS258	Hitachi
	M74LS258A	Mitsubishi
	SN54LS258A	† Motorola
	SN74LS258A	◊ Motorola
	DM54LS258B	† National
	DM74LS258B	National
	DN74LS258A	◊ Panasonic
	54LS258	† SGS
	74LS258	SGS
	54LS256	† Signetics
	54LS258A	† Signetics
	74LS258A	**Signetics (3003)**
	SN54LS258B	◊† TI
	SN74LS258B	TI
TTL-S	SN74S258	AMD
	74S258	Fairchild
	DM54S258	† National
	DM74S258	National
	54S258	† Signetics
Quad 2-Input, Inverting Three-State TTL-S (Cont'd)		
	74S258	**Signetics (3003)**
	SN54S258	† TI
	SN74S258	TI
Quad 2-Input Multiplexer		
TTL-LS	**GD74LS298**	**GoldStar (2693)**
Quad 2-Input, Non-Inverting		
TTL	54157	◊† Fairchild
	74157	Fairchild
	9322C	Fairchild
	9322M	† Fairchild
	DM54157	† National
	DM74157	National
	DM8322	National
	DM9322	† National
	RM8233	† Raytheon
	N9322	**Signetics (3022)**
	S8233	† Signetics
	54157	† Signetics
	74157	**Signetics (3003)**
	SN54157	† TI
	SN74157	TI
TTL-ALS	M74ALS157	Mitsubishi
	SN54ALS157	† TI
	SN74ALS157	TI
TTL-AS	SN74AS157	TI
TTL-F	54F157	◊† Fairchild
	74F157	◊ Fairchild
	MC54F157	† Motorola
	MC74F157	Motorola
	54F157	† Signetics
	74F157	**Signetics (3023)**
	SN54F157A	† TI
	SN74F157A	◊ TI
TTL-LS	54LS157	† Fairchild
	74LS157	◊ Fairchild
	GD74LS157	**GoldStar (2693)**
	HD74LS157	Hitachi
	SN54LS157	† Motorola
	SN74LS157	Motorola
	DM54LS157	† National
	DM74LS157	National
	DN74LS157	◊ Panasonic
	54LS157	† SGS
	74LS157	SGS
	54LS157	◊ Signetics
	74LS157	**Signetics (3003)**
	SN54LS157	◊† TI
	SN74LS157	TI
TTL-S	SN74S157	AMD
	74S157	Fairchild
	GD74S157	**GoldStar (2694)**
	DM54S157	† National
	DM74S157	National
	54S157	† Signetics
	74S157	**Signetics (3003)**
	SN54S157	† TI
	SN74S157	TI
Quad 2-Input, Non-Inverting, Three-State		
TTL-ALS	M74ALS257	Mitsubishi
	DM54ALS257	† National
	DM54AS257	† National
	DM74ALS257	National
	DM74AS257	National
	SN54ALS257	† TI
	SN74ALS257	TI
Quad 2-Input, Non-Inverting, Three-State (Cont'd)		
TTL-AS	SN74AS257	TI
TTL-F	54F257	† Fairchild
	74F257	◊ Fairchild
	MC54F257	◊† Motorola
	MC74F257	Motorola
	54F257	† Signetics
	74F257	**Signetics (3023)**
	SN54F257	† TI
	SN74F257	TI
TTL-LS	54LS257A	† Fairchild
	74LS257	Fairchild
	GD74LS257A	**GoldStar (2693)**
	HD74LS257	Hitachi
	M74LS257A	Mitsubishi
	SN54LS257A	† Motorola
	SN74LS257A	◊ Motorola
	DM54LS257B	† National
	DM74LS257B	National
	DN74LS257A	Panasonic
	74LS257	SGS
	54LS257A	† Signetics
	74LS257A	**Signetics (3003)**
	SN54LS257B	◊† TI
	SN74LS257B	TI
TTL-S	SN74S257	AMD
	74S257	Fairchild
	GD74S257	**GoldStar (2694)**
	DM54S257	† National
	DM74S257	National
	54S257	† Signetics
	74S257	**Signetics (3003)**
	SN54S257	† TI
	SN74S257	TI
Quad 2-Input, Open Collector (for adder, register input)		
TTL	RM8267	† Raytheon
Quad 2-Input, (three-state 54/74157)		
TTL	DM7123	National
	DM8123	† National
Quad 2-Input with Output Register		
TTL	54298	† Fairchild
	54298	◊† Signetics
	74298	**Signetics (3003)**
	SN54298	† TI
	SN74298	TI
TTL-AS	SN74AS298	TI
TTL-F	54F398	† Fairchild
	54F399	† Fairchild
	74F298	Fairchild
	74F398	◊ Fairchild
	74F399	◊ Fairchild
	74F298	**Signetics (3023)**
	74F398	**◊ Signetics (3024)**
	74F399	**◊ Signetics (3024)**
TTL-LS	AM25LS09C	AMD
	AM25LS09M	† AMD
	AM25LS399C	AMD
	AM25LS399M	† AMD
	SN54LS399	† AMD
	SN74LS399	AMD
	54LS298	◊† Fairchild
	74LS298	◊ Fairchild
	HD74LS298	Hitachi
	SN54LS298	† Motorola
	SN54LS398	† Motorola
	SN54LS399	† Motorola
	SN74LS298	Motorola

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Multiplexers (Digital) (Cont'd)

Function	Device	Source	Line
Quad 2-Input with Output Register			
TTL-LS		(Cont'd)	
	SN74LS398	Motorola	
	SN74LS399	Motorola	
	DM54LS298	† National	
	DM74LS298	National	
	54LS298	† SGS	5
	74LS298	SGS	
	54LS298	† Signetics	
	74LS298	**Signetics (3003)**	
	SN54LS298	◊† TI	
	SN54LS398	◊† TI	10
	SN54LS399	◊† TI	
	SN74LS298	TI	
	SN74LS399	TI	
TTL-S	AM25S09C	AMD	
	AM25S09M	† AMD	15
	SN54S399	† AMD	
	SN74S399	AMD	
Quad 2-Port			
TTL-F	MC54F398	† Motorola	
	MC54F399	† Motorola	
	MC74F398	Motorola	20
	MC74F399	Motorola	
Quad 3-Input, Conditional Complementing			
TTL	RM8263	† Raytheon	
Quad 3-Input, Open Collector, Conditional Complementing, Output Enable			
TTL	RM8264	† Raytheon	
Quad 4-Input			
TTL-LS	SN54LS453	† MMI	
	SN74LS453	MMI	25
	DM54LS453	† National	
	DM74LS453	National	
Hex 2-Input, Three-State			
TTL-ALS	SN54ALS857	† TI	
	SN74ALS857	TI	
TTL-AS	SN74AS857	TI	30
8-Input			
TTL-LS	T74LS151	SGS	
	T74LS251	SGS	
8-Input, Complementary Output			
TTL	9312C	Fairchild	
	9312M	† Fairchild	
	DM8312	National	35
	DM9312	† National	
	RM8232	† Raytheon	
TTL-S	S82S30	◊† Signetics	
	S82S31	◊† Signetics	
	S82S32	◊† Signetics	40
8-Input, Complementary Output, Open Collector			
TTL	RM8231	† Raytheon	
8-Input, Complementary Output, Strobe			
TTL	54151	† Fairchild	
	74151	Fairchild	
	DM54151A	† National	
	DM74151A	National	45
	54151	† Signetics	
	74151	**Signetics (3003)**	
	SN54151A	† TI	
	SN74151A	TI	
TTL-ALS	M74ALS151	Mitsubishi	50
	DM54ALS151	† National	
	DM74ALS151	National	

(Continued)

Function	Device	Source	Line
8-Input, Complementary Output, Strobe			
TTL-ALS		(Cont'd)	
	SN54ALS151	† TI	
	SN74ALS151	TI	
TTL-AS	SN54AS151	† TI	55
	SN74AS151	TI	
TTL-F	54F151	† Fairchild	
	74F151	Fairchild	
	MC54F151	† Motorola	
	MC74F151	Motorola	60
	74F151	**Signetics (3023)**	
	SN54F151	TI	
	SN74F151	TI	
TTL-LS	54LS151	† Fairchild	
	74LS151	◊ Fairchild	65
	GD74LS151	**GoldStar (2693)**	
	HD74LS151A	Hitachi	
	SN54LS151	† Motorola	
	SN74LS151	Motorola	
	DM54LS151	† National	70
	DM74LS151	◊ National	
	DN74LS151	◊ Panasonic	
	54LS151	† SGS	
	74LS151	SGS	
	54LS151	† Signetics	75
	74LS151	**Signetics (3003)**	
	SN54LS151	◊† TI	
	SN74LS151	TI	
TTL-S	74S151	Fairchild	
	DM54S151	† National	80
	DM74S151	National	
	54S151	† Signetics	
	74S151	**Signetics (3003)**	
	SN54S151	† TI	
	SN74S151	TI	85
8-Input, Complementary Output (three-state 54/74151)			
TTL	DM8121	National	
8-Input, Inverted Output			
TTL-LS	54LS152	† Fairchild	
	HD74LS152	Hitachi	
	T74LS152	SGS	
8-Input, Inverting/Non Inverting, Control Storage			
TTL-LS	AM25LS2535C	AMD	90
	AM25LS2535M	† AMD	
	AM25LS2922C	AMD	
	AM25LS2922M	† AMD	
	AM2922C	AMD	
	AM2922M	† AMD	95
8-Input Multiplexer			
TTL-LS	T54LS151	† SGS	
	74LS152	SGS	
8-Input Multiplexer/Data Selector/Register, Complementary Output, Three-State			
TTL-LS	SN54LS356	◊† TI	
	SN74LS354	TI	
	SN74LS356	TI	100
8-Input, Stobe, Complementary Output, Three-State			
TTL-F	SN54F251	† TI	
8-Input, Strobe, Complementary Output			
TTL-ALS	M74ALS251	Mitsubishi	
8-Input, Strobe, Complementary Output, Three-State			
TTL	DM74251	National	
	SN54251	† TI	
	SN74251	TI	105
TTL-ALS	M74ALS251	Mitsubishi	
	DM54ALS251	† National	

(Continued)

Function	Device	Source	Line
8-Input, Strobe, Complementary Output, Three-State			
TTL-ALS		(Cont'd)	
	DM74ALS251	National	
	SN54ALS251	† TI	
	SN74ALS251	TI	110
TTL-F	54F251A	◊† Fairchild	
	74F251	Fairchild	
	MC54F251	◊† Motorola	
	MC74F251	Motorola	
	74F251	**Signetics (3023)**	115
	SN74F251	TI	
TTL-LS	54LS251	† Fairchild	
	74LS251	◊ Fairchild	
	GD74LS251	**GoldStar (2693)**	
	HD74LS251	Hitachi	120
	SN54LS251	† Motorola	
	SN74LS251	◊ Motorola	
	DM54LS251	† National	
	DM74LS251	National	
	DN74LS251	◊ Panasonic	125
	74LS251	SGS	
	74LS251	**Signetics (3003)**	
	SN54LS251	◊† TI	
	SN74LS251	TI	
TTL-S	SN74S251	AMD	130
	GD74S251	**GoldStar (2694)**	
	DM54S251	† National	
	DM74S251	National	
	54LS251	† Signetics	
	54S251	† Signetics	135
	74S251	**◊ Signetics (3003)**	
	SN54S251	† TI	
	SN74S251	TI	
8-Input, Switches 1 of 8 Inputs to 2 complementary outputs			
TTL-AS	AM2923C	AMD	
	AM2923M	† AMD	140
16-Input, Complementary Output, Three-State			
TTL-AS	SN74AS850	TI	
	SN74AS851	TI	
16-Input, Inverted Output, Strobe			
TTL	54150	† Fairchild	
	74150	Fairchild	
	DM54150	† National	145
	DM74150	National	
	54150	† Signetics	
	74150	**Signetics (3003)**	
	SN54150	† TI	
	SN74150	TI	150
TTL-LS	SN54LS450	† MMI	
	SN74LS450	MMI	
	DM54LS450	† National	
	DM74LS450	National	
16-Input, Inverting Output, Three-State			
TTL-AS	SN54AS250	† TI	155
	SN74AS250	TI	

Multivibrators

Bidirectional Monostable (low level input)			
TTL	RC8T20	◊ Raytheon	
	N8T20	**Signetics (3022)**	
Monostable, Schmitt Trigger Input			
TTL	54121	† Fairchild	
	74121	◊ Fairchild	160
	DM54121	† National	
	DM74121	National	
	54121	† Signetics	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—TTL (Cont'd)

Multivibrators (Cont'd)

Function	Device	Source
Monostable, Schmitt Trigger Input		
TTL		(Cont'd)
	74121	**Signetics (3003)**
	SN54121	† TI
	SN74121	TI
Retriggerable Monostable		
TTL	9601C	◊ Fairchild
	9601M	◊† Fairchild
	DM8601	National
	DM9601	† National
	RF9601	Raytheon
Retriggerable Monostable with Clear		
TTL	54122	† Fairchild
	SN54122	† TI
	SN74122	TI
TTL-LS	HD74LS122	Hitachi
	M74LS122	Mitsubishi
	SN54LS122	† Motorola
	SN74LS122	Motorola
	DM74LS122	National
	SN54LS122	◊† TI
	SN74LS122	TI
Dual Monostable, Schmitt-Trigger Input (dual 54/74121)		
TTL-LS	M74LS221	Mitsubishi
TTL	54221	† Signetics
	74221	**Signetics (3003)**
	SN54221	◊† TI
	SN74221	TI
TTL-LS	**GD74LS221**	**GoldStar (2693)**
	HD74LS221	Hitachi
	SN54LS221	† Motorola
	SN74LS221	Motorola
	DM54LS221	† National
	DM74LS221	National
	54LS221	† Signetics
	SN54LS221	◊ TI
	SN74LS221	TI
Dual Retriggerable Monostable (AND triggered)		
TTL-LS	SN74LS423	TI
Dual Retriggerable Monostable with Clear (AND triggered)		
TTL	54123	† Fairchild
	74123	◊ Fairchild
	DM54123	† National
	DM74123	National
	54123	† Signetics
	74123	**Signetics (3003)**
	SN54123	† TI
	SN74123	TI
TTL-LS	**GD74LS123**	**GoldStar (2693)**
	HD74LS123	Hitachi
	M74LS123	◊ Mitsubishi
	M74LS423	Mitsubishi
	SN54LS123	† Motorola
	SN74LS123	Motorola
	DM74LS123	National
	DN74LS123	◊ Panasonic
	SN54LS123	◊† TI
	SN74LS123	TI
Dual Retriggerable Monostable with Reset (OR triggered)		
TTL	AM2602C	AMD
	AM2602M	† AMD

(Continued)

Function	Device	Source
Dual Retriggerable Monostable with Reset (OR triggered)		
TTL		(Cont'd)
	96L02C	Fairchild
	96L02M	† Fairchild
	9602C	◊ Fairchild
	9602M	◊† Fairchild
	DM8602	National
	DM9602	† National
	N9602	**Signetics (3022)**
	S9602	† Signetics
TTL-LS	96LS02C	Fairchild
	96LS02M	† Fairchild
TTL-S	AM26S02C	AMD
	AM26S02M	† AMD
	96S02C	Fairchild
	96S02M	† Fairchild
Dual Voltage-Controlled		
TTL	MC4024	Motorola
	MC4324	† Motorola

Shift Registers

Function	Device	Source
Diagnostic Register, 8-Bit		
TTL-S	SN54S818	† MMI
	SN74S818	◊ MMI
Parallel 4-Bit D-Type with Enable		
TTL-F	MC54F379	Motorola
Parallel 6-Bit D-Type with Enable		
TTL-F	MC54F378	Motorola
Pipeline Register with On-Board 8-Bit Shadow Register		
TTL-S	AM29818C	◊ AMD
	AM29818M	◊† AMD
Serial Data Polynomial Generator/Checker		
TTL-F	74F402	◊ Fairchild
Quad Parallel Register		
TTL-LS	74LS379	SGS
Quad 2-Port Register		
TTL-LS	74LS399	SGS
Hex Parallel D Register		
TTL-LS	74LS378	SGS
Octal D-Type, Common Clear and Enable, Three-State		
TTL-LS	**GD25LS2520**	**GoldStar (2694)**
4-Bit		
TTL-LS	T74LS95	SGS
	54LS195A	† SGS
	74LS195	SGS
	74LS395	SGS
4-Bit Bidirectional		
TTL-LS	74LS194	SGS
4-Bit Parallel In, Parallel Out, Right/Left, Three-State		
TTL-LS	SN54LS295A	† Motorola
	SN74LS295A	Motorola
	74LS295A	SGS
	54LS295B	† Signetics
	74LS295B	**Signetics (3003)**
	SN54LS295B	◊† TI
	SN74LS295B	TI
4-Bit Parallel Input, Parallel Output		
TTL	9300C	Fairchild
	9300M	† Fairchild
	DM54195	† National
	DM74195	National
	DM8300	National
	DM9300	◊† National
	54195	† Signetics
	74195	**Signetics (3003)**

(Continued)

Function	Device	Source
4-Bit Parallel Input, Parallel Output		
TTL		(Cont'd)
	SN54195	† TI
	SN74195	TI
TTL-F	MC74F195	Motorola
	74F195	**Signetics (3023)**
TTL-LS	**GD74LS195**	**GoldStar (2693)**
	HD74LS195A	Hitachi
	SN54LS195A	† Motorola
	SN74LS195A	Motorola
	DM54LS195A	† National
	DM74LS195A	National
	DN74LS195A	◊ Panasonic
	T74LS195A	◊ SGS
	74LS195A	**Signetics (3003)**
	SN54LS195A	◊† TI
	SN74LS195A	◊ TI
TTL-S	93S00C	Fairchild
	93S00M	† Fairchild
	DM54S195	† National
	DM74S195	National
	54S195	† Signetics
	74S195	**Signetics (3003)**
	SN54S195	† TI
	SN74S195	TI
4-Bit Parallel-In, Parallel Out, Right/Left		
TTL	5495	◊† Fairchild
	7495	Fairchild
	MC4012	Motorola
	MC4312	† Motorola
	DM5495	† National
	DM7495	◊ National
	5495A	† Signetics
	SN5495A	† TI
	SN7495A	TI
TTL-AS	DM54AS95	† National
	DM74AS95	National
	SN74AS95	TI
TTL-LS	54LS95B	† Fairchild
	74LS95B	◊ Fairchild
	GD74LS95	**GoldStar (2693)**
	HD74LS95B	Hitachi
	SN54LS95B	† Motorola
	SN74LS95B	Motorola
	DN74LS95B	Panasonic
	74LS95B	SGS
	54LS95B	† Signetics
	74LS95B	**Signetics (3003)**
	SN54LS95B	◊† TI
	SN74LS95B	TI
4-Bit Parallel-In, Parallel Out, (with load, shift, hold control)		
TTL	RM8270	† Raytheon
	SN54178	† TI
4-Bit Parallel-In, Parallel Out, with Reset, Complementary Output for Last Bit		
TTL	RM8271	† Raytheon
	N8271	**Signetics (3022)**
	S8271	† Signetics
	SN54179	† TI
4-Bit Parallel-In, Parallel-Out, Cascadable, Three-State		
TTL-F	**74F395**	◊ **Signetics (3024)**
TTL-LS	74LS395	◊ Fairchild
	GD74LS395A	**GoldStar (2693)**
	DN74LS395A	◊ Panasonic
	T54LS395	† SGS
	T74LS395	SGS
	54LS395A	† Signetics

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Shift Registers (Cont'd)

Function	Device	Source	Line
4-Bit Parallel-In, Parallel-Out, Cascadable, Three-State			
TTL-LS (Cont'd)			
	74LS395A	◇ **Signetics (3003)**	
	SN54LS395A	◇† TI	
	SN74LS395A	TI	
4-Bit Parallel-In, Serial-Out			
TTL	**7494**	**Signetics (3003)**	
	SN5494	† TI	5
4-Bit Shift Register			
TTL-LS	T54LS194A	† SGS	
	T54LS195A	† SGS	
4-Bit Universal Bidirectional			
TTL	DM54194	† National	
	DM74194	National	
	54194	† Signetics	10
	74194	**Signetics (3003)**	
	SN74194	TI	
TTL-AS	SN54AS194	† TI	
	SN74AS194	TI	
TTL-F	54F194	◇† Fairchild	15
	74F194	◇ Fairchild	
	MC54F194	† Motorola	
	MC74F194	Motorola	
	74F194	**Signetics (3023)**	
TTL-LS	54LS194A	† Fairchild	20
	GD74LS194A	**GoldStar (2693)**	
	HD74LS194A	Hitachi	
	SN54LS194A	† Motorola	
	SN74LS194A	Motorola	
	DM54LS194A	† National	25
	DM74LS194A	National	
	DN74LS194A	◇ Panasonic	
	T74LS194A	◇ SGS	
	54LS194A	† Signetics	
	74LS194A	**Signetics (3003)**	30
	SN54LS194A	◇† TI	
	SN74LS194A	◇ TI	
TTL-S	74S194	Fairchild	
	DM54S194	† National	
	DM74S194	National	35
	SN54S194	† TI	
	SN74S194	TI	
5-Bit Parallel-In, Parallel-Out			
TTL	DM5496	† National	
	DM7496	◇ National	
	5496	† Signetics	40
	7496	**Signetics (3003)**	
	SN5496	† TI	
	SN7496	TI	
TTL-LS	54LS96	† Signetics	
	74LS96	**Signetics (3003)**	45
	SN74LS96	TI	
5-Bit Dual Parallel-In, Parallel-Out Buffer Register, (clocked flip-flops)			
TTL	RM8200	† Raytheon	
	RM8201	† Raytheon	
8-Bit			
TTL-LS	T54LS170	† SGS	
	T54LS273	† SGS	50
	T74LS166	SGS	
	54LS273	† SGS	
	74LS166	SGS	
8-Bit Diagnostic/Pipeline			
TTL-ALS	SN74ALS29818	TI	

Function	Device	Source	Line
8-Bit Gated Serial-In, Parallel-Out			
TTL	54164	◇† Fairchild	55
	74164	Fairchild	
	DM54164	† National	
	DM74164	National	
	DM7570	† National	
	DM8570	National	60
	54164	† Signetics	
	74164	**Signetics (3003)**	
	SN54164	† TI	
	SN74164	TI	
TTL-F	54F164	◇† Fairchild	65
	74F164	Fairchild	
	MC54F164	† Motorola	
	MC74F164	Motorola	
	74F164	**Signetics (3023)**	
TTL-LS	54LS164	† Fairchild	70
	74LS164	◇ Fairchild	
	GD74LS164	◇ **GoldStar (2693)**	
	HD74LS164	Hitachi	
	SN54LS164	† Motorola	
	SN74LS164	Motorola	75
	DM54LS164	◇† National	
	DM74LS164	National	
	DN74LS164	◇ Panasonic	
	74LS164	SGS	
	54LS164	◇† Signetics	80
	54LS164B	◇† Signetics	
	74LS164	**Signetics (3003)**	
	SN54LS164	◇† TI	
	SN74LS164	TI	
8-Bit, Inverting, Back-to-Back Configuration			
TTL-LS	SN54LS566	† MMI	85
	SN74LS566	MMI	
8-Bit, Non-Inverting, Back-to-Back Configuration			
TTL-LS	SN54LS546	† MMI	
	SN74LS546	MMI	
8-Bit, Non-Inverting, Three-State, Readback			
TTL-LS	SN54LS794	† MMI	
	SN74LS794	MMI	90
8-Bit Parallel-In, Parallel-Out, Right/Left			
TTL	DM54198	† National	
	DM74198	National	
	SN54198	† TI	
	SN74198	TI	
TTL-F	**74F198**	**Signetics (3023)**	95
8-Bit Parallel-In, Parallel-Out, Unidirectional			
TTL	54199	† Signetics	
	74199	**Signetics (3003)**	
	SN54199	† TI	
	SN74199	TI	
TTL-F	**74F199**	**Signetics (3023)**	100
8-Bit Parallel-In, Parallel-Out, Three-State, with Positive Edge-Triggered D-Type Flip Flops (bus interface)			
TTL	AM29825	◇ AMD	
	AM29826	◇ AMD	
8-Bit Parallel-In, Serial-Out, Complementary Output			
TTL	54165	† Fairchild	
	74165	Fairchild	
	DM54165	† National	105
	DM74165	National	
	54165	† Signetics	
	74165	**Signetics (3003)**	
	SN54165	† TI	
	SN74165	TI	110
TTL-ALS	DM54ALS165	† National	
	DM74ALS165	National	

(Continued)

Function	Device	Source	Line
8-Bit Parallel-In, Serial-Out, Complementary Output (Cont'd)			
TTL-LS	54LS165	† Fairchild	
	74LS165	◇ Fairchild	
	GD74LS165	◇ **GoldStar (2693)**	115
	HD74LS165A	Hitachi	
	SN54LS165	† Motorola	
	SN74LS165	Motorola	
	SN54LS165A	◇† TI	
	SN74LS165A	TI	120
8-Bit Parallel-In, Serial-Out with Clear			
TTL	74166	Fairchild	
	DM54166	† National	
	DM74166	National	
	54166	† Signetics	
	74166	**Signetics (3003)**	125
	SN54166	† TI	
	SN74166	TI	
TTL-ALS	DM54ALS166	† National	
	DM74ALS166	National	
TTL-F	**74F166**	**Signetics (3023, 3037)**	130
TTL-LS	**GD74LS166**	◇ **GoldStar (2693)**	
	SN54LS166	† Motorola	
	SN74LS166	Motorola	
	DM54LS166	◇† National	
	DM74LS166	National	135
	SN54LS166A	◇† TI	
	SN74LS166A	TI	
8-Bit Parallel-In, Serial-Out with Input Latches			
TTL-F	**74F597**	**Signetics (3024)**	
	74F598	**Signetics (3024)**	
TTL-LS	SN54LS597	† TI	140
	SN54LS598	† TI	
	SN74LS597	TI	
	SN74LS598	TI	
8-Bit Register			
TTL-LS	74LS273	SGS	
8-Bit Serial/Parallel-In Register with Sign Extend (for use with 25LS14/74LS384 multiplier)			
TTL-F	54F322	† Fairchild	145
	74F322	◇ Fairchild	
	74F322	**Signetics (3023)**	
TTL-LS	74LS322	Fairchild	
8-Bit Serial-In, Parallel-Out Register with Output Latches			
TTL-F	**74F595**	**Signetics (3024)**	
TTL-LS	M74LS595	Mitsubishi	150
	M74LS596	Mitsubishi	
	SN54LS595	† TI	
	SN74LS594	TI	
	SN74LS595	TI	
	SN74LS599	TI	155
8-Bit Serial-In, Serial-Out			
TTL	5491	† Signetics	
	SN5491A	† TI	
TTL-LS	HD74LS91	Hitachi	
	SN74LS91	Motorola	
	SN54LS91	† TI	160
	SN74LS91	TI	
8-Bit Synchronous with Parallel Load and Hold			
TTL-LS	SN54LS498	◇† MMI	
	SN74LS498	MMI	
	S74LS498	† MMI	
	DM54LS498	† National	165

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—TTL (Cont'd)

Shift Registers (Cont'd)

Function	Device	Source
8-Bit Synchronous with Parallel Load, Load Complement, Preset, Clear and Hold		
TTL-LS	SN54LS380	† MMI
	SN74LS380	† MMI
	DM54LS380	† National
	DM74LS380	National
8-Bit Universal Shift/Storage, Three-State		
TTL-ALS	SN54ALS299	◊† TI
	SN54ALS323	† TI
	SN74ALS299	◊ TI
	SN74ALS323	TI
TTL-AS	SN74AS299	TI
TTL-F	74F299	Fairchild
	74F323	◊ Fairchild
	MC74F323	Motorola
	74F299	◊ **Signetics (3023)**
	74F323	**Signetics (3023)**
	SN54F299	† TI
	SN74F299	TI
	SN74F323	TI
TTL-LS	AM25LS23C	AMD
	AM25LS23M	† AMD
	SN54LS323	† AMD
	SN74LS323	AMD
	54LS299	◊† Fairchild
	54LS323	† Fairchild
	74LS299	◊ Fairchild
	74LS323	Fairchild
	GD74LS299	**GoldStar (2693)**
	HD74LS299	Hitachi
	SN74LS299	Motorola
	SN74LS323	Motorola
	SN54LS299	◊† TI
	SN54LS323	◊† TI
	SN74LS299	TI
	SN74LS323	TI
TTL-S	**GD74S299**	**GoldStar (2694)**
	DM54S299	† National
	DM74S299	National
	SN54S299	† TI
	SN74S299	TI
8-Bit Dual Serial-In, Serial-Out		
TTL	9328C	Fairchild
	9328M	† Fairchild
9-Bit Bidirectional Register with Parity		
TTL	SL6007	Universal
	SL6008	Universal
	SL6009	Universal
	SL6010	Universal
9-Bit Parallel-In, Parallel-Out, Three-State, with Positive Edge-Triggered D-Type Flip-Flops (bus interface)		
TTL	AM29823	◊ AMD
	AM29824	◊ AMD
10-Bit Parallel-In, Parallel-Out Buffer Register, with Reset (clocked flip-flops)		
TTL	RM8202	† Raytheon
	RM8203	† Raytheon
10-Bit Parallel-In, Parallel-Out, Three-State, with Positive Edge-Triggered D-Type Flip-Flops (bus interface)		
TTL	AM29821	◊ AMD
	AM29822	◊ AMD
10-Bit Parallel-In, Serial Out		
TTL	RM8274	† Raytheon
	N8274	**Signetics (3022)**
10-Bit Serial-In, Parallel-Out		
TTL	RM8273	† Raytheon
	N8273	**Signetics (3022)**
	S8273	† Signetics
16-Bit Parallel-In, Serial-Out		
TTL-F	**74F674**	**Signetics (3024)**
TTL-LS	SN74LS674	Motorola
	SN54LS674	◊† TI
	SN74LS674	TI
16-Bit Serial/Parallel-In, Serial Out		
	54F676	◊† Fairchild
	74F676	◊ Fairchild
TTL-F	**74F676**	**Signetics (3024)**
16-Bit Serial-In, Serial/Parallel Out		
	74F675	◊ Fairchild
	74F675	Signetics
16-Bit Serial-In, Serial-Out Register plus Stored Parallel Output		
TTL-F	74F673	◊ Fairchild
	74F673A	**Signetics (3024)**
TTL-LS	SN74LS673	Motorola
	SN54LS673	◊† TI
8-Bit Gated Serial-In, Parallel-Out		
TTL-S	**GD74S164**	**GoldStar (2694)**

Transceivers, Bus

Function	Device	Source
Differential Bus Transceiver		
TTL-ALS	SN54ALS176	TI
Triple 2-Input Bus Driver		
TTL	RG160	Raytheon
Quad Bus Transceiver		
TTL-ALS	DM54ALS1242	† National
	DM54ALS1243	† National
	DM54ALS242	† National
	DM54ALS243	† National
	DM74ALS1242	National
	DM74ALS1243	National
	DM74ALS242	National
	DM74ALS243	National
	SN54ALS242B	† TI
	SN54ALS243A	† TI
	SN74ALS242B	TI
	SN74ALS242B-1	TI
	SN74ALS243A	TI
	SN74ALS243A-1	TI
TTL-AS	DM54AS242	† National
	DM54AS243	† National
	DM74AS242	National
	DM74AS243	National
	SN54AS242	◊† TI
	SN74AS242	TI
	SN74AS243	TI
TTL-F	54F243	† Fairchild
	74F243	◊ Fairchild
	MC74F242	Motorola
	MC74F243	Motorola
	54F242	† Signetics
	54F243	† Signetics
	74F1242	**Signetics (3023)**
	74F1243	**Signetics (3023)**
	74F242	**Signetics (3023)**
	74F243	**Signetics (3023)**
	SN54F242	† TI
	SN54F243	† TI
	SN74F242	TI
	SN74F243	TI

(Continued)

Function	Device	Source
Quad Bus Transceiver		(Cont'd)
TTL-LS	GD74LS242	GoldStar
	GD74LS243	**GoldStar (2693)**
	HD74LS242	Hitachi
	HD74LS243	Hitachi
	SN54LS242	† Motorola
	SN54LS243	† Motorola
	SN74LS242	◊ Motorola
	SN74LS243	◊ Motorola
	DM54LS242	† National
	DM54LS243	† National
	DM74LS242	National
	DM74LS243	National
	54LS242	Signetics
	54LS243	Signetics
	54S242	Signetics
	54S243	Signetics
	74LS242	**Signetics (3003)**
	74LS243	**Signetics (3003)**
	74S242	◊ **Signetics (3003)**
	74S243	◊ **Signetics (3003)**
	SN54LS242	◊† TI
	SN54LS243	◊† TI
	SN74LS242	TI
	SN74LS243	TI
TTL-S	DM54S242	† National
	DM54S243	† National
Quad Bus Transceiver, Open Collector		
TTL-AS	SN74AS758	TI
	SN74AS759	TI
Quad Bus Transceiver, Three-State		
TTL-ALS	SN74ALS758	TI
TTL-F	MC54F242	† Motorola
	MC54F243	† Motorola
Quad Transceiver, Inverting		
TTL-ALS	SN74ALS1242	TI
Quad Transceiver with Series Output Resistor, Inverting		
TTL-ALS	**SN74ALS2242**	**TI (3228)**
Quad Tridirectional Bus Transceiver, Three-State		
TTL-LS	SN54LS442	† TI
	SN74LS442	TI
Octal Buffer/Driver with Series Output Resistor, Inverting		
TTL-ALS	**SN74ALS2240**	**TI (3228)**
Octal Bus Driver, Inverting and Non-Inverting, Three-State		
TTL-ALS	SN74ALS231	TI
TTL-AS	SN74AS230	TI
	SN74AS231	TI
Octal Bus Driver, Inverting, Open Collector, Symmetrical Controls		
TTL-ALS	SN74ALS756	TI
	SN74ALS756-1	TI
TTL-AS	SN74AS756	TI
Octal Bus Driver, Inverting, Three-State		
TTL-F	MC54F20	† Motorola
Octal Bus Driver, Inverting, Three-State, Complementary Controls	SN54S210	† MMI
Octal Bus Driver, Inverting, Three-State, Symmetrical Controls		
TTL-ALS	M74ALS1240	Mitsubishi
	M74ALS240A	Mitsubishi
	M74ALS240A-1	Mitsubishi
	DM54ALS240	† National
	DM74ALS240	National
	SN74ALS1240	TI
	SN74ALS1240-1	TI

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Transceivers, Bus (Cont'd)

Function	Device	Source	Line
Octal Bus Driver, Inverting, Three-State, Symmetrical Controls			
TTL-ALS		(Cont'd)	
	SN74ALS2540	**TI (3228)**	
	SN74ALS540	TI	
	SN74ALS540-1	TI	
TTL-AS	DM54ALS1240	◊† National	
	DM54AS240	† National	5
	DM74ALS1240	National	
	DM74AS240	National	
	SN54ALS240A	† TI	
	SN54AS240	◊† TI	
	SN74ALS240A	TI	10
	SN74ALS240A-1	TI	
	SN74AS240	TI	
TTL-F	54F240	◊† Fairchild	
	74F240	◊ Fairchild	
	74F540	Fairchild	15
	MC74F240	Motorola	
	54F240	† Signetics	
	54F540	† Signetics	
	74F1240	**Signetics (3023, 3035)**	
	74F240	**Signetics (3023)**	20
	74F30240	**Signetics (3023)**	
	74F540	**Signetics (3024)**	
	SN54F240	† TI	
	SN74F240	TI	
TTL-LS	54LS240	† Fairchild	25
	74LS240	◊ Fairchild	
	74LS540	◊ Fairchild	
	GD74LS240	**GoldStar (2693)**	
	HD74LS240	Hitachi	
	M74LS540	Mitsubishi	30
	SN54LS210	† MMI	
	SN54LS240	◊† MMI	
	SN54LS340	† MMI	
	SN54LS240	† Motorola	
	SN74LS240	◊ Motorola	35
	SN74LS540	Motorola	
	DM54LS240	† National	
	DM74LS240	National	
	74LS240	**Signetics (3003)**	
	74LS540	**Signetics (3003)**	40
	SN54LS240	◊† TI	
	SN54LS540	† TI	
	SN74LS240	TI	
	SN74LS540	TI	
TTL-S	**GD74S240**	**GoldStar (2694)**	45
	54LS240	† Signetics	
	54S240	† Signetics	
	74S240	**◊ Signetics (3003)**	
	SN54S240	† TI	
	SN74S240	TI	50
Octal Bus Driver, Non-Inverting, Open Collector, Complementary Controls			
TTL-AS	SN74AS757	TI	
Octal Bus Driver, Non-Inverting, Three-State			
TTL-F	MC54F21	† Motorola	
	MC54F244	† Motorola	
Octal Bus Driver, Non-Inverting, Three-State, Complementary Controls			
TTL-ALS	M74ALS1241	Mitsubishi	
	M74ALS241A	Mitsubishi	55
	M74ALS241A-1	Mitsubishi	
	DM54ALS1241	† National	

(Continued)

Function	Device	Source	Line
Octal Bus Driver, Non-Inverting, Three-State, Complementary Controls			
TTL-ALS		(Cont'd)	
	DM54ALS241	† National	
	DM74ALS1241	National	
	DM74ALS241	National	60
	SN54ALS241A	† TI	
	SN54ALS541	† TI	
	SN74ALS241A	TI	
	SN74ALS241A-1	TI	
	SN74ALS2541	**TI (3228)**	65
	SN74ALS541	TI	
	SN74ALS541-1	TI	
TTL-AS	DM54AS241	† National	
	DM74AS241	National	
	SN54AS241	◊† TI	70
	SN74AS241	TI	
TTL-F	54F241	◊† Fairchild	
	74F241	◊ Fairchild	
	74F541	Fairchild	
	MC74F241	Motorola	75
	54F241	† Signetics	
	74F1241	**Signetics (3023, 3035)**	
	74F241	**Signetics (3023)**	
	74F30241	**Signetics (3023)**	
	74F541	**Signetics (3024)**	80
	SN54F241	† TI	
	SN74F241	TI	
TTL-LS	54LS241	† Fairchild	
	74LS241	◊ Fairchild	
	GD74LS241	**GoldStar (2693)**	85
	HD74LS241	Hitachi	
	M74LS541	Mitsubishi	
	SN54LS241	◊† MMI	
	SN54LS310	† MMI	
	SN54LS341	† MMI	90
	SN54LS241	† Motorola	
	SN74LS241	◊ Motorola	
	SN74LS541	Motorola	
	DM54LS241	† National	
	DM74LS241	National	95
	54LS241	† Signetics	
	54LS541	† Signetics	
	74LS241	**Signetics (3003)**	
	74LS541	**Signetics (3003)**	
	SN54LS241	◊† TI	100
	SN54LS541	◊† TI	
	SN74LS241	TI	
	SN74LS541	TI	
TTL-S	54S241	† Signetics	
	74S241	**◊ Signetics (3003)**	105
	SN54S241	† TI	
	SN74S241	TI	
Octal Bus Driver, Non-Inverting, Three-State, Symmetrical Controls			
TTL-ALS	M74ALS244A	Mitsubishi	
	M74ALS244A-1	Mitsubishi	
	DM54ALS1244	† National	110
	DM54ALS244	† National	
	DM74ALS1244	National	
	DM74ALS244	National	
	SN54ALS1244A	† TI	
	SN54ALS244A	† TI	115
	SN74ALS1244A	TI	
	SN74ALS1244A-1	TI	
	SN74ALS244A	TI	
	SN74ALS244A-1	TI	

(Continued)

Function	Device	Source	Line
Octal Bus Driver, Non-Inverting, Three-State, Symmetrical Controls		(Cont'd)	
TTL-AS	DM54AS230	† National	120
	DM54AS231	† National	
	DM54AS244	† National	
	DM74AS230	National	
	DM74AS231	National	
	DM74AS244	National	125
	SN54AS244	◊† TI	
	SN74AS244	TI	
TTL-F	54F244	◊† Fairchild	
	74F244	◊ Fairchild	
	MC74F244	Motorola	130
	54F244	† Signetics	
	74F1244	**Signetics (3023)**	
	74F244	**Signetics (3023)**	
	74F30244	**Signetics (3023)**	
	SN54F244	† TI	135
	SN74F244	TI	
TTL-LS	54LS244	† Fairchild	
	74LS244	◊ Fairchild	
	GD74LS244	**GoldStar (2693)**	
	HD74LS244	Hitachi	140
	SN54LS244	◊† MMI	
	SN54LS344	† MMI	
	SN54LS244	† Motorola	
	SN74LS244	◊ Motorola	
	54LS244	† Signetics	145
	SN54LS244	◊† TI	
	SN74LS244	TI	
TTL-S	54S244	† Signetics	
	74S244	**◊ Signetics (3003)**	
	SN54S244	† TI	150
Octal Bus Driver, Open Collector, Complementary Controls			
TTL-AS	SN74AS763	TI	
Octal Bus Driver, Open Collector, Symmetrical Controls			
TTL-AS	SN74AS760	TI	
	SN74AS762	TI	
Octal Bus Driver (Schmitt trigger), Inverting, Three-State			
TTL-LS	SN74S310	◊ MMI	
	DN74LS240	◊ Panasonic	155
Octal Bus Driver (Schmitt trigger), Non-Inverting, Three-State, Symmetrical Controls			
TTL-LS	DN74LS241	◊ Panasonic	
	DN74LS244	◊ Panasonic	
Octal Bus Transceiver			
TTL-LS	T74LS245	SGS	
	74LS245	SGS	
Octal Bus Transceiver, GPIB Compatible			
TTL-F	**74F588**	**Signetics (3024)**	160
Octal Bus Transceiver, IEEE-488			
TTL	SN95160B	TI	
	SN96161B	TI	
TTL-ALS	SN54ALS160	TI	
	SN55ALS161	TI	
Octal Bus Transceiver, Interface Between OC and TS Buses			
TTL-ALS	DM54ALS1638	† National	165
	DM54ALS1639	† National	
	DM54ALS638	† National	
	DM54ALS639	† National	
	DM74ALS1638	National	
	DM74ALS1639	National	170
	DM74ALS638	National	
	DM74ALS639	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

DIGITAL—TTL (Cont'd)

Transceivers, Bus (Cont'd)

Function	Device	Source	Line
Octal Bus Transceiver, Interface Between OC and TS Buses			
TTL-ALS		(Cont'd)	
	SN74ALS638A	TI	
	SN74ALS638A-1	TI	
	SN74ALS639A	TI	
	SN74ALS639A-1	TI	
TTL-AS	DM54AS638	† National	5
	DM54AS639	† National	
	DM74AS638	National	
	DM74AS639	National	
	SN74AS638	TI	
	SN74AS639	TI	10
Octal Bus Transceiver, Inverting, Open Collector			
TTL-ALS	DM54ALS642	† National	
	DM74ALS642	National	
	SN74ALS642A	TI	
	SN74ALS642A-1	TI	
TTL-AS	DM54AS642	† National	15
	DM74AS642	National	
	SN74AS642	TI	
TTL-F	**74F642**	◇ **Signetics (3024)**	
TTL-LS	HD74LS642	Hitachi	
	SN54LS649	† MMI	20
	SN54LS653	† MMI	
	SN74LS649	MMI	
	SN74LS653	MMI	
	SN54LS642	† Motorola	
	SN74LS642	Motorola	25
	74LS642	◇ **Signetics (3003)**	
	74LS642-1	◇ **Signetics (3003)**	
	SN54LS642	◇† TI	
	SN74LS642	TI	
	SN74LS642-1	TI	30
Octal Bus Transceiver, Inverting, Three-State			
TTL-ALS	M74ALS640A-1	Mitsubishi	
	DM54ALS1640	† National	
	DM54ALS640A	† National	
	DM54ALS643	† National	
	DM74ALS1640	National	35
	DM74ALS640	National	
	DM74ALS643	National	
	SN54ALS640A	† TI	
	SN54ALS652	† TI	
	SN74ALS1640A	TI	40
	SN74ALS1640A-1	TI	
	SN74ALS640A	TI	
	SN74ALS640A-1	TI	
	SN74ALS643A	TI	
	SN74ALS643A-1	TI	45
	SN74ALS651	TI	
	SN74ALS652	TI	
TTL-AS	DM54AS640	† National	
	DM54AS643	† National	
	DM54AS644	† National	50
	DM54AS651	† National	
	DM54AS652	† National	
	DM74AS640	National	
	DM74AS643	National	
	DM74AS644	National	55
	DM74AS651	◇ National	
	DM74AS652	◇ National	
	SN54AS640	† TI	
	SN54AS651	† TI	
	SN54AS652	† TI	60
	SN74AS640	TI	

(Continued)

Function	Device	Source	Line
Octal Bus Transceiver, Inverting, Three-State			
TTL-AS		(Cont'd)	
	SN74AS643	TI	
	SN74AS651	TI	
	SN74AS652	TI	
TTL-F	MC74F640	Motorola	65
	MC74F643	Motorola	
	74F640	◇ **Signetics (3024)**	
TTL-LS	**GD74LS640**	**GoldStar (2693)**	
	HS74LS640	Hitachi	
	SN54LS640	† Motorola	70
	SN54LS643	† Motorola	
	SN74LS640	Motorola	
	SN74LS643	Motorola	
	N8T125	**Signetics (3022)**	
	S8T125	◇† Signetics	75
	54LS640	Signetics	
	74LS640	**Signetics (3003)**	
	SN54LS640	◇† TI	
	SN74LS640	TI	
	SN74LS640-1	TI	80
	SN74LS651	TI	
	SN74LS652	TI	
Octal Bus Transceiver, Inverting, Three-State (Front Loading)			
TTL-LS	SN54LS648	† MMI	
	SN54LS651	† MMI	
	SN74LS648	MMI	85
	SN74LS651	MMI	
Octal Bus Transceiver, MOS Driver, Inverting			
TTL-AS	DM54AS2620	◇† National	
	DM74AS2620	◇ National	
	SN74AS2620	TI	
	SN74AS2640	**TI (3228)**	90
Octal Bus Transceiver, MOS Driver, Non-inverting			
TTL-AS	SN74AS2623	TI	
	SN74AS2645	**TI (3228)**	
Octal Bus Transceiver, Non-Inverting, Open Collector			
TTL-LS	SN54LS647	† MMI	
	SN54LS654	† MMI	
	SN74LS647	MMI	95
	SN74LS654	MMI	
Octal Bus Transceiver, Non-Inverting, Three-State			
TTL-ALS	M74ALS245A	Mitsubishi	
TTL-F	MC54F245	† Motorola	
TTL-LS	SN54LS646	† MMI	
	SN54LS652	† MMI	100
	SN74LS646	MMI	
	SN74LS652	MMI	
Octal Bus Transceiver, Noninverting, Open Collector			
TTL-ALS	DM54ALS641	† National	
	DM74ALS641	National	
	SN74ALS641A	TI	105
	SN74ALS641A-1	TI	
TTL-AS	DM54AS641	† National	
	DM74AS641	National	
	SN74AS641	TI	
TTL-F	**74F641**	◇ **Signetics (3024)**	110
	74F641-1	◇ **Signetics (3024)**	
TTL-LS	HD74LS641	Hitachi	
	M74LS641-1	Mitsubishi	
	SN54LS641	† Motorola	
	SN74LS641	Motorola	115
	54LS641	† Signetics	
	74LS641	◇ **Signetics (3003)**	
	74LS641-1	◇ **Signetics (3003)**	
	SN54LS641	◇† TI	

(Continued)

Function	Device	Source	Line
Octal Bus Transceiver, Noninverting, Open Collector			
TTL-LS		(Cont'd)	
	SN74LS641	TI	120
	SN74LS641-1	TI	
Octal Bus Transceiver, Noninverting, three-StateT			
TTL-F	SN54F245	† TI	
Octal Bus Transceiver Noninverting, Three-State			
TTL-ALS	M74ALS245A-1	Mitsubishi	
	M74ALS645	Mitsubishi	
	M74ALS645A-1	Mitsubishi	125
	DM54ALS1245	† National	
	DM54ALS245	† National	
	DM54ALS645	† National	
	DM74ALS1245	National	
	DM74ALS245	National	130
	DM74ALS645	National	
	SN54ALS1245A	† TI	
	SN54ALS245A	† TI	
	SN54ALS645A	† TI	
	SN74ALS1245A	TI	135
	SN74ALS1245A-1	TI	
	SN74ALS1645A-1	TI	
	SN74ALS245A	TI	
	SN74ALS245A-1	TI	
	SN74ALS645A	TI	140
	SN74ALS645A-1	TI	
TTL-AS	DM54AS245	† National	
	DM54AS645	† National	
	DM74AS245	National	
	DM74AS645	National	145
	SN54AS245	† TI	
	SN54AS645	† TI	
	SN74AS245	TI	
	SN74AS645	TI	
TTL-F	54F245	◇† Fairchild	150
	54F545	◇† Fairchild	
	74F245	◇ Fairchild	
	74F545	◇ Fairchild	
	MC74F245	Motorola	
	54F245	† Signetics	155
	54F545	† Signetics	
	74F1245	**Signetics (3023)**	
	74F245	**Signetics (3023)**	
	74F545	**Signetics (3024)**	
	74F645	◇ **Signetics (3024)**	160
	SN74F245	TI	
TTL-LS	DP8304B	AMD	
	54LS245	† Fairchild	
	74LS245	◇ Fairchild	
	GD74LS245	**GoldStar (2693)**	165
	HD74LS245	Hitachi	
	HD74LS645	Hitachi	
	SN54LS245	◇† MMI	
	SN54LS645	† MMI	
	SN54LS245	† Motorola	170
	SN54LS645	† Motorola	
	SN74LS245	◇ Motorola	
	SN74LS645	Motorola	
	DM54LS245	† National	
	DM74LS245	National	175
	DN74LS245	◇ Panasonic	
	N8T245	◇ **Signetics (3022)**	
	S8T245	† Signetics	
	54LS245	† Signetics	
	54LS645	† Signetics	180
	74LS245	**Signetics (3003)**	
	74LS645	◇ **Signetics (3003)**	
	74LS645-1	◇ **Signetics (3003)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Transceivers, Bus (Cont'd)

Function	Device	Source	Line
Octal Bus Transceiver, Noninverting, Three-State			
TTL-LS		(Cont'd)	
	SN54LS245	◊† TI	
	SN54LS645	◊† TI	
	SN74LS245	TI	
	SN74LS645	TI	
	SN74LS645-1	TI	5
Octal Bus Transceiver, Noninverting, Three-State, 30 ohm			
TTL-F	**74F30245**	**Signetics (3023)**	
Octal Bus Transceiver, Open Collector			
TTL-ALS	M74ALS1644	Mitsubishi	
Octal Bus Transceiver, Open-Collector, Inverting			
TTL-ALS	M74ALS1642	Mitsubishi	
Octal Bus Transceiver, Open-Collector, Non-Inverting			
TTL-ALS	M74ALS1641	Mitsubishi	
Octal Bus Transceiver, True, Inverting, Open Collector			
TTL-ALS	DM54ALS644	† National	10
	DM74ALS644	National	
	SN74ALS644A	TI	
	SN74ALS644A-1	TI	
TTL-AS	SN74AS644	TI	
TTL-LS	SN54LS644	† Motorola	15
	SN74LS644	Motorola	
	SN54LS644	◊† TI	
	SN74LS644	TI	
	SN74LS644-1	TI	
Octal Bus Transceiver with Parity Generator-Checker			
TTL-F	54F657	† Signetics	20
	74F657	**◊ Signetics (3024, 3034)**	
Octal Bus Transceiver with Register, Inverting			
TTL-ALS	SN74ALS653	TI	
	SN74ALS653-1	TI	
Octal Bus Transceiver with Register, Non-inverting			
TTL-ALS	SN74ALS654	TI	
	SN74ALS654-1	TI	25
Octal Bus Transceiver with Register, Open Collector			
TTL-ALS	DM54ALS647	† National	
	DM54ALS649	† National	
TTL-F	54F647	† Signetics	
	54F649	† Signetics	
	74F647	**◊ Signetics (3024)**	30
	74F649	**◊ Signetics (3024)**	
Octal Bus Transceiver with Register, Open-Collector			
TTL-ALS	SN74ALS614	TI	
	SN74ALS614-1	TI	
	SN74ALS615	TI	
	SN74ALS615-1	TI	35
	SN74ALS647	TI	
	SN74ALS647-1	TI	
	SN74ALS649	TI	
	SN74ALS649-1	TI	
Octal Bus Transceiver with Register, Three-State			
TTL-ALS	SN74ALS646	TI	40
	SN74ALS646-1	TI	
	SN74ALS648	TI	
	SN74ALS648-1	TI	
	SN74ALS651	TI	
	SN74ALS651-1	TI	45
	SN74ALS652	TI	
	SN74ALS652-1	TI	
TTL-AS	DM54AS646	† National	
	DM54AS648	† National	
	DM74AS646	National	50
		(Continued)	

Function	Device	Source	Line
Octal Bus Transceiver with Register, Three-State			
TTL-AS		(Cont'd)	
	SN54AS646	† TI	
	SN74AS646	TI	
	SN74AS648	TI	
TTL-F	54F544	† Fairchild	
	74F543	◊ Fairchild	55
	74F544	◊ Fairchild	
	74F550	◊ Fairchild	
	74F551	◊ Fairchild	
	74F552	◊ Fairchild	
	54F646	† Signetics	60
	54F648	† Signetics	
	74F543	**Signetics (3024)**	
	74F544	**Signetics (3024)**	
	74F550	**Signetics (3024)**	
	74F551	**Signetics (3024)**	65
	74F646	**◊ Signetics (3024, 3030)**	
	74F648	**◊ Signetics (3024, 3030)**	
	SN54F543	† TI	
	SN54F544	† TI	
	SN74F543	TI	70
	SN74F544	TI	
TTL-LS	**GD74LS646**	**GoldStar (2693)**	
	SN74LS646	TI	
	SN74LS648	TI	
	SN74LS651	TI	75
	SN74LS652	TI	
Octal Bus Transceiver with Storage, Open-Collector			
TTL-ALS	DM54ALS622	◊† National	
	DM74ALS622	National	
	SN74ALS621A	TI	
	SN74ALS621A-1	TI	80
	SN74ALS622A	TI	
	SN74ALS622A-1	TI	
TTL-AS	DM54AS621	† National	
	DM54AS622	† National	
	DM74AS621	National	85
	DM74AS622	National	
	SN74AS621	TI	
	SN74AS622	TI	
TTL-F	**74F621**	**Signetics (3024)**	
	74F622	**Signetics (3024)**	90
	SN54F621	† TI	
	SN74F621	◊ TI	
	SN74F622	TI	
TTL-LS	SN74LS621	Motorola	
	SN74LS622	Motorola	95
	54LS621	Signetics	
	54LS622	Signetics	
	74LS621	**Signetics (3003)**	
	74LS622	**Signetics (3003)**	
Octal Bus Transceiver with Storage, Three-State			
TTL-ALS	M74ALS1620	Mitsubishi	100
	M74ALS1623	Mitsubishi	
	M74ALS620A	◊ Mitsubishi	
	M74ALS620A-1	◊ Mitsubishi	
	M74ALS623A-1	◊ Mitsubishi	
	DM54ALS1620	† National	105
	DM54ALS1621	† National	
	DM54ALS1623	† National	
	DM54ALS620	◊† National	
	DM54ALS623	◊† National	
	DM74ALS1620	National	110
	DM74ALS1621	National	
	DM74ALS1623	National	
		(Continued)	

Function	Device	Source	Line
Octal Bus Transceiver with Storage, Three-State			
TTL-ALS		(Cont'd)	
	DM74ALS620	◊ National	
	DM74ALS623	National	
	SN74ALS620A	TI	115
	SN74ALS620A-1	TI	
	SN74ALS623A	TI	
	SN74ALS623A-1	TI	
TTL-AS	DM54AS620	† National	
	DM54AS623	† National	120
	DM74AS620	National	
	DM74AS623	National	
	SN74AS620	TI	
	SN74AS623	TI	
TTL-F	MC74F620	Motorola	125
	MC74F623	Motorola	
	54F620	† Signetics	
	74F620	**Signetics (3024)**	
	74F623	**Signetics (3024)**	
	SN54F620	† TI	130
	SN54F623	† TI	
	SN74F620	TI	
	SN74F623	TI	
TTL-LS	M74LS620	Mitsubishi	
	SN74LS620	Motorola	135
	SN74LS623	Motorola	
	54LS620	Signetics	
	54LS623	† Signetics	
	74LS620	**Signetics (3003)**	
	74LS623	**Signetics (3003)**	140
	SN74LS623	TI	
Octal Bus Transceiver, Three-State			
TTL-ALS	M74ALS1643	Mitsubishi	
8-Bit Bidirectional Bus Transceiver, Tri-State I/O			
TTL-LS	MM82C08	National	
	MM82PC08	National	
8-Bit to 9-Bit Parity Bidirectional Bus Transceivers, Three-State			
TTL	AM29833	◊ AMD	145
	AM29834	◊ AMD	
	AM29853	AMD	
	AM29854	AMD	
TTL-ALS	SN74ALS29833	TI	
	SN74ALS29834	TI	150
	SN74ALS29853	TI	
	SN74ALS29854	TI	
9-Bit Bidirectional Bus Transceiver, Three-State			
TTL	AM29864	AMD	
TTL-ALS	SN74ALS29863	TI	
	SN74ALS29864	TI	155
TTL-LS	AM29863	AMD	
10-Bit Bidirectional Bus Transceiver, Three-State			
TTL	AM29861	AMD	
	AM29862	AMD	
TTL-ALS	SN74ALS29861	TI	
	SN74ALS29862	TI	160
TTL-F	**74F861**	**Signetics (3025)**	
	74F862	**Signetics (3025)**	

Translators

TTL to 10K ECL with latch			
	DP8481	National	
TTL to 100K ECL with latch			
	DP8483	National	
Dual MOS to TTL Level, Three-State			
TTL	MC54468	† Motorola	165

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—TTL (Cont'd)

Translators (Cont'd)

Function	Device	Source	Line
Dual TTL to MOS Voltage			
TTL	D139A	† Siliconix	
TTL-ALS	DM54ALS646	† National	
	DM54ALS648	† National	
Dual 2-Input NAND TTL to MOS Voltage			
TTL	μA962AM	† Fairchild	
	MC0034	† Micra	5
	MC0034C	Micra	
	DH0034	† National	
	DH0034C	National	
	DS7800	† National	
	DS8800	National	10
Hex TTL to MOS Voltage			
TTL	DS78L12	◊‡ National	
	DS88L12	National	
	D125A	† Siliconix	
	D125B	Siliconix	
Octal 10KH ECL to TTL and TTL to 10KH ECL			
	BT501	◊ Brooktree	15
Octal 100K ECL to TTL and TTL to 100K ECL			
	BT502	◊ Brooktree	
7-Unit MOS to TTL Level Converter			
TTL	SN75270	TI	

Miscellaneous

Function	Device	Source	Line
Microprocessor/Multiplier, 32-Bit			
TTL-AS	SN74AS8836	TI	
Bidirectional Bus Extender and Repeater, Asynchronous			
TTL	N8X41	Signetics	
Bus Transfer Switch (transmit-receive connections to 4 bus terminals)			
TTL	MC4060	Motorola	20
Comparator, 10-Bit			
	SN54LS460	† MMI	
Contact Bounce Eliminator			
TTL	DM7544	† National	
	DM8544	National	
Cyclic Redundancy Checker			
TTL	9401C	Fairchild	
	9401M	† Fairchild	25
	N8X01A	Signetics	
	N9401	Signetics	
Delay Element			
TTL-LS	SN74LS31	TI	
Driver, Dual (TTL level to MOSFETs)			
	CS3706	Cherry	
	CS2706	Cherry	30
Dynamic Memory Controller			
TTL-ALS	SN54ALS6301	† TI	
	SN74ALS6301	**TI (3227, 3232)**	
	SN74ALS6302	**TI (3227, 3232)**	
Dynamic RAM Refresh Controller			
	MB1422A	Fujitsu	
Error Correction Chip (ECC)			
TTL-LS	MB1412A	Fujitsu	35
	MB1426	Fujitsu	
Error Detection and Correction Circuit, 16-Bit Parallel			
TTL-ALS	**SN74ALS616**	**TI (3227)**	
TTL-LS	SN54LS630	◊† TI	
	SN74LS630	TI	
FIFO RAM Emulator (12-Bit address)			
TTL-LS	N8X60	Signetics	40
Flip-Flop, 20 MHz J-K			
TTL	RF60	Raytheon	
Floating Point ALU, 32-Bit IEEE			
TTL(N)	WTL1033C	◊ Weitek	
	WTL1033M	◊† Weitek	
Floating Point Multiplier, 32-Bit IEEE			
TTL(N)	WTL1032C	◊ Weitek	
	WTL1032M	◊† Weitek	45
Funnel Shifter			
TTL-AS	**SN74AS8833**	**TI (3224)**	
GPIB Adapter (IEEE 488 bus) See also Microprocessor Peripheral			
TTL-LS	96LS488DC	Fairchild	
	96LS488DM	† Fairchild	
GPIB Data Transceiver See also Microprocessor Peripherals			
TTL-F	74F588	◊ Fairchild	
I/O Register Array (16x8 or 8x16)			
TTL-LS	N8X320	Signetics	50
Identity Comparator/Decoder, Fuse Programmable			
TTL-ALS	SN74ALS812	◊ TI	
Memory Address Generator			
TTL-AS	**SN74AS895**	**TI (3226)**	
Memory Mapper, Expands 4 Address Lines to 12 Address Lines			
TTL-LS	**GD74LS612**	**GoldStar (2693)**	
	SN54LS610	† TI	
	SN74LS610	TI	55
	SN74LS611	TI	
	SN74LS612	TI	
	SN74LS613	TI	
Microprogram Sequencer			
TTL-LS	AM2909A	AMD	
	AM2909C	AMD	60
	AM2909M	† AMD	
	AM2911A	AMD	
	AM2911C	AMD	
	AM2911M	† AMD	
	M3001	Intel	65
	IDM2909AC	National	
	IDM2911AC	National	
	N3001	Signetics	
	N8X02A	Signetics	
	S3001	† Signetics	70
	SFC2909	Thomson	
	SFC2911A	Thomson	
Microsequencer			
TTL-AS	SN54AS890	† TI	
	SN74AS890	**TI (3226)**	
Multimode Associative Stack			
TTL-S	DP8402	National	75
Multivibrator, Retriggerable Monostable			
TTL	RF9601	Raytheon	
Oscillator Clock/Driver			
TTL-LS	SN54LS320	† TI	
	SN54LS321	† TI	
	SN74LS321	TI	
Phase Locked Loop			
TTL-LS	SN74LS297	TI	80
Phase-Frequency Detector			
TTL	MC4044	Motorola	
	MC4344	◊† Motorola	
Pipeline registerR, 8-Bit, Diagnostic			
TTL-ALS	SN74ALS819	◊ TI	
Processor, 8-Bit Microprocessor			
TTL-AS	SN74AS8832	TI	
	SN74AS8835	TI	85
Processor, 8-Bit Microcodeable			
TTL-AS	**SN74AS887**	**TI (3226)**	
S-R Clocked Flip-Flop			
TTL	RF20	Raytheon	
S-R-T Flip-Flop			
TTL	RF30	Raytheon	
Set-Reset Flip-Flop			
TTL	RF10	Raytheon	
Synchronous Decade Rate Multiplier			
TTL	74167	Fairchild	90
	SN54167	† TI	
	SN74167	TI	
Voltage Comparator (analog input-digital output)			
TTL-S	AM686C	AMD	
	AM686M	† AMD	
Voltage Controlled Oscillator (or crystal controlled)			
TTL-LS	SN54LS624	◊† TI	95
	SN54LS628	◊† TI	
	SN74LS624	TI	
	SN74LS628	TI	
Voltage-Controlled Oscillator, Low Power			
TTL-LS	SN74LS724	Motorola	
Binary-To-BCD Converter			
TTL	DM54185A	† National	100
	DM74185A	National	
	DM8899	National	
	SN54185A	† TI	
BCD-To-Binary Converter			
TTL	DM54184	† National	
	DM74184	National	105
	SN54184	† TI	
BCD-To-Binary Converter (three-state 54/74184)			
TTL	DM8898	National	
Dual Pulse Shaper/Delay and Gate			
TTL	RG80	◊ Raytheon	
Dual Pulse Synchronizer/Driver			
TTL	SN54120	† TI	
	SN74120	TI	110
Dual Voltage Controlled Oscillator (or crystal controlled)			
TTL-S	SN54LS626	◊† TI	
	SN54LS629	◊† TI	
	SN74LS625	TI	
	SN74LS629	TI	
Dual 4-Bit Parity Tree			
TTL	MC4010	Motorola	115
	MC4310	† Motorola	
Dual 4-Input Lamp Driver			
TTL	RG7540	Raytheon	
Dual 4-Input NAND Schmitt-Trigger			
TTL	DM5413	† National	
	DM7413	National	
	5413	† Signetics	120
	7413	**◊ Signetics (3003)**	
	SN5413	† TI	
	SN7413	TI	
TTL-ALS	DM54ALS13	† National	
	DM74ALS13	National	125
TTL-F	**74F13**	**Signetics (3023)**	
TTL-LS	54LS13	† Fairchild	
	74LS13	◊ Fairchild	
	HD74LS13	Hitachi	
	M74LS18	Mitsubishi	130
	SN54LS13	† Motorola	
	SN74LS13	Motorola	
	DM54LS13	† National	
	DM74LS13	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Miscellaneous (Cont'd)

Function	Device	Source
Dual 4-Input NAND Schmitt-Trigger		
TTL-LS		(Cont'd)
	DN74LS13	◊ Panasonic
	T54LS13	† SGS
	T74LS13	SGS
	54LS132	† SGS
	74LS132	SGS
	54LS13	† Signetics
	74LS13	**Signetics (3003)**
	SN54LS13	◊† TI
	SN74LS13	TI
TTL-S	54S13	† Signetics
Dual 4-Input 30-Ohm Transmission Line Driver		
TTL-F	54F3040	† Signetics
	74F3040	**Signetics (3023)**
Quad Backplane Transceiver		
TTL	AM26LS38	AMD
TTL-ALS	SN54ALS056	◊ TI
Quad Bus Receiver		
TTL	**N8T380**	**Signetics (3022)**
Quad Bus Transceiver		
	UDN2522A	Sprague
Quad Complementary-Output Elements (for symmetrical generation of complementary outputs)		
TTL	SN54265	† TI
	SN74265	◊ TI
Quad Power Strobe (Vcc strobe or digit driver)		
TTL	HD6600	† MMI
	HD6605	MMI
Quad S-R Latch		
TTL-LS	T54LS279	† SGS
Quad 2-Input Lamp Driver		
TTL	RG7520	Raytheon
Quad 2-Input NAND Schmitt-Trigger		
TTL	74132	Fairchild
	DM54132	† National
	DM74132	National
	54132	† Signetics
	74132	**Signetics (3003)**
	SN54132	† TI
	SN74132	TI
TTL-ALS	DM54ALS132	† National
	DM74ALS132	National
TTL-F	**74F132**	◊ **Signetics (3023)**
TTL-LS	74LS132	◊ Fairchild
	GD74LS132	**GoldStar (2693)**
	HD74LS132	Hitachi
	M74LS24	Mitsubishi
	SN54LS132	† Motorola
	SN74LS132	Motorola
	DM54LS132	† National
	DM74LS132	National
	DN74LS132	◊ Panasonic
	54LS132	† Signetics
	54LS132A	† Signetics
	74LS132	◊ **Signetics (3003)**
	SN54LS132	◊† TI
	SN74LS132	TI
TTL-S	74S132	Fairchild
	SN54S132	† TI
	SN74S132	TI
Quad 2-Input 30-Ohm Transmission Line Driver		
TTL-F	54F3037	† Signetics
	74F3037	**Signetics (3023, 3043)**
	74F3038	**Signetics (3023)**
Hex Current Sensing Interface Gate		
TTL-LS	SN54LS63	◊† TI
Hex Schmitt Trigger, Inverting		
TTL	5414	† Fairchild
	7414	Fairchild
	DM5414	† National
	DM7414	National
	5414	† Signetics
	7414	◊ **Signetics (3003)**
	SN5414	† TI
	SN7414	TI
TTL-ALS	DM54ALS14	† National
	DM74ALS14	National
TTL-F	**74F14**	**Signetics (3023)**
TTL-LS	54LS14	† Fairchild
	74LS14	◊ Fairchild
	GD74LS14	**GoldStar (2693)**
	HD74LS14	Hitachi
	M74LS19	Mitsubishi
	SN54LS14	† Motorola
	SN74LS14	Motorola
	DM54LS14	† National
	DM74LS14	National
	DN74LS14	◊ Panasonic
	54LS14	† SGS
	74LS14	◊ SGS
	54LS14	† Signetics
	74LS14	**Signetics (3003)**
	SN54LS14	◊† TI
	SN74LS14	TI
	SN74LS19	TI
Octal Backplane Transceiver		
TTL-ALS	SN55ALS057	TI
Octal Receiver, Three-State		
TTL-S	DS3892	National
Octal Trapezoidal Repeater		
TTL-S	DS3898	National
4-Bit Parallel Bus Transceiver, Inverting Three-State		
TTL-S	**GD8T26A**	**GoldStar (2694)**
	MC8T26A	**Motorola (2951)**
	DS8T26A	National
	DS8T26AM	† National
	N8T126	**† Signetics (3022)**
	N8T127	**Signetics (3022)**
	N8T26A	**Signetics (3022)**
	S8T126	◊† Signetics
	S8T127	◊† Signetics
	S8T26A	† Signetics
	N8T26	◊ TI
	N8T26A	◊ TI
	SN75136	TI
4-Bit Parallel Bus Transceiver, Non-Inverting, Three-State		
TTL-S	N8T28	AMD
	GD8T28	**GoldStar (2694)**
	MC6889	**Motorola (2951)**
	MC8T28	**Motorola (2951)**
	DS8T28	National
	DS8T28M	† National
	N8T128	Signetics
	N8T129	**Signetics (3022)**
	N8T28	**Signetics (3022)**
	S8T128	◊† Signetics

(Continued)

Function	Device	Source
4-Bit Parallel Bus Transceiver, Non-Inverting, Three-State		
TTL-S		(Cont'd)
	S8T129	◊† Signetics
	S8T28	† Signetics
4-Bit Parallel Bus Transceiver, Open Collector Drivers		
TTL-S	AM26S10C	AMD
	AM26S10M	† AMD
	AM26S11C	AMD
	AM26S11M	† AMD
	AM26S12AC	AMD
	AM26S12AM	† AMD
	AM26S12C	AMD
	AM26S12M	† AMD
	μA9640C	Fairchild
	μA9640M	† Fairchild
	MC26S10	**Motorola (2952)**
	DS26S10C	National
	DS26S10M	† National
	DS26S11C	National
4-Bit Parallel Universal Bus Transceiver, Storage, Three-State		
TTL-S	SN54S226	† TI
4-Bit Priority Register, Cascadable		
TTL	SN54278	† TI
	SN74278	TI
4-Bit Shifter, Three-State (shifts 0, 1, 2, or 3-bits under 2-line select control)		
TTL-S	AM25S10C	AMD
	AM25S10M	† AMD
4-Bit Universal Presettable Polynomial Generator		
TTL	MC8504	Motorola
6-Bit Synchronous Binary Rate Multiplier		
TTL	5497	◊† Fairchild
	7497	Fairchild
	SN5497	† TI
	SN7497	TI
8-Bit Bidirection I/O Port		
TTL-S	N8T31	Signetics
8-Bit Bidirectional I/O Port, Latched, Addressable		
TTL-S	N8T32	Signetics
	N8T33	Signetics
	N8T36	Signetics
	S8T32	† Signetics
	S8T33	† Signetics
	S8T35	† Signetics
	S8T36	† Signetics
	S8T39	† Signetics
8-Bit Parity Tree		
TTL	MC4008	Motorola
	MC4308	† Motorola
8-Bit Position Scaler (The output is shifted with respect to the input up to 8 positions as determined by a 3-bit selector code.)		
TTL	RM8243	† Raytheon
8-Bit Successive Approximation Register		
TTL	AM2502C	AMD
	AM2502M	† AMD
	AM2503C	AMD
	AM2503M	† AMD
	DM2502C	National
	DM2502M	† National
TTL-LS	54LS502	† Fairchild
	54LS503	† Fairchild
	74LS502	◊ Fairchild
	74LS503	◊ Fairchild

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL–TTL (Cont'd)

Miscellaneous (Cont'd)

Function	Device	Source	Line
8-Bit Universal Transceiver/Port Controller			
TTL-AS	SN54AS877	† TI	
8-Input Priority Encoder			
	MC54F148	† Motorola	
	MC74F148	Motorola	
TTL	9318C	Fairchild	
	9318M	† Fairchild	5
	DM54148	† National	
	DM74148	National	
	DM8318	National	
	DM9318	† National	
	54148	† Signetics	10
	74148	**Signetics (3003)**	
	SN54148	† TI	
	SN74148	TI	
TTL-F	74F148	◊ Fairchild	
	74F148	**Signetics (3023)**	15
TTL-LS	AM25LS2513C	AMD	
	AM25LS2513M	† AMD	
	AM2913C	AMD	
	AM2913M	† AMD	
	HD74LS148	Hitachi	20
	M74LS148	Mitsubishi	
	SN54LS148	† Motorola	
	SN74LS148	Motorola	
	SN74LS748	Motorola	
	SN54LS148	◊† TI	25
	SN74LS148	TI	
TTL-S	SN54S148	† MMI	
	SN74S148	† MMI	
8-Input Priority Encoder, Three State			
TTL-LS	SN74LS348	Motorola	
	SN74LS848	Motorola	30
	SN54LS348	† TI	
	SN74LS348	TI	
TTL-S	SN54S348	◊† MMI	
	SN74S348	MMI	
9-bit Bus Interface D-Type Latches, Three-State			
TTL-AS	SN74AS1843	TI	35
9-bit Bus Interface Flip-Flops, Three-State			
TTL-AS	SN74AS1823	TI	
9-Bit Odd/Even Parity Generator/Checker			
	T54L5280	† SGS	
	T74L5280	SGS	
TTL	74180	Fairchild	
	DM54180	† National	40
	DM74180	National	
	RM8262	† Raytheon	
	N8262	**Signetics (3022)**	
	S8262	† Signetics	
	54180	† Signetics	45
	74180	**Signetics (3003)**	
	SN54180	† TI	
	SN74180	TI	
TTL-ALS	SN74ALS280	TI	
TTL-AS	DM54AS280	† National	50
	DM74AS280	National	
	SN54AS280	† TI	
	SN74AS280	TI	
TTL-F	54F280	◊† Fairchild	
	74F280	◊ Fairchild	55
	MC54F280	† Motorola	
	MC74F280	Motorola	
	54F280	† Signetics	
	74F280B	**Signetics (3023)**	

(Continued)

Function	Device	Source	Line
9-Bit Odd/Even Parity Generator/Checker			
TTL-F		(Cont'd)	
	SN54F280A	† TI	60
	SN74F280A	TI	
TTL-LS	**GD74LS280**	**GoldStar (2693)**	
	HD74LS280	Hitachi	
	M74LS280	Mitsubishi	
	SN74LS280	Motorola	65
	SN54LS280	◊† TI	
	SN74LS280	TI	
TTL-S	AM82S62C	AMD	
	AM82S62M	† AMD	
	93S62C	Fairchild	70
	93S62M	† Fairchild	
	GD74S280	**◊ GoldStar (2694)**	
	DM54S280	† National	
	DM74S280	National	
	N82S62	**Signetics (3022)**	75
	54S280	† Signetics	
	74S280	**Signetics (3003)**	
	SN54S280	† TI	
	SN74S280	◊ TI	
9-Bit Parity Generator/Checker with Parity I/O Port			
TTL-AS	DM54AS286	† National	80
	DM74AS286	National	
	SN74AS286	TI	
10-bit Bus Interface D-Type Latches, Three-State			
TTL-AS	SN74AS1841	TI	
10-bit Bus Interface Flip-Flops, Three-State			
TTL-AS	SN74AS1821	TI	
10-Bit Priority Encoder			
TTL	54147	† Signetics	85
	74147	**Signetics (3003)**	
	SN54147	† TI	
	SN74147	TI	
TTL-LS	M74LS147	Mitsubishi	
	SN74LS147	Motorola	90
	SN54LS147	◊† TI	
	SN74LS147	TI	
12-Bit Successive Approximation Register			
TTL	AM2504C	AMD	
	AM2504M	† AMD	
	DM2504C	National	95
	DM2504M	† National	
12-Input Odd/Even Parity Checker/Generator			
TTL	9348C	◊ Fairchild	
	9348M	◊† Fairchild	
TTL-S	AM93S48C	AMD	
	AM93S48M	† AMD	100
16-Bit Shift Register, Video, Parallel-In, Parallel Out			
	DP8515	National	
	DP8516	National	
16-Stage Programmable Counter/Divider			
	74F525	◊ Fairchild	
32-Bit Parallel Error Correction and Detection Circuit			
TTL-AS	**SN74AS632**	**TI (3230)**	
32-Bit Parallel Error Detection and Correction Circuit			
TTL-ALS	**SN74ALS632B**	**TI (3227)**	105
	SN74ALS634A	**TI (3227)**	
	SN74ALS635	TI	
40-Bit Register File			
TTL-AS	**SN74AS8834**	**TI (3224)**	
64x18 Five Port Register File			
	B2210	Bipolar	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source
Arithmetic Processor (supply 5–12 V)	AM9511A	AMD
Baud Rate Generator/Programmable Divider (ROM controlled divider)	MM5307	National
	COM5026	◊ SMC
	COM5026T	◊ SMC
	COM5046	SMC
	COM5046T	SMC
	COM8046	SMC
	COM8046T	SMC
	COM8126	SMC
	COM8126T	SMC
	COM8146	SMC
	COM8146T	SMC
Baud Rate Generator/Programmable Divider, Dual (ROM controlled divider)	COM5016	◊ SMC
	COM5016T	◊ SMC
	COM5036	SMC
	COM5036T	SMC
	COM8116	SMC
	COM8116T	SMC
	COM8136	SMC
	COM8136T	SMC
	COM8156	SMC
	COM8156T	SMC
	WD1943	Western
Bidirectional Interface Circuit, High Voltage	TEA1512	Thomson
Comparator/Mux, 6 Decade, 7 Level, Latched and Multiplexed Output (use with 6 decade counter)	LS7240	LSIComp
Counter/Display Decoder, 4 Decade (7 segment and BCD outputs, 0.25 MHz; supply 5 V)	MIC5002	Micrel
	MIC5005	Micrel
	MIC5007	Micrel
	MK5002	Thomson
	MK5005	Thomson
	MK5007	Thomson
Counter/Display Driver, 1 Decade Up/Down, Preset (7 segment and BCD output, 1 MHz)	HCTR0107	Hughes
Counter/Display Driver, 6 Decade Up/Down (7 segment and BCD output, 1MHz, presettable compare register, latched output, LED driver maximum count 999999, 995959, or 595999 versions, supply 10–15V)	MIC50395	Micrel
	MIC50396	Micrel
	MIC50397	Micrel
	MIC50398	Micrel
	MIC50399	Micrel
	MK50395	Thomson
	MK50396	Thomson
	MK50397	Thomson
	MK50398	Thomson
	MK50399	Thomson
Counter Logic Control (use with MC12013 and MC4016)	MC12014	Motorola
Counter Time-Base (oscillator, programmable divider, 10^1 to 10^8, $2x10^7$, $6x10^8$, and $36x10^8$, supply –12,5 V)	MIC5009	Micrel
	MK5009	Thomson

Function	Device	Source
Counter/Timer, 4 Digit Up/Down Presettable Counter/Timer, Settable Register with Comparison to Counter, Multiplexed 7-Segment and BCD Output (maximum count 5959)	**ICM7217B**	**GE/Intersil (2669)**
	ICM7217C	**GE/Intersil (2669)**
	ICM7227B	**GE/Intersil (2669)**
	ICM7217B	Maxim
	ICM7217C	Maxim
Counter/Timer, 4-Digit Up/Down Presettable Counter/Timer, Settable Register with Comparison to Counter, Multiplexed 7-Segment and BCD Output (maximum count 5959)	**ICM7227C**	**GE/Intersil (2669)**
Counter, Universal (8 decade)/Latch/Display Driver (direct 7 segment and digit drivers for common anode LEDs: 'A' types	**ICM7216A**	**GE/Intersil (2669)**
	ICM7216B	**GE/Intersil (2669)**
	ICM7226A	**GE/Intersil (2669)**
	ICM7226B	**GE/Intersil (2669)**
Counter, Dual (two 3-decade up/down counters with latch, BCD output, 0.5 MHz, supply 5–15 V)	LS7040	LSIComp
Counter, Dual 16-Bit Binary Up Counter with 32-Bit Latch, Multiplexer and Three-State Drivers	**LS7062**	**LSIComp (2867)**
Counter, Dual 16-Bit, Prescalable, Multiplexed and Latched Outputs (5 V supply)	**LS7063**	**LSIComp (2867)**
Counter, 6 Decade Up/Down (predetermining, 3 pre-set storage registers, latched output)	LS7050	LSIComp
	LS7055	**LSIComp (2867)**
	LS7056	**LSIComp (2867)**
Counter, 6 Decade, BCD Output, 5 MHz, 8 Latches (supply 5–15 V)	**LS7031**	**LSIComp (2867)**
Counter, 8 Decade Frequency Counter/Latch/Display Driver (Direct 7 segment and digit drivers for common anode LEDs: 7216C. common cathode LEDs: 7216D. DC to 10 MHz, 5 V supply)	**ICM7216C**	**GE/Intersil (2669)**
	ICM7216D	**GE/Intersil (2669)**
Counter, 8 Decade, BCD and 7 Segment Outputs, 5 MHz, Latches (supply 5–15 V)	**LS7030**	**LSIComp (2867)**
Counter, 24-Bit, Universal	**LS7066**	**LSIComp (2867)**
Counter, 32-Bit, Multiplexed and Latched Outputs (5 V supply)	**LS7060**	**LSIComp (2867)**
Counter, 32-Bit, 8-Bit Prescalable, Multiplexed and Latched Outputs (5 V supply)	**LS7061**	**LSIComp (2867)**
Counter, 3 Timers, 0.01 to 99 sec Counter	RP5C06	Panatech
Data Encryption Device (high speed)	**WD20C03**	**◊ Western (3380)**

Function	Device	Source
Data Encryption Device (NBS standard)	WD2001	◊ Western
	WD2002	◊ Western
Data Security Device (data encryption standard)	**MC6859**	**Motorola (2903)**
Delay Line, 3-in–1	DS1013	Dallas
Delay Line, 10-Tap	DS1010	Dallas
Digital Gain Set, for setting gain of op-amps	LF13006	National
	LF13007	National
Divider, Adjustable, for 500 MHz	S89	Siemens
Divider, Divide by 2, Above 1 GHz	SP8606B	Plessey
	SP8606M	Plessey
Divider, Divide by 2, to 2 GHz, ECL Output	U822BS	Telefunken
Divider, Divide by 2, 0.2 to 1 GHz	SP8602A	† Plessey
	SP8602B	Plessey
	SP8605B	Plessey
	SP8605M	Plessey
	SP8607A	† Plessey
	SP8607B	Plessey
Divider, Divide by 2, 740 MHz	MC12090	Motorola
Divider, Divide by 3/4, 40 to 300 MHz	SP8720	Plessey
Divider, Divide by 4, 0.07 to 1 GHz	SP8613	Plessey
Divider, Divide by 4, 0.1 to 1.5 GHz	S1534	Signetics
Divider, Divide by 4, 0.15 to 1 GHz	SP8600A	† Plessey
	SP8600B	Plessey
Divider, Divide by 5/6, to 1 MHz	**RED5/6**	**LSIComp (2867)**
Divider, Divide by 5/6, 0.2 to 1 GHz	MC12009	◊ Motorola
	SP8740A	† Plessey
	SP8740B	Plessey
Divider, Divide by 6/7, 0.2 to 1 GHz	SP8741A	† Plessey
	SP8741B	Plessey
Divider, Divide by 8, 0.25 to 1 GHz	SP8735B	Plessey
Divider, Divide by 8/9, 0.25 to 1 GHz	SP8743B	Plessey
	SP8743M	Plessey
Divider, Divide by 10, Above 1 GHz	SP8665B	Plessey
	SP8668B	Plessey
Divider, Divide by 10, 0.2 to 1 GHz	SP8630A	† Plessey
	SP8630B	Plessey
Divider, Divide by 10/11, 0.2 to 1 GHz	MC12013	Motorola
	SP8643B	Plessey
	SP8647A	† Plessey
	SP8647B	Plessey
	SP8680A	† Plessey
	SP8680B	Plessey
	SP8685A	† Plessey
	SP8685B	Plessey

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

DIGITAL—Special (Cont'd)

Function	Device	Source	Line
Divider, Divide by 10/11, 0.2 to 1 GHz (Cont'd)			
	SP8690A	† Plessey	
	SP8690B	Plessey	
Divider, Divide by 10/100/1000/10,000 to 2 MHz			
	RDD104	**LSIComp (2867)**	
Divider, Divide by 16, 0.2 to 1 GHz			
	SP8659A	† Plessey	
	SP8659B	Plessey	5
Divider, Divide by 16/17, 32/33			
	MB503	Fujitsu	
Divider, Divide by 20, 0.2 to 1 GHz			
	DS8628	National	
	SP8657A	† Plessey	
	SP8657B	Plessey	
	SP8658	Plessey	10
Divider, Divide by 20/21, to 225 MHz			
	DS8614	National	
Divider, Divide by 24, 0.2 GHz			
	DS8627	National	
Divider, Divide by 32, 0.2 to 1 GHz			
	SP8655A	† Plessey	
	SP8655B	Plessey	
Divider, Divide by 32/33, to 225 MHz			
	DS8615	National	15
Divider, Divide by 32/33, 225 MHz			
	MC12015	Motorola	
Divider, Divide by 32/33, 64/65			
	MB504	Fujitsu	
Divider, Divide by 40/41, to 225 MHz			
	DS8616	National	
Divider, Divide by 40/41, 225 MHz			
	MC12016	Motorola	
Divider, Divide by 50/60, to 1 MHz			
	RED50/60	**LSIComp (2867)**	20
Divider, Divide by 64, above 1 GHz			
	SP8755A	† Plessey	
	SP8755B	Plessey	
	U264	Telefunken	
Divider, Divide by 64, 0.03 to 1 GHz, ECL Output			
	U664B	Telefunken	
	U664BS	Telefunken	25
Divider, Divide by 64, 0.03 to 1.2 GHz, ECL Output			
	U624BS	Telefunken	
Divider, Divide by 64/65, to 225 MHz			
	DS8617	National	
Divider, Divide by 64/65, 128/129			
	MB501	Fujitsu	
Divider, Divide by 64/65, 128/129 to 1.1			
	MB501L	Fujitsu	
Divider, Divide by 64/65, 225 MHz			
	MC12017	Motorola	30
Divider, Divide by 64/256, 90–1000 MHz			
	CA3163	GE/RCA	
	MC12071	Motorola	
	DS8621	National	
Divider, Divide by 64, 1 GHz			
	SAB1164	Signetics	
	SAB1165	Signetics	35
Divider, Divide by 64, 1.1 GHz			
	MC12073	Motorola	
Divider, Divide by 64, 225 MHz			
	MC12023	Motorola	

Function	Device	Source	Line
Divider, Divide by 100, to 150 MHz			
	DS8629	National	
	SP8629	Plessey	
Divider, Divide by 100/120			
	RED100/120	**◊ LSIComp (2867)**	40
Divider, Divide by 126/128 (VHF) or 252/256 (UHF)			
	DS8622	National	
Divider, Divide by 128/129, 520 MHz			
	MC12018	Motorola	
Divider, Divide by 128, 256 to 2.4 GHz			
	MB505-24	Fujitsu	
Divider, Divide by 239,240,255,256, to 0.5 GHz			
	SP8906	Plessey	
Divider, Divide by 256, above 1 GHz			
	U266	Telefunken	45
Divider, Divide by 256, 0.03 to 1 GHz, ECL Output			
	U666B	Telefunken	
	U666BS	Telefunken	
Divider, Divide by 256, 0.03 to 1 GHz, TTL Output			
	U666BST	Telefunken	
Divider, Divide by 256, 0.03 to 1.2 GHz, ECL Output			
	U626BS	Telefunken	
Divider, Divide by 256, 0.03 to 1.3 GHz, ECL Output			
	U636BS	Telefunken	50
Divider, Divide by 256, 0.03 to 1.5 GHz, ECL Output			
	U656BS	Telefunken	
Divider, Divide by 256, 1 GHz			
	SAB1256	Signetics	
Divider, Divide by 256, 1.1 GHz			
	MC12074	Motorola	
Divider, Divide by 300/360			
	RED300/360	**LSIComp (2867)**	
Divider, Divide by 478,480,510,512, to 1 GHz			
	SP8901	Plessey	55
Divider, Divide by 960/1024, 0.03 to 1 GHz, TTL Output			
	U665B	Telefunken	
Divider, Divide by 3000/3600			
	RED3000/3600	**LSIComp (2867)**	
Divider, Divide by 4096, 0.03 to 1 GHz, TTL Output			
	U496BS	Telefunken	
Divider, Divide by 4/10/11/20/21			
	TD6109	Toshiba	
Divider Extender, Divide by 4, to Extend Division Ratios of Two Modulus Counters while Maintaining the Difference (i.e., 5/6 to 20/21)			
	SP8790A	† Plessey	60
	SP8790B	Plessey	
Divider Extender, Divide by 8 (i.e., extends 5/6 to 40/41)	SP8794A	† Plessey	
	SP8794B	Plessey	
Divider, Programmable; 6– 1/2 Decade, to 4.5 GHz			
	HEF4751	Signetics	
Dividtored priority interrupts, ROM/PROM expandable to 64K with iSBC Multi-Module.			
	MC12011	Motorola	65
Filter, Digital Programmable High Order, Low-Pass			
	FLJ-D1	Datel	
	FLJ-D2	Datel	
	FLJ-D5	Datel	
	FLJ-D6	Datel	
Hall Effect Switch (senses magnetic field)			
	DN6835	Panasonic	70
	DN6837	Panasonic	
	DN6838	Panasonic	
	DN6839	Panasonic	

(Continued)

Function	Device	Source	Line
Hall Effect Switch (senses magnetic field) (Cont'd)			
	DN834	Panasonic	
	DN835	Panasonic	75
	DN837	Panasonic	
	DN838	Panasonic	
	DN839	Panasonic	
	SAS251	Siemens	
	UGN3013	Sprague	80
	UGN3019	Sprague	
	UGN3020	Sprague	
	UGN3030	Sprague	
	UGN3040	Sprague	
	UGS3019	† Sprague	85
	UGS3020	† Sprague	
	UGS3030	† Sprague	
	TL170C	TI	
	TL172C	TI	
Inverter, Triple PMOS			
	LM8942	Sanyo	90
LED Driver System, 8 Decade 8x8 Memory, Decoder (versions either hardwire or processor controlled			
	ICM7218A	**GE/Intersil (2671)**	
	ICM7218B	**GE/Intersil (2671)**	
	ICM7218C	**GE/Intersil (2671)**	
	ICM7218D	**GE/Intersil (2671)**	
	ICM7218E	**GE/Intersil (2671)**	95
	ICM7218A	Maxim	
	ICM7218B	Maxim	
	ICM7218C	Maxim	
	ICM7218D	Maxim	
Multiplexer/Demultiplexer, 8-Channel Latched, Binary Addressable (supply –5 to –70 V)			
	LS7110	**LSIComp (2867)**	100
Multiplier (16x16)			
	WTL1516	Weitek	
Multiplier-Accumulator (16x16)			
	WTL1010C	Weitek	
	WTL1010M	† Weitek	
PIN Diode Drivers			
	DH0035	† National	
	DH0035C	National	105
	UDS5791H	† Sprague	
Programmable Diode Martix, 8x10			
	S416	Siltronics	
Programmable Diode Matrix, 10x16			
	S353	Siemens	
Resistor Network, Logic Controlled			
	FLJ-ACR1	Datel	
	FLJ-ACR2	Datel	110
Schmitt Trigger, Programmable			
	CA3098	**† GE/RCA (2654)**	
	CA3099	† GE/RCA	
Schmitt Trigger (supply 8 to 16 V)			
	LB8015	Sanyo	
Schmitt Trigger, Zener Clamped Output (supply 2.2 to 6 V)	CS102	Cherry	
Schmitt Trigger, Dual, Complementary Open Collector Outputs (supply 2.2 to 6 V)			
	CS122	Cherry	115
Schmitt Trigger, Dual, Low Voltage			
	SN76811	TI	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Static RAM, 256x8, w/ Alarm Clock/Calendar			
	PCF8583	Signetics	

© IC MASTER 1988

IS THIS A BORROWED COPY?

Avoid the hassle and order your own personal two-volume set of IC MASTER. It's the surest way to simplify your IC selection efforts.

Only IC MASTER allows you to examine and compare the specifications, relative strengths, and weaknesses of all devices in serious contention for your application. And only IC MASTER brings you actual manufacturers' data sheets, allowing you to make complete and definitive device selections.

You can order IC MASTER simply by charging it to your VISA or MasterCard credit card. To place your order call Marie Botta at (516) 227-1314.

INTRODUCTION TO MICROPROCESSORS

This section begins with a Master Selection Guide that covers all major parameters needed to choose a microprocessor for a particular application. Microprocessors are sequenced by increasing data word size and then alphabetically by manufacturer.

Once you've chosen the proper microprocessor for your application, go to the System Components section. These are arranged alphanumerically by microprocessor, and shows all of the available peripheral devices that work with a particular microprocessor.

Finally, there is a General Purpose section describing devices that can be used in many different microprocessor systems, not just in certain families.

©IC MASTER 1988

MICROPROCESSORS

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
—	CMOS	5	84	20	152	30	9216			10	0.1			
S8	CMOS		20	8	32K	44	64x8	1Kx8		20	1	3	x	x
x	BIP	5	24							10				
2BS	TTL	5	40	≥18	512	512				6	45			
2BS	TTL	5	40	18	512	512				6	45			
4	CMOS	5	40							32				
4	CMOS	5	40	9	User defined	512				32				
4	CMOS	5	40	9	User defined	512				31				
4	CMOS	5	40	9	User defined	512				31				
4	CMOS	5	40	9	User defined	512				16				
4	CMOS	5	16	8,16	512	72	16x4	512x8		2	3		x	x
4	CMOS	5	16	8,16	1024	72	32x4	1Kx8		2	3		x	x
4	NMOS	5	42	8,16	4K	72	192x4	4Kx8		2	3		x	x
4	NMOS	5	42	8,16	2K	72	128x4	2Kx8		2	3		x	x
4	NMOS	5	42	8,16	4K	72	192x4	4Kx8		2	3		x	x
4	NMOS	5	42	8,16	2K	72	192x4	2Kx8		2	3		x	x
4	NMOS	5	28	8,16	2K	72	128x4	2Kx8		2	3		x	x
4	NMOS	5	64	8,16	4K	72	192x4	4Kx8		2	3		x	x
4	NMOS	5	64	8,16	2K	70	128x4	2Kx8		2	3		x	x
4	NMOS	5	42	8,16	1K	70	64x4	1Kx8		2	3		x	x
4	NMOS	5	28	8,16	1K	70	64x4	1Kx8		2	3		x	x
4	CMOS	5,3.5–6	42	8,16	4K	70	192x4	4Kx8		2	3		x	x
4	CMOS	5,3.5–6	42	8,16	2K	70	128x4	2Kx8		2	3		x	x
4	CMOS	5	42	8,16	1K	70	64Kx4	1Kx8		2	3		x	x
4	CMOS	3.5–6	42	8,16	2K	70	128x4	2Kx8		2	3		x	x
4	CMOS	2.5–3.5	42	8,16	2K	70	128x4	2Kx8		2	3		x	x
4	CMOS	5	42	8,16	1K	70	64Kx4	1Kx8		2	3		x	x
4	CMOS	5	42	8,16	2K	72	128x4	2Kx8		2	3		x	x
4	CMOS	5	42	8,16	2K	72	128x4	2Kx8		2	3		x	x
4	CMOS	5	28	8,16	1K	72	64x4	1Kx8		2	3		x	x
4	CMOS	3.5–6	28	8,16	1K	72	64x4	1Kx8		2	3		x	x
4	CMOS	2.5–3.5	28	8,16	1K	72	64x4	1Kx8		2	3		x	x
4	CMOS	5	70	8,16	4K	72	196x4	4Kx8		2	3		x	x
4	CMOS	5	80			76	256x4			3	2.0		x	x
4	CMOS	5	80			80	256x4			3	2.0		x	x
4	CMOS	5	80			82	256x4			3	2.5		x	x
4	CMOS	5	80			82	256x4			4	1.5		x	x
4	CMOS	5	80			82	256x4			3	2.5		x	x
4	CMOS	5	80			82	256x4			4	1.5		x	x
4	CMOS	5	80			70				4.5	6.67			

© IC MASTER 1988

Software Support									
	High Level Language	Programs							
Cross Assembler		Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
x	x	x	x			Systolic array of 72 parallel processor elements	NCR45CG72	NCR	
x		x	x	x	Sierra	Software Selectable I/O Options.	COP822C	National	
					National	System Support, System Timing and Control Unit, special cycle for slow peripherals.	TI32201	TI	
						Use 74S182 for look-ahead carry and N3001 microprogram control unit.	N3001	Signetics	
						Use 74S182 for look-ahead carry and N3001 microprogram control unit.	N3002	Signetics	5
						Compatible with bipolar 2901.	CA29C01	Calmos	
						25% Faster than "C" Spec 70mA Icc	**CY7C901-23C**	**Cypress (2569)**	
						15% Faster than "C" Spec 90mA Icc	**CY7C901-27M**	**Cypress (2569)**	
						Icc = 26.5mA, 1/10 Bipolar	**CY7C901-31C**	**Cypress (2569)**	
						Icc = 26.5mA, 1/10 Bipolar	CY8C901-69C	Cypress	10
x						Low cost, 12 I/O ports, TTL/CMOS compatible.	MB88201	Fujitsu	
x						Low cost, 12 I/O ports, TTL/CMOS compatible.	MB88202	Fujitsu	
x						36 I/O ports, TTL/CMOS compatible, on board PLA.	MB88401	Fujitsu	
x						37 I/O ports, TTL/CMOS compatible.	MB8841	Fujitsu	
x						32 I/O ports, TTL/CMOS compatible, 8 bit A/D.	MB88411	Fujitsu	15
x						32 I/O ports, TTL/CMOS compatible, 8 bit A/D.	MB88413	Fujitsu	
x						23 I/O ports, TTL/CMOS compatible.	MB8842	Fujitsu	
x						57 I/O ports, TTL/CMOS compatible, watch dog timer, power down detect.	MB88421	Fujitsu	
x						57 I/O ports, TTL/CMOS compatible, watch dog timer, power down detect.	MB88423	Fujitsu	
x						37 I/O ports, TTL/CMOS compatible.	MB8843	Fujitsu	20
x						23 I/O ports, TTL/CMOS compatible.	MB8844	Fujitsu	
x						Other Vcc ranges available, 36 I/O ports TTL/CMOS compatible.	MB88501	Fujitsu	
x						Other Vcc ranges available, 36 I/O ports TTL/CMOS compatible.	MB88503	Fujitsu	
x						37 I/O ports, TTL/CMOS compatible.	MB8851	Fujitsu	
x						37 I/O ports, TTL/CMOS compatible.	MB8851A	Fujitsu	25
x						37 I/O ports, TTL/CMOS compatible.	MB8851L	Fujitsu	
x						37 I/O ports, TTL/CMOS compatible.	MB8853	Fujitsu	
x						6 bit 3 Channel D/A, 34 I/O ports, TTL/CMOS compatible.	MB88535	Fujitsu	
x						6 bit 3 Channel, 13 bit 1 CHL D/A, 34 I/O ports, TTL/CMOS compatible.	MB88536	Fujitsu	
x						23 I/O ports, TTL/CMOS compatible.	MB8854	Fujitsu	30
x						23 I/O ports, TTL/CMOS compatible.	MB8854A	Fujitsu	
x						23 I/O ports TTL/CMOS compatible.	MB8854L	Fujitsu	
x						LCD driver, 29 I/O ports, TTL/CMOS compatible.	MB88541	Fujitsu	
x						On-chip LCD driver with 24-segment output.	MB88543	Fujitsu	
x						On-chip LCD driver with 32-segment output.	MB88545	Fujitsu	35
x						On-chip A/D converter, 68 I/O ports.	MB88551	Fujitsu	
x						On-chip A/D converter, high speed version of 88551.	MB88551H	Fujitsu	
x						On-chip A/D converter, 68 I/O ports.	MB88552	Fujitsu	
x						On-chip A/D converter, high speed version of 88552.	MB88552H	Fujitsu	
						On-chip LCD driver, PLL, A/D converter.	MB88561	Fujitsu	40

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
4	CMOS	5	80			71				4.5	6.67		x	x
4	CMOS	5	64	10		99	256x4	4096x10		4.5	1.78/20	5	x	x
4	CMOS	5	80	10		71	160x4	2.1Kx10		0.5	10	2	x	
4	CMOS	5	64	10		99	576x4	4Kx10			1.33	5	x	x
4	CMOS	5	42	10		98	576x4			6.2	1.33	3	x	x
4	CMOS	5	64	10		99	576x4			6.2	1.33	5	x	x
4	CMOS	5	42	10		98	576x4	4Kx10			2.0	3	x	x
4	CMOS	4.5–6.0	64	10	2048	99	160x4	2Kx10		6.2	1.33	5	x	x
4	CMOS	4.0–6.0	64	10	2048	99	160x4	2Kx10		4.5	2	5	x	x
4	CMOS	2.7–6.0	64	10	2048	99	160x4	2Kx10		2.25	4	5	x	x
4	CMOS	4.5–6.0	64	10	4096	99	256x4	4Kx10		6.2	1.33	5	x	x
4	CMOS	4.0–6.0	64	10	4096	99	256x4	4Kx10		4.5	2	5	x	x
4	CMOS	2.7–6.0	64	10	4096	99	256x4	4Kx10		2.25	4	5	x	x
4	CMOS	4.5 to 6	64	10		99	512x4	8Kx10			3.55	5	x	x
4	CMOS	4.5–6.0	42	10	2048	98	160x4	2Kx10		6.2	1.33	3	x	x
4	CMOS	4.0–6.0	42	10	2048	98	160x4	2Kx10		4.5	2	3	x	x
4	CMOS	2.7–6.0	42	10	2048	98	160x4	2Kx10		2.25	4	3	x	x
4	CMOS	5	42	10		98	160x4	4Kx10			2	3	x	x
4	CMOS	5	42	10	2048	71	160x4	2Kx10		0.5	10	3	x	x
4	CMOS	3	42	10	2048	71	160x4	2Kx10		0.5	20	3	x	x
4	CMOS	5	54	10	2048	71	160x4	2Kx10		0.5	10	3	x	x
4	CMOS	3	54	10	2048	71	160x4	2Kx10		0.5	20	3	x	x
4	CMOS	5	42	10	4096	71	256x4	4Kx10		0.9	5	3	x	x
4	CMOS	3	42	10	4096	71	256x4	4Kx10		0.9	20	3	x	x
4	CMOS	5	54	10	4096	71	256x4	4Kx10		0.9	5	3	x	x
4	CMOS	3	54	10	4096	71	256x4	4Kx10		0.9	20	3	x	x
4	CMOS	2.5 to 6	64	10		99	512x4	8Kx10			1.78	5	x	x
4	CMOS	5	80	10	2048	71	160x4	2Kx10		0.5	10	3	x	x
4	CMOS	5	80	10	4096	71	256x4	4Kx10		1.0	5	3	x	x
4	NMOS	4.5–6.3	48	8	2K		160x4	.25/1			4/10	4/CPU	x	x
4	NMOS	4.5–6.3	40	8	2048	60	160x4	2048		0.25	8/16	4/CPU	x	x
4	NMOS	4.5–6.3	40	8	2048	60	160x4	See comments		0.25	8/16	4	x	x
4	NMOS	4.5–6.3	28	8	2048	60	160x4	2048		0.25	8/16	4/CPU	x	x
4	NMOS	4.5–6.3	24	8	2048	60	160x4	2048		0.25	8/16	4/CPU	x	x
4	NMOS	4.5–9.5	40	8	512	40	32x4	see comments		2.097	15/40		x	x
4	NMOS	4.5–9.5	40	8	512	40	32x4	see comments		0.50	16/40		x	x

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x						On-chip VFD driver, PLL, A/D converter.	MB88562	Fujitsu	
x		x		x		26 High voltage pins, 8-bit serial interface	GM8460	GoldStar	
x						Drives seven segment LCDs, on chip counter timer. 32 I/O lines.	HD44790	Hitachi	
x		x	x	x		58 I/O lines, 26 high voltage (40 V max)	HD614P0160S	Hitachi	
x		x	x	x		EPROM-on-package device (8K ROM max) for HMCS412 series	HD614P080C	Hitachi	5
x		x	x	x		EPROM-on-package device (8K ROM max) for HMCS402/404 series	HD614P080S	Hitachi	
x		x	x	x		36 I/O lines, 24 high voltage (40 V max)	HD614P180S4	Hitachi	
x		x	x	x		58 I/O Lines; 26 high voltage (40V max), serial interface	HMCS402AC	Hitachi	
x		x	x	x		58 I/O Lines; 26 high voltage (40V max), serial interface	HMCS402C	Hitachi	
x		x	x	x		58 I/O Lines; 26 high voltage (40V max), serial interface	HMCS402CL	Hitachi	10
x		x	x	x		58 I/O Lines; 26 high voltage (40V max), serial interface	HMCS404AC	Hitachi	
x		x	x	x		58 I/O Lines; 26 high voltage (40V max), serial interface	HMCS404C	Hitachi	
x		x	x	x		58 I/O Lines; 26 high voltage (40V max), serial interface	HMCS404CL	Hitachi	
x		x	x	x		58 I/O lines, 26 high voltage (40 V max)	HMCS408AC	Hitachi	
x		x	x	x		36 I/O Lines,. 24 high voltage (40V max)	HMCS412AC	Hitachi	15
x		x	x	x		36 I/O Lines,. 24 high voltage (40V max)	HMCS412C	Hitachi	
x		x	x	x		36 I/O Lines,. 24 high voltage (40V max)	HMCS412CL	Hitachi	
x		x	x	x		36 I/O lines, 24 high voltage (40 V max)	HMCS414C	Hitachi	
x		x	x	x		32 I/O Lines, stand-by mode, on-chip counter	HMCS44C	Hitachi	
x		x	x	x		32 I/O Lines, stand-by mode, on-chip counter	HMCS44CL	Hitachi	20
x		x	x	x		44 I/O Lines, stand-by moe, on-chip counter	HMCS45C	Hitachi	
x		x	x	x		44 I/O Lines, stand-by moe, on-chip counter	HMCS45CL	Hitachi	
x		x	x	x		32 I/O Lines, stand-by mode, on-chip counter	HMCS46C	Hitachi	
x		x	x	x		32 I/O Lines, stand-by mode, on-chip counter	HMCS46CL	Hitachi	
x		x	x	x		44 I/O Lines, stand-by mode, on-chip counter	HMCS47C	Hitachi	25
x		x	x	x		44 I/O Lines, stand-by mode, on-chip counter	HMCS47CL	Hitachi	
x		x	x	x		58 I/O lines, 26 high voltage (40 V max)	HMC408CL	Hitachi	
x		x	x	x		32 I/O Lines, power-on-reset, on-chip LCD drive	LCD-III	Hitachi	
x		x	x	x		32 I/O Lines, power-on-reset, on-chip LCD drive	LCD-IV	Hitachi	
x		x	x	x		Same as COP2440 except no on chip ROM and faster execution time (4μs). Interfaces with MM2716 EPROM. COP2304 is extended temperature range device.	COP2404	National	30
x					Eurotechnique	Dual CPU microcontroller, programmable counter, zero crossing detector serial I/O port. 35 I/O lines, COP23XX extended temperature range.	COP2440	National	
x		x	x	x		Piggyback Microcontroller. Same as COP2440 except socket for development EPROM.	COP2440R	National	
x					Eurotechnique	Same as COP2440 except 23 I/O lines.	COP2441	National	
x					Eurotechnique	Same as COP2440 except 19 I/O lines.	COP2442	National	
x		x	x	x		Romless microcontroller, emulated COP410L/COP411L, interfaces with external memory, will accept MM2716, NM27C16, MM2758A, MM2758B 1K byte accessories.	COP401L	National	35
x		x	x	x		Same as COP401L except emulates COP413L with selected RC oscillator option.	COP401L-R13	National	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
4	NMOS	4.5–9.5	40	8	512	40	32x4	see comments		0.50	16/40		x	x
4	NMOS	4.5–6.3	40	8	1K	49	64x4	See comments		4	4/10	3	x	x
4	NMOS	4.5–6.3	40	8	1K	49	64x4	See comments		4	4/10		x	x
4	NMOS	4.5–9.5	40	8	2K	49	128x4	See comments		2.1	16/40	3	x	x
4	NMOS	4.5–9.5	40	8	2048	49	128x4	See comments		2.1	16/40	3	x	x
4	CMOS	2.4–6.0	24	8	512	40	32x4	512		0.25	4/dc		x	x
4	NMOS	4.5–6.3	24	8	512	40	32x4	512		0.25	15/40		x	x
4	CMOS	2.4–6.0	20	8	512	40	32x4	512		0.25	4/dc		x	x
4	NMOS	4.5–6.3	20	8	512	40	32x4	512x8		0.25	15/40	2	x	x
4	CMOS	3.0–5.5	20	8	512	40	32x4	512x8		0.50	16/dc		x	x
4	CMOS	4.5–5.5	20	8	512	40	32x4	512x8		2.0	4/dc		x	x
4	NMOS	4.5–5.5	20	8	512	40	32x4	512x8		0.50	16/40		x	x
4	NMOS		20	8	512		64x4	512		.25	16		x	x
4	NMOS	4.5–6.3	28	8	1K	49	64x4	1Kx8		2.1	4/10	3	x	x
4	NMOS	4.5–9.5	28	8	1K	49	64x4	1Kx8		2.1	4/dc	3	x	x
4	NMOS	4.5–6.3		8	1K	49	64x4	1Kx8		2.1		3	x	x
4	CMOS	3–5	28	8	1K		64x4	1Kx4		4	4/dc		x	x
4	CMOS	3–5	24	8	1K		64x4	1Kx4		4	4/dc		x	x
4	CMOS	2.4–5.0	20	8	1K		64x4	1Kx8		0.25	4/dc		x	x
4	NMOS	4.5–6.3	40	8	2K	49	160x4	2Kx8		1.0	4/10	4	x	x
4	NMOS	4.5–6.3	40	8	2K	49	160x4	2Kx8			4/10	4	x	x
4	NMOS	4.5–6.3	28	8	2K		160x4	2Kx8			4/10	4	x	x
4	NMOS	4.5–6.3	24	8	2K		160x4	2Kx8			4/10	4	x	x
4	CMOS	3–5	28	8	2K		128x4	2Kx4		4	4/dc		x	x
4	NMOS	4.5–6.3	28	8	2K	49	128x4	2Kx8		2.1	15/40	3	x	x

© IC MASTER 1988

Software Support									
		Programs							
Cross Assembler	High Level Language	Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
x		x	x	x		Same as COP401L except emulates COP413L with selected RC oscillator option.	COP401L-X13	National	
x		x	x	x	Western Digital	Has piggyback EPROM socket. Will accept: MM2716, NM27C16, MM2758A, MM2758B. 1K byte accessable.	COP402	National	
x		x	x	x	Western Digital	Has piggyback EPROM socket. Will accept: MM2716, NM27C16, MM2758A, MM2758B. 1K byte accessable.	COP402M	National	
x		x	x	x	Western Digital	Has piggyback EPROM socket. Will accept MM2716, 2758A, 2758B or NM27C16 EPROM. 2K Byte accessable. Open drain memory interface drivers.	COP404LP	National	
x		x	x	x	Western Digital	Same as COP404LP except push pull memory interface drivers.	COP404LS	National	5
x		x	x	x		4μs instruction cycle time, 20 I/O lines, 2 level subroutine stack, COP310C operates extended temperature range, COP210C operates full temperature range.	COP410C	National	
x		x	x	x	Eurotechnique, Western Digital	16 I/O lines, 24 pins, COP310L has extended temperature range (–40°C to –85°C).	COP410L	National	
x		x	x	x		4μs instruction cycle time, 16 I/O lines, 2 level subroutine stack, COP311C operates extended temperature range, COP211C operates full temperature range.	COP411C	National	
x		x	x	x	Eurotechnique, Western Digital	13 I/O lines, 20 pins, COP311L has extended temperature range (–40°C to –85°C).	COP411L	National	
x		x	x	x		16 I/O lines, 20 pins COP313C has extended temperature range (–40°C to 85°C)	COP413C	National	10
x		x	x	x		16 I/O lines, 20 pins COP313CH has extended temperature range.	COP413CH	National	
x		x	x	x		15 I/O lines, 20 pins, COP313L has extended temperature range.	COP413L	National	
x		x	x	x			COP414L	National	
x		x	x	x	Eurotechnique, Western Digital	COP32X is extended temperature range version. Also available in smaller packages: COP421 series–24 pins, COP422 series–20 pins.	COP420	National	
x		x	x	x	Eurotechnique, Western Digital	Same as COP420 except 23 I/O lines.	COP420L	National	15
x		x	x	x		Basically the same as COP420 except piggyback microcontroller. CPU, RAM, I/O and EPROM socket. Accepts: MM2716, NMC27C16, MM2758A, MM2758B. 1K byte accessable.	COP420R	National	
x		x	x	x		23 I/O lines. COP324C has extended temperature range (–40°C to 85°C).	COP424C	National	
x		x	x	x		COP424C less 4 general-purpose inputs.	COP425C	National	
x		x	x	x		COP424C less eight general purpose inputs.	COP426C	National	
x		x	x	x	Eurotechnique	CPU version of COP2440 series, COP340 is extended temperature range version. 40 pins. 35 I/O lines.	COP440	National	20
x		x	x	x		Piggyback Microcontroller: CPU, RAM, I/O and EPROM socket. Accepts: MM2716, NMC27C16, MM2758A, MM27588 EPROMs. Same electrical specs as base P/N.	COP440R	National	
x		x	x	x	Eurotechnique	CPU version of COP2440 series, COP341 is extended temperature range version. 28 pins. 23 I/O lines.	COP441	National	
x		x	x	x	Eurotechnique	CPU version of COP2440 series, COP342 is extended temperature range version. 24 pins. 19 I/O lines.	COP442	National	
x		x	x	x		23 I/O Lines. COP344C has extended temperature range (–40°C to 85°C).	COP444C	National	
x		x	x	x	Eurotechnique, Western Digital	28 pins, 16 I/O lines.	COP444L	National	25

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
4	NMOS	4.5–6.3	28	8	2K	49	128x4	2Kx8		2.1	15/40	3	x	x
4	CMOS	3–5	24	8	2K		128x4	2Kx4		4	4/dc		x	x
4	NMOS	4.5–6.3	24	8	2K	49	128x4	2Kx8		2.1	15/40	3	x	x
4	NMOS	4.5–5.5	28	8	4K		256x4	4Kx8		1.0	4/20			
4	CMOS	5		8			96x4 max	2000 max		0.44			x	
4	CMOS	4.5–5.5	40	8	4K	92	224x4	4K		0.4	5	x	x	x
4	CMOS	4.5–5.5	40	8	4K	92	224x4	4K		4.19	2.86	4	x	x
4	CMOS	4.5–5.5	64	8	6K	107	256x4	6K		6.55	2.44	4	x	x
4	CMOS	4.5–5.5	64	8	4K	106	256x4	4K		4.19	7.63	4	x	x
4	CMOS	4.5–5.5	64	8	4K	106	256x4	4K		6.55	2.44	4	x	x
4	CMOS	4.5–5.5	64	8	8K	43	497x4	8K		5	0.8	8	x	x
4	CMOS	4.5–5.5	42	8	4K	67	160x4	4K		0.4	5	3	x	x
4	CMOS	4.5–5.5	42	8	4K	67	160x4	4K		0.4	5	3	x	x
4	CMOS	4.5–6.0	42	8	4K	67	160x4	4K		0.4	5	3	x	x
4	CMOS	4.5–5.5	64	8	8K	43	512x4	8K		5	0.8	7	x	x
4	CMOS	4.5–5.5	80	8	8K	42	512x4	8K		5	0.8	6	x	x
4	CMOS	2.7–5.5	64	8		110	256x4			0.28	6.67		x	x
4	CMOS	4.5–5.5	64	8	1K	45	64x4	1K		0.7	2.86	2	x	x
4	CMOS	2.7–5.5	64	8		63	96x4	1Kx8		0.28	6.67	4	x	x
4	CMOS	2.7–5.5	64	8		92	128x4	2Kx8		0.28	6.67	4	x	x
4	CMOS	2.7–5.5	64	8		92	224x4	4Kx8		0.28	6.67	4	x	x
4	CMOS	2.7–5.5	28/52	8		58	64x4	1Kx8		0.28	10	2	x	x
4	CMOS	2.7–5.5	40/52	8		92	128x4	2Kx8		0.28	10	4	x	x
4	CMOS	2.7–6.0	40/44	8	2K	92	128x4	2K		4.19	2.86	4	x	x
4	CMOS	2.7–5.5	40/52	8		91	128x4	2Kx8		0.28	10	4	x	x
4	CMOS	2.7–5.5	28/40	8		92	224x4	4Kx8		0.28	10	4	x	x
4	CMOS	2.7–5.5	40	8		92	208x4	4Kx8		0.28	10	4	x	x
4	CMOS	2.7–6.0	64	8	4K	43	320x4	4K		5	0.8	7	x	x
4	CMOS	2.7–6.0	64	8	6K	43	320x4	6016		5	0.8	7	x	x
4	CMOS	2.7–6.0	64	8	8K	43	512x4	8064		5	0.8	7	x	x
4	CMOS	2.5–6.0	64	8	6K	107	256x4	6K		6.55	2.44	4	x	x
4	CMOS	2.7–5.5	64	8		92	256x4	4Kx8		0.2	10	4	x	x
4	CMOS	2.5–6.0	64	8	4K	106	256x4	4K		6.55	2.44	4	x	x
4	PMOS	–6 to –10	28	8	750	47	48x4	768		0.45			x	x

© IC MASTER 1988

Software Support									
	High Level Language	Programs							
Cross Assembler		Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
x		x	x	x		Piggyback Microcontroller: CPU, RAM, I/O and EPROM socket. Accepts: MM2716, NMC27C16, MM2758A, MM27588 EPROMs. Same electrical specs as base P/N.	COP444LR	National	
x		x	x	x		COP444C less 4 general-purpose inputs.	COP445C	National	
x		x	x	x	Eurotechnique, Western Digital	24 pin package, no interrupt, 12 I/O lines.	COP445L	National	
						CPU, 23 I/O lines, COP384 has extended temperature range.	COP484	National	
x						μCOM–4 single chip microprocessor family. Consists of 14 individual devices with various RAM, ROM, I/O subroutine stack level options.	μCOM-4	NEC	5
	x	x	x			Piggyback version for uPD7507, and uPD7508.	μPD75CG08	NEC	
x		x	x	x		Piggyback version for uPD7507H and uPD7508H.	μPD75CG08H	NEC	
x		x	x	x		Piggyback version for uPD7516H.	μPD75CG16H	NEC	
x		x	x	x		Piggyback version for uPD7519.	μPD75CG19	NEC	
x		x	x	x		Piggyback version for uPD7519H.	μPD75CG19H	NEC	10
x		x	x	x		Piggyback version for uPD76206, uPD75208.	μPD75CG208	NEC	
x		x	x	x		Piggyback version for uPD7527A, uPD7528A.	μPD75CG28A	NEC	
x		x	x	x		Piggyback version for uPD7533.	μPD75CG33	NEC	
x		x	x	x		Piggyback version for uPD7537, uPD7538.	μPD75CG38	NEC	
x		x	x	x		EPROM version for uPD75104, uPD75106, uPD75108	μPD75P108	NEC	15
x		x	x	x		EPROM version for uPD75308.	μPD75P308	NEC	
x	x	x	x	x		ROM-less evaluation chip, 8-bit timer/counter, 8-bit serial interface, 32 I/O lines	μPD7500	NEC	
x		x	x	x		8-Bit timer/counter, comparator-four channel, direct drive LED–14 lines, mask option I/O.	μPD7500H	NEC	
x	x	x	x	x			μPD7501	NEC	
x	x	x	x	x			μPD7502	NEC	20
x	x	x	x	x			μPD7503	NEC	
x	x	x	x	x		Eight-bit timer/counter, 8-bit serial interface, 32 I/O lines	μPD7506	NEC	
x	x	x	x	x		Eight-bit timer/counter, 8-bit serial interface, 22 I/O lines	μPD7507	NEC	
x		x	x	x		8-Bit timer/conter, 8-Bit SIO, 32 I/O lines, direct drive LED–16 lines.	μPD7507H	NEC	
x	x	x	x	x		Eight-bit timer/counter, 8-bit serial interface, 20 I/O lines	μPD7507S	NEC	25
x	x	x	x	x		Eight-bit timer/counter, 8-bit serial interface, 40 I/O lines	μPD7508	NEC	
x	x	x	x	x		Vacuum fluorescent display driver, 8-bit timer/counter, 8-bit serial interface, 32 I/O lines	μPD7508A	NEC	
x		x	x	x		Three 8-Bit Timers, 8-Bit SIO, Four Comparators, LED direct drive	μPD75104	NEC	
x		x	x	x		Three 8-Bit timers, 8-Bit SIO, Four Comparators, LED direct drive.	μPD75106	NEC	
x		x	x	x		Three 8-Bit timers, 8-Bit SIO, Four Comparators, LED direct drive.	μPD75108	NEC	30
x		x	x	x		8-Bit timer/counter, 8-Bit SIO, 14-Bit PWM, 10-Bit signal generator.	μPD7516H	NEC	
x	x	x	x	x		Vacuum fluorescent display driver, 14-bit D/A, 28 I/O lines	μPD7519	NEC	
x		x	x	x		8-Bit timer/counter, 8-Bit SIO, 14-Bit PWM, 10-Bit signal generator.	μPD7519H	NEC	
x	x	x	x	x		Directly drives 8 digit, 8 segment LED display, 24 I/O lines.	μPD7520	NEC	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture								Hardware Support	
							(For Microcomputers Only)						
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
4	CMOS	4.5–5.5	64	8	6K	43	368x4	6016		5	0.8	8	x	x
4	CMOS	2.5–6.0	64	8	8K	43	497x4	8064		5	0.8	8	x	x
4	CMOS	2.7–6.0	42	8	2K	67	128x4	2K		0.6	3.3	3.0	x	x
4	CMOS	2.7–6.0	42	8	4K	67	160x4	4K		0.6	3.3	3.0	x	x
4	CMOS	2.7–6.0	80	8	8K	42	512x4	8064		5	0.8	6	x	x
4	CMOS	2.7–6.0	42/44	8	4K	67	160x4	4K		0.4	5	3	x	x
4	CMOS	2.7–6.0	42	8	2K	67	128x4	2K		0.6	3.3	3	x	x
4	CMOS	2.7–6.0	42	8	4K	67	160x4	4K		0.6	3.3	3	x	x
4	CMOS	2.5–6.0	20	8	1K	47	64x4	1K		0.7	2.86	3	x	x
4	CMOS	2.5–6.0	24	8	1K	45	64x4	1K		0.7	2.86	2	x	x
4	CMOS	2.5–6.0	20	8	1K	45	64x4	1K		0.7	2.86	3	x	x
4	CMOS	2.5–6.0	24	8	1K	45	64x4	1K		0.7	2.86	2	x	x
4	CMOS	3–6	42	8	—	98	128x4	—		2	16	2	x	x
4	CMOS	3–6	42	8	2K	98	128x4	2K		2	16	2	x	x
4	CMOS	4–6	60	8	1536	52	40x4	1536x8		4	8/16		x	x
4	CMOS	5	40	8	1536	52	32x4	1280x8		4	8/16		x	x
4	CMOS	3–6	42	8	1280	49	64x4	1280x8		4	8/16	2	x	x
4	NMOS	5	40	8	1024	75	64x4	1024		0.45	10/20	1		
4	NMOS	5	28	8	768	57	32x4	768		0.45	10/20	1	x	x
4	NMOS	5	18	8	512	50	16x4	512		0.45	10/20	1	x	x
4	NMOS	5	16	8	512	48	16x4	512		0.45	10/20	1	x	x
4	NMOS	5	40	8	2048	75	128x4	2048		0.45	10/20	2	x	x
4	PMOS	–15	40	8	1024	75	64x4	1024		0.3	15/30	1	x	x
4	PMOS	–15	28	8	768	57	32x4	768		0.3	15/30	1	x	x
4	PMOS	–15	40	8	2048	75	128x4	2048		0.3	15/30	2	x	x
4	CMOS	5	40	8	1024	75	64x4	1024		0.5	10/20	1	x	x
4	CMOS	5	18	8	512	50	16x4	512x8		0.5	10/20	1	x	x
4	CMOS	5	16	8	512	48	16x4	512x8		0.5	10/20	1	x	x
4	CMOS	5	40	8	2K	75	128x4	2Kx8		0.5	10/20	1	x	x
4	NMOS	5	40	8	1K	68	64x4			0.45	10/20	1	x	x
4	NMOS	5	64	8	2K	75	64x4			0.45	10/20	1	x	x

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x		x	x	x		Four 8-Bit timers, 8-Bit SIO, 14-Bit PWM.	μPD75206	NEC	
x		x	x	x		Four 8-Bit timers, 8-Bit SIO, 14-Bit PWM.	μPD75208	NEC	
x		x	x	x		8-Bit timer/counter, 8-Bit SIO, direct drive LED–16 lines.	μPD7527A	NEC	
x		x	x	x		8-Bit timer/counter, 8-Bit SIO, direct drive FIP–31 lines.	μPD7528A	NEC	
x		x	x	x		Three 8-Bit timers, 8-Bit SIO, 14-Bit PWM.	μPD75308	NEC	5
x		x	x	x		Direct drive LED–16 lines, Four channel 8-Bit A/D converter.	μPD7533	NEC	
x		x	x	x		Direct drive FIP–31 lines, 8-Bit timer/counter, Zero cross detection circuit.	μPD7537A	NEC	
x		x	x	x		8-Bit timer/counter, 8-Bit SIO, direct drive FIP–31 lines, direct drive LED–16 lines.	μPD7538A	NEC	
x		x	x	x		8-Bit timer/counter, 8-Bit SIO, direct drive LED–12 lines, mask option I/O.	μPD7554	NEC	
x		x	x	x		8-Bit timer/counter, comparator-four channel, direct drive LED–14 lines, mask option I/O.	μPD7556	NEC	10
x		x	x	x		8-Bit timer/counter, 8-Bit SIO, direct drive LED–12 lines, mask option I/O.	μPD7564	NEC	
x		x	x	x		8-Bit timer/counter, comparator-four channel, direct drive LED–14 lines, mask option I/O.	μPD7566	NEC	
x		x	x	x		Evaluator chip for Series 40 microcomputers.	MSM5840	OKI	
x		x	x	x		30 I/O lines, 8-Bit programmable timer.	MSM5840RS	OKI	
x		x	x	x		13 I/O lines, 40 LCD segment outputs, 12-bit timer.	MSM58421GS	OKI	15
x		x	x	x		9 I/O lines, 24 Vacuum Fluorescent segment outputs, 8-bit timer.	MSM584223RS	OKI	
x		x	x	x		30 I/O lines, 8-bit timer/counter.	MSM5845	OKI	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1400	Panasonic	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1402	Panasonic	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1403	Panasonic	20
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1404	Panasonic	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1405	Panasonic	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1430	Panasonic	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1432	Panasonic	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1435	Panasonic	25
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1450	Panasonic	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1453	Panasonic	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1454	Panasonic	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1455	Panasonic	
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1498	Panasonic	30
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1499	Panasonic	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
4	NMOS	5	64	8	2K	75	128x4			0.45	10/20	1	x	x
4	NMOS	5	40	8	4K	124	152x4	1536x8		4	2/4	4	x	x
4	NMOS	5	40	8	4K	124	152x4	2048x8		4	2/4	4	x	x
4	NMOS	5	40	8	4K	124	256x4	4096x8		4	2/4	4	x	x
4	NMOS	5	64	8	4K	124	152x4	2048x8		4	2/4	4	x	x
4	NMOS	5	64	8	4K	124	256x4	4096x8		4	2/4	4	x	x
4	CMOS	3–5		8	2K		128x4	2Kx4		0.03	30	4	x	x
4	CMOS	5.0	16	8	512	44	64	4K	x	6	1	2	x	x
4	CMOS	5.0	18	8	512	44	64	4K	x	6	1	2	x	x
4	CMOS	5.0	18	8	1024	46	128	8K	x	5	1	2	x	x
4	CMOS	5.0	24	8	1024	46	128	8K	x	5	1	2	x	x
4	CMOS	5.0	28	8	1024	46	128	8K	x	5	1	2	x	x
4	CMOS	1.5	60	12	3K	54	64x4	1024x12		0.04	122	3	x	x
4	CMOS	1.5–3	80	10	7.5K	58	128x4	3072x10		0.04	122	4	x	x
4	CMOS	3.0	60	12	1K	78	192	12K	x	0.04	122	1	x	x
4	CMOS	1.5	60	12	1K	78	192	12K	x	0.04	122	1	x	x
4	CMOS	3.0	60	12	1K	78	192	12K	x	0.6	8	1	x	x
4	CMOS	3.0	60	9	2K	45	192	18K	x	0.04	122	0	x	x
4	CMOS	1.5	60	9	2K	45	192	18K	x	0.04	122	0	x	x
4	CMOS	3.0	60	9	2K	45	192	18K	x	0.6	8	0	x	x
4	CMOS	3.0	60	9	3K	45	192	27K	x	0.04	122	0	x	x
4	CMOS	1.5	60	9	3K	45	192	27K	x	0.04	122	0	x	x
4	CMOS	3.0	60	9	3K	45	192	27K	x	0.6	8	0	x	x
4	CMOS	5	28	8	1K	43	64x4	1Kx8		0.6	15/60		x	
4	CMOS	5	40	8	1K	43	64x4	1Kx8		0.6	15/60		x	
4	CMOS	3	60	8	1K	54	96x4	2Kx8		0.3	6/120		x	
4	CMOS	2.7 to 5.5	80	4		97	1280	6Kx8		2.5	1.6	5	x	
4	PMOS	–9	28	8	1134	58	64x4	1134		0.4 *	10	x		x
4	PMOS	–9	60	9	2032	90	128x4	2032		0.4 *	10	1		
4	PMOS	–9	60	9	4064	90	192x4	4064		0.4 *	10	1	x	
4	PMOS	–9	60	9	4064	90	192x4	4064			10	3	x	
4	PMOS	–9	44	8	1536	54	64x4	1336		0.8	10		x	
4	PMOS	–12	64	9		95	192x4	4096x9		0.4	10	3	x	
4	NMOS	5	60	9	3072	100	128x4 + 16	3072		0.262 *	10	1	x	
4	PMOS	–15	60	8	2268	57	128x4	2268		0.2 *	10		x	
4	CMOS	–3	60	8	2268	54	96x4	2268		0.032 *	61		x	
4	CMOS	–3	60	8	1827	51	65x4	1827		0.032 *	61			

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x		x	x	x		All the MN14XX series members are available in at least one other process type.	MN1499A	Panasonic	
x		x	x	x		All the MN15XX series members have bidirectional I/O lines, 8 bit counter/timer, 8 bit serial shift register, and power down feature to save contents of RAM.	MN1541	Panasonic	
x		x	x	x		All the MN15XX series members have bidirectional I/O lines, 8 bit counter/timer, 8 bit serial shift register, and power down feature to save contents of RAM.	MN1542	Panasonic	
x		x	x	x		All the MN15XX series members have bidirectional I/O lines, 8 bit counter/timer, 8 bit serial shift register, and power down feature to save contents of RAM.	MN1544	Panasonic	
x		x	x	x		All the MN15XX series members have bidirectional I/O lines, 8 bit counter/timer, 8 bit serial shift register, and power down feature to save contents of RAM.	MN1562	Panasonic	5
x		x	x	x		All the MN15XX series members have bidirectional I/O lines, 8 bit counter/timer, 8 bit serial shift register, and power down feature to save contents of RAM.	MN1564	Panasonic	
x		x	x	x		1/4 duty 32-segment LCD driver. Instruction set is same as TMS1000.	SMC1112	S-MOS	
x		x	x	x		10 I/O ports	SMC4040C	S-MOS	
x		x	x	x		12 I/O ports	SMC4041C	S-MOS	
x		x	x	x		12 I/O ports	SMC4051C	S-MOS	10
x		x	x	x		18 I/O ports	SMC4052C	S-MOS	
x		x	x	x		22 I/O ports	SMC4053C	S-MOS	
x		x	x	x		2.5 μA operating current, 27-segment LCD driver.	SMC4151F	S-MOS	
x		x	x	x		5 μA operating current, 46-segment LCD driver.	SMC4170F	S-MOS	
x		x	x	x		1.5 μA typical operating current, 96 segment LCD driver	SMC6115F	S-MOS	15
x		x	x	x		3 μA typical operating current, 96 segment LCD driver	SMC6117F	S-MOS	
x		x	x	x		100 μA typical operating current, 96 segment LCD driver	SMC6118F	S-MOS	
x		x	x	x		78 Segment LCD driver	SMC6125F	S-MOS	
x		x	x	x		78 Segment LCD driver	SMC6127F	S-MOS	
x		x	x	x		78 Segment LCD driver	SMC6128F	S-MOS	20
x		x	x	x		78 Segment LCD driver	SMC6135F	S-MOS	
x		x	x	x		78 Segment LCD driver	SMC6137F	S-MOS	
x		x	x	x		78 Segment LCD driver	SMC6138F	S-MOS	
x		x	x	x			KS51000	Samsung	
x		x	x	x			KS51200	Samsung	25
x		x	x	x		Built in LCD Driver Circuit	KS52000	Samsung	
x		x		x			LU5E4POP	Sharp	
							SM100	Sharp	
x						Built-in 8-bit A/D converter.	SM110	Sharp	
x							SM111	Sharp	30
x							SM114	Sharp	
x						Built-in display digit decoder.	SM120	Sharp	
x		x		x			SM143	Sharp	
x						Optionally expandable for external ROM/RAM.	SM200	Sharp	
x						Optionally expandable for external RAM.	SM3A	Sharp	35
x						Optionally expandable for external RAM, built-in LCD driver circuit.	SM4A	Sharp	
x						Built-in LCD driver.	SM5A	Sharp	

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
4	CMOS	2.7 to 5.5	80	8		99	192x4	4096x4		2.5	1	5	x	
4	CMOS	2.7 to 5.5	80	8		99	256x4	6144x8		2.5	1	5	x	
4	CMOS	2.7 to 5.5	80	4		97	1792	8Kx8		2.5	1.6	5	x	
4	CMOS	2.7 to 5.5	48	9		104	256x4	4096x9		4	4	6		
4	CMOS	2.7 to 5.5	64	4		93	768	4Kx9		4	1	5	x	
4	CMOS	2.7 to 5.5	64	4		93	1024	6Kx9		4	1	5	x	
4	CMOS	2.7 to 5.5	64	4		94	1024	8Kx9		4	1	5	x	
4	CMOS	–3	60	8	14K	51	65x4	14K	x	0.032 *	61	—	x	
4	CMOS	–3	48	8	1197	52	64 40	1197		0.032 *	61		x	
4	CMOS	–3	60	8	2772	49	96x4 + 32x4	2772		0.032 *	61		x	
4	CMOS	–3	60	8	4032	55	128x4	4032		0.032 *	61		x	
4	CMOS	–3.0	80	8		55	80x4/ 48x4	4032x8/ 256x6		0.032	61		x	
4	CMOS	–5	64	9	3072	93	160x4 + 16x2	3072		0.27 *	11	1	x	
4	CMOS	–5	64	10	30K	93	168x4	30K	x	0.09 *	11	1	x	
4	CMOS	–1.5	80	8	2016	49	64x4 + 24x4	2016		0.032 *	91.6		x	
4	CMOS	–1.5	60	8	1260	45	32x4 + 20x4	1260		0.032 *	91.6		x	
4	CMOS	–1.5	60	8		46	64x4/ 36x4	2016x8/ 128x8		0.032	92		x	
4	CMOS	–1.5	60	8		46	64x4/ 36x4	2016x8/ 128x6		0.032	92		x	
4	CMOS	–4.5	60	8	2016	57	64x4 + 64x4	2016		0.12 *	16		x	
4	CMOS	5	48	8	1024	94	80x4	1024		2.5	1.6	5	x	
4	CMOS	5	60/64	8	2048	94	128x4	2048		2.5	1.6		x	
4	CMOS	5	60/64	8	4096	94	256x4	4096		2.5	1.6	5	x	
4	CMOS	3–5	48	8	8K	94	80x4	8K	x	2.5	1.6	5	x	
4	CMOS	3–5	60	8	16K	94	128x4	16K	x	2.5	1.6	5	x	
4	CMOS	3–5	60	8	32K	94	256x4	32K	x	2.5	1.6	5	x	
4	CMOS	3	64	8	4096	94	160x4	4096		0.032 *	6.6	5	x	
4	CMOS	5	60/64	9	4064	92	224x4	4064		2	2	4	x	
4	CMOS	2.7 to 5.5	64	9		94	192x4	4096x9		4	2	5	x	
4	CMOS	2.7 to 5.5	64	9		94	256x4	6096x9		4	2	5	x	
4	CMOS	5	16/18/20	8	508	40	32x4	508		2	2		x	
4	CMOS	5	16/18/20	8	1016	40	56x4	1016		2	2		x	
4	CMOS	2.7 to 5.5	20	8		41	32x4	762x8		4	1		x	
4	PMOS	–15V		8	1K		64x4			0.4	15/60			
4	PMOS	–15V		8	4K		128x4			0.55	11/60			

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x		x		x			SM5E3	Sharp	
x		x		x			SM5E4	Sharp	
x		x		x			SM5E5	Sharp	
x		x		x			SM5F3	Sharp	
x		x		x			SM5G3	Sharp	5
x		x		x			SM5G4	Sharp	
x		x		x			SM5J5	Sharp	
x		x			—		SM5L	Sharp	
x						Built-in LCD driver.	SM500	Sharp	
x						Multi LCD display. Built-in LCD driver.	SM510	Sharp	10
x						Built-in melody generator circuit and LCD driver.	SM511	Sharp	
x		x		x			SM512	Sharp	
x						Optionally expandable for external RAM.	SM520	Sharp	
x		x			—		SM525	Sharp	
x						Built-in melody generator circuit and LCD driver circuit.	SM530	Sharp	15
x						Built-in LCD driver circuit.	SM531	Sharp	
x		x		x			SM534	Sharp	
x		x		x			SM535	Sharp	
x						Built-in LCD driver circuit. Capable of Dot Matrix display.	SM540	Sharp	
x						Capable of driving at 3V. Serial input/output.	SM550	Sharp	20
x						Capable of driving at 3V. Serial input/output.	SM551	Sharp	
x						Capable of driving at 3V. Serial input/output.	SM552	Sharp	
x		x			—		SM555	Sharp	
x		x			—		SM556	Sharp	
x		x			—		SM557	Sharp	25
x						Built-in LCD driver circuit.	SM563	Sharp	
x						Capable of driving at 3V. Built-in A/D converter.	SM573	Sharp	
x		x		x			SM578	Sharp	
x		x		x			SM579	Sharp	
x						High-speed, low-end type.	SM590	Sharp	30
x						High-speed, low-end type.	SM591	Sharp	
x		x		x			SM595	Sharp	
						ROMless system evaluator supports TMS1000/1070/1200/1270/1700 PMOS family members.	SE1000P	TI	
						ROMless system evaluator supports TMS1400/1470/1600/1670 PMOS family members.	SE1400P	TI	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
4	PMOS	−15V		8	2K		128x4			.4	15/60			
4	PMOS	9,15	28	8	1K	43	64x4	1Kx8		0.4	15/60		x	x
4	PMOS	9,15	28	8	1K	43	64x4	1Kx8		0.4	15/60		x	
4	PMOS	9,15	28	8	2K	40	128x4	2Kx8		0.4	15/60		x	x
4	PMOS	9,15	28	8	2K	40	128x4	2Kx8		0.4	15/60		x	x
4	PMOS	9,15	40	8	1K	43	64x4	1Kx8		0.4	15/60		x	
4	PMOS	9,15	40	8	2K	40	128x4	2Kx8		0.4	15/60		x	x
4	PMOS	9	28	8	4K	41	128x4	4Kx8		0.55	11/60		x	x
4	PMOS	9	28	8	4K	41	128x4	4Kx8		0.55	11/60		x	x
4	PMOS	9	40	8	4K	41	64x4	4Kx8		0.55	11/60		x	x
4	PMOS	9	40	8	4K	41	64x4	4Kx8		0.55	11/60		x	x
4	PMOS	9	28	8	4K	43	64x4	4Kx8		0.4	15/60		x	x
4	CMOS	4–6		8	4K		160x4			0.2			x	
4	CMOS	5	16/28	8		44	32x4	512 to 1024		5/2	1.0/2.5			x
4	NMOS	5	16/28	8		42	32x4	512 to 1024		2	2.5/25			x
4	CMOS	5	42	8		90	256x4	4Kx8		4	2	6		x
4	NMOS	5	42/66	8		90	256x4	4Kx8		4	2	6		x
4	CMOS	5	42	8		92	512x4	8Kx8		6	1.33	6		x
4	NMOS	5		8	2K		128x4			0.5			x	
4	NMOS	5		8	4K		256x4			0.25			x	
4	NMOS	4.5–6.3	28	8	2K	49	64x4	1Kx8		4	4/10	3		
4	NMOS	4.5–6.3	24	8	2K	49	64x4	1Kx8		4	4/10	3		
4	NMOS	4.5–6.3	28	8	2K	49	64x4	1Kx8		4	4/10	3		
4	NMOS	4.5–6.3	24	8	2K	49	64x4	1Kx8		4	4/10	3		
4	PMOS	13.2	40											
4 BS	CMOS	5	40	9	User defined	512				33				
4 BS	CMOS	5	40	9	User defined	512				41				
4 BS	CMOS	5	48	4xN	User defined	16								
4 BS	CMOS	5	48	4xN	User defined	16								
4 BS	CMOS	5	40	4		60				43	.023			x
4BS	TTL	5	40	9	User defined	16				10	115		x	
4BS	TTL/ECL	5		9	User defined	512				10			x	

© IC MASTER 1988

Software Support									
	High Level Language	Programs							
Cross Assembler		Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
						ROMless system evaluator supports TMS1100/1170/1300/1370 PMOS family members.	SE2200P	TI	
x		x	x	x		64 pin version, TMS–1099/SE–1, permits use of external PROM, RAM or ROM for program development. –9 volt VDD version available.	TMS1000	TI	
x		x	x	x		3.5 V output drive capability. –9 volt VDD version available.	TMS1070	TI	
x		x	x	x		A 64-pin version, TMS1098/SE–2 permits use of external PROM/ RAM/ROM for program development. –9 volt VDD version available.	TMS1100	TI	
x		x	x	x		Fluorescent drive capability otherwise same as TMS1100. –9V VDD version available.	TMS1170	TI	5
x		x	x	x		3.5 V output drive capability. –9 volt VDD version available.	TMS1270	TI	
x		x	x	x		27 I/O lines, fluorescent drive capability. –9V VDD version available.	TMS1370	TI	
x		x	x	x		Expanded memory version of TMS1000. –9V VDD version available.	TMS1400	TI	
x		x	x	x		Vacuum fluorescent drive version of TMS1400. –9V VDD version available.	TMS1470	TI	
x		x	x	x		32 I/O lines. –9V VDD version available.	TMS1600	TI	10
x		x	x	x		Vacuum fluorescent drive version of TMS1600. –9V VDD version available.	TMS1670	TI	
x		x	x	x		21 I/O lines, increased ROM version of TMS1000. –9V VDD version available.	TMS1700	TI	
x						Evaluator chip for TLCS–46A series microprocessors. Use with external 4K ROM, 34 I/O lines.	TCP4600AC	Toshiba	
x		x				Frequency Divider, Low Power	TLCS42-CMOS	Toshiba	
x		x				Frequency Divider	TLCS42-NMOS	Toshiba	15
x	x	x				LCD, VFT, DTMF, A/D, Watchdog, Low Power.	TLCS47-CMOS	Toshiba	
x	x	x				LED Driver	TLCS47-NMOS	Toshiba	
x	x	x				Upward Version of TLCS47	TLCS470	Toshiba	
x						Evaluator chip for TLCS–43 series microprocessors. Use with external 2K ROM, 35 I/O lines.	TMP4300C	Toshiba	
x						Evaluator chip for TLCS–47 series microprocessors. Use with external 4K ROM, 35 I/O lines.	TMP4700C	Toshiba	20
					National	Microcontroller, serial I/O, counter/timer, 8-bit bidirectional port.	WD4200	Western	
					National	Same as WD4200, but no 4-bit IN port.	WD4210	Western	
					National	Extended temperature (–40 - 85°C) WD4200.	WD4320	Western	
					National	Extended temperature (–40 - 85°C) WD4210.	WD4321	Western	
							WD55	Western	25
							IDT39C01C	**IDT**	**(2801)**
							IDT39C01D	**IDT**	**(2801)**
							IDT39C03A	**IDT**	**(2801)**
							IDT39C203	**IDT**	**(2801)**
x	x	x	x	x	Cypress, RCA, Sharp	Bit Slice ALU	**WS5901**	**Waferscale**	**(3376)** 30
x					Fairchild, National, NEC, Raytheon, Thomson		AM2901B	AMD	
x					Fairchild, NEC, National, Raytheon, Thomson	Eight function ALU. Four status flags. Microprogrammable. Interrupt requires AM2914 chip. 25% faster than AM2901B.	AM2901C	AMD	

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
4BS	TTL	5	48	4xN	User defined	16				8	174		x	
4BS	TTL	5	48	4xN	User defined	16				8	174		x	
4BS	CMOS	5	40	9	User defined	512				32				
4BS	CMOS	5	40	9	User defined	512				31				
4BS	CMOS	5	40	9	User defined	512				16				
4BS	CMOS	5	40	9	User defined	512				16				
4BS	CMOS	5	40	9	User defined	512				15				
4BS	TTL	5		3						14			x	
4BS	CMOS	3–15		4						4.9				
4BS	CMOS	5	40	9	User defined	512				50				
4BS	CMOS	5	48	4xN	User defined	16								
4BS	CMOS	5	48	4xN	User defined	16								
4BS	ECL	–2,–5.2		4		16							x	
4BS	ECL	–2,–5.2		8		16				10				
4BS	TTL	5	40	9	User defined					10			x	
4BS	TTL	5	48	4xN	User defined	16				8	174		x	
4BS	TTL	5	40	9	User defined	16				10	115		x	
4BS	TTL/ECL	5		9	User defined	512				10			x	
8	TTL	5		16	8K					8	0.2		x	x
8	NMOS	±5,12	40	8,16,24	65K	78				4	1.5/3.75			
8	NMOS	±5,12	40	8,16,24	65K	78				2	1.5/3.75	1		
8	NMOS	5	40	8,16,24	65K	80				3	0.8/1.3	4	x	x
8	CMOS	5	40	8,16,24	64K	246				8	1.28/8	5		
8	CMOS	5	40	8, 16, 24	64K	246				10	1.02/6.4	5		
8	CMOS	5	40	8	65K	64				4	0.5/3.5	1		
8	CMOS	5	28	8	4K	64				4	0.5/3.5	1		
8	CMOS	5	28	8	8K	64				4		1		
8	CMOS	5	28	8	4K	64				4		1		
8	CMOS	5	28	8	4K	64				4		1		
8	CMOS	5	28	8	8K	64				4		1		
8	CMOS	5	40	8	65K	64			x	4		1		

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x					Fairchild, NEC, National, Raytheon	Expandable register file. Built-in normalization and division logic. Built-in parity generation.	AM2903	AMD	
x					Fairchild, NEC, National, Raytheon	Automatic BCD add, subtract and conversion between binary and BCD. Improved byte handling.	AM29203	AMD	
							CY2901B	Cypress	
							CY2901C	Cypress	
							CY7C901-32M	**Cypress (2569)**	5
						Equivalent to "B" Spec Icc = 70mA	**CY7C901-69C**	**Cypress (2569)**	
						Equivalent to "B" Spec Icc = 90mA	**CY7C901-88M**	**Cypress (2569)**	
						Hardware stack with 9406, 10-Bit sequencer with 9408.	Macrologic Bipolar	Fairchild	
							Macrologic CMOS	Fairchild	
							IDT39C01E	**IDT (2801)**	10
							IDT39C03B	**IDT (2801)**	
							IDT39C203A	**IDT (2801)**	
							MC10800	Motorola	
					AMD, Fairchild, National, Raytheon		MC10902	Motorola	
					AMD, Fairchild, Motorola, NEC, Raytheon	Interrupt capability requires peripheral chip.	IDM2901A-2	National	15
x					Fairchild, NEC, National, Raytheon	Expandable register file. Built-in normalization and division logic. Built-in parity generation.	SFC-2903	Thomson	
x					Fairchild, National, NEC, Raytheon		SFC2901B	Thomson	
x					Fairchild, NEC, National, Raytheon	Eight function ALU. Four status flags. Microprogrammable. Interrupt requires AM2914 chip. 25% faster than AM2901B.	SFC2901C	Thomson	
x			x			Bipolar with fixed instructions	AM29X305A	AMD	
					Intel, NEC, National, Raytheon, Signetics, Mitsubishi	Priority interrupts with Intel 8214.	AM9080A	AMD	20
					Intel, NEC, National, Raytheon, Signetics, Mitsubishi	Priority interrupts with Intel 8214.	8080A	AMD	
x	x	x	x	x	Intel, NEC, Mitsubishi	8085A–2 runs at 5 MHz.	8085A	AMD	
					OKI, Harris	Compatible with NMOS 8085; supports extended instruction set	**CA80C85B**	**Calmos (2553)**	
					OKI, Harris	Static operation; compatible with NMOS 8085; supports extended instructions	**CA80C85S**	**Calmos (2553)**	
					Rockwell	Pin compatible with NMOS 6500 processors, bus compatible with MC6800. On-board clock oscillator.	**G65SC02**	**CMD Micro (2552)**	25
					Rockwell	Pin compatible with NMOS 6500 processors, bus compatible with MC6800.	**G65SC03**	**CMD Micro (2552)**	
					Rockwell	Pin compatible with NMOS 6500 processors, bus compatible with MC6800.	**G65SC04**	**CMD Micro (2552)**	
					Rockwell	Pin compatible with NMOS 6500 processors, bus compatible with MC6800.	**G65SC05**	**CMD Micro (2552)**	
					Rockwell	Pin compatible with NMOS 6500 processors, bus compatible with MC6800.	**G65SC06**	**CMD Micro (2552)**	
					Rockwell	Pin compatible with NMOS 6500 processors, bus compatible with MC6800.	**G65SC07**	**CMD Micro (2552)**	30
					Rockwell	Bus compatible with MC6800. On board clock oscillator.	**G65SC102**	**CMD Micro (2552)**	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	CMOS	5		8	4K					4		1		
8	CMOS	5	28	8	8K	64			x	4		1		
8	CMOS	5	28	8	4K	64			x	4		1		
8	CMOS	5	28	8	4K	64			x	4		1		
8	CMOS	5	28	8	8K	64			x	4		1		
8	CMOS	5	40	8	65K	64				4		1		
8	CMOS	5	28	8	4K	64				4		1		
8	CMOS	5	40	8	65K	64				4		4		
8	CMOS	5	28	8	4K	64				4		4		
8	CMOS	5	28	8	8K	64				4		1		
8	CMOS	5	28	8	4K	64				4		1		
8	CMOS	5	60	8	64K		64x8	2Kx8		2		1	x	x
8	CMOS	5	40	8	64K	91				10	0.1/0.7	2		
8	CMOS	5	40	8-24	64K	68				4	0.5/3.5	2	x	x
8	CMOS	5	40	8,16	4K	98	128x8	2Kx8		6	2.5	yes	1	
8	NMOS	5	68	8-48	1M	150			x	8		1	x	x
8	NMOS	5	68	8-48	1M	150			x	6		1	x	x
8	NMOS	5	40	8,16,24	64K	111	128x8			12	1/4	2	x	x
8	NMOS	5		8,16	4K		64x8			6	2.5/4.17	yes	1	
8	NMOS	5		8,16	4K		128x8			6	2.5/4.17	yes	1	
8	NMOS	5		8,16	4K		64x8	1Kx8		6	1.36/2.5	yes	1	
8	NMOS	5	40	8,16,24	65K	111	128x8	4Kx8		12	1/4	2	x	x
8	CMOS	5	40	8, 16	4K	96	64x8			6	1.4/2.8	1		
8	CMOS	5	40	8, 16	4K	96	128x8			6	1.4/2.8	2		
8	CMOS	5	40	8, 16	4K	96	64x8	1Kx8		6	1.4/2.8	1		
8	CMOS	5	40	8, 16	4K	96	128x8	2Kx8		6	1.4/2.8	2		
8	CMOS	4-10.5	40	8,16,24	64K	91			x	6.4		1	x	x
8	CMOS	4-6.5	40	8,16,24	64K	91			x	3.2		1	x	x
8	CMOS	4-6.5		8,16,24	64K	91			x	5	3.2/4.8	1	x	x
8	CMOS	4-6.5		8,16,24	64K	123	64x8	2Kx8	x	5	3.2/4.8	1	x	x
8	CMOS	4-6.5		8,16,24	64K	123	64x8		x	5	3.2/4.8	1	x	x
8	CMOS	4-6.5		8,16,24	64K	123	64x8		x	5	3.2/4.8	1	x	x
8	CMOS	3-6		8	8K		112			5	2.0/4.0	1	x	x

© IC MASTER 1988

Software Support									
	High Level	Programs							
Cross Assembler	Language	Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
						Bus compatible with MC6800.	**G65SC103**	**CMD Micro (2552)**	
						Bus compatible with MC6800.	**G65SC104**	**CMD Micro (2552)**	
						Bus compatible with MC6800.	**G65SC105**	**CMD Micro (2552)**	
						Bus compatible with MC6800.	**G65SC106**	**CMD Micro (2552)**	
						Bus compatible with MC6800.	**G65SC107**	**CMD Micro (2552)**	5
					Rockwell	Bus compatible with MC6800. On board clock oscillator.	**G65SC112**	**CMD Micro (2552)**	
						Bus compatible with MC6800.	**G65SC115**	**CMD Micro (2552)**	
					Rockwell	Pin compatible with NMOS 6500 processors, bus compatible with MC6800.	**G65SC12**	**CMD Micro (2552)**	
					Rockwell	Pin compatible with NMOS 6500 processors, bus compatible with MC6800.	**G65SC13**	**CMD Micro (2552)**	
					Rockwell	Pin compatible with NMOS 6500 processors, bus compatible with MC6800.	**G65SC14**	**CMD Micro (2552)**	10
					Rockwell	Pin compatible with NMOS 6500 processors, bus compatible with MC6800.	**G65SC15**	**CMD Micro (2552)**	
x	x	x	x	x		Uses 65SC00 CPU, on board sine wave generator, 16 bit timer, bus compatible with 6800.	**G65SC150**	**CMD Micro (2548)**	
						15 to 20% faster instruction execution than a standard 65C02	**65CE02**	**Commodore (2555)**	
					GTE, NCR	CMOS 6502	65C02	Commodore	
						Intel	MBL80C39	Fujitsu	15
	x	x	x	x	Intel	High integration 16-bit microprocessor with 8-bit bus, 2 independent DMA channels, 3 programmable 16 bit timers, programmable memory and chip-select logic, clock generator, object code compatible with MBL8086/8088 software.	MBL80188	Fujitsu	
	x	x	x	x	Intel	High integration 16-bit microprocessor with 8-bit bus, 2 independent DMA channels, 3 programmable 16 bit timers, programmable memory and chip-select logic, clock generator, object code compatible with MBL8086/8088 software.	MBL80188-6	Fujitsu	
x	x	x	x	x	Intel	Two 16-bit timer/counters, serial I/O port Boolean processor.	MBL8031	Fujitsu	
						Intel	MBL8035	Fujitsu	
						Intel	MBL8039	Fujitsu	20
						Intel	MBL8048	Fujitsu	
x	x	x	x	x	Intel	Two 16-bit timer/counters, serial I/O port Boolean processor, 4 K EPROM.	MBL8051	Fujitsu	
					Intel		IM80C35	GE/Intersil	
					Intel		IM80C39	GE/Intersil	
					Intel		IM80C48	GE/Intersil	25
					Intel		IM80C49	GE/Intersil	
x	x	x	x	x	Hughes		CDP1802A	GE/RCA	
x	x	x	x	x	Hughes		**CDP1802AC**	**GE/RCA (2639)**	
	x	x	x		Hughes		**CDP1802BC**	**GE/RCA (2639)**	
x	x				Hughes	8-bit counter on board.	**CDP1804AC**	**GE/RCA (2639)**	30
x	x				Hughes	8-bit counter on board.	**CDP1805AC**	**GE/RCA (2639)**	
x	x	x	x	x	Hughes	8-bit counter on board.	**CDP1806AC**	**GE/RCA (2639)**	
x	x				Motorola	Single chip CMOS CPU, 16 programmable bi-directional I/O lines.	**CDP6805E2**	**GE/RCA (2641)**	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	CMOS	5	40	8	64K	61				5	2	4		
8	CMOS	3–6		8	1089		64	1089		5	2.0/4.0	1	x	x
8	CMOS	3–6		8	2106		112	2106		5	2.0/4.0	1	x	x
8	CMOS	5	28	12		31	32	512x12		3	3.3/6.6		x	x
8	NMOS	5	18	12		29	32	256x12		4	2/10		x	x
8	NMOS	5	18	12	512x12	30	32x8	512x12		4	2/4		x	x
8	NMOS	5	28	12	512x12	30	32x8	512x12		1	4/8		x	x
8	NMOS	5	28	12	512	29	32x8	512x12		4	2/10		x	x
8	NMOS	5	40	13	1024x13	57	64x8	1024x13		8	1/2	1	x	x
8	NMOS	5	40	13	2048x13	57	64x8	2048x13		8	1/2	1	x	x
8	NMOS	5	40	8	64K	61	128			5	2.4/19.2	3	x	x
8	NMOS	5	40	8	64K	61	128	2048x8		5	2.4/19.2	3	x	x
8	NMOS	5	40	8	64K	61	128x8	4Kx8		5	2.4/19.2	3	x	x
8	NMOS	5	40	8	64K	61	128x8	4Kx8		5	2.4/19.2	3	x	x
8	NMOS	5	28	8	64K	17	120	64K		3.12	1.56	0		
8	NMOS	5	28	8	64K	17	120	64K		3.12	1.56	0		
8	NMOS	5	40	8,16,24	64K	82	64x8	2Kx8		2	1/6	8	x	x
8	NMOS	5	40	8,16,24	64K	82	192x8			2	1.6/9.6	8	x	x
8	NMOS	5	28	8–24	2K	59	64x8	1100x8		2	1/5.5	3	x	
8	CMOS	5	64	8–24			192x8	4Kx8			0.67	10	x	x
8	CMOS	5	64	8–32			256x8	16Kx8			0.67	6	x	x
8	CMOS	5	40	8–24			128x8	2Kx8			0.67	6	x	x
8	CMOS	5	64	8–24			128x8	4Kx8			0.67	6	x	x
8	CMOS	5	64	8–24		65	128x8	4Kx8			0.67	6	x	x
8	CMOS	5	64	8–24		65	128x8				0.67	6	x	x
8	CMOS	5	64	8–24		65	256X8	7872x8			0.67	6	x	x
8	CMOS	5	64	8–24			256x8	7872x8			0.67	6	x	x
8	CMOS	5	64	8–24			256x8	7872x8			0.67	6	x	x
8	CMOS	5	64	8–24			192x8	4Kx8			0.5	10	x	x
8	CMOS	5	64	8–32			256x8	16Kx8			0.5	6	x	x
8	CMOS	5	40	8–24			128x8	2Kx8			0.5	6	x	x
8	CMOS	5	64	8–24			128x8	4Kx8			0.5	6	x	x
8	CMOS	5	64	8–24		65	128x8	4Kx8			0.5	6	x	x
8	CMOS	5	64	8–24		65	128x8				0.5	6	x	x
8	CMOS	5	64	8–24		65	256x8	7872x8			0.5	6	x	x
8	CMOS	5	64	8–24			256x8	7872x8			0.5	6	x	x
8	CMOS	5	64	8–24			256x8	7872x8			0.5	6	x	x
8	CMOS	3	64	8–24			96x8	4Kx8			1	2	x	x
8	CMOS	5	64	8–24			256X8	4kX8			0.67	6	X	X

© IC MASTER 1988

Software Support									
	High Level Language	Programs							
Cross Assembler		Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
x				M	otorolaE	nhanced 6805E22	**CDP6805E3**	**GE/RCA (2641)**	
x	x				Motorola	Single chip CMOS CPU, 20 programmable bi-directional I/O lines, self check mode.	**CDP6805F2**	**GE/RCA (2641)**	
x	x				Motorola	Single chip CMOS CPU, 32 prog	**CDP6805G2**	**GE/RCA (2641)**	
x		x	x			Mask programmable prescaler for RTCC. Very low power consumption in standby mode. 50μA max, power supply range (3.2V to 5.5V)	PIC16C58	GIM	
x		x	x			Pin for pin compatible with the PIC 1654. Available in 3 temperature ranges including –40°C to + 110°C.	PIC1652	GIM	5
x		x	x		Plessey	12 I/O lines, crystal oscillator. Available in three temperature ranges including –40°C to 110°C.	PIC1654	GIM	
x		x	x		Plessey	All the features of the PIC1650A but with 20 I/O lines.	PIC1655A	GIM	
x		x	x			20 Bidirectional I/O lines. 2 μs instruction cycle time and mask programmable prescaler for RTCC.	PIC1657	GIM	
x		x	x		Plessey	Expanded PIC1650 instruction set. 1024x13 bit program ROM. 64 8-bit registers, 6 level stack, 2 external interrupts. 32 I/O lines.	PIC1670	GIM	
x		x	x		Plessey	Expanded PIC1650 instruction set. 2Kx13 bit program ROM. 64 8-bit registers, 6 level stack, 2 external interrupts. 32 I/O lines.	PIC1672	GIM	10
x		x	x		TI		PIC7000	GIM	
x		x	x		TI	External memory expansion capability.	PIC7020	GIM	
x		x	x			External memory expansion capability.	PIC7040	GIM	
x		x	x			External memory expansion capability.	PIC7041	GIM	
							SPO216	GIM	15
							SPO264	GIM	
					Thomson-CSF, Motorola, Hitachi	DMA thru HALT and three state control, software compatible with S6800.	S6801	Gould	
					Thomson-CSF, Motorola, Hitachi	ROMless version of S6801.	S6803	Gould	
					Thomson-CSF, Hitachi, Motorola, Signetics	20 programmable bidirectional I/O lines, self check ROM.	S6805	Gould	
x		x	x	x		53 I/O lines, serial communications interface	HD63A01X0	Hitachi	20
x		x	x	x		58 parallel I/O lines, parallel handshake interface	HD63A01Y0	Hitachi	
x		x	x	x		31 bidirectional I/O lines	HD63A05U0	Hitachi	
x		x	x	x		55 I/O lines, serial communications interface	HD63A05X0	Hitachi	
x		x	x	x		24 I/O lines, two timers	HD63A05X1	Hitachi	
x		x	x	x		24 I/O lines, two timers	HD63A05X2	Hitachi	25
x		x	x	x		55 I/O lines, serial communciations interface	HD63A05Y0	Hitachi	
x		x	x	x		24 I/O lines, on-chip serial interface circuit	HD63A05Y1	Hitachi	
x		x	x	x		24 I/O lines, on-chip serial interface circuit	HD63A05Y2	Hitachi	
x		x	x	x		53 I/O lines, serial communications interface	HD63B01X0	Hitachi	
x		x	x	x		58 parallel I/O lines, parallel handshake interface	HD63B01Y0	Hitachi	30
x		x	x	x		31 bidirectional I/O lines	HD63B05U0	Hitachi	
x		x	x	x		55 I/O lines, serial communications interface	HD63B05X0	Hitachi	
x		x	x	x		24 I/O lines, two timers	HD63B05X1	Hitachi	
x		x	x	x		24 I/O lines, two timers	HD63B05X2	Hitachi	
x		x	x	x		55 I/O lines, serial communications interface	HD63B05Y0	Hitachi	35
x		x	x	x		24 I/O lines, on-chip serial interface circuit	HD63B05Y1	Hitachi	
x		x	x	x		24 I/O lines, on-chip serial interface circuit	HD63B05Y2	Hitachi	
x		x	x	x		20 parallel I/O ports, 8-Bit timer, A/D converter	HD63L05F1	Hitachi	
X		X	X	X		24 I/O lines, on-chip serial interface circuit	HD63PA05Y1	Hitachi	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	CMOS	5	64	8–24			256x8	4Kx8			0.5	6	x	x
8	CMOS	5	40	8,16,24	65K	82	128x8		x	4	1.0	8	x	x
8	CMOS	5	64	8,16,24		65	256x8			4	0.5/1.0	6	x	x
8	CMOS	5	64	8–24			256x8				1	6	x	x
8	CMOS	3–6	40	8–24	65K	82	128x8	4Kx8	x	4	0.5–2.0	8	x	x
8	CMOS	5	64	8–24			192x8	4Kx8			1.0	10	x	x
8	CMOS	5	64	8–32			256x8	16Kx8			1	6	x	x
8	CMOS	5	40	8–24	65K	82	128x8	2Kx8	x	1			x	x
8	CMOS	5	40	8–24			128x8	2Kx8			1	6	x	x
8	CMOS	3–6	40	8–24	4K	65	142x8	4Kx8	x	4	0.5–1.0	6	x	x
8	CMOS	5	64	8–24			128x8	4Kx8			1	6	x	x
8	CMOS	5	64	8–24		65	128x8	4Kx8			1	6	x	x
8	CMOS	5	64	8–24		65	128x8				1	6	x	x
8	CMOS	5	64	8–24		65	256x8	7872x8			1	6	x	x
8	CMOS	5	64	8–24			256x8	7872x8			1	6	x	x
8	CMOS	5	64	8,16,24	16K	66	256x8		x	4	0.5/1.0	6	x	x
8	CMOS	3–6	40	8, 16, 24	65K	76	142x8	4Kx8		4	0.5–1.0	10	x	x
8	CMOS	3–6	40	8, 16, 24	65K	65	142x8	4Kx8		4	0.5–1.0	6	x	x
8	CMOS	5	64	8–24				128x8	4Kx8		0.67	6	x	x
8	NMOS	5	40	8,16,24	64K	72	128x8	4K/8Kx8	x	1.25	0.8/10	7	x	x
8	NMOS	5	40	8,16,24	65K	78	128x8		x	1.25	0.8/10	7	x	x
8	NMOS	5	40	8,16,24	4K	62	96x8	4K/8Kx8	x	4	1.0/10	9	x	x
8	CMOS	5	40	8–24			128x8	2Kx8			0.8	2	x	x
8	CMOS	5	40	8–24			128x8	4Kx8			1	2	x	x
8	CMOS	5	40	8–24			128x8	4Kx8			0.8	2	x	x
8	CMOS	5	40	8–24			128X8	2Kx8			1	2	x	x
8	CMOS	5	40	8–24			128x8				1	2	x	x
8	CMOS	5	40	8–24			128x8				0.8	2	x	x
8	CMOS	5	28	8–16			64x8	1100x8			1	2	x	x
8	CMOS	5	28	8–16			64x8	1804x8			1	2	x	x
8	CMOS	5	28	8–16			64x8	2508x8			1	2	x	x
8	CMOS	5	40	8–24			96x8	2056x8			1	2	x	x
8	CMOS	5	40	8–24			96x8	3848x8			1	2	x	x
8	CMOS	5	40	8–24			96x8				1	2	x	x
8	CMOS	5	40	8–24			86x8	3848x8			1	2	x	x
8	CMOS	5	28	8–16			64x8	1100x8			1	2	x	x
8	NMOS	5	40	8–32	64K	59			x	2	1/7.5	6		
8	NMOS	5	40	8–24	64K	59			x	2	1/1	3		
8	CMOS	5	40	8–24	8 K	56	64x8	2Kx8		4MHz	0.5/3.5	4		x
8	CMOS	5	40	8–24	16 K	74	192x8	4096x8		16MHz	0.25/1.75	10		x
8	CMOS	5	40	8–24	64 K	68				8MHz	0.125/0.875	2		x

© IC MASTER 1988

Software Support								
		Programs						
Cross Assembler	High Level Language	Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source
x		x	x	x		24 I/O lines, on-chip serial interface circuit	HD63PB05Y1	Hitachi
x		x	x	x		Can be used with 2732/64 type EPROMs.	HD63P01M1	Hitachi
x		x	x	x		External expandable memory device—Y1 available.	HD63P05Y0	Hitachi
x	x	x	x			24 I/O lines, on-chip serial interface circuit	HD63P05Y1	Hitachi
x		x	x	x	Motorola	CMOS version of HD6801, various options available on HD6301X, Y series.	HD6301V	Hitachi
x		x	x	x		53 I/O lines, serial communications interface	HD6301X0	Hitachi
x		x	x	x		58 parallel I/O lines, parallel handshake interface	HD6301Y0	Hitachi
x		x	x	x		CMOS version of HD6803. Various options available on HD6303X family member chips.	HD6303	Hitachi
x		x	x	x		31 bidirectional I/O lines	HD6305U0	Hitachi
x		x	x	x	Motorola	CMOS version of HD6805, various options available on HD6305U, X and Y series.	HD6305V	Hitachi
x		x	x	x		55 I/O lines, serial communications interface	HD6305X0	Hitachi
x		x	x	x		24 I/O lines, two timers	HD6305X1	Hitachi
x		x	x	x		24 I/O lines, two timers	HD6305X2	Hitachi
x		x	x	x		55 I/O lines, serial communications interface	HD6305Y0	Hitachi
x		x	x	x		24 I/O lines, on-chip serial interface circuit	HD6305Y1	Hitachi
x		x	x	x		HD6305X2 with 128 bytes RAM also available.	HD6305Y2	Hitachi
x		x	x	x	Motorola	One time programmable and reprogrammable versions available.	HD63701X	Hitachi
x		x	x	x	Motorola	One time programmable and reprogrammable versions available.	HD63705V	Hitachi
x	x		x	x			HD64A05X0	Hitachi
x		x	x	x	Motorola	HD6801 with piggyback socket for EPROM 2732.	HD68P01M0	Hitachi
x		x	x	x		64 Bytes RAM retainable on powerdown.	HD68P01V07	Hitachi
x		x	x	x			HD68P05V07	Hitachi
x		x	x	x		29 parallel I/O lines, two handshade control lines	HD6801S5	Hitachi
x		x	x	x		29 parallel I/O lines, two handshade control lines	HD6801V0	Hitachi
x		x	x	x		29 parallel I/O lines, two handshake control lines	HD6801V5	Hitachi
x		x	x	x		29 parallel I/O lines, two handshake control lines	HD680190	Hitachi
x	x	x	x			13 parallel I/O lines, serial communications interface	HD6803	Hitachi
x	x	x	x			13 parallel I/O lines, serial communications interface	HD6803-1	Hitachi
x		x	x	x		20 TTL/CMOS compatible I/O lines	HD6805S1	Hitachi
x		x	x	x		20 TTL/CMOS compatible I/O lines	HD6805S6	Hitachi
x		x	x	x		19 TTL/CMOS compatible I/O lines, PLL logic	HD6805T2	Hitachi
x		x	x	x		24 I/O lines	HD6805U1	Hitachi
x		x	x	x		24 I/O lines	HD6805V1	Hitachi
x		x	x	x		23 I/O lines, internal 8-Bit timer	HD6805W0	Hitachi
x		x	x	x		23 TTL/CMOS compatible I/O lines	HD6805W1	Hitachi
x		x	x	x		20 TTL/CMOS compatible I/O lines	HD680581	Hitachi
					AMI, Thomson-CSF, Fairchild	Various options available on HD6809X family member chips.	HD6809	Hitachi
						Same as HD6809, but with external clock, various options available on HD6809EX family member chips.	HD6809E	Hitachi
x						CMOS version of 6500/1	HY65C00/1	Hyundai
x						CMOS version of 6500/11	HY65C00/11	Hyundai
x					GTE, NCR	CMOS 6502	HY65C02	Hyundai

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	CHMOS	5	40	8,16,24	64K	111	128x8			12	1/4	2	x	x
8	CHMOS	5	40	8,16	4K	97	128x8			11	1.4/2.8		x	x
8	CHMOS	5	40	8,16	4K	96	128x8	2x8		11	1.4/2.8	1	x	x
8	CHMOS	5	40	8,16,24	64K	111	128x8	4Kx8		12	1/4	2	x	x
8	HMOS	5	40	8,16	4K	96	64x8			8	1.9	2	x	x
8	HMOS	5	40	8,16	4K	96	128x8			8	1.9	2	x	x
8	HMOS	5	40	8,16,24	4K		128x8	2Kx8		11		2	x	x
8	CHMOS	5	40	8,16,24	65K	111	128x8			12	1/4	5	x	x
8	CHMOS	5	40	8	4K	97	128x8			11	1.4/2.8	2	x	x
8	CHMOS	5	40	8	4K	97	128x8	2K		11	1.4/2.8	2	x	x
8	CHMOS	5	40	8,16,24	65K	111	128x8	4Kx8		12	1/4	5	x	x
8	CMOS	5	40	8–48	1MB					5		1	x	x
8	CMOS	5	40	8–48	1MB					8		1	x	x
8	HMOS	5	28	8,16	1K	70	64x8	1Kx8		3.58	8.38/16.8		x	x
8	HMOS	5	40	8,16,24	64K	111	128x8			12	1/4	2	x	x
8	HMOS	5	40	8,16,24	65K	111	256x8			12	1/4	2	x	x
8	HMOS	5	40	8,16	4K	96	64x8			11	1	1	x	x
8	HMOS	5	40	8,16	4K	96	128x8			11	1.4/2.8	2	x	x
8	HMOS	5	40	8	4K		256x8			11	1.4/2.8	1	x	x
8	HMOS	5	40	8,16	4K	96	64x8	1Kx8		8	1.4/2.8	1	x	x
8	HMOS	5	40	8,16	4K	96	128x8	2Kx8		11	1.4/2.8	1	x	x
8	HMOS	5	40	8	4K	96	256x8	4Kx8		11	1.4/2.8	1	x	x
8	HMOS	5	40	8,16,24	64K	111	128x8	4Kx8		12	4	2	x	x
8	HMOS	5	40	8,16,24	65K	111	256x8	8Kx8		12	1.4/2.8	2	x	x
8	NMOS	±5,12	40	8,16,24	65K	78				2	1.5/3.75	1	x	x
8	HMOS	5	40	8,16,24	65K	102				3,5,6	0.67/1.3	4	x	x
8	HMOS	5	40	8,16	4K	111	64x8	1Kx8		11	1.3	1	x	x
8	HMOS	5	40	8,16,24	65K	111	128x8	4Kx8		12	4	2	x	x
8	CMOS	5	40	8	64	150	128x8			16	0.62/8.3	5		
8	CMOS	5	40	8	64Kb	150	256x8			16	0.62/8.3	6		
8	CMOS	5	40	8	64	150	128x8	4Kx8		16	0.62/8.3	5		
8	CMOS	5	40	8	64	150	128x8			16	0.62/8.3	6		
8	NMOS	5	40	8	64	150	128x8			15	0.66/8.3	5		
8	NMOS	5	40	8	64	150	256x8			12	1/8.4	6		
8	NMOS	5	40	8	64	150	128x8	4Kx8		15	0.66/8.3	5		
8	NMOS	5	40	8	64	150	256x8	8Kx8		12	1/8.3	6		

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x		x	x	x		Two 16-bit timer/counters, serial port, Boolean processor, MIL temp.	M80C31	Intel	
x		x	x	x		27 I/O lines, 8-bit counter/timer. Can use external RAM or ROM, MIL temp.	M80C39	Intel	
x		x	x	x		27 I/O lines, programmable ROM, 8-bit counter/timer. Can use external RAM or ROM, MIL temp.	M80C49	Intel	
x		x	x	x		M80C31 with mask programmable ROM, MIL temp.	M80C51	Intel	
						CPU with power down mode. Can be used with external RAM or ROM.	M8035HL	Intel	5
						CPU with power down mode. Can be used with external RAM or ROM.	M8039HL	Intel	
						27 I/O lines, programmable ROM, 8-bit counter/timer. Can be used with external RAM or ROM.	M8749H	Intel	
x	x	x	x	x	Intersil	Two 16 bit timer/counters, serial I/O port. Boolean processor. Can be used with external ROM or RAM.	80C31	Intel	
x		x	x	x	NEC, National, Toshiba	Low power operation. 27 I/O lines. Can be used with external RAM and ROM.	80C39	Intel	
		x	x	x		Low power operation. 27 I/O lines. Can be used with external RAM and ROM.	80C49	Intel	10
x	x	x	x	x	Intersil	Two 16 bit timer/counters, serial I/O port. Boolean processor. Can be used with external ROM or RAM.	80C51	Intel	
x	x	x	x	x			80C88	Intel	
x	x	x	x	x			80C88-2	Intel	
x		x	x	x	Signetics, NEC	Software subset of 8048, 21 I/O lines.	8021H	Intel	
x	x	x	x	x	AMD	Two 16 bit counters, serial I/O port Boolean processor.	8031AH	Intel	15
x	x	x	x	x		Three 16-bit timer/counters. Serial I/O port.	8032	Intel	
x		x	x	x		Can be used with external ROM and RAM. 27 I/O lines, 8-bit timer/counter.	8035AHL	Intel	
x		x	x	x	AMD	Can be used with external ROM and RAM.	8039AHL	Intel	
		x	x	x		27 I/O lines. Can be used with external RAM and ROM.	8040AHL	Intel	
x		x	x	x	AMD	1K ROM. 27 I/O lines. 8048H–1 has 11 MHz clock. Can be used with external RAM and ROM.	8048AH	Intel	20
x		x	x	x	AMD, NEC, Fujitsu, Signetics, Mitsubishi	Can be used with external ROM and RAM.	8049AH	Intel	
		x	x	x		27 I/O lines. Can be used with external RAM and ROM.	8050AH	Intel	
x	x	x	x	x	AMD	Two 16 bit counters, serial I/O port Boolean processor.	8051AH	Intel	
x	x	x	x	x		Three 16-bit timer/counters. Serial I/O port.	8052	Intel	
x	x	x	x	x	AMD, NEC, TI, National, Mitsubishi	8080A–1 runs at 3.125 MHz max, –2 runs at 2.63 MHz max.	8080A	Intel	25
x	x	x	x	x	AMD	8085AH–1 runs 6 MHz, AH–2 runs 5 MHz. M8085AH Mil version.	8085AH	Intel	
x		x	x	x	AMD	1K EPROM. Can be used with external ROM and RAM.	8748H	Intel	
x	x	x	x	x		Two 16 bit counters, serial I/O port Boolean processor, 4K EPROM.	8751H	Intel	
x					Intel		80C31	Matra-Harris	
	x						80C32	Matra-Harris	30
	x				Intel		80C51	Matra-Harris	
	x						80C52	Matra-Harris	
x					Intel		8031	Matra-Harris	
x					Intel		8032	Matra-Harris	
	x				Intel		8051	Matra-Harris	35
	x				Intel		8052	Matra-Harris	

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	CMOS	5	40	8	64Kb	160	256x8	16Kx8		12	1.0/8.3	6		x
8	CMOS	5	80	8	64K	71	128x8	4Kx8		10	0.8/3.6	16	x	x
8	NMOS	5	40	8	4K	96	128			6	25/5	1		
8	CMOS	5	40	8	4K	98	64	1K		6	25/5	1		
8	CMOS	5	40	8	4K	97	128	2K		6	2.5/5	1		
8	CMOS	5	42	8	4K	97	128	2K		11	1.36/2.72	1		
8	CMOS	5	40	8	4K	97	128			11	1.36/2.72	1		
8	CMOS	5	40	8	4K	97	128			11	1.36/2.72	1		
8	CMOS	5	40	8	4K	97	128	2K		11	136/2.72	1		
8	CMOS	5	40	8	4K	97	128	2K		11	1.36/2.72	1		
8	CMOS	5	40	8	4K	97	128	2K		11	1.36/2.72	1		
8	CMOS	5	40	8	4K	97	128	2K		11	1.36/2.72	1		
8	CMOS	5	40	8	64K	113			x	5	0.8/4.0	4		
8	CMOS	5	40	8	64K	114			x	5	0.8/1.8	4		
8	CMOS	5	40	8	4K	96	256			6	2.5/5	1		
8	CMOS	5	42	8	4K	97	128	2K		11	1.36/2.72	1		
8	CMOS	5	40	8	4K	96	256	4K		6	2.5/5	1		
8	CMOS	5	64	8	128K	69				8	1/4.5	11	x	x
8	CMOS	5	64	8	128K	69				10	0.8/3.6	6	x	x
8	CMOS	5	52	8	8K	69	96x8	3Kx8		4	2/9	5	x	x
8	CMOS	5	52	8	8K	69	96x8	3Kx8		4	2/9	5	x	x
8	CMOS	5	52	8	8K	69	96x8	4Kx8		4	2/9	5	x	x
8	CMOS	5	64	8	64K	69	128x8	4Kx8		4	2/9	5	x	x
8	CMOS	5	64	8	64K	69	128x8	4Kbx8		8	1/4.5	5	x	x
8	CMOS	5	72	8	64K	69	144x8	4Kx8		4	2/9	6	x	x
8	CMOS	5	64	8	64K	69	144x8	4Kx8		4	2/9	6	x	x
8	CMOS	5	72	8	64K	69	144x8	4Kx8		4	2/9	6	x	x
8	CMOS	5	64	8	64K	69	192x8	6Kx8		4	2/9	5	x	x
8	CMOS	5	72	8	64K	69	144x8	6Kx8		4	2/9	6	x	x
8	CMOS	5	64	8	64K	69	144x8	6Kbx8		4	2/9	5	x	x
8	CMOS	5	64	8	64K	69	144x8	6Kbx8		4	2/9	5	x	x
8	CMOS	5	64	8	64K	69	144x8	6Kbx8		4	2/9	5	x	x
8	CMOS	5	64	8	64K	69	256x8	8Kbx8		8	1/4.5	5	x	x
8	CMOS	5	64	8	64K	69	256x8	8Kbx8		8	1/4.5	5	x	x
8	CMOS	5	64	8	64K	69	256x8	8K		8	1/4.5	6	x	x
8	CMOS	5	64	8	64K	69	256x8	8Kbx8		12	0.6/2.7	5	x	x
8	CMOS	5	72	8	64K	69	256x8	8K		8	1/4.5	6	x	x
8	CMOS	5	52	8	8K	69	128x8	4Kx8		4	2/9	5	x	x
8	CMOS	5	60	8	64K	69	192x8	6Kbx8		4	2/9	5	x	x
8	CMOS	5	60	8	64K	69	192x8	6K		4	2/9	6	x	x
8	CMOS	5	64	8	64K	69	160x8	6Kx8		8	1/4.5	5	x	x
8	CMOS	5	52	8	8K	69	96x8	3Kx8		4	2/9	5	x	x
8	CMOS	5	64	8	64K	69	128x8	6Kx8		4	2/9	6	x	x

© IC MASTER 1988

Software Support									
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit	Alternate Sources	Comments	Device	Source	Line
	x	x	x	x	OKI	32-bit timer/counter, watchdog capability	83C154	Matra-Harris	
x		x		x			M37450M2	Mitsubishi	
						Single-Chip 8-bit Microcomputer.	M5L8039-6	Mitsubishi	
						Slave Microcomputer.	M5L8041A	Mitsubishi	
						Single-Chip 8-bit Microcomputer.	M5MC49A	Mitsubishi	5
						Single-Chip 8-bit Microcomputer.	M5MC49H	Mitsubishi	
						Single-Chip 8-bit Microcomputer.	M5M80C39A	Mitsubishi	
						Single-Chip 8-Bit Microcomputer	M5M80C39H	Mitsubishi	
						Single-Chip 8-bit Microcomputer.	M5M80C49A	Mitsubishi	
						Single-Chip 8-bit Microcomputer.	M5M80C49AT	Mitsubishi	10
						Single-Chip 8-bit Microcomputer.	M5M80C49H	Mitsubishi	
						Single-Chip 8-bit Microcomputer.	M5M80C49HT	Mitsubishi	
						Eight-bit parallel processor	M5M80C55A	Mitsubishi	
						8-Bit Parallel Processor	M5M80C85A-2	Mitsubishi	
						Single-Chip 8-bit Microcomputer.	M5M8040L	Mitsubishi	15
						Single-Chip 8-bit Microcomputer.	M5M8050H	Mitsubishi	
						Single-Chip 8-bit Microcomputer.	M5M8050L	Mitsubishi	
x		x		x	Rockwell	Serial I/O, A/D Converter, UART, step motors, PWM	M50734	Mitsubishi	
x		x		x			M50734-10	Mitsubishi	
x		x		x	Rockwell		M50740	Mitsubishi	20
x		x		x	Rockwell	Mask ROM version of M50740	M50740A	Mitsubishi	
x		x		x	Rockwell	4 Kb version of M50740	M50741	Mitsubishi	
x		x		x	Rockwell	56 I/O lines, serial I/O	M50742	Mitsubishi	
x		x		x	Rockwell	56 serial I/Os	M50743	Mitsubishi	
x		x		x			M50744	Mitsubishi	25
x		x		x			M50744-PGYS	Mitsubishi	
x		x		x			M50744T	Mitsubishi	
x		x		x	Rockwell	Serial I/O	M50745	Mitsubishi	
x		x		x			M50746	Mitsubishi	
x		x		x	Rockwell	One-time programmable (OTP) version of M50746S	M50746E	Mitsubishi	30
x		x		x	Rockwell	EPROM version of M50746S	M50746ES	Mitsubishi	
x		x		x	Rockwell	A/D, D/A, PWM	M50746S	Mitsubishi	
x		x		x	Rockwell	Serial I/O, UART	M50747	Mitsubishi	
x		x		x	Rockwell	EPROM version of M50747	M50747E	Mitsubishi	
x		x		x			M50747ES	Mitsubishi	35
x		x		x	Rockwell	12-MHz version of M50747	M50747H	Mitsubishi	
x		x		x			M50747T	Mitsubishi	
x		x		x	Rockwell	4 Kb version of M50757	M50752	Mitsubishi	
x		x		x	Rockwell	Serial I/O, A/D, PWM	M50753	Mitsubishi	
x		x		x			M50753T	Mitsubishi	40
x		x		x	Rockwell	High-voltage I/Os, VFD, PWMs	M50754	Mitsubishi	
x		x		x	Rockwell	High-voltage (–35V) I/O	M50757	Mitsubishi	
x		x		x			M5078	Mitsubishi	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	CMOS	5	40	8	4K	98	64	1K		12	1.25/2.5	1		
8	CMOS	3–5	80	8	16K	69	128x8	4Kbx8		4	2/9	5	x	x
8	CMOS	5	80	8	16K	69	128x8	4K		4	2/9	6	x	x
8	CMOS	3–5	80	8	16K	69	512x8	4Kbx8		4	2/9	5	x	x
8	CMOS	5	80	8	16K	69	512x8	12Kx8		4	2/9	6	x	x
8	CMOS	5	64	8	64K	69	128x8	4Kbx8		4	2/9	5	x	x
8	CMOS	5	64	8	64K	69	192x8	8Kbx8		11	2/9	5	x	x
8	CMOS	5	64	8	64K	69	192x8	16Kx8		4	2/9	6	x	x
8	CMOS	5	60	8	64K	69	192x8	8Kx8		8	1/4.5	6	x	x
8	CMOS	5	52	8	16K	69	144x8	6Kx8		5	1.6/7.2	6	x	x
8	CMOS	5	52	8	16K	69	144x8	8Kx8		5	1.6/7.2	6	x	x
8	CMOS	5	52	8	16K	69	144x8	4Kx8		5	1.6/7.2	6	x	x
8	CMOS	5	72	8	64K	69	192x8	8Kx8		4	2/9	6	x	x
8	CMOS	5	64	8	64K	69	192x8	10Kx8		4	2/9	6	x	x
8	CMOS	5	64	8	64K	69	160x8	16Kx8		4	2/9	6	x	x
8	CMOS	5	64	8	64K	69	192x8	10Kx8		4	2/9	6		x
8	CMOS	5	64	8	64K	69	192x8	10Kx8		4	2/9	6		x
8	CMOS	5	64	8	64K	69	256x8	16Kx8		4	2/9	6		x
8	CMOS	5	64	8	64K	69	160x8	10Kx8		4	2/9	6	x	x
8	CMOS	5	72	8	64K	69	160x8	6Kx8		4	2/9	6	x	x
8	CMOS	5	64	8	64K	69	160x8	16Kx8		4	2/9	6	x	x
8	CMOS	3–6	40	8,16,24	8K	51	112			1	2/10	4	x	x
8	CMOS	3–6	28	8,16,24	2K	51	64x8	1089x8		1	2/10	4	x	x
8	CMOS	3–6	40	8,16,24	8K	51	112x8	2.1Kx8		1	2/10	4	x	x
8	CMOS	3–6	40	8,16,24	8K	51	112x8	2106x8		1	2/10	4	x	x
8	CMOS	3–6	28	8,16,24	2K	51	64x8	1.1x8		1	2/10	4	x	x
8	CMOS	3–6	40	8,16,24	8K	51	112x8	2.1Kx8		1	2/10	4	x	x
8	NMOS	5	40	8,16,24	4K		128x8	4Kx8		4		1	x	x
8	HMOS	5	40	8,16,24	64K	82	128x8			1.5			x	x
8	HMOS	5	40	8,16,24	64K	82	128x8			2			x	x
8	CMOS	3–6	40	8,16,24	4K	60	176	4Kx8		2.1	2/11	3	x	x
8	CMOS	3–5	40	8,16,24	4K	59	176x8	7.7Kx8		2.1				
8	HCMOS	5	68	8–24		62	176x8	6208x8	x	4	0.25/1.0	4		
8	CMOS	3–6	48 or 52	8,16,24,32	64K	145	256x8	8Kx8		2,1	1/10	21	x	x
8	CMOS	5	48/52	8, 16, 24, 32	64K	145	256x8	2Kx8		1/10	21		x	x

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
						Slave Microcomputer.	M508041AH	Mitsubishi	
x		x		x	Rockwell	LCD controller, serial I/O	M50930	Mitsubishi	
x		x		x			M50930T	Mitsubishi	
x		x		x	Rockwell	512 byte RAM version of M50930	M50931	Mitsubishi	
x		x		x			M50931-PGYS	Mitsubishi	5
x		x		x	Rockwell	A/D converter, VFD	M50940	Mitsubishi	
x		x		x	Rockwell		M50941	Mitsubishi	
x		x		x			M50941-PGYS	Mitsubishi	
x		x		x			M50943	Mitsubishi	
x		x		x			M50950	Mitsubishi	10
x		x		x			M50950-PGYS	Mitsubishi	
x		x		x			M50951	Mitsubishi	
x		x		x			M50954	Mitsubishi	
x		x		x			M50955	Mitsubishi	
x		x		x			M50955-PGYS	Mitsubishi	15
x		x		x			M50957	Mitsubishi	
x		x		x			M50957ES	Mitsubishi	
x		x		x			M50959	Mitsubishi	
x		x		x			M50963	Mitsubishi	
x		x		x			M50964	Mitsubishi	20
x		x		x			M50964-PGYS	Mitsubishi	
x		x	x	x	RCA	Single chip CPU and I/O, up to 8K external address space, 16 programmable bidirectional I/O lines, multiplexed bus.	**MC146805E2**	**Motorola (2901)**	
x		x	x	x	RCA	20 I/O (16 programmable bidirectional) self check mode, EPROM version available.	**MC146805F2**	**Motorola (2901)**	
x		x	x	x	RCA	32 programmable bidirectional I/O lines. Self check mode, EPROM version available.	**MC146805G2**	**Motorola (2901)**	
x		x	x	x		Self check, frequency synthesis, audio tone output, dead man timer.	MC146805H2	Motorola	25
x		x	x	x		EPROM version of 146805F2	**MC1468705F2**	**Motorola (2901)**	
x		x	x	x		32 programmable bidirectional I/O lines, bootstrap, EPROM version of 146805F2.	**MC1468705G2**	**Motorola (2901)**	
x			x		Fairchild, Mostek, SGS	Recommended replacement MC6805XX.	MC3870	Motorola	
x	x	x	x	x		1.5 MHz version of MC6803	MC68A03	Motorola	
x	x	x	x	x		Serial I/O, timer, expansion bus.	MC68B03	Motorola	30
x		x	x	x		Single chip CPU, SCI SPI, 16-bit timer	**MC68HC05C4**	**Motorola (2901)**	
						68HC054C4 with 8K bytes of ROM	**MC68HC05C8**	**Motorola (2901)**	
x	x	x	x	x		8-bit Microcomputer with Liquid Crystal Driver Circuitry	MC68HC05L6	Motorola	
x	x	x	x	x		512 bytes EEPROM, 2 serial ports, 16-bit timer, pulse accumulator, 8-channel A/D	MC68HC11	Motorola	
x	x	x	x	x		2 Kbytes of EEPROM, enhanced 16-bit timer system, eight-channel 8-bit A/D converter	MC68HC81A2	Motorola	35

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture								Hardware Support	
							(For Microcomputers Only)						
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	NMOS	5	40	8,16,24	64K	72			x	2	1/6	3	x	x
8	HMOS	5			1M	56								
8	HMOS	5	40	8,16,24	64K	82	128x8	2Kx8		1	2/12	2	x	x
8	HMOS	5	40	8,16,24	64K	89	192x8	4Kx8		1.25	1.6/9.6	8	x	x
8	HMOS	5	40	8,16,24	64K	82	192x8	4Kx8		1.25	1	1	x	x
8	NMOS	5	40	8,16,24	64K	72	128x8			2	1/6	3	x	x
8	HMOS	5	40	8,16,24	64K	82	128x8			1	1.6/9.6	8	x	x
8	HMOS	5	40	8,16,24	64K	89	128x8			1	1.6/9.6	8	x	x
8	HMOS	5	40	8,16,24	64K	89	192x8			1.25	1.6/9.6	8	x	x
8	HMOS	5	20	8,16,24	4K	42	32x8	0.5x8		0.9	0.6/14	3	x	x
8	HMOS	5	20	8,16,24	4K	42	32x8	1Kx8		0.9	0.6/14	3	x	x
8	HMOS	5	28	8,16,24	4K	42	32x8	1Kx8		0.9	0.6/14	3	x	x
8	HMOS	5	40	8,16,24	4K	59	96x8	2Kx8		1	2/11	3	x	x
8	HMOS	5	40	8,16,24	4K	59	96x8	3.7Kx8		1	2/11	3	x	x
8	HMOS	5	28	8,16,24	2K	59	64x8	1.1Kx8		2	1/5.5	3	x	x
8	HMOS	5	28	8,16,24	2K	59	64x8	1.8Kx8		2	2/11	3	x	x
8	HMOS	5	40	8,16,24	4K	59	64x8	2Kx8		1	2/11	3	x	x
8	HMOS	5	40	8,16,24	4K	59	64x8	3.8Kx8		1	2/11	3	x	x
8	HMOS	5	28	8,16,24	4K	59	64x8	1480x8		1	2/11	3	x	x
8	HMOS	5	28	8,16,24	4K	59	104x8	3.7Kx8		1	2/11	3	x	x
8	HMOS	5	28	8,16,24	4K	59	64x8	2.5Kx8		1.05	2/11	3		x
8	HMOS	5	40	8,16,24	4K	59	64x8	2Kx8		1	2/11	3	x	x
8	HMOS	5	40	8,16,24	4K	59	112x8	3.8Kx8		1	2/11	3	x	x
8	NMOS	5	40	8,16,24	64K	72			x	2	1/6	3	x	x
8	HMOS	5	40	8–32	64K	59			x	2	1/7.5	6	x	x
8	HMOS	5	40	8–32	64K	59			x	2	1/7.5	6	x	x
8	HMOS	5	48	8,16,24	64K	82	128x8	2Kx8		1.25	1.6/9.6	8		x
8	HMOS	5	48	8,16,24	64K	82	128x8			1.25	1.6/9.6	8		x
8	HMOS	5	40	8,16,24	64K	89	192x8	4Kx8		1.25	1.6/9.6	8	x	x
8	HMOS	5	28	8,16,24	2K	59	112x8	1.8Kx8		1	2/11	3	x	x
8	HMOS	5	28	8,16,24	2K	59	112x8	1804x8		1	2/11	3	x	x
8	HMOS	5	40	8,16,24	4K	59	112x8	3.8K		1	2/11	3	x	x
8	HMOS	5	40	8,16,24	4K	59	112x8	3776x8		1	2/11	3	x	x
8	HMOS	5	28	8,16,24	4K	59	104x8	3.7Kx8		1	2/11	3	x	x
8	HMOS	5	40	8,16,24	4K	59	112x8	3.8Kx8		1	2/11	3	x	x
8	HMOS	5	40	8,16,24	4K	59	112x8	3776x8		1	2/11	3	x	x
8	CMOS		28	8	32K	44	64x8	1Kx8		20	1	3	x	x
8	CMOS		24	8	32K	44	64x8	1Kx8		20	1	3	x	x

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x	x		x		AMI, Thomson-CSF, Fairchild, Hitachi	DMA through HALT and three state control, addressing modes.	MC6800	Motorola	
						MC68008 completely code compatible with MC68000. 32 bit internal architecture, general purpose machine.	**MC68008**	**Motorola (2896)**	
x	x	x	x	x	AMI, Hitachi, Fujitsu, Fairchild	On-chip clock, 16-bit timer 31 I/O lines, serial I/O, four selectable baud rates.	**MC6801**	**Motorola (2900)**	
x	x	x	x	x		Same as 6801 with 4K ROM and selectable baud rates.	**MC6801U4**	**Motorola (2900)**	
x	x	x	x	x		Same as 6801-U4 with1.25 MHz internal speed.	**MC6801U4-1**	**Motorola (2900)**	5
x	x	x	x	x	AMI, Thomson-CSF, Fairchild, Hitachi	6800 CPU plus clock and RAM, 32 bytes standby RAM.	**MC6802**	**Motorola (2902)**	
x	x	x	x	x	AMI, Thomson-CSF, Hitachi	Expansion bus, ROMless 6801.	**MC6803**	**Motorola (2900)**	
x	x	x	x	x		Serial I/O, timer, external clock, standby RAM.	**MC6803E**	**Motorola (2900)**	
x	x	x	x	x		ROMless 6801u4, external bus.	**MC6803U4**	**Motorola (2900)**	
x		x	x	x		20-pin version of MC6804P2, 12 I/O, 512 byte ROM.	**MC6804J1**	**Motorola (2901)**	10
x		x	x	x		20-pin version of 6804P2, 12 I/O, 1K byte ROM.	**MC6804J2**	**Motorola (2901)**	
x	x	x	x	x	Signetics	20 bidirectional I/O lines, 64 byte data ROM, self check.	**MC6804P2**	**Motorola (2901)**	
x		x	x	x		128 bytes EEPROM, two 8-bit timers, 32 I/O, 16 bytes standby RAM, serial communication, port	MC6805K2	Motorola	
x		x	x	x		256 bytes EEPROM, two 8-bit timers, 32 I/O, 16 bytes standby RAM, serial communication port	MC6805K3	Motorola	
x		x	x	x	AMI, Thomson-CSF, Hitachi, Signetics	20 programmable bidirectional I/O lines, timer/counter.	**MC6805P2**	**Motorola (2901)**	15
x		x	x	x	Signetics	20 programmable bidirectional I/O lines, self check, EPROM version available.	**MC6805P6**	**Motorola (2901)**	
x		x	x	x	Thomson-CSF, Signetics	A/D on chip, 31 I/O lines.	**MC6805R2**	**Motorola (2901)**	
x		x	x	x	Signetics	4 channel 8-bit A/D converter, self check.	**MC6805R3**	**Motorola (2901)**	
x		x	x	x	Signetics	4-channel 8-bit A/D converter, SPI, watchdog timer, self check.	**MC6805S2**	**Motorola (2901)**	
x		x	x	x		Four timers, A/D converter, serial communication port	**MC6805S3**	**Motorola (2901)**	20
x		x	x	x	Signetics	19 I/O, on chip PLL, self check.	MC6805T2	Motorola	
x		x	x	x	Signetics	32 I/O lines, self check.	**MC6805U2**	**Motorola (2901)**	
x		x	x	x	Signetics	24 bidirectional I/O, self check	**MC6805U3**	**Motorola (2901)**	
x	x	x	x	x	AMI, Thomson-CSF, Fairchild, Hitachi	Same as 6802 with RAM.	MC6808	Motorola	
x	x	x	x	x	AMI, Thomson-CSF, Fairchild, Hitachi	On chip oscillator enhanced 6800 command set.	**MC6809**	**Motorola (2902)**	25
x	x	x	x	x	AMI, Thomson-CSF, Fairchild, Hitachi	External clocking for synchronization of multiprocessor systems.	**MC6809E**	**Motorola (2902)**	
x	x	x	x	x	Signetics	128 bytes of dual port RAM, Intelligent peripheral controller, SCI.	MC68120	Motorola	
x	x	x	x	x	Signetics	ROMless version of 68020.	MC68121	Motorola	
x	x	x	x	x		EPROM version of 680144.	MC68701U4	Motorola	
x		x	x	x		20 programmable bidirectional I/O lines. Self programming bootstrap, EPROM version for 6805P2, P4, P6.	**MC68705P3**	**Motorola (2901)**	30
x		x	x	x		Same as 68705P3 except PS has software security.	**MC68705P5**	**Motorola (2901)**	
x		x	x	x		4 channel A/D, 31 I/O lines (24 programmable), EPROM.	**MC68705R3**	**Motorola (2901)**	
x		x	x	x		Same as 68705R3 except includes software security.	**MC68705R5**	**Motorola (2901)**	
x		x	x	x		EPROM version of the MC6805S3	**MC68705S3**	**Motorola (2901)**	
x		x	x	x		EPROM version of MC6805U3.	**MC68705U3**	**Motorola (2901)**	35
x		x	x	x		Same as 68705U3 except includes software security.	**MC68705U5**	**Motorola (2901)**	
x		x	x	x	Sierra	Software Selectable I/O Options	COP820C	National	
x		x	x	x	Sierra	Software Selectable I/O Options	COP821C	National	

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	CMOS		28	8	32K	44	128x8	2Kx8		20	1	3	x	x
8	CMOS		28	8	32K	44	64x8	1Kx8		20	1	3	x	x
8	CMOS		24	8	32K	44	64x8	1Kx8		20	1	3	x	x
8	CMOS		20	8	32K	44	64x8	1Kx8		20	1	3	x	x
8	NMOS	5	40	8,16	4K		256x8			11	1.36	1	x	x
8	XMOS	5	40	8,16	4K	96	64x8			11	1.36	1		
8	NMOS	5	40	8,16	4K	96	64x8			11	1.36	1	x	x
8	XMOS	5	40	8,16	4K	97	128x8			11	1.36	1	x	x
8	XMOS	5	40	8,16	4K	97	128x8			11	1.36	1	x	x
8	XMOS	5	40	8,16	4K		256x8			11	1.36	1		
8	NMOS	5		8,16	4K		256x8			11	1.36	1	x	x
8	NMOS	5	40	8,16	4K		256x8			11	1.36	1	x	x
8	XMOS	5	40	8,16	4K		64x8	1Kx8		11	1.36	1		
8	NMOS	5		8,16	4K		64x8	1Kx8		11	1.36	1	x	x
8	XMOS	5	40	8,16	4K		128x8	2Kx8		11	1.36	1		
8	XMOS	5	40	8,16	4K		128x8	2Kx8		11	1.36	1		
8	XMOS	5	40	8,16	4K		256x8	4Kx8		11	1.36	1		
8	NMOS	5		8,16	4K		256x8	4Kx8		11	1.36	1		
8	NMOS	5	40	8,16	4K		256x8	4Kx8		11	1.36	1	x	x
8	NMOS	5	40	8,16	4K		256x8	4Kx8		11	1.36	1	x	x
8	CMOS	5	40	8–32	64K	158				2.5	1.6/9.2	5	x	x
8	CMOS	5	40	8–32	64K	158				1	4/23	5	x	x
8	CMOS	5	40	8–32	64K	158				4	1/5.75	5	x	x
8	XMOS	5	48	8, 16, 24, 32	16 M	108				10	0.4/12	3		
8	XMOS	5		8,16	4K		256	See comments		11				x
8	CMOS	5	40	8,16,24		60	64x8	2Kx8		2	1/3.5	4	x	x
8	CMOS	5	40	8,16,24	64K	56				3	0.67/2.3	2	x	x
8	NMOS	5	40	8,16,24		56	64x8	2Kx8		2	1/3.5	4	x	x
8	NMOS	5	40	8,16,24	16K	60	192x8	3Kx8		2	1/3.5	10	x	x
8	CMOS	5	40	16	1M	101			x	8		3		x
8	CMOS	5	64	8–32	64K	101	128x8							
8	CMOS	5	64	8–32	64K	101	128x8	4Kx8						
8	NMOS	5	64	8–32	56K	165	256x8	1Kx8	x	12	1 *			
8	NMOS	5	40	8–32	64K	158	26x8			4	2	3		
8	NMOS	5	64	8–32	65K	165	256x8		x	12				
8	NMOS	5	64	8–32	56K	165	256x8	1Kx8	x	12	1 *			
8	NMOS	5	64	8–32	65K	153	256x8		x	12	1 *			
8	NMOS	5	64	8–32	60K	153	256X8	4096X8	x	12	1 *			
8	CMOS	2.5–6	40	8–16	4K	97	64x8			6	2.5/5	1	x	
8	CMOS	2.5–6	40	8–16	4K	97	64x8	1Kx8		6	2.5/5	1	x	

© IC MASTER 1988

Software Support									
		Programs							
Cross Assembler	High Level Language	Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
x		x	x	x	Sierra	Software Selectable I/O Options	COP840C	National	
x		x	x	x	Sierra	EEPROM version ofVersion of COP820C	COP8720C	National	
x		x	x	x	Sierra	EEPROM Version of COP821C	COP8721C	National	
x		x	x	x	Sierra	EEPROM Version of COP822C	COP8722C	National	
x		x	x	x		ROMless INS8050U	INS40U	National	5
x		x	x	x	Intel, NEC, AMD, Fujitsu, Signetics	ROMless version of INS8048.	INS8035	National	
x		x	x	x	Intel	Lowpower version of INS8035.	INS8035L	National	
x		x	x	x	Intel, NEC, AMD	ROMless version of INS8049.	INS8039	National	
x		x	x	x		Low power version of INS8039.	INS8039L	National	
x		x	x	x	Intel	ROMless version of INS8050.	INS8040	National	10
x		x	x	x	Intel	ROMless version of INS8050L.	INS8040L	National	
x		x	x	x		ROMless INS8050UL	INS8040UL	National	
x		x	x	x	Intel, NEC, AMD		INS8048	National	
x		x	x	x	Intel	Lowpower version of INS8048.	INS8048L	National	
x		x	x	x	Intel, NEC, AMD	Lowpower standby mode, on-chip bettery charging.	INS8049	National	15
x		x	x	x		Low power version of INS8049.	INS8049L	National	
x		x	x	x	Intel		INS8050	National	
x		x	x	x	Intel		INS8050L	National	
x		x	x	x		Microwire/Plus Serial Port	INS8050U	National	
x		x	x	x		Microwire/Plus Serial Port Low Power	INS8050UL	National	20
x	x	x	x	x	SMC	Fully compatible with Z80 instruction set, power-save mode, system clock generator, NSC888 evaluation board available.	NSC800	National	
x	x	x	x	x	SMC	Fully compatible with Z80 instruction set, power-save mode, system clock generator, NSC888 evaluation board available.	NSC800-1	National	
x	x	x	x	x	SMC	Fully compatible with Z80 instruction set, power-save mode, system clock generator, NSC888 evaluation board available.	NSC800-4	National	
x	x	x				32-bit internal architecture, 8-bit external data bus	NS32008	National	
x		x	x	x		Piggy-back microcomputer, emulates 8048/49/50, socket for program module and EPROM.	NS87P50	National	25
x	x	x	x	x	Rockwell	CMOS version of NCR6500/1 with bit manipulation instructions	NCR65C00/1	NCR	
x	x	x	x	x	GTE, Rockwell	CMOS NCR6502	NCR65C02	NCR	
x	x	x	x	x	Rockwell	Software compatible with NCR6502, 32 I/O lines, 16-bit counter	NCR6500/1	NCR	
x	x	x	x	x	Rockwell	On-board UART, two 16-bit counters, 32 I/O lines.	NCR6500/11	NCR	
x	x	x	x	x	Zilog	High speed, CMOS 8088	μPD70108-8	NEC	30
						ROM-less μPD78C06.	μPD78C05	NEC	
						46 I/O Lines, 8-bit timer.	μPD78C06	NEC	
						16-Bit Multiply/Divide, EPROM, USART	μPD78P09	NEC	
x	x			x	Mostek, Zilog	Z80 compatible, 158 instructions, 8080A software compatible, 26 bytes R/W memory, on chip dynamic RAM refresh circuitry.	μPD780	NEC	
						16-Bit Multiple/Divide, ROM bus, USART	μPD7807	NEC	35
						16-Bit Multiple/Divide, ROM bus, USART	μPD7809	NEC	
						16-Bit ALU, A/D Converter, USART	μPD7810	NEC	
						16-Bit ALU, A/D Converter, USART	μPD7811	NEC	
x		x	x	x	Intersil	CMOS version of PD8035L.	μPD80C35	NEC	
x			x		Intersil, Intel	CMOS version of PD8048.	μPD80C48	NEC	40

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	NMOS	5	40	8–16	4K	96	64x8			6	2.5/5	1		
8	NMOS	5	40	8–16	4K	96	128x8			11	1.4/2.8	1	x	x
8	NMOS	5	40	8–16	4K	96	64x8	1Kx8		6	2.5/5	1		
8	NMOS	5	40	8–16	4K	96	128x8	2Kx8		11	1.4/2.8	1	x	x
8	NMOS	5	40	8,16,24	64K	80				5	1.4/2.8	4		
8	NMOS	5	40	8–16	4K		64x8	1Kx8		6	2.5/5	1		
8	CMOS	2.5–6	64	8–32	64K	258	256x8	4096x8		15	0.8	15	x	x
8	CMOS	2.5–6	64	8–32	64K	258	256x8	16Kx8		15	0.8	15	x	x
8	CMOS	2.5–6	40	8–24	4K	98	256x8	4Kx8		12	1.2	1.0		x
8	CMOS	3–6	40	8–16	4K	97	64x8	1Kx8		6	2.5/5	1	x	x
8	CMOS	3–6	40	8–16	4K	97	128x8			11	1.4/2.8	1	x	x
8	CMOS	3–6	40	8–16	4K	97	64x8	1Kx8		6	2.5/5	1	x	x
8	CMOS	3–6	40	8,16,24	64K					3		1		
8	CMOS	5	40	8–24	64K	68				4	0.5/3.5	2	x	x
8	CMOS	5	40	8	Int.	71	512	16384		4	0.5	3	x	x
8	CMOS	5	40	8–24	64K	68				4	0.5/3.5	2		
8	CMOS	5	40	8–24	64K	68				4	0.5/3.5	2		
8	NMOS	5	28	8,16,24	64K	56				2	1/7	2	x	x
8	NMOS	5	40	8,16,24	8K	56	64x8	2Kx8		2	1/7	4	x	x
8	NMOS	5	40	8,16,24	16K	60	192x8	3072x8		2	1/7	10	x	x
8	NMOS	5	64	8,16,24	16K	60	192x8	3072x8		2	1/7	10	x	x
8	NMOS	5	64	8,16,24	64K	60	192x8	256x8		2	1/7	10	x	x
8	NMOS	5	40	8, 16, 24	16K	60	192x8	4096x8		2	1/7	10	x	x
8	NMOS	5	40	8,16,24	4K	60	64x8	1.5Kx8		2	1/7	7	x	x
8	NMOS	5	64	8,16,24	4K	60	64x8	1.5Kx8		2	1/7	7	x	x
8	NMOS	5	40	8,16,24	64K					2	0.5/3.5	2	x	x
8	NMOS	5	64	8,16,24	64K	60	192			2	1/7	10	x	x
8	NMOS	5	40	8	16K	71	1536	Ext.		2	1.0	10	x	x
8	CMOS	5	60	8	4K	104	128x8	4Kx8		4	1	5	x	x
8	CMOS	5.0	60	8	4K	104	1K	32K	x	4	1	2	x	x
8	CMOS	5.0	80	8	4K	104	1K	32K	x	4	1	2	x	x
8	CMOS	5.0	100	8	4K	104	1K	32K	x	4	1	2	x	x
8	NMOS	5	28	8,16,32	4K	56			x	2	0.25/40	1		
8	NMOS	5		8–32	64K					2.5				
8	NMOS	5	40	8	64K	158	x	x	x	2.5	1.6	2		x
8	NMOS	5	40	8	64K	158	x	x	x	4	1	2		x
8	NMOS	5	40	8–32	64K	158				8	0.5/2.875	3		x
8	NMOS	5	40	8	64K	158	x	x	x	6	0.67	2		x
8	NMOS	5	40	8	126K	43	128x8	16K	x	8	1.5	6	x	x
8	NMOS	5	40	8–24	124K	129	128Kx8	2Kx8	x	12	1	6	x	x
8	NMOS	5	64	8	126K	43	128x8	16K	x	8	1.5	6	x	x
8	NMOS	5	40	8	126K	43	128x8	16K	x	8	1.5	6	x	x
8	NMOS	5	40	8	124K	43	128x8	32K	x	8	1.5	6	x	x

© IC MASTER 1988

Software Support									
	High Level Language	Programs							
Cross Assembler		Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
x				x	AMD, Intel, Signetics, Siemens	Can be used with external RAM and ROM, 27 I/O lines, 8 bit interval timer/counter.	μPD8035L	NEC	
		x	x	x	Fujitsu, Intel, Signetics	Can be used with external RAM and ROM, 27 I/O lines, programmable, interval timer. Pin compatible with 8039.	μPD8039L	NEC	
x				x	AMD, Intel, Signetics, Siemens	27 I/O lines, 8 bit interval timer/events counter.	μPD8048	NEC	
		x	x	x	Fujitsu, Intel, Signetics	Same as PD8039L but with 2K ROM.	μPD8049	NEC	
x	x		x		AMD, Mitsubishi, Intel	8080A compatible.	μPD8085A-2	NEC	5
x				x	AMD, Intel, Signetics, Siemens	Same as PD8048 but with 1K EPROM.	μPD8748	NEC	
x	x			x		16-Bit ALU, A/D, USART	78C11	NEC	
x	x			x		16-Bit ALU, A/D, USART	78C14	NEC	
x				x	Toshiba, OKI, Fujitsu, Mitsubishi	8-Bit, 4K ROM Version of 80C48	80C50	NEC	
x		x	x	x	NEC, National	CMOS version of MSM8035, low stand by power mode.	MSM80C35	OKI	10
x		x	x	x	NEC, National	CMOS version of MSM8039, low standby power mode.	MSM80C39	OKI	
x		x	x	x	NEC, National	CMOS version of MSM8048, low stand by power mode.	MSM80C48	OKI	
						CMOS version of MSM8085A.	MSM80C85A	OKI	
					GTE, NCR	CMOS R6502	**R65C02**	**Rockwell (2990)**	
x	x	x	x	x	NCR	Available in DIP and PLCC.	**R65C10**	**Rockwell (2988)**	15
					GTE	On-chip oscillator, bus three-state capability, quadrature clock, R6500 software compatibility.	**R65C102**	**Rockwell (2990)**	
						Slave processor, bus three-state capability	**R65C112**	**Rockwell (2990)**	
x	x	x	x	x	Fairchild	Bus compatible with 6800.	**R6500**	**Rockwell (2988)**	
x	x	x	x	x	NCR	Software compatible with R6502, 32 I/O lines, 16-bit counter.	**R6500/1**	**Rockwell (2988)**	
x	x	x	x	x	NCR	On board USART, two 16 bit counters, 32 I/O lines.	**R6500/11**	**Rockwell (2988)**	20
x	x	x	x	x	NCR	On board USART, two 16 bit counters, 56 I/O lines.	**R6500/12**	**Rockwell (2988)**	
x	x	x	x	x		On board USART, two 16 bit counters, 32 I/O lines.	**R6500/13**	**Rockwell (2988)**	
x	x	x	x	x		R6500/11 with 4K ROM	**R6500/15**	**Rockwell (2988)**	
x	x	x	x	x		Asychronous host interface port, 16 bit counter, 23 I/O lines.	**R6500/41**	**Rockwell (2988)**	
x	x	x	x	x		Asychronous host interface port, 16 bit counter, 47 I/O lines.	**R6500/42**	**Rockwell (2988)**	25
x	x	x	x	x		Bus compatible with 6800, 68000.	**R6502**	**Rockwell (2987, 2990)**	
x	x	x	x	x		On board USART, 16 bit counter, 32 I/O lines without pullups.	**R6511Q**	**Rockwell (2988)**	
x	x	x	x	x		Available in DIP and PLCC.	**R6518**	**Rockwell (2988)**	
x		x	x	x		Contains zoo gate array for increased flexibility.	SMC8340F	S-MOS	
x		x	x	x		400 Gates of on-board gate array	SMC8360F	S-MOS	30
x		x	x	x		800 Gates of on-board gate array	SMC8362F	S-MOS	
x		x	x	x		1200 Gates of on-board gate array	SMC8364F	S-MOS	
					GTE, Rockwell	On chip clock, IRQ, RYD bus compatible with MC6800.	L6505	SGS	
x	x	x	x	x		4 MHz optional.	Z80/A	SGS	
x		x		x	Zilog		LH0080	Sharp	35
x		x		x	Zilog		LH0080A	Sharp	
x	x	x	x		Zilog		LH0080E	Sharp	
x		x		x	Zilog		LH0800B	Sharp	
x		x			Zilog	8 bit 1 chip microcomputer	LH0801	Sharp	
x		x	x	x	Zilog		LH0801A	Sharp	40
x		x			Zilog	Development Device	LH0802	Sharp	
x		x			Zilog	Protopack Emulator	LH0803	Sharp	
x		x			Zilog	8 bit 1 chip microcomputer	LH0811	Sharp	

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	NMOS	5	64	8	124K	43	128x8	32K	x	8	1.5	6	x	x
8	NMOS	5	40	8	124K	43	128x8	32K	x	8	1.5	6	x	x
8	NMOS	5	40	8	128K	43	128x8		x	8	1.5	6	x	x
8	NMOS	5	40	8–24	124K	129	128Kx8		x	12	1	6	x	x
8	CMOS	5	40	8–32	64K	158				2.5	1.6	3	x	x
8	CMOS	5	40	8–32	64K	158				4	1	3	x	x
8	CMOS	5	40	8–32	64K	158				4	1	3	x	x
8	CMOS	5	44	8–32	64K	158				6	0.67	3	x	x
8	CMOS	5	44	8–32	64K	158				6	0.67	3	x	x
8	CMOS	5	40	8–32	64K	158				2.5	1.6	3	x	x
8	CMOS	5	44	8–24	124K	129				6	1	6	x	x
8	CMOS	5	44	8–24	124K	129				4	1	6	x	x
8	CMOS	5	40	8	124K	45	144x8	32K	x	8	1.5	6	x	x
8	CMOS	5	64	8	64K	51	128x8	16K	x	4	1	5	x	x
8	CMOS	5	64	8	64K	51	192x8	32K	x	4	1	5	x	x
8	CMOS	2.7 to 5.5	64	8		81	256x8	6144x8		4	1	5	x	
8	CMOS	2.5–6.0	28	8	32K	44	64x8	1Kx8		20.0	1.0/00	3		
8	CMOS	2.5–6.0	24	8	32K	44	64x8	1Kx8		20.0	1.0/00	3		
8	CMOS	2.5–6.0	20	8	32K	44	64x8	1Kx8		20.0	1.0/00	3		
8	CMOS	2.5–6.0	28	8	32K	44	128x8	2Kx8		20.0	1.0/00	3		
8	CMOS	2.5–6.0	24	8	32K	44	128x8	2Kx8		20.0	1.0/00	3		
8	CMOS	2.5–6.0	28	8	32K	44	64x8	1Kx8		20.0	1.0/00	3		
8	CMOS	2.5–6.0	24	8	32K	44	64x8	1Kx8		20.0	1.0/00	3		
8	CMOS	2.5–6.0	20	8	32K	44	64x8	1Kx8		20.0	1.0/00	3		
8	CMOS	2.5–6.0	28	8	32K	44	64x8			20.0	1.0/00	3		
8	CMOS	2.5–6.0	24	8	32K	44	64x8			20.0	1.0/00	3		
8	CMOS	2.5–6.0	20	8	32K	44	64x8			20.0	1.0/00	3		
8	CMOS	5	28	8–16		90	256x8	0		12				
8	CMOS	5	28	8–16		90	256x8	4Kx8		12				
8	CMOS	5	28	8–16		90	256x8	4Kx8		12				
8	NMOS	5		8,16,24	32K					2			x	x
8	TTL	5		16	8K					8	0.2		x	x
8	TTL	5		16	8K					10			x	x
8	ECL	5	64	20		32				10			x	x
8	NMOS	5		8–16	1K		64x8	1Kx8		3	8.38/16.8		x	x
8	NMOS	5		8–16	4K	96	64x8			6	1.4/2.8	1		
8	NMOS	5		8–16	4K	96	128x8			11	1.4/2.8	1		
8	NMOS	5		8–16	4K	96	256x8			11	1.4/2.8	1		
8	NMOS	5		8–16	4K	90	64x8	1Kx8		6	1.4/2.8	1		
8	NMOS	5		8–16	4K	90	128x8	2Kx8		11	1.4/2.8	1		
8	NMOS	5		8–16	4K		256x8	4Kx8		11	1.4/2.8	1		

© IC MASTER 1988

Software Support									
		Programs							
Cross Assembler	High Level Language	Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
x		x			Zilog	Development Device	LH0812	Sharp	
x		x			Zilog	Protopack Emulator	LH0813	Sharp	
x		x			Zilog	ROMless Microcomputer	LH0881	Sharp	
x		x	x	x	Zilog		LH0881A	Sharp	
x	x	x	x	x	Zilog		LH5080	Sharp	5
x	x	x	x	x	Zilog		LH5080A	Sharp	
x	x	x	x	x	Zilog		LH5080AL	Sharp	
x	x	x	x	x	Zilog		LH5080B	Sharp	
x	x	x	x	x	Zilog		LH5080BL	Sharp	
x	x	x	x	x	Zilog		LH5080L	Sharp	10
x		x	x	x			LU800AV1	Sharp	
x		x	x	x			LU800V1	Sharp	
x		x			—		SM803	Sharp	
x		x			—		SM812	Sharp	
x		x			—		SM813	Sharp	15
x		x		x			SM814	Sharp	
x		x	x	x	National COP820C		SC44820	Sierra	
x		x	x	x	National COP821C		SC44821	Sierra	
x		x	x	x	National COP822C		SC44822	Sierra	
x		x	x	x	National COP840C		SC44840	Sierra	20
x		x	x	x	National COP841C		SC44841	Sierra	
x		x	x	x	National COP8620C	Additional 64x8 EERAM.	SC48620	Sierra	
x		x	x	x	National COP8621C	Additional 64x8 EERAM.	SC48621	Sierra	
x		x	x	x	National COP8622C	Additional 64x8 EERAM.	SC48622	Sierra	
x		x	x	x	National COP8720C	1Kx8 EEROM & Additionaladditional 64x8 EERAM.	SC48720	Sierra	25
x		x	x	x	National COP8721C	1Kx8 EEROM & additional 64x8 EERAM.	SC48721	Sierra	
x		x	x	x	National COP8722C	1Kx8 EEROM & additional 64x8 EERAM.	SC48722	Sierra	
						I^2C and NBAP Protocols	**SCC84C00**	**Signetics (3070)**	
						I^2C and NBAP Protocols	**SCC84C20**	**Signetics (3070)**	
						I^2C and NBAP Protocols	**SCC84C40**	**Signetics (3070)**	30
x		x	x	x		Any of the general purpose registers can be used as an index register.	2650A-1	Signetics	
x			x			Bipolar with fixed instructions.	8X300	Signetics	
x		x	x	x	AMD		8X305	Signetics	
x		x	x	x		35% faster than 8x305	**8X401**	**Signetics (3078)**	
		x	x	x	Intel		8021	Signetics	35
					AMD, Fujitsu, Intel, National, NEC		8035	Signetics	
					AMD, Fujitsu, Intel, National, NEC		8039	Signetics	
					AMD, Fujitsu, Intel, National, NEC		8040	Signetics	
					AMD, Fujitsu, Intel, National, NEC		8048	Signetics	
					AMD, Fujitsu, Intel, National, NEC		8049	Signetics	40
							8050	Signetics	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	CMOS	2.4–6	40	8–30	64K	150				2.5		5	yes	
8	CMOS	2.4–6	40	8–30	64K	150				1	1.6	5	yes	
8	CMOS	2.4–6	40	8–30	64K	150				4	1.0	5	yes	
8	NMOS	5	40	8	64K	61	256x8			8	1/12.5	6	x	x
8	CMOS	2.5–5.5	68	8	64 K	64	2048	32768		20	1/11	10	x	x
8	CMOS	2.5–6.0	40	8	64 K	61	2048			6	1.3/15.9	6	x	x
8	CMOS	2–5.5	40	8	64K	61	256x8	4096x8		7.5	1.1/13.3	6	x	x
8	SMOS	5	40	8	64K	61	128x8			8	1.6/19.2	4	x	x
8	NMOS	5	40	8	64K	61	256x8			8	1/12.5	6	x	x
8	SMOS	5	40	8	64K	61	128x8	2K		2.5	1.6/19.2	4	x	x
8	SMOS	5	40	8	64K	61	128	4K		2.5	1.6/19.2	4	x	x
8	NMOS	5	40	8	64K	61	256x8	4096x8		8	1/12.5	6	x	x
8	CMOS	3–5	40	8						3.6		2		
8	NMOS	5	40	8						3.6		2		
8	NMOS	5	40	8	64K	61	256x8	4096x8		5	1.6/19.6	6	x	x
8	CMOS	5	28	8,16,24	4K	42	128x8	1.7Kx8		11	0.15/14	2	x	x
8	NMOS	5	40	8,16,24	64K	72			x	2	1/6	3	x	x
8	HMOS	5			1M	56								
8	HMOS	5			1M	56								
8	HMOS	5	20	8,16,24	4K	42	32x8	1Kx8		11	0.6/14	3	x	x
8	HMOS	5	28	8,16,24	4K		32x8	1Kx8		11	0.6/14	3	x	x
8	HMOS	5	40	8,16,24	4K	59	64x8	2Kx8		1	2/11	3	x	x
8	NMOS	5,12		8,16,24	64K		64x8	1Kx8		2		1	x	x
8	NMOS	5	40	8,16,24	4K	70	128x8	4Kx8		4	1/6.5	1	x	x
8	NMOS	5	40	8,16,24	2112	70	128x8	2Kx8		4	1/6.5	1	x	x
8	NMOS	5	40	8–36	65K	70				4	1/6.5	1	x	x
8	CMOS	5		8–16	4K		128			11			x	x
8	NMOS	5	40	8–16	4K		64			6			x	x
8	NMOS	5	40	8–16	4K		128			11			x	x
8	NMOS	5		8–16	4K		64	1K		6			x	x
8	NMOS	5		8–16	4K			2K		11			x	x
8	NMOS	5		8,16,24	64K					3			x	x
8	NMOS	5		8,16,24	64K					5			x	x
8	NMOS	5	40	81632	64K	56			x	4	0.25/40	1		
8	NMOS	5	40	81632	64K	56				4		1		
8	CMOS	5	40	8	64K	64				4	.5/3.5	1		

© IC MASTER 1988

Software Support									
		Programs							
Cross Assembler	High Level Language	Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
					National	Fully Compatible with Z80 instruction set, on chip bus controller and clock generator	MPU800	SMC	
					National	Fully Compatible with Z80 instruction set, on chip bus controller and clock generator	MPU800-1	SMC	
					National	Fully Compatible with Z80 instruction set, on chip bus controller and clock generator	MPU800-4	SMC	
x							SE70P162	TI	
x		x				8-Bit Microcontroller with Program and Data EEPROM, UART, A/D Converter Watchdog, PWM Timer Outputs	TMS3700 SERIES	TI	5
x		x				8-Bit CMOS Microprocessor with UART	TMS70C02	TI	
x							TMS70C42	TI	
	x					8 bit timer/event counter, optional memory expansion modules available to complement on chip ROM.	TMS7000	TI	
x							TMS7002	TI	
	x					8 bit timer/event counter, optional memory expansion modules available to complement on chip ROM.	TMS7020	TI	10
	x					8 bit timer/event counter, optional memory expansion modules available to complement on chip ROM.	TMS7040	TI	
x							TMS7042	TI	
						Encrytion, Federal Processing Standard	TMS75C00	TI	
						Encryption, Federal Processing Standard	TMS7500	TI	
x						On-board EPROM version.	TMS7742	TI	15
x	x	x	x	x		Larger ROM Version of 68HC04P2	EF68HC04P3	Thomson	
x	x		x		AMI, Thomson-CSF, Fairchild, Hitachi	DMA through HALT and three state control, addressing modes.	EF6800	Thomson	
						MC68008 completely code compatible with MC68000. 32 bit internal architecture, general purpose machine.	EF68008-10	Thomson	
						MC68008 completely code compatible with MC68000. 32 bit internal architecture, general purpose machine.	EF68008-8	Thomson	
x		x	x	x		20-pin version of 6804P2, extensive self check.	EF6804J2	Thomson	20
x	x	x	x	x	Signetics	20 bidirectional I/O lines, 64 byte data ROM, self check.	EF6804P2	Thomson	
x		x	x	x	Signetics	4 channel 8-bit A/D converter, self check.	EF6805R3	Thomson	
x		x	x	x	Fairchild, SGS	Programmable timer.	MK3850	Thomson	
x		x	x	x	Fairchild, Motorola	One chip microcomputer. Programmable hardware, timer on-chip: 3K, 2K, 1K PROM versions available.	MK3870	Thomson	
x		x	x	x	Fairchild, Motorola	Programmable hardware timer, baud rate generator.	MK3873	Thomson	25
x	x		x		NEC, Zilog	8080A software compatible, 25 MHz optional frequency.	MK3880	Thomson	
x		x	x	x	NEC, National, OKI		**TMP80C39A**	**Toshiba**	**(3306)**
		x	x	x	AMD, Intel, National, NEC, Fujitsu, Signetics		**TMP8035**	**Toshiba**	**(3306)**
		x	x	x	AMD, Intel, National, NEC, Fujitsu, Signetics		**TMP8039**	**Toshiba**	**(3306)**
		x	x	x	AMD, Intel, NEC, Fujitsu, Signetics	8748 has U.V. PROM.	**TMP8048**	**Toshiba**	**(3306)** 30
		x	x	x	NEC, Fujitsu, Signetics		**TMP8049**	**Toshiba**	**(3306)**
x	x	x	x	x	AMD, Mitsubishi, NEC	8080A compatible with multiplexed bus operation.	**TMP8085A**	**Toshiba**	**(3306)**
x	x	x	x	x	AMD, Mitsubishi, NEC		**TMP8085A-2**	**Toshiba**	**(3306)**
					Rockwell	On-chip Clock, IRQ, NMI, RYD, BUS compatible with MC6800	UM6502	UMC	
					Rockwell	External clock, IRQ, NMI, RYD, BUS compatible with MC6800	UM6512	UMC	35
					GTE, NCR, Rockwell		VL65NC02	VLSI Tech	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
8	CMOS	5	40/56	8	64K	180	192x8	4Kx8		2,4,6,8	0.25/4.0	8	x	x
8	CMOS	5	68	8–32	1M	101				4				
8	CMOS	5	68	8–32	1M	101				6				
8	CMOS	5	40	16	1M	101				5	0.25/4			
8	CMOS	5	40	16	1M	101				8	0.25/4			
8	CMOS	5		8	1 MB					8	0.25	7	x	
8	NMOS	5	40	8–32	64K	158			x	2.5		3	x	x
8	NMOS	5	40	8–32	64K	158			x	4		3	x	x
8	NMOS	5	40	8–32	64K	158			x	6	0.7/4.2	3	x	x
8	NMOS	5	40	8–32	64K	158			x	2.5		3	x	x
8	NMOS	5	40	8–32	500K				x	25		2		
8	NMOS	5	40	8,16,24	124K	129	128x8	2Kx8	x	4	2.2/4.25	6	x	x
8	NMOS	5												
8	NMOS	5	40	8,16,24	124K	129	128x8			4	2.2/4.25	6	x	x
8	NMOS	5	40	8,16,24	124K	129	128x8	4Kx8	x	4	1/1.5	6	x	x
8	NMOS	5	40	8,16,24	124K	129	128x8	4Kx8	x	12	1/2.8	6	x	x
8	NMOS	5	64	8–24	124K	129	128x8		x	4	1/1.5	6	x	x
8	NMOS	5	64	8,16,24	124K	129	128x8	NULL	x	12	1/2.8	6	x	x
8	NMOS	5	40	8–24	124K	129	128x8		x	4	1/1.5	6	x	x
8	NMOS	5	40	8,16,24	124K	129	128x8	NULL	x	12	1/2.8	6	x	x
8	NMOS	5	40	8–24	124K	129	128x8			4			x	x
8	NMOS	5	40	8–24	128K		128x8			4			x	x
8	NMOS	5	40	8,16,24	124K	129	128x8	NULL	x	12	1/2.8	6	x	x
8/16	HMOS	5	40	8–48	1M	133				8	0.2/19	1		x
8/16	HMOS	5	40	8–48	1M	133				8				
8/16	HMOS	5	40	8–48	1M					8		1	x	x
8/16	HMOS	5	40	8–48	1M	46	144x8		x	5	0.4/4			
8/16	CMOS	5	40	8	64K	91				8	1	2	x	x
8/16	CMOS	5	40	8–16	16M	91				8	1	2		
8/16	CMOS	5	40	8–32	16M	74				4MHz	0.1/0.7	5		x
8/16	HMOS	5	40	8–48	1M	46				5	0.4/4		x	
8/16	CMOS	5	68	8–48	1M	101			x	8		8	x	x
8/16	NMOS	5	40	8–48	1M		64x8			5				
8/16	I^2L	5	64	16,32,48	128K	73				4.4	1.37/13.6	17	x	

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x	x	x	x	x		I/O or External Memory Mode, Six I/O ports, two timers, serial port, W65C02 core, Toolbox Emulation Interface.	W65C124	WDC	
x	x	x	x			Compatible with Z80 CPU software	**Z64180-4**	**Zilog (3417)**	
x	x	x	x			Compatible with Z80 CPU software	**Z64180-6**	**Zilog (3417)**	
x	x	x	x			Instruction set is a superset of 8086/88 instruction set.	Z70108-05(V20)	Zilog	
x	x	x	x			Instruction set is a superset of 8086/88 instruction set.	Z70108-08(V20)	Zilog	5
			x			Instruction set is a superset of 8086/88 instruction set.	Z70208	Zilog	
x	x	x	x	x	Mostek, NEC, SGS, Sharp	8080A software compatible.	**Z80**	**Zilog (3418)**	
x	x	x	x	x	Mostek, NEC, SGS, Sharp	8080A software compatible.	**Z80A**	**Zilog (3418)**	
x	x	x	x	x	Mostek, NEC, SGS, Sharp	8080A software compatible.	**Z80B**	**Zilog (3418)**	
x	x	x	x	x	Mostek, NEC, SGS, Sharp	Low power version of Z80, slower speeds available.	**Z80L**	**Zilog (3418)**	10
						The first of a series of processors. The devices are binary code compatible with the Z80 CPU. 8 and 16 bit multiple and divide.	Z8108	Zilog	
x	x	x	x	x	SGS, Sharp, GTE	On-chip UART, and 2 counter/timers. 4 external interrupts, 32 I/O lines.	**Z8601-MCU**	**Zilog (3419)**	
							Z8601-12	**Zilog (3419)**	
x	x	x	x	x	SGS, Sharp, GTE	Program storage in separate 2716 EPROM, 4 external interrupts. Has piggyback 24-pin socket to program memory.	**Z8603-MCU**	**Zilog (3419)**	
x	x	x	x	x	SGS, Sharp, GTE	On-Chip UART and 2 counter/timers, 32 I/O lines. 4 external interrupts.	**Z8611-MCU**	**Zilog (3419)**	15
x	x	x	x	x		On-chip UART, 2 counter/timers, 32 I/O lines, 4 external interrupts.	**Z8611-12**	**Zilog (3419)**	
x	x	x	x	x	SGS, Sharp, GTE	64 pin development version. 4 external interrupts. ROMless Z8601.	Z8612-MCU	Zilog	
x	x	x	x	x		Development version, 4 external interrupts, ROMless Z8601–11.	Z8612-12	Zilog	
x	x	x	x	x	SGS, Sharp, GTE	ROMless Z8. Has piggyback 24-pin socket for direct interface to program memory. Permits program storage in separate EPROMs.	**Z8613-MCU**	**Zilog (3419)**	
x	x	x	x	x		ROMless Z8. Has piggyback 24-pin socket for direct interface to program memory.	**Z8613-12**	**Zilog (3419)**	20
x	x	x	x	x		Single chip basic interpreter with Tiny Basic in ROM.	**Z8671-MCU**	**Zilog (3419)**	
x	x	x	x	x		ROMless Z8.	**Z8681-MCU**	**Zilog (3419)**	
x	x	x	x	x		ROMless Z8.	**Z8681-12**	**Zilog (3419)**	
x	x	x	x	x	Intel, NEC	Same part as AM8088.	iAPX88/10	AMD	
					Intel	Two chip set using iAPX88/10 plus 8087 numeric data processor.	iAPX88/20	AMD	25
x	x	x	x	x	Intel	Same part as iAPX88/10.	8088	AMD	
					Intel	I/O processor, concentrator and intelligent DMA controller. 4 special purpose input interrupts, 2 DMA requests interrups, 2 general purpose interrupt outputs.	8089A-3	AMD	
x		x	x	x	Western Design Center Hyundai	Runs G65SC02 code.	**G65SC802**	**CMD Micro (2549)**	
x				x	Western Design Center Hyundai	Runs G65SC02 code.	**G65SC816**	**CMD Micro (2549)**	
x					GTE	16-bit version of HY65C02	HY65C816	Hyundai	30
		x	x	x	AMD	I/O processor concentrator and intelligent DMA controller. 4 special purpose input interrupts, 2 DMA request interrupts, 2 general purpose interrupt outputs.	8089	Intel	
x	x	x	x	x	Zilog	High integration with several peripherals on chip. Upwards compatible with μPD70108, μPD70116.	μPD70208	NEC	
					AMD, Intel		μPD8088	NEC	
	x	x	x	x		Mil temperature range.	SBP9989	TI	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSOR

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
12	CMOS	5		12	32K					4				
12	PMOS	5		12,24	4K					1.2			x	
16	HMOS	5		8–48	1M					8				
16	HMOS	5		8–48	16M	150				8				
16	HMOS	5		8–48	1M	133				10				
16	HMOS	5		8–48	1M					10				
16	TTL/ECL	5	52	8,16	User defined		32Kx16			10	0.1		x	
16	NMOS	5		16,32	48M					4			x	x
16	NMOS	5		16,32	384K					4			x	x
16	HMOS	5		8–48	1M					10				
16	CMOS	5	100	24	16K		32K		x		0.125	4	x	x
16	CMOS	5	64	9	User Defined	512				41	0.024/0.037	x	x	x
16	CMOS	5	64	9	User Defined	512				35	0.024/0.037			
16	CMOS	5	64	9	User Defined	512				32	0.024/0.037			
16	CMOS	5	64	9	User Defined	512				27	0.024/0.037			
16	CMOS	5	52	8, 16	User Defined		32x16			10	0.100		x	
16	CMOS	5	52	8, 16	User Defined		32x16			19	0.03		x	
16	CMOS	5	52	8, 16	User Defined		32x16			12.6	0.079		x	
16	CMOS	5	52	8, 16	User Defined		32x16			12.6	0.079		x	
16	I^3L	5		16	32K					10			x	
16	I^3L	5	40		64K					10				x
16	I^3L	5	64	16	2M					20		16		x
16	I^3L	5	64	16	2M					20		16		x
16	NMOS	5	68	8–48	1M	150			x	8		1	x	x
16	NMOS	5	68	8–48	16M	150				6			x	x
16	NMOS	5	68	8–48	16M	150				8			x	x
16	NMOS	5	40	8–48	1M	133				5			x	x
16	NMOS	5	40	8–48	1M	133				10			x	x
16	NMOS	5	40	8–48	1M	133				8			x	x
16	CMOS	5	40	16	4K	60	2304	24K		20.5	—/0.195	1		

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
					Intersil	PDP–8 instruction set compatible Fortrar, Basic, Focal, Pascal, available from outside vendors.	HM6100	Harris	
x	x		x				TLCS12A	Toshiba	
					Intel	High performance-provides two times the performance of iAPX86. Upward compatible with iAPX86/88 software. 10 additional instruction types.	iAPX186	AMD	
					Intel	High performance 80286 processor with memory management. Upward compatible with iAPX86, 88 and iAPX186 software.	iAPX286	AMD	
					Mitsubishi, NEC, Mostek, Siemens, Intel, Fujitsu	Same part as AM8086.	iAPX86/10	AMD	5
					Intel	Two chip set using iAPX86/10 plus AM8087 numeric data processor.	iAPX86/20	AMD	
x					Thompson/CSF	Three-operand ALU, 16-bit barrel shifter, instruction set optimized for high-performance intelligent controllers.	AM29116	AMD	
x	x	x	x	x	Zilog	Segmented, single step mode.	Z8001	AMD	
x	x	x	x	x	Zilog	Non-segmented, single step mode.	Z8002	AMD	
					Intel, Fujitsu, NEC	Same part as iAPX86/10.	8086	AMD	10
x	x	x	x	x		Digital Signal Processor with high speed numeric processing applications.	ADSP-2100	AD	
x	x	x	x		AM29101	Replaces four 2901s and carry look-ahead logic	**CY7C9101-24C**	**Cypress (2569)**	
					AM29101	Replaces four 2901s and carry look-ahead logic Mil temp.	**CY7C9101-28M**	**Cypress (2569)**	
					AM29101	Replaces four 2901s and carry look-ahead logic.	**CY7C9101-31C**	**Cypress (2569)**	
					AM29101	Replaces four 2901s and carry look-ahead logic Mil temp.	**CY7C9101-36M**	**Cypress (2569)**	15
x					AMD, Thompson-Mostek	Three Operand ALU, 16-Bit Barrel Shifter, instruction set optimized for high performance intelligent controllers	CY7C9116-100M	Cypress	
x					AMD, Thompson-Mostek	Three Operand ALU, 16-Bit Barrel Shifter, instruction set optimized for high performance intelligent controllers	CY7C9116-53C	Cypress	
x					AMD, Thompson-Mostek	Three Operand ALU, 16-Bit Barrel Shifter, instruction set optimized for high performance intelligent controllers	CY7C9116-79C	Cypress	
x					AMD, Thompson-Mostek	Three Operand ALU, 16-Bit Barrel Shifter, instruction set optimized for high performance intelligent controllers	CY7C9116-79M	Cypress	
x	x	x	x	x		Microcomputer performance. Multifunction instructions process several steps e.g. add/shift/check and skip.	F9440	Fairchild	20
x	x	x	x	x			F9445	Fairchild	
x		x	x				F9450C	Fairchild	
x		x	x				F9450M	Fairchild	
	x	x	x	x	Intel	High integration 16-bit microprocessor, 2 independent DMA channels, 3 programmable 16-bit timers, object code compatible with all MBL8086/88 software.	MBL80186	Fujitsu	
	x	x	x	x		High performance 16-bit microprocessor with on-chip memory management and protection, upward compatible with MBL8086/8088 software.	MBL80286-6	Fujitsu	25
	x	x	x	x		High performance 16-bit microprocessor with on-chip memory management and protection, upward compatible with MBL8086/8088 software.	MBL80286-8	Fujitsu	
	x	x	x	x	Mostek, Intel, Siemens, NEC	Assembly language compatible with 8080/8085.	MBL8086	Fujitsu	
	x	x	x	x	Mostek, Intel, Siemens, NEC	Assembly language compatible with 8080/8085.	MBL8086-1	Fujitsu	
	x	x	x	x	Mostek, Intel, Siemens, NEC	Assembly language compatible with 8080/8085.	MBL8086-2	Fujitsu	
					TI		DSP320C10	GIM	30

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
16	CMOS	5	40	16	4K	60	2304	24K		25	—/0.16	1		
16	CMOS	5	40	16	4K	60	2304	24K		32	—/0.125	1		
16	CMOS	5	40	16	4K	60	4096	40K		20.5	—/0.195	1		
16	CMOS	5	40	8–48	1M					8			x	x
16	CMOS	5	40	8–48	1M					8			x	x
16	CMOS	5	68	8–80	16M	150				10		256	x	x
16	CMOS	5	68	8–80	16M	150				12.5		256	x	x
16	CMOS	5	68	8–80	16M	150				16		256	x	x
16	CMOS	5	40	8–48	1M					8			x	x
16	CMOS	5	40	8–48	1M					8			x	x
16	CMOS	5	68	8	64K		0		x	20	0.05/2	1	x	
16	CMOS	5	68	16	64K		2K		x	20	0.05/2	1	x	
16	CMOS	5	68	8	64K		32K		x	20	0.05/2	1	x	
16	CMOS	5	64	9	User defined					21				
16	CMOS	5	64	9	User defined					21				
16	CMOS	5	64	9	User defined	16				21				
16	HMOS	5		8–48	16M					8	0.8			x
16	CMOS	5	40	8–48	1MB	133				5	0.4/0.8		x	x
16	CMOS	5	40	8–48	1MB	133				8	0.4/0.8		x	x
16	HMOS	5	68	8–48	1M	150			x	10		1	x	x
16	HMOS	5	68	8–48	1M	150			x	8	0.25/8.6	256		x
16	HMOS	5		8–48	16M					8	0.8			x
16	HMOS	5	40	8–48	1M	133				10	0.4/0.8		x	x
16	HMOS	5	40	1–4	500K	69				8	1.25/100	1	x	
16	CMOS	5	64	9	User-defined					4		opt.		
16	CMOS	5	64	9	User-defined					4		opt.		
16	NMOS	5	144	16	64	200+		128	x	40		16	x	x
16	CMOS	5	68	8–32	64 K	54	256x8			16.8	0.24/6.8	8	x	x
16	CMOS	5	68	8–32	64K	54	256x8	4Kx8		16.8	0.24/6.8	8	x	x
16	CMOS	5	68	8–32	64 K	54	256x8			16.8	0.24/6.8	8	x	x
16	CMOS	5	68	8–32	64 K	54	256x8			16.8	0.24/6.8	8	x	x
16	CMOS	5	48	8, 16, 24, 32	16 M	108				15	0.267/8	3	x	x

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
					TI	25 MHz version of DSP320C10	DSP320C10-25	GIM	
					TI		DSP320C10-32	GIM	
						EEPROM-based DSP320C10	DSP320EE12	GIM	
x	x	x	x	x	Intel	Multiply and divide multibus system compatible, available in military temperature ranges.	**HS80C86RH**	**Harris (2708)**	
x	x	x	x	x	Intel	Multiply and divide, multibus system compatible, 8 MHz version available.	**MD80C86**	**Harris (2702)**	5
x	x	x	x	x	Intel	High performance 16-bit microprocessor with on-chip memory management and protection.	**80C286-10**	**Harris (2729)**	
x	x	x	x	x	Intel	High performance 16-bit microprocessor with on-chip memory management and protection.	**80C286-12**	**Harris (2729)**	
x	x	x	x	x	Intel	High performance 16-bit microprocessor with on-chip memory management and protection.	**80C286-16**	**Harris (2729)**	
x	x	x	x	x	Intel	Multiply and divide, multibus system compatible, 8 MHz version available, available in industrial or military temperature ranges.	**80C86**	**Harris (2730, 2768)**	
x	x	x	x	x	Intel	Multiply and divide, multibus system compatible, 8 MHz version available, available in commercial or military temperature ranges.	**80C86-2**	**Harris (2730, 2768)**	10
x	x	x	x	x		16-bit Transputer	IMST202	Inmos	
x	x	x	x	x		16-bit Transputer	**IMST212**	**Inmos (2777)**	
x	x	x	x	x		16-bit Transputer	IMST222	Inmos	
						Four 2901, 2902 Look-ahead carry, 64 addressable registers	**IDT49C401**	**IDT (2801)**	
						Four 2901, 2902 Look-ahead carry, 64 addressable registers	**IDT49C401A**	**IDT (2801)**	15
						Four 2901, 2902 Look-ahead carry, 64 addressable registers, additional instructions	**IDT49C402**	**IDT (2801, 2813)**	
	x	x	x		AMD	High performance 80286 processor with memory management. Upward compatible with iAPX86, 88 software.	iAPX268/10	Intel	
	x	x	x	x			80C86	Intel	
	x	x	x	x			80C86-2	Intel	
	x	x	x	x		High integration 16-bit microprocessor, 2 independent DMA channels, 3 programmable 16-bit timers, clock generator, object code compatible with all iAPX8086/8088 software.	80186	Intel	20
x	x	x	x	x	Fujitsu, AMD, Siemens		80188	Intel	
	x	x	x		AMD	High performance 80286 processor with memory management. Upward compatible with iAPX86, 88 software.	80286	Intel	
	x	x	x	x	NEC, Mostek, Siemens, AMD	8086 runs 5 MHz, –1 runs 10 MHz, –2 runs 8 MHz.	8086	Intel	
x	x	x	x	x		Numeric coprocessor for 8086, 8088, 80186, 80188	8087-2	Intel	
						Four 2901's and a 2902 Look-ahead Carry in one.	2901X4	IMI	25
						Four 2901's and a 2902 Look-ahead Carry in one.	4X2901B	IMI	
x	x	x	x	x		Implements MIL-STD–1750A Instruction Set. MMU Support Chip Available (L64550).	**L64500**	**LSI Logic (2871)**	
x	x	x	x	x		On-board UART, eight 16-bit timer/counters, PWM outputs, 3 input captures, Microwire/plus 52 I/O lines, MIL temp.	HPC16030	National	
x	x	x	x	x		On-board UART eight 16-bit Timer/Counters, PWM outputs, 3 input captures, Microwire/plus 52 I/O lines.	HPC16040	National	
x	x	x	x	x		On-board UART, eight 16-bit timer/counters, PWM outputs, 3 input captures, microwire/plus 52 I/O lines.	HPC46030	National	30
x	x	x	x	x		On-board UART, eight 16-bit timer/counters, PWM outputs, 3 input captures, microwire/plus 52 I/O lines.	HPC46040	National	
x	x	x	x	x		CMOS, 32-bit internal architecture, 16-bit external data bus	NS32C016	National	

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
16	CMOS	5	48	8–32	16M	108			x	10			x	x
16	CMOS	5	48	8–32	16M	108			x	15			x	x
16	CMOS	5	48	8–32	16M	108			x	6			x	x
16	XMOS	5	48	8, 16, 24, 32	16 M	108				10	0.4/12	3	x	x
16	XMOS	5	48	8–32	16M	128				10	0.3/—	3		
16	XMOS	5	48	8–32	16M	128				6	0.3/—	3		
16	XMOS	5	24							15	4/12		x	x
16	XMOS	5	48		16 M					10			x	x
16	CMOS	5	40	16	1M	101			x	10		3		x
16	CMOS	5	68	8–48	1M	101			x	8		8	x	x
16	CMOS	5	28	23		20	128x16	510x13 and 512x23	x	8.3	0.24	1.0	x	x
16	NMOS	5	40	8–48	1M					5			x	x
16	CMOS	5	80	8–40	1M	105	256x8		x	10	0.4	17		x
16	CMOS	5	80	8–40	1M	105	256x8	16Kx8	x	10	0.4	17		x
16	HCMOS	5	120	16–64	2 MB	130				7.5		4		
16	HCMOS	5	120	16–64	48 MB	130				10				
16	CMOS	5	64	16	64K	103				40	0.10	9	x	x
16	CMOS	5	64	16	2 MB					20		16		
16	CMOS	5	64	16	2 MB					30		16		
16	CMOS	5	64	16	2 MB					40		16		
16	NMOS	5	48	16	64M	110	x	x	x	4	1	3		x
16	NMOS	5	48	16	64M	110	x	x	x	6	0.67	3		x
16	NMOS	5	68	16	64K	110			x	10	0.3/74.9	3		
16	NMOS	5	40	16	64K	110	x	x	x	4	1	3		x
16	NMOS	5	40	16	64K	110	x	x	x	6	0.67	3		x
16	NMOS	5	44	16	64K	110			x	10	0.3/74.9	3		
16	NMOS	5	48	16–64	8M	110			x	4	1	5		
16	NMOS	5	48	16–64	8M	110				6	0.67	5		
16	NMOS	5	40	16–64	384K	110				4	1	5		
16	NMOS	5	40	16–64	384K	110				6	0.67	5		
16	NMOS	5	40	8–48	1M	133				5				
16	NMOS	5	40	8–48	1M	133				10	0.4/0.8		x	
16	NMOS	5	40	8–48	1M	133				8				
16	NMOS	5	40	8–48	1M	133				4				
16	HMOS	5		16–80	16M	56				10				
16	CMOS	5	40	16	4k	60	144x16	1.5k	x	20.48	0.6/0.196	1	x	x

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x	x	x	x	x		32-bit Internal Architecture, 16-bit External Data Bus.	NS32C016RT-10	National	
x	x	x	x	x		32-bit Internal Architecture, 16-bit External Data Bus.	NS32C016RT-15	National	
x	x	x	x	x		32-bit Internal Architecture, 16-bit External Data Bus.	NS32C016RT-6	National	
x	x	x	x	x	TI	32-bit internal architecture, 16-bit external data bus	NS32016	National	
	x	x	x	x		Real-Time Processor, 32-bir Internal Architecture, 16-bit External Data Bus.	NS32016RT-10	National	5
	x	x	x	x		Real-Time Processor, 32-bit Internal Architecture, 16-bit External Data Bus.	NS32016RT-6	National	
x	x	x	x	x	TI	Slave processor for floating point arithmetic	NS32081	National	
x	x	x	x	x	TI	Slave processor for virtual memory control	NS32082	National	
x	x	x	x	x	Zilog	High speed, CMOS 8086	μPD70116-10	NEC	
x	x	x	x	x	Zilog	High integration with several peripherals on chip. Upwards compatible with μPD70108, μPD70116.	μPD70216	NEC	10
x					OKI	CMOS Version of 7720	μPD77C20	NEC	
	x	x	x	x	Intel, Mostek, Siemens		μPD8086-2	NEC	
x	x					ROMless Version of 70322	70320 (V25)	NEC	
x	x					V20/8088 Software Compatible	70322 (V25)	NEC	
	x	x	x	x			NC4016	Novix	15
	x	x	x	x			NC6016	Novix	
x	x	x	x	x	Fairchild F9450	32- and 48-Bit Floating Point Multiplier on chip. Military Temperature Range Floating point multiplier is 1.4 μs at 30 MHz. Also, Double Precision Fixed Point.	PACE1750A	Performance	
						SEAFAC Certified to MIL-STD–1750A	P1750A-20CM	Performance	
						SEAFAC Certified to MIL-STD–1750A	P1750A-30CM	Performance	
						SEAFAC Certified to MIL-STD–1750A	P1750A-40CM	Performance	20
x	x	x		x	Zilog		LH8001	Sharp	
x	x	x		x	Zilog		LH8001A	Sharp	
x	x	x	x	x	Zilog		LH8001B	Sharp	
x	x	x		x	Zilog		LH8002	Sharp	
x	x	x		x	Zilog		LH8002A	Sharp	25
x	x	x	x	x	Zilog		LH8002B	Sharp	
x	x	x	x	x	Zilog		LH8003	Sharp	
x	x	x	x	x	Zilog		LH8003A	Sharp	
x	x	x	x	x	Zilog		LH8004	Sharp	
x	x	x	x	x	Zilog		LH8004A	Sharp	30
					Intel, Mostek, NEC		SAB8086	Siemens	
					Intel, Mostek, NEC		SAB8086-1	Siemens	
					Intel, Mostek, NEC		SAB8086-2	Siemens	
					Intel, Mostek, NEC		SAB8086-4	Siemens	
					Motorola, Hitachi, Mostek, Rockwell, Phillips	General purpose register machine, supports memory to memory operations.	SCN68000	Signetics	35
x	x	x	x		GI	Harvard Architecture, Hardware Multiplier, Low Power, 8 I/O Ports	SMJ320C10	TI	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
16	NMOS	5	48	8–200	16 M	133			x	10	0.3	256		
16	NMOS	5	24			16				10				
16	NMOS	5	48			4				10				
16	NMOS	5	40							10		16		
16	CMOS	5	40	16	4 K	60	144x16	1.5 K	x	20.48	0.6/0.196	1	x	x
16	CMOS	5	40	16	4 K	60	144x16	1.5 K	x	25	0.6/0.16	1	x	x
16	CMOS	5	40	16	4 K	60	256x16	4 K	x	20.48	0.6/0.196	1	x	x
16	CMOS	5	40	16	4 K	60	256x16	4 K	x	20.48	0.6/0.196	4	x	x
16	CMOS	5	68	16	64 K	133	544x16	4 K	x	40	0.6/0.1	6	x	x
16	CMOS	5	40	16	4 K	60	256x16	4 K	x	20.48	0.6/0.196	1	x	x
16	CMOS	5	40	16	4 K	60	256x16	4 K	x	20.48	0.6/0.196	4	x	x
16	NMOS	5	40	16	4 K	60	144x16	1.5 K		20.48	0.6/0.196	1	x	x
16	NMOS	5	40	16	4 K	60	144x16	1.5 K		14	0.6/0.286	1	x	x
16	NMOS	5	40	16	4 K	60	144x16	1.5 K		25	0.6/0.16	1	x	x
16	NMOS	5	40	16	1.5 K	60	144x16	1.5 K		20.48	0.6/0.196	4	x	x
16	NMOS	5	68	16	64 K	109	544x16	0	x	20.48	0.6/0.16	6	x	x
16	NMOS	5	24	24		16				10/15	2.4/23	64		
16	NMOS	5	48	16	64K	87	256	4K	yes	6	.5/4	16	x	x
16	NMOS	5		8–48	1M					5				
16	CMOS	5	40	8–24	64K	256				10		4		x
16	CMOS	5	40	8–24	16M	256				10		5		x
16	NMOS	±5,12		16	64K					3		std.		x
16	NMOS	±5,12		16	65K					3.3		std.		x
16	CMOS	68	8,16	16M	256				5					x
16	CMOS	5	40	16,32	1M	101				5	0.25/4			
16	CMOS	5	40	16,32	1M	101				8	0.25/4			
16	CMOS	5		16	1 MB					8	0.25	7	x	
16	NMOS	5	48	16–64	8M	110				4		5	x	x
16	CMOS	5	48	8–32	8M	110				6	0.25/4	3		
16	CMOS	5	48	8–32	8M	110				10				
16	NMOS	5	48	16–64	8M	110				6		5	x	x
16	NMOS	5	48	16–64	8M	110				10		5	x	x
16	NMOS	5	40	16–64	384K	110				4		5	x	x
16	CMOS	5	40	8–32	8M	110				6				

© IC MASTER 1988

Software Support									
	High Level Language	Programs							
Cross Assembler		Debug	Diagnostic	Edit	Alternate Sources	Comments	Device	Source	Line
					National	Full 32-bit internal architecture, 16-bit external data paths	TI32016	TI	
					National	Coprocessor, Floating Point Unit, 32-bit and 64-bit operations, supports proposed IEEE standard.	TI32081	TI	
					National	Coprocessor, Demand Paged Virtual Memory Management, 32-entry associative cache, debugging features.	TI32082	TI	
					National	System Support, Interrupt Controller, cascadable to 256 sources, fixed or rotating priorities, 2 counters.	TI32202	TI	
x	x	x	x		GI	Harvard Architecture, Hardware Multiplier, Low Power, 8 I/O Ports	**TMS320C10**	**TI**	**(3221)** 5
x	x	x	x		GI	Harvard Architecture, Hardware Multiplier, Low Power, 8 I/O Ports	**TMS320C10-25**	**TI**	**(3221)**
x	x	x	x			Expanded RAM/ROM	TMS320C15	TI	
x	x	x	x			Expanded RAM/ROM, Serial Port, Timer, Compounding Hardware	TMS320C17	TI	
x	x	x	x			Repeat Instruction, Single Cycle Multiplier/accumulator, 16 I/O Ports, Carry Bit, Power Down	**TMS320C25**	**TI**	**(3221)**
x	x	x	x			Expanded RAM/EPROM, Program Memory	TMS320E15	TI	10
x	x	x	x			Expanded RAM/EPROM Program Memory, Serial Port, Timer, Compounding Hardware	TMS320E17	TI	
x	x	x	x		GI	Harvard Architecture, Hardware Multiplier, 8 I/O Ports	**TMS32010**	**TI**	**(3221)**
x	x	x	x			Low-cost DSP	**TMS32010-14**	**TI**	**(3221)**
x	x	x	x		GI	Harvard Architecture, 8 I/O Ports, Hardware Multiplier	**TMS32010-25**	**TI**	**(3221)**
x	x	x	x			Serial Port, Timer, CM Compounding Hardware	TMS32011	TI	15
x	x	x	x			Repeat Instruction, Single Cycle Multiplier/accumulator, 16 I/O Ports	**TMS32020**	**TI**	**(3221)**
					National	Floating Point Coprocessor	T132081	TI	
x	x	x	x	x	Motorola	40 I/O lines, USART, 3 timers, 90% source-code compatible with 68000. Available in expanded, 68000 bus-compatible version. Also in CMOS.	MK68200	Thomson	
					Mitsubishi, NEC	Extended temperature range.	MK8086	Thomson	
						Pin Compatible with the 6502	W65C802	WDC	20
						Software compatible with the 6500	W65C816	WDC	
		x		x			CP9008	Western	
				x			MP1600	Western	
x	x	x				Enhanced Z80 CPU instruction set.	**Z280-MPU**	**Zilog**	**(3417)**
x	x	x	x			Instruction set is a superset of 8086/88 instruction set	Z70116-05(V30)	Zilog	25
x	x	x	x			Instruction Set is a superset of 8086/88 instruction set	Z70116-08(V30)	Zilog	
			x				Z70216	Zilog	
x	x	x	x	x	AMD, SGS, Sharp	Segmented. 16 8-bit, 8 32-bit, 4 64-bit or 16 16-bit registers.	**Z8001-CPU**	**Zilog**	**(3418)**
x	x	x	x			Z-BUS compatible	**Z8001-06CPU**	**Zilog**	**(3418)**
x	x	x	x			Z-BUS compatible	**Z8001-10CPU**	**Zilog**	**(3418)** 30
x	x	x	x	x	AMD, SGS, Sharp	Segmented. 16 8-bit, 8 32-bit, 4 64-bit or 16 16-bit registers.	**Z8001A**	**Zilog**	**(3418)**
x	x	x	x	x	AMD, SGS, Sharp	Segmented. 16 8-bit, 8 32-bit, 4 64-bit or 16 16-bit registers.	**Z8001B**	**Zilog**	**(3418)**
x	x	x	x	x	AMD, SGS, Sharp	Non-segmented. 16 8-bit, 8 32-bit, 4 64-bit or 16 16-bit registers.	**Z8002**	**Zilog**	**(3418)**
x	x	x	x			Z-BUS compatible	**Z8002-06CPU**	**Zilog**	**(3418)**

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
16	CMOS	5	40	8–32	8M	110				10				
16	NMOS	5	40	16–64	384K	110				6		5	x	x
16	NMOS	5	40	16–64	64K	110				10		5	x	x
16	NMOS	5	48	16–64	384K	110				10		5	x	x
16	NMOS	5	40	16–64	384K	110				10		5	x	x
16	CMOS	5	44	8–32	8M	110				6				
16	CMOS	5	44	8–32	8M	110				10				
16 BS	CMOS	5	64/68	16		60				32	0.31			x
16/32	NMOS	5	48	8–200	16M	100				6	0.4	256	x	x
16/32	HMOS	5	64	24, 32	16 M	56				12.5	0.08/0.25		x	
16/32	HMOS	5	64	16–80	16M	56			x	10	0.4	7	x	x
16/32	—	5	64	16–80	16M	56			x	4	0.4	7		
16/32		5	64	16,32,48, 64,80	16M	56			x	4	0.4	7		
16/32	NMOS	5	48	16–80	1M	56				12	0.75/78	7	x	x
16/32	NMOS	5	64	16–80	16M	56				12	0.75/78	7	x	x
16BS	CMOS	5	108											
16BS	CMOS	5	108											
32	CMOS	5	132	32	4Gb		64x32			18		16	x	x
32	CMOS	5	133	32	4Gb	32x32				24			x	x
32	CMOS	5	96	16	4 Gbytes	101				33	0.03	256	x	
32	CMOS	5	84	8	4G		0		x	20	0.05/2	1	x	
32	CMOS	5	84	8	4G		16K		x	20	0.05/2	1	x	
32	CMOS	5	84	8	1 GB	160	32K		x	30	0.04/1	1		
32	CMOS	5	132	8–56	4G	180				24	0.08/1.9	256	x	x
32	CMOS	5	114	16–32	4 G	65			x	25		7	x	x
32	CMOS	−0.3 to +7		32	4 GB	128			x	20		7	x	
32	CMOS	5	64	8, 16, 24, 32	16 M	108				15	0.267/8	3		x
32	CMOS	5	68	8,16,32	4 GB	128				10		3		
32	CMOS	5	68	8,16,32	4 GB	128				15		3		
32	CMOS	5	68	8,16,32	4 GB	128				6		3		
32	XMOS	5	64	8, 16, 24, 32	16 M	108				1	0.4/12	3		x

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x	x	x	x			Z-BUS compatible	**Z8002-10CPU**	**Zilog (3418)**	
x	x	x	x	x	AMD, SGS, Sharp	Non-segmented. 16 8-bit, 8 32-bit, 4 64-bit or 16 16-bit registers.	**Z8002A**	**Zilog (3418)**	
x	x	x	x	x	AMD, SGS, Sharp	Non-segmented. 16 8-bit, 8 32-bit, 4 64-bit or 16 16-bit registers.	**Z8002B**	**Zilog (3418)**	
x	x	x	x	x	AMD, SGS, Sharp	Virtual memory, segmented addresses.	Z8003	Zilog	
x	x	x	x	x	AMD, SGS, Sharp	Virtual memory, binary compatible with Z8001/Z8002, non-segmented.	Z8004	Zilog	5
x	x	x	x			Z-BUS compatible	**Z8005-06CPU**	**Zilog (3418)**	
x	x	x	x			Z-BUS compatible	**Z8005-10CPU**	**Zilog (3418)**	
x	x	x	x			Contains 4 WS5901s and one 5902.	**WS59016D**	**Waferscale (3376)**	
x	x	x	x	x	National	32 bit interval architecture, software multiply and divide.	F16032	Fairchild	
	x	x	x	x		Low-Power HCMOS Microprocessor	**MC68HC000**	**Motorola (2896)**	10
x	x	x	x	x	Hitachi, Mostek, Rockwell, Signetics	Enhanced 68000 supporting true virtual memory with taster instruction set. Relocatable vector table to support multiple operating systems.	**MC68010**	**Motorola (2896)**	
						68000 screened to MIL-STD–883.	MKB68000	Thomson	
						MKB68000 available screened to MIL-STD883.	MK68000	Thomson	
x	x	x	x	x	Motorola	8 bit data bus version of 68000.	MK68008	Thomson	
x	x	x	x	x	Motorola	Virtual memory 68000 processor	MK68010	Thomson	15
							IDT49C403	**IDT (2801, 2814)**	
							IDT49C403A	**IDT (2801, 2814)**	
	x	x	x	x		High-performance 32-bit CPU. Performs all system address generation, control, memory, access and processing functions. CMOS technology. 32-bit address and data buses are also provided.	**WE32100**	**AT&T (2518)**	
	x	x	x	x		Improvements over WE32100 include: arbitrary byte alignment for data and instructions; new addressing modes to support more efficient array access; additional kernal and user registers; enhanced quick interrupt; enhanced loop control; BCD arithmetic instructions; enhanced semaphore support; dynamic bus sizing; byte replication	**WE32200**	**AT&T (2522)**	
x	x	x	x	x		Three-chip VLSI module, (plus clock chip).	CLIPPER	Fairchild	20
x	x	x	x	x		32-bit Transputer	IMST404	Inmos	
x	x	x	x	x		32-bit Transputer	**IMST414**	**Inmos (2775)**	
x	x	x	x	x		On Chip 64-bit IEEE FPU	**IMST800**	**Inmos (2776)**	
x	x	x	x	x		Binary compatible with 8088, 8086, 80188, 80286	80386	Intel	
	x	x	x	x	Hitachi, Mostek, Signetics, Thomson	MC68000, 68010 and 68008 are upward compatible with 68020. Separate 32-bit data and address bus. On-chip cache for speed enhancement and co-processor interface to extend CPU functions.	**MC68020**	**Motorola (2896)**	25
						Second generation 32-bit enhanced microprocessor, object code compatible with MC68020 and MC68000 family	**MC68030**	**Motorola (2895)**	
x	x	x				32-bit internal architecture, 32-bit external data bus	NS32C032	National	
x	x	x	x			32-bit virtual memory processor	NS32C032-10	National	
x	x	x	x			32-bit virtual memory processor	NS32C032-15	National	
x	x	x	x			32-bit virtual memory processor	NS32C032-6	National	30
x	x	x			TI	32-bit internal architecture, 32-bit external data bus	NS32032	National	

Bold face indicates additional data is provided on the page noted.

MICROPROCESSORS (Cont'd)

General				Architecture									Hardware Support	
							(For Microcomputers Only)							
Data Word Size (bits)	Process Type	Supply Voltage (V)	No. of Pins	Instruction Word Size (bits)	Directly Addressable Memory (words)	No. of Basic Instructions	On-Chip RAM (bits)	On-Chip (P)ROM (bits)	DMA Capability	Maximum Clock Frequency (MHz)	Instruction Time Min/Max (μs)	No. of Interrupt Levels	Prototyping System	In-Circuit Emulator
32	CMOS	5	120							15	0.8/15			
32	XMOS	5	84	8, 16, 24, 32	4 G	108				0.267/8	3			x
32	XMOS	5	84	8,16,32	4 GB	128				10		3		
32	XMOS	5	84	8,16,32	4 GB	128				12		3		
32	XMOS	5	84	8,16,32	4 GB	128				15		3		
32	XMOS	5	120		4 G					15				
32	CMOS	5	175		4 GB					30				
32	NMOS	5	40	32		53	17K			10	0.2			x
32	CMOS	5	68	16	64M	130				50	0.16/6	4	x	x
32	NMOS	5	48	8,16,24	16 M	128				10/15	0.3/22	256		x
32	NMOS	5	68	8–200	16 M	133			x	10	0.3	256		
32	NMOS	5	68	8,16,24	16 M	128				10/15	0.3/19	256		x
32	CMOS	5	68	16	64 M	130				50	0.16/6	4	x	x
32	CMOS	5		32	4 GB					18		15	x	x
32	CMOS	5	84	32	4 GB					10		7	x	x
32 BS	CMOS	5	101	32		60				33	0.042			x
4	CMOS	3.5 to 6	64	10		99	512x4	8Kx10			1.78	5	x	x

© IC MASTER 1988

Software Support					Alternate Sources	Comments	Device	Source	Line
Cross Assembler	High Level Language	Programs: Debug	Programs: Diagnostic	Programs: Edit					
x	x					Advanced slave processor for floating point arithmetic	NS32310	National	
x	x					32-bit advanced microprocessor with virtual memory	NS32332	National	
x	x	x	x			32-bit advanced processor with virtual memory	NS32332-10	National	
x	x	x	x			32-bit advanced processor with virtual memory	NS32332-12	National	
x	x	x	x			32-bit advanced processor with virtual memory	NS32332-15	National	5
x	x	x				Advanced slave processor for virtual memory control	NS32382	National	
x	x	x	x			Advanced CMOS 32-bit CPU	NS32532	National	
x	x	x	x	x		Image Pipeline Processor	μPD7281	NEC	
x	x	x				Graphics System Processor	**SMJ34010**	**TI**	**(3221)**
x	x	x		x	National		TI32016T	TI	10
					National	Full 32-bit internal architecture, 32-bit external data paths	TI32032	TI	
x	x	x		x	National		TI32032T	TI	
x	x	x				Graphics System Processor	TMS34010	TI	
x	x	x	x	x			**Z32100-MPU**	**Zilog**	**(3418)**
x	x	x	x	x			**Z80000**	**Zilog**	**(3419)** 15
x	x	x	x			Contains 8 WS5901s and 3 WS5902s.	**WS59032E**	**Waferscale**	**(3376)**
x		x	x	x		58 I/O lines, 26 high voltage (40 V max)	HMCS408C	Hitachi	

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Last Page This Section. Next Page 860.

MICROPROCESSOR—System Components

Bit Slice

Macrologic Bipolar

Function	Device	Source
Buffer (16x4 First-in first-out memory. See also Memory-FIFO's)	9403AC	Fairchild
	9403AM	† Fairchild
	N9403	Signetics
CRC Generator/Checker (See also Interface-Error Checking Circuits)	9401C	Fairchild
	9401M	† Fairchild
	N9401	Signetics
	S9401	† Signetics

Macrologic CMOS

Function	Device	Source
Arithmetic Logic Register Stack	F4705BC	Fairchild
	F4705BM	† Fairchild
Data Access Register (performs memory address arithmetic)	F4707BC	Fairchild
	F4707BM	† Fairchild
Data Path Switch (for closing data path loops around arithmetic/logic networks such as the F4705)	F4704BC	Fairchild
	F4704BM	† Fairchild
Microprogram Sequencer	F4708C	Fairchild
	F4708M	† Fairchild
	GD4708B	**GoldStar (2698)**
Parallel/Serial First-In First-Out Memory (FIFO) (See also Memory-FIFO's)	F4703BC	Fairchild
	F4703BM	† Fairchild
Program Stack (16x4 LIFO Memory)	F4706BC	Fairchild
	F4706BM	† Fairchild
Programmable Bit Rate Generator (See also Digital-CMOS-Miscellaneous-Bit Rate Generator)	F4702BC	Fairchild
	F4702BM	† Fairchild
	GD4702B	**GoldStar (2698)**
	HD4702-Cell	**° Harris (2703, 2735, 2768)**
	HD4702-2	**† Harris (2703, 2735, 2768)**
RAM (16x4, clocked) Write-While-Read (See also Digital-CMOS-Memories)	F4710BC	◊ Fairchild
	F4710BM	◊† Fairchild
	GD4710B	**GoldStar (2698)**
RAM (16x4) (See also Memory-RAM's)	F4725BC	◊ Fairchild
	F4725BM	◊† Fairchild
RAM (256x1) (See also Memory-RAM's)	F4720C	◊ Fairchild
	F4720M	◊† Fairchild
RAM (256x4) (See also Memory-RAM's)	F4726BC	◊ Fairchild
	F4726BM	◊† Fairchild
	GD4721B	**GoldStar (2698)**
RAM (1024x1) (See also memory-RAM's)	GD4736B	GoldStar
ROM (256x8) (See also Memory-ROMS)	F4735BC	Fairchild
	F4735BM	† Fairchild
	GD4735B	**GoldStar (2698)**

2 Bit Slice

888

Function	Device	Source
Memory Address Generator	**SN74AS895**	**TI (3226)**
Processor, 8-Bit Microcodeable	**SN74AS887**	**TI (3226)**

3000

Function	Device	Source
Central Processing Element	N3002	Signetics
	S3002	† Signetics
Microprogram Control Unit	N3001	Signetics
	S3001	† Signetics

4 Bit Slice

2900

Function	Device	Source
Microprocessor, Four 2901's and a 2902 Look-Ahead Carry in one device	2901X4	IMI
	4X2901B	IMI
Microprocessor, 4-Bit Slice, Cascadable	AM2901BC	AMD
	AM2901BM	† AMD
	AM2903AC	AMD
	AM2903AM	† AMD
	AM2903C	AMD
	AM2903M	† AMD
	CY2901BC	Cypress
	CY2901BM	† Cypress
	CY2901CC	Cypress
	CY2901CM	† Cypress
	CY7C901-32M	**† Cypress (2569)**
	CY7C901-88M	**† Cypress (2569)**
	CY7C901C	**Cypress (2569)**
	CY7C901M	**† Cypress (2569)**
	2901	° Fairchild
	2901-Cell	° Fairchild
	GE29C01	GE Semi
	2901-Cell	° GE Semi
	IDT39C01C	**◊ IDT (2801)**
	IDT39C03A	**◊ IDT (2801)**
	IDT39C203	**◊ IDT (2801)**
	IDT39C203A	**IDT (2801)**
	2901-Cell	° LSI Logic
	IDM2901A-2	National
	IDM2901AC	National
	NCR2901-Cell	◊° NCR
	SFC2901B	Thomson
	SFC2901C	Thomson
	SFC2903	Thomson
	2901-Cell	° Thomson
	VSC2901-Cell	◊° VLSI Tech
	2901-Cell	**° Waferscale (3376)**
Bus Transceivers (See also Interface-Line Transceivers)	AM2905C	AMD
	AM2905M	† AMD
	AM2906C	AMD
	AM2906M	† AMD
	AM2907C	AMD
	AM2907M	† AMD
	AM2912C	AMD
	AM2915AC	AMD
	AM2915AM	† AMD
	AM2916AC	AMD

(Continued)

Function	Device	Source
Bus Transceivers (See also Interface-Line Transceivers) (Cont'd)	AM2916AM	† AMD
	AM2917AC	AMD
	AM2917AM	† AMD
	AM2927C	AMD
	AM2928C	AMD
	AM2946C	AMD
	AM2947C	AMD
	AM2948C	◊ AMD
	AM2949C	◊ AMD
	SFC2915A	Thomson
	SFC2917	Thomson
Clock Generator and Driver	AM2925C	AMD
	AM2925M	† AMD
	IDT49C25	**◊ IDT (2801)**
Decoder/Demultiplexer	AM2924C	AMD
DMA Address Generator	AM2940C	AMD
	AM2940M	† AMD
DMA Address Generator/Programmable Timer/Counter	AM2942C	AMD
	AM2942M	† AMD
Dynamic Memory Controller	AM2964B	◊ AMD
	AM2964BC	◊ AMD
	AM2964BM	◊† AMD
	AM2968	◊ AMD
	MC54F2968	† Motorola
	MC74F2968	◊ Motorola
Error Correction and Detection Circuit, 16-Bit	**IDT39C60**	**◊ IDT (2801)**
	IDT39C60-1	**◊ IDT (2801)**
Error Correction and Detection Circuit, 32-bit	**IDT49C460**	**◊ IDT (2801, 2817)**
	IDT49C460A	**IDT (2801, 2817)**
	IDT49C460B	**IDT (2801, 2817)**
Error Correction and Detection Circuit, 16-Bit	AM2960C	◊ AMD
	AM2960M	◊† AMD
	MC54F2960	Motorola
	MC74F2960	◊ Motorola
Error Correction and Detection Circuit, 6-Bit	AM2960-1	◊ AMD
Error Correction Multiple Bus Buffer, 4-Bit (datapath interface between AM2960, data bus, and RAM)	AM2904C	AMD
	AM2904M	† AMD
	AM2961C	◊ AMD
	AM2961M	◊† AMD
	AM2962C	◊ AMD
	MC54F2961	† Motorola
	MC54F2962	† Motorola
	MC74F2961	◊ Motorola
	MC74F2962	◊ Motorola
Look-Ahead Carry Generator	AM2902AC	AMD
	AM2902AM	† AMD
	IDT39C02A	**◊ IDT (2801)**
	IDM2902C	National
	IDM2902M	† National
	SFC2902A	Thomson

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

4 Bit Slice

2900 (Cont'd)

Function	Device	Source	
Memory Timing Controller with EDAC			
	AM2969	◊† AMD	
	MC54F2969	† Motorola	
	MC74F2969	◊ Motorola	
Memory Timing Controller without EDAC			
	AM2970	◊ AMD	
	MC54F2970	† Motorola	
	MC74F2970	◊ Motorola	
Microprogram Sequencer, 4-Bit			
	AM2909AC	AMD	
	AM2909C	AMD	
	AM2911A	AMD	
	CY2909AC	Cypress	
	CY2909AM	† Cypress	
	CY2909C	Cypress	
	CY2909M	† Cypress	
	CY2911AC	Cypress	
	CY2911AM	† Cypress	
	CY2911C	Cypress	
	CY2911M	† Cypress	
	CY7C909-30C	**Cypress**	**(2569)**
	CY7C909-30M	**† Cypress**	**(2569)**
	CY7C909-40C	**Cypress**	**(2569)**
	CY7C909-40M	**† Cypress**	**(2569)**
	CY7C911-30C	**Cypress**	**(2569)**
	CY7C911-30M	**† Cypress**	**(2569)**
	CY7C911-40C	**Cypress**	**(2569)**
	CY7C911-40M	**† Cypress**	**(2569)**
	IDT39C09A	**◊ IDT**	**(2801)**
	IDT39C09B	**◊ IDT**	**(2801)**
	IDT39C11A	**◊ IDT**	**(2801)**
	IDT39C11B	**◊ IDT**	**(2801)**
	IDM2909AC	National	
	IDM2911AC	National	
	SFC2909	Thomson	
	SFC2909A	Thomson	
	SFC2911	Thomson	
	SFC2911A	Thomson	
Multiplier Accumulator, 12x12 bit			
	AM29L509	AMD	
	AM29509	AMD	
Multiplier Accumulator, 16x16 bit			
	AM29L510	AMD	
	AM29510	AMD	
	CY7C510M	**† Cypress**	**(2569)**
Multiplier, 16x16 bit			
	AM29L516	AMD	
	AM29L517	AMD	
	CY7C516C	**Cypress**	**(2569)**
	CY7C516M	**† Cypress**	**(2569)**
	CY7C517C	**◊ Cypress**	**(2569)**
	CY7C517M	**◊† Cypress**	**(2569)**
Next Address Control Unit (use with 2911)			
	AM29811AC	AMD	
	AM29811AM	† AMD	
	IDM29811C	National	
	IDM29811M	† National	
Priority Encoder			
	IDM29902C	National	
	IDM29902M	† National	
Priority Interrupt Encoder, Vectored			
	AM2914C	AMD	
	AM2914M	† AMD	
	SFC2914	Thomson	
Priority Interrupt Expander (for 2914)			
	AM2913C	AMD	
	AM2913M	† AMD	
Programmable Event Generator			
	AM2971C	AMD	
	AM2971M	† AMD	
RAM (16x4) Two Outputs Ports			
	AM29705C	AMD	
	AM29705M	† AMD	
	AM29707	AMD	
	IDT39C705A	**IDT**	**(2801)**
	IDT39C705B	**IDT**	**(2801)**
	IDT39C707	**IDT**	**(2801)**
	IDT39C707A	**IDT**	**(2801)**
	IDM29705AC	National	
Quad Bus Driver/Receiver			
	AM2926C	AMD	
	AM2929C	AMD	
Quad D Flip-Flop with Two Output Ports			
	AM2919C	AMD	
	AM2919M	† AMD	
	SFC2919	Thomson	
Quad D Register with Both Standard and Three-State Outputs (See also Digital-TTL-Flip-Flops)			
	AM2918C	AMD	
	AM2918M	† AMD	
	SFC2918	Thomson	
Quad-Gated Flip-Flop			
	IDM29908C	National	
	IDM29908M	† National	
Octal Buffer/Line Driver/Line Receiver			
	AM2958C	◊ AMD	
	AM2959C	◊ AMD	
Octal D-Type Flip-Flip, Clear and Clock Enable, Three-State	AM2920C	AMD	
	AM2920M	† AMD	
Octal D-Type Flip-Flop, Three State			
	IDM29901C	National	
	IDM29901M	† National	
Octal Latch, Three State			
	AM2956C	◊ AMD	
	AM2957C	◊ AMD	
Octal Memory Driver, Three-State			
	AM2965C	◊ AMD	
	AM2965M	◊† AMD	
	AM2966C	◊ AMD	
	AM2966M	◊† AMD	
	54S730	◊† MMI	
	54S734	◊† MMI	
Octal Register, Three State			
	AM2954C	◊ AMD	
	AM2955C	◊ AMD	
One-of-Eight Decoder, with Polarity Control, Three-State			
	AM2921C	AMD	
	AM2921M	† AMD	
6-Bit Comparator with 1 of 4 Chip Select			
	AM29806	AMD	
8-Bit Bidirectional I/O Port			
	AM2952C	◊ AMD	
	AM2952M	◊† AMD	
	AM2953C	◊ AMD	
	AM2953M	◊† AMD	
	29F52C	Fairchild	
	29F52M	† Fairchild	
	29F53C	Fairchild	
	29F53M	† Fairchild	
8-Bit Diagnostic Register with Serial Shadow Register			
	AM29818	◊ AMD	
8-Bit Parallel I/O Port			
	AM2950C	◊ AMD	
	AM2950M	◊† AMD	
	AM2951C	◊ AMD	
	AM2951M	◊† AMD	
8-Input Multiplexer, with Control Storage			
	AM2922C	AMD	
	AM2922M	AMD	
	AM2923C	AMD	
9-Bit Equal to Comparator			
	AM29809	AMD	
16-Way Branch Control Unit (use with 2909)			
	AM29803AC	AMD	
	AM29803AM	† AMD	
	IDM29803C	◊ National	
	IDM29803M	◊† National	
32-Bit Microprocessor Slice			
	IDT49C404	**IDT**	**(2801, 2815)**
	IDT49C404A	**IDT**	**(2801, 2815)**
64-Bit (16x4) Edge-Triggered Register, Three-State			
	IDM29903C	National	

10800

Function	Device	Source	
Arithmetic Logic Unit			
	MC10800	Motorola	
Bidirectional Translator with Latch			
	MC10804	Motorola	
	MC10805	Motorola	
ECL Transceiver with Latch			
	MC10807	Motorola	
Microprogram Control Function			
	MC10801	Motorola	
Multibit Shifter (16-Bit programmable shifter)			
	MC10808	Motorola	
Dual Address Register (32x9 stack)			
	MC10806	Motorola	

8 Bit Slice

888

Function	Device	Source	
Microprocessor, 8-Bit Slice			
	SN74AS888	**TI**	**(3226)**
Microprocessor, 8-Bit Slice			
	SN54AS888	† TI	
Microsequencer			
	SN54AS890	† TI	
	SN74AS890	**TI**	**(3226)**

10900

Function	Device	Source	
ALU, 8-Bit Slice			
	MC10900	Motorola	
Microcode Sequencer			
	MC10904	Motorola	

EPIC

Function	Device	Source	
Microprocessor, CMOS			
	GP001AD	‡ GE/RCA	
Address Select Unit (Double)			
	GP514AD	**‡ GE/RCA**	**(2658)**
Bus Interface Unit			
	GP516	**GE/RCA**	**(2658)**

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

Function	Device	Source	Line
8 Bit Slice			
EPIC (Cont'd)			
Double Address Select Unit			
	GP514	**GE/RCA (2658)**	
Double Register Select Unit			
	GP515	**GE/RCA (2658)**	
Emulating Controller			
	GP501AD	‡ GE/RCA	
Interrupt Control and Timing			
	GP517AD	**‡ GE/RCA (2658)**	
Interrupt Control and Timing Unit			
	GP517	**GE/RCA (2658)**	5
Level Shifter	**GP511AD**	**‡ GE/RCA (2658)**	
Microprogram Sequencer (2910)			
	GP502	GE/RCA	
Register Select Unit (Double)			
	GP515AD	**‡ GE/RCA (2658)**	
ROM (4096 bit)			
	GP301AD	‡ GE/RCA	
	GP302AD	‡ GE/RCA	10
ROM (512x16)			
	GP305AD	‡ GE/RCA	
8x8-Bit Multiplier			
	GP503AD	‡ GE/RCA	
16 Bit Slice			
2900			
Microprocessor, 16-Bit Slice, Cascadable			
	CY7C9101C	**Cypress (2569)**	
	CY7C9101M	**† Cypress (2569)**	
1 Bit			
14500			
Microprocessor, Industrial Control Unit			
	MC14500B	Motorola	15
Latch, 8-Bit	MC14597BA	† Motorola	
	MC14597BC	Motorola	
	MC14598BA	† Motorola	
	MC14598BC	Motorola	
	MC14599BA	† Motorola	20
	MC14599BC	Motorola	
4 Bit			
SM Series			
Microcomputer			
	SM100	Sharp	
	SM111	◊ Sharp	
	SM114	Sharp	
	SM590	Sharp	25
	SM591	Sharp	
Microcomputer, Expandable for External RAM			
	SM3A	Sharp	
Microcomputer, Expandable for External RAM/ROM			
	SM200	◊ Sharp	
	SM520	Sharp	
Microcomputer, Multi-LCD Display, On-Chip LCD Driver			
	SM510	◊ Sharp	30
Microcomputer, On-Chip A/D Converter			
	SM110	◊ Sharp	
	SM573	Sharp	
Microcomputer, On-Chip LCD Driver			
	SM5A	Sharp	
	SM500	◊ Sharp	

(Continued)

Function	Device	Source	Line
Microcomputer, On-Chip LCD Driver (Cont'd)			
	SM531	◊ Sharp	35
	SM540	Sharp	
	SM563	Sharp	
Microcomputer, On-Chip LCD Driver, Expandable for External RAM	SM4A	Sharp	
Microcomputer, On-Chip Melody Generator and LCD Driver	SM511	◊ Sharp	
	SM530	◊ Sharp	40
Microcomputer, Serial Input/Output			
	SM550	◊ Sharp	
	SM551	◊ Sharp	
	SM552	◊ Sharp	
1400			
Microcomputer			
	MN1400	Panasonic	
	MN1402	Panasonic	45
	MN1403	Panasonic	
	MN1404	Panasonic	
	MN1405	Panasonic	
	MN1430	Panasonic	
	MN1432	Panasonic	50
	MN1435	Panasonic	
Microcomputer, CMOS			
	MN1450	Panasonic	
	MN1453	Panasonic	
	MN1454	Panasonic	
	MN1455	Panasonic	55
Microcomputer, Evaluator			
	MN1499	Panasonic	
	MN1499A	Panasonic	
Microcomputer, External Memory			
	MN1498	Panasonic	
1500			
Microcomputer			
	MN1541	Panasonic	
	MN1542	Panasonic	60
	MN1544	Panasonic	
	MN1562	Panasonic	
	MN1564	Panasonic	
Evaluator	MN1599	◊ Panasonic	
I/O Expander	MN1591	Panasonic	65
2100			
Program Development Device			
	SE2100P	TI	
	SE2400P	TI	
6000			
Microcomputer			
	SAA6000	◊ ITT	
6400			
Microcomputer			
	LM6402	◊ Sanyo	
	LM6405	◊ Sanyo	70
8840/50			
Microcomputer, CMOS, Clock, RAM, ROM, I/O			
	MB8851	Fujitsu	
	MB8851A	Fujitsu	
	MB8851L	Fujitsu	
	MB8853	Fujitsu	

(Continued)

Function	Device	Source	Line
Microcomputer, CMOS, Clock, RAM, ROM, I/O (Cont'd)			
	MB8854A	Fujitsu	75
	MB8854L	Fujitsu	
	MB8855	Fujitsu	
	MB8858	Fujitsu	
Microcomputer, NMOS, Clock, RAM, ROM, I/O			
	MB8841	Fujitsu	
	MB8842	Fujitsu	80
	MB8843	Fujitsu	
	MB8844	Fujitsu	
	MB8845	Fujitsu	
	MB8846	Fujitsu	
	MB8847	Fujitsu	85
	MB8848	Fujitsu	
COP200			
Microcontroller, RAM, ROM, I/O			
	COP224C	National	
	COP225C	National	
	COP226C	National	
	COP245C	◊ National	90
COP400			
Microcontroller, CMOS, RAM, ROM, I/O			
	COP313C	National	
	COP313CH	National	
	COP324C	National	
	COP325C	National	
	COP344C	National	95
	COP345C	National	
	COP413C	National	
	COP413CH	National	
Microcontroller, Piggyback EPROM			
	COP2440R	National	
	COP2441R	National	100
	COP402M	National	
	COP420R	National	
	COP440R	National	
	COP444LR	National	
Microcontroller, Piggyback with EPROM Socket			
	COP2440R	National	105
	COP420R	National	
	COP440R	National	
	COP444LR	National	
Microcontroller, RAM, ROM, I/O			
	COP326C	National	
	COP342	National	110
Microcontroller, ROMless			
	COP402	National	
	COP404	National	
Microcontroller (with ROM)			
	COP210C	† National	
	COP211C	† National	
	COP310C	National	115
	COP310L	National	
	COP311C	National	
	COP311L	National	
	COP320	National	
	COP320L	National	120
	COP321	National	
	COP321L	National	
	COP322L	National	
	COP340	† National	
	COP341	† National	125
	COP410C	National	
	COP410L	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

4 Bit

COP400 (Cont'd)

Function	Device	Source
Microcontroller (with ROM) (Cont'd)		
	COP411C	National
	COP411L	National
	COP414L	◊ National
	COP420	◊ National
	COP420L	National
	COP421	◊ National
	COP421L	National
	COP422L	National
	COP440	National
	COP441	National
	COP442	National
	COP444L	◊ National
	COP445L	National
	ETC9410	Thomson
	ETC9411	Thomson
	ETC9420	Thomson
	ETC9421	Thomson
	ETC9422	Thomson
	ETC9444	Thomson
	ETC9445	Thomson
	ETL9410	Thomson
	ETL9411	Thomson
	ETL9413	Thomson
	ETL9420	Thomson
	ETL9421	Thomson
	ETL9422	Thomson
	ETL9444	Thomson
	ETL9445	Thomson
	ET9413	Thomson
	ET9420	Thomson
	ET9421	Thomson
	ET9422	Thomson
Microcontroller, Single-Chip, Dual CPU		
	COP2341	National
	COP2342	National
	COP2440	National
	COP2441	National
	COP2442	National
E² PROM 256-Bit Serial		
	COP494	◊ National
Frequency Generator/Counter Peripheral		
	COP452	National
Liquid Crystal Display Controller		
	COP472	National
RAM (4x64) and Timer		
	COP398	National
	COP498	◊ National
RAM (4x64) Serial (CMOS)		
	COP399	National
	COP499	◊ National
Vacuum Fluorescent Display Driver		
	COP370	National
	COP470	National
8-Bit A/D Converter		
	COP430	National
	COP431	National
	COP432	National
	COP434	National
	COP438	National

51000

Function	Device	Source
Microcomputer, RAM, ROM, I/O		
	KS51000	Samsung
	KS51200	Samsung
	KS52000	Samsung

OLMS40

Function	Device	Source
Microcomputer (CMOS), I/O, Display Outputs, Timer		
	MSM58421	◊ OKI
	MSM58422	◊ OKI
Microcomputer (CMOS), ROM, RAM, Timer/Counter, I/O	MSM5842	◊ OKI
	MSM5845	OKI
Microprocessor, Real-Time Clock Calendar		
	MSM5832	OKI
	MSM58321	OKI
	L5832	SGS
Column Data Register for LCD		
	MSM5839	OKI
Row Scanning Controller for LCD DOT Matrix Driver		
	MSM5838	OKI
Serial to Parallel Converter and LED Driver		
	MSM58371	OKI
Four Digit LED Driver		
	MSM58282	OKI
Four Digit VF Driver		
	MSM58283	OKI
Five Digit LCD Driver		
	MSM58292	◊ OKI
Five Digit VF Driver		
	MSM58293	◊ OKI

SM-4

Function	Device	Source
Evaluation Device		
	LI3010	Sharp

88200

Function	Device	Source
Microcomputer, CMOS, Clock, RAM, ROM, I/O		
	MB88200	Fujitsu
	MB88201	Fujitsu
	MB88202	Fujitsu
	MB88205	Fujitsu

88400

Function	Device	Source
Microcomputer, NMOS, Clock, RAM, ROM, I/O		
	MB88401	Fujitsu
	MB88411	Fujitsu
	MB88413	Fujitsu
	MB88421	Fujitsu
	MB88423	Fujitsu

88500

Function	Device	Source
Microcomputer, CMOS, Clock, RAM, ROM, I/O		
	MB88501	Fujitsu
	MB88503	Fujitsu
	MB88535	◊ Fujitsu
	MB88536	◊ Fujitsu
	MB88541	Fujitsu

TLCS47

Function	Device	Source
Microcomputer, 1K ROM, Zero Cross Detector		
	TMP42C66	Toshiba
Microcomputer, 1K ROM, 11 I/O Lines		
	TMP42C60	Toshiba
	TMP4260	Toshiba
Microcomputer, 1K ROM, 23 I/O Lines		
	TMP42C70	Toshiba
	TMP4270	Toshiba
Microcomputer, 2K ROM		
	TMP47C200	◊ Toshiba
Microcomputer, 2K ROM, DTMF		
	TMP47C25	Toshiba
	TMP47C26	Toshiba
Microcomputer, 2K ROM, LCD Drivers		
	TMP47C220A	◊ Toshiba
Microcomputer, 2K ROM, LED Drive		
	TMP4720	Toshiba
Microcomputer, 2K ROM, PWM		
	TMP47C231A	Toshiba
	TMP47C232	Toshiba
Microcomputer, 2K ROM, VFT Drivers		
	TMP47C210A	◊ Toshiba
Microcomputer, 4K ROM		
	TMP47C400	Toshiba
Microcomputer, 4K ROM, A/D, Watchdog Timer		
	TMP47C440A	Toshiba
Microcomputer, 4K ROM, A/D, Watchdog Timer, VFT Driver	TMP47C441A	Toshiba
Microcomputer, 4K ROM, I/O		
	TMP47C460A	◊ Toshiba
Microcomputer, 4K ROM, LCD Drivers		
	TMP47C420A	Toshiba
Microcomputer, 4K ROM, LCD Drivers, Dual Clock		
	TMP47C425A	Toshiba
Microcomputer, 4K ROM, LED Drive		
	TMP4740	Toshiba
	TMP4746	Toshiba
Microcomputer, 4K ROM, PWM		
	TMP47C432	Toshiba
Microcomputer, 4K ROM, RAM, DTMF		
	TMP47C451A	Toshiba
	TMP47C452A	Toshiba
Microcomputer, 4K ROM, VFT Drivers		
	TMP47C410A	Toshiba
	TMP47C475A	◊ Toshiba
Microcomputer, 6K ROM, A/D, Watchdog Timer		
	TMP47C660	Toshiba
Microcomputer, 6K ROM, VFT Drivers, Watchdog Timer		
	TMP47C670	Toshiba
Microcomputer, 8K ROM, A/D, Watchdog Timer		
	TMP47C860	Toshiba
Microcomputer, 8K ROM, VFT Drivers, Watchdog Timer		
	TMP47C870	Toshiba
Microcomputer, 8K ROM, Watchdog Timer		
	TMP47C800	Toshiba
Microcomputer, 512 byte ROM, 11 I/O Lines		
	TMP42C40	Toshiba
	TMP4240	Toshiba
Microcomputer, 512 byte ROM, 23 I/O Lines		
	TMP42C50	Toshiba
	TMP4250	Toshiba

TMS1000

Function	Device	Source
Microcomputer		
	TMS1000	TI
	TMS1070	◊ TI

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

Function	Device	Source	Line
4 Bit			
TMS1000 (Cont'd)			
Microcomputer (Cont'd)			
	TMS1100	TI	
	TMS1270	TI	
Microcomputer (CMOS)			
	TMS1730	TI	
I/O Expander	TMS1030	TI	
ROMless TMS1000 Family Evaluator and Program Development Device			
	SE1000P	◊ TI	5
	SE1400P	TI	
	SE2200P	TI	
TMS2000			
ROMless TMS2000 Family Evaluator			
	SE2100P	TI	
	SE2400P	TI	
μCOM-75			
Microcomputer			
	μCOM-75	NEC	10
	μPD7527	NEC	
Microcomputer, General Purpose Driver			
	μPD7506	◊ NEC	
	μPD7507	◊ NEC	
	μPD7507S	NEC	
	μPD7508	◊ NEC	15
	μPD7508A	NEC	
	μPD7508H	NEC	
	μPD75106	NEC	
	μPD7517	NEC	
	μPD75206	NEC	20
	μPD7528	NEC	
	μPD75308	NEC	
	μPD7538	◊ NEC	
	μPD7554	◊ NEC	
	μPD7556	◊ NEC	25
Microcomputer, LCD Driver			
	μPD7501	◊ NEC	
	μPD7502	◊ NEC	
	μPD7503	◊ NEC	
	μPD7514	◊ NEC	
Microcomputer, LED Driver			
	μPD7520	NEC	30
Microcomputer, Vacuum Fluorescent Driver			
	μPD7508A	NEC	
	μPD7517	NEC	
	μPD7519	◊ NEC	
	μPD7528	NEC	
	μPD7537	NEC	35
	μPD7538	◊ NEC	
8 Bit			
Microprocessor			
	INS8060	National	
Microcontroller, RAM, ROM, I/O			
	COP820	National	
	COP821	National	
	COP822	National	
	COP840	National	40
	COP841	National	
Bit Programmable I/O			
	INS8254	National	

Function	Device	Source	Line
Programmable Communication Interface (See also Interface Transmitters-Receivers)			
	INS8250	National	
	INS8251	National	45
	COM8251A	SMC	
	VL82C50	**VLSI Tech (3329)**	
Programmable Peripheral Interface			
	INS8255	National	
RAM(128x8) and I/O			
	INS8154	National	
4-Bit Latch	DM74LS175	National	50
8-Bit I/O Port	DP8212	National	
	INS8212	National	
740			
Microprocessor, External ROM			
	M50734	Mitsubishi	
Microprocessor, Piggy-Back for M50740/M50741			
	M50740-PGYS	Mitsubishi	
Microprocessor, Piggy-Back for M50742			
	M50742-PGYS	Mitsubishi	55
Microprocessor, Piggy-Back for M50743			
	M50743-PGYS	Mitsubishi	
Microprocessor, Piggy-Back for M50745			
	M50745-PGYS	Mitsubishi	
Microprocessor, Piggy-Back for M50747			
	M50747-PGYS	Mitsubishi	
Microprocessor, Piggy-Back for M50753			
	M50753-PGYS	Mitsubishi	
Microprocessor, Piggy-Back for M50757/M50752			
	M50752-PGYS	Mitsubishi	60
Microprocessor, RAM, External ROM			
	M50740ASP	Mitsubishi	
Microprocessor, RAM, ROM			
	M50740	Mitsubishi	
	M50740A	Mitsubishi	
	M50741	Mitsubishi	
	M50742	Mitsubishi	65
	M50743	Mitsubishi	
	M50745	Mitsubishi	
	M50747	Mitsubishi	
	M50752	Mitsubishi	
	M50753	Mitsubishi	70
	M50754	Mitsubishi	
	M50757	Mitsubishi	
	M50758	Mitsubishi	
Microcontroller, 8K ROM, RAM			
	M50932	Mitsubishi	
	M50943	Mitsubishi	75
1650			
Microcomputer			
	PIC1652	GIM	
	PIC1654	GIM	
	PIC1655	GIM	
	PIC1657	GIM	
	PIC1670	GIM	80
	PIC1672	GIM	
1800			
Microcomputer, RAM, ROM, Counter/Timer			
	CDP1804AC	**† GE/RCA (2639)**	
Microcomputer with Pascal Kernel in 2K ROM			
	CDP1804PC	GE/RCA	

Function	Device	Source	Line
Microprocessor			
	CDP1802A	† GE/RCA	
	CDP1802AC	**† GE/RCA (2639)**	85
	CDP1802B	GE/RCA	
	CDP1802BC	**† GE/RCA (2639)**	
	CDP1804A	GE/RCA	
	CDP1805A	GE/RCA	
	CDP1806A	GE/RCA	90
	HCMP1802A	◊ Hughes	
	HCMP1802AC	Hughes	
	HCMP1802BC	Hughes	
	HMMP1802A	† Hughes	
	HMMP1802AC	† Hughes	95
	HMMP1802BC	† Hughes	
Microprocessor, Counter/Timer			
	CDP1806AC	**† GE/RCA (2639)**	
Microprocessor, RAM, Counter/Timer			
	CDP1805AC	**† GE/RCA (2639)**	
Keyboard Encoder			
	CDP1871A	**GE/RCA (2642)**	
	CDP1871AC	GE/RCA	100
Latch/Decoder Memory Interface			
	CDP1881	**GE/RCA (2642)**	
	CDP1881C	**GE/RCA (2642)**	
	CDP1882	**GE/RCA (2642)**	
	CDP1882C	**GE/RCA (2642)**	
	CDP1883	**GE/RCA (2642)**	105
Multiply-Divide Circuit			
	CDP1855	**◊† GE/RCA (2642)**	
	HCMP1855	Hughes	
	HCMP1855C	Hughes	
	HMMP1855	† Hughes	
	HMMP1855C	† Hughes	110
N-Bit Decoder (for I/O interface)			
	CDP1853	**◊† GE/RCA (2642)**	
	CDP1853C	**◊† GE/RCA (2642)**	
	HCMP1853	◊ Hughes	
	HCMP1853C	Hughes	
	HMMP1853	† Hughes	115
	HMMP1853C	† Hughes	
Programmable I/O Interface			
	CDP1851	**◊† GE/RCA (2642)**	
	CDP1851C	**◊† GE/RCA (2642)**	
	HMMP1851	† Hughes	
	HMMP1851C	† Hughes	120
Programmable Interrupt Controller			
	CDP1877	**GE/RCA (2642)**	
	CDP1877C	**GE/RCA (2642)**	
RAM (32x8) (See also Memory-RAM's)			
	CDP1824	**† GE/RCA (2643)**	
	CDP1824C	**† GE/RCA (2643)**	
	HCMP1824	◊ Hughes	125
	HCMP1824C	Hughes	
	HMMP1824	◊† Hughes	
RAM (64x8) (See also Memory-RAM's)			
	CDP1826C	**GE/RCA (2643)**	
RAM (128x8) (See also Memory-RAM's)			
	CDP1823	**† GE/RCA (2643)**	
	CDP1823C	**† GE/RCA (2643)**	130
RAM (256x4) (See also Memory-RAM's)			
	CDP1822	**† GE/RCA (2643)**	
	CDP1822C	**† GE/RCA (2643)**	
	HCMP1822C	Hughes	
	HMMP1822C	◊† Hughes	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8 Bit

1800 (Cont'd)

Function	Device	Source	Line
Real-Time Clock (time and calendar information in BCD format from seconds to months)	**CDP1879**	**† GE/RCA (2642)**	
	CDP1879C-1	**† GE/RCA (2642)**	
ROM (512x8) (See also Memory-ROM's)	**CDP1832**	**† GE/RCA (2644)**	
	CDP1832C	**† GE/RCA (2644)**	
	HCMP1831	◊ Hughes	5
	HCMP1831C	Hughes	
	HCMP1832	◊ Hughes	
	HCMP1832C	Hughes	
	HMMP1831	◊† Hughes	
	HMMP1831C	◊† Hughes	10
	HMMP1832	◊† Hughes	
	HMMP1832C	◊† Hughes	
ROM (1024x8) (See also Memory-ROM's)	**CDP1833**	**† GE/RCA (2644)**	
	CDP1833C	**† GE/RCA (2644)**	
	CDP1834	**† GE/RCA (2644)**	15
	CDP1834C	**† GE/RCA (2644)**	
	HCMP1833	◊ Hughes	
	HCMP1833C	Hughes	
	HCMP1834	◊ Hughes	
	HCMP1834C	Hughes	20
	HMMP1833	◊† Hughes	
	HMMP1833C	◊† Hughes	
	HMMP1834	† Hughes	
	HMMP1834C	† Hughes	
ROM (2048x8) (See also memory-ROMs)	**CDP1835C**	**† GE/RCA (2644)**	25
	CDP1837C	**† GE/RCA (2644)**	
	HCMP1835	◊ Hughes	
	HCMP1835C	Hughes	
	HMMP1835	† Hughes	
	HMMP1835C	† Hughes	30
	HMMP1836	† Hughes	
	HMMP1836C	† Hughes	
UART	**CDP1854A**	**◊† GE/RCA (2642)**	
	CDP1854AC	◊† GE/RCA	35
	CDP65C51-1	**GE/RCA (2642)**	
	CDP6853	**GE/RCA (2642)**	
	HCMP1854A	◊ Hughes	
	HCMP1854AC	Hughes	
	HMMP1854A	† Hughes	
	HMMP1854AC	† Hughes	40
Video Display Controller	HMMP1861	† Hughes	
	HMMP1861C	† Hughes	
Video Interface System (1869 is an address and sound generator	CDP1869C	† GE/RCA	
Dual Counter/Timer (two 16-bit programmable down counters independently controlled by separate control registers)	**CDP1878**	**† GE/RCA (2642)**	
4-Bit Buffer/Separator (for memory interface)	HCMP1856	Hughes	45
	HCMP1856C	Hughes	
	HMMP1856	† Hughes	
	HMMP1856C	† Hughes	
4-Bit Bus Buffer/Separator (for I/O interface)	HCMP1857	Hughes	
	HCMP1857C	Hughes	50
	HMMP1857	† Hughes	
	HMMP1857C	† Hughes	

Function	Device	Source	Line
4-Bit Latch with Dual 1 of 4 Decoders	HCMP1858	Hughes	
	HCMP1858C	Hughes	
	HMMP1858	† Hughes	55
	HMMP1858C	† Hughes	
4-Bit Latch with 1 of 4 Decoder	HCMP1859	Hughes	
	HCMP1859C	Hughes	
	HMMP1859	† Hughes	
	HMMP1859C	† Hughes	60
6-Bit Latch with 1 of 4 Decoder	**CDP1882**	**GE/RCA (2642)**	
	CDP1882C	**GE/RCA (2642)**	
	CDP1883	**GE/RCA (2642)**	
7-Bit Latch with Decoder for 8Kx8 Memories	**CDP1883C**	**GE/RCA (2642)**	
8-Bit Input/Output Port	**CDP1852**	**◊† GE/RCA (2642)**	65
	CDP1872C	**† GE/RCA (2642)**	
	CDP1874C	**† GE/RCA (2642)**	
	CDP1875C	**† GE/RCA (2642)**	
	HCMP1852	◊ Hughes	
	HCMP1852C	Hughes	70
	HMMP1852	† Hughes	
	HMMP1852C	† Hughes	

2650

Function	Device	Source	Line
Microprocessor	SCN2650A	Signetics	
Advanced Video Display Controller	MC2674	Motorola	
	SCN2674	**◊ Signetics (3046)**	75
Asynchronous Communications Interface	SCN2641	◊ Signetics	
Display Character and Graphics Generator	SC2670AC3	Signetics	
	SC2670BC3	Signetics	
Multi-Protocol Communications Circuit (includes SDLC, BiSync)	SCN2652A	Signetics	
Polynomial Generator/Checker	SCN2653A	Signetics	80
Programmable Communication Interface	SCN2651C	Signetics	
	SCN2661A	Signetics	
	SCN2661B	Signetics	
	COM2651	SMC	
	COM2661	SMC	85
Programmable Video Timing Controller	SCN2672A	Signetics	
Video Attributes Controller	SCB2673A	Signetics	
	SCB2673B	Signetics	
Dual Universal Asynchronous Receiver/Transmitter	**SCN2681**	**◊ Signetics (3052)**	
Quad Transceivers (See also Interface-Line Transceivers)	**MC8T26A**	**Motorola (2951)**	90
	MC8T28	**Motorola (2951)**	
	DS8T26A	National	
	DS8T28	National	
Hex Buffers/Inverters (See also Digital-TTL-Buffers/Inverters 8T95, 8T96, 8T97, 8T98)	**MC8T95**	**Motorola (2951)**	
	MC8T96	**Motorola (2951)**	95
	MC8T97	**Motorola (2951)**	
	MC8T98	**Motorola (2951)**	
	N8T95	**Signetics (3022)**	

(Continued)

Function	Device	Source	Line
Hex Buffers/Inverters (See also Digital-TTL-Buffers/Inverters 8T95, 8T96, 8T97, 8T98) (Cont'd)	**N8T96**	**Signetics (3022)**	
	N8T97	**Signetics (3022)**	100
	N8T98	**Signetics (3022)**	
	S8T95	† Signetics	
	S8T97	† Signetics	
	S8T98	† Signetics	

3870

Function	Device	Source	Line
Microcomputer, Piggyback EPROM	M38P74	SGS	105
	M38P78	SGS	
	MK38P70	Thomson	
Microcomputer, Piggyback EPROM, Emulates all MK3870 Devices	MK38P70/02	Thomson	
Microcomputer, ROM, A/D, 64 Byte RAM, Timer, I/O	M38ADP70	SGS	
Microcomputer, ROM, PLL, Shadow RAM, I/O, A/D	M8910	◊ SGS	110
Microcomputer, ROM, Serial Bus, 64 + 64 Byte, Timer, I/O	M38SB72	SGS	
Microcomputer, ROM, 64-Byte Executable RAM, 64-Byte Scratchpad RAM, Timer I/O	F38L72	Fairchild	
	F3872	Fairchild	
	MC3870	Motorola	
	M38SH72	◊ SGS	115
	M3872	◊ SGS	
	MK3870/12	Thomson	
	MK3870/22	Thomson	
	MK3870/32	Thomson	
	MK3870/42	Thomson	120
Microcomputer, ROM, 64-Byte Scratchpad RAM, Timer, I/O	M3870	◊ SGS	
	U2870	Telefunken	
	U3870	Telefunken	
	MK3870/10	Thomson	
	MK3870/20	Thomson	125
	MK3870/30	Thomson	
	MK3870/40	Thomson	
Microcomputer, 2K ROM, 64 Byte scratchpad RAM, Timer, I/O	M2870	SGS	
Microcomputer, 4K ROM, 64 Byte + 64 Byte, Timer, I/O, 28 pin	M2872	SGS	
Microcomputer, 4K ROM, 64 + 64 Byte RAM, Timer, I/O	M3875	SGS	130
Microcomputer, 6K ROM, 64 Byte + 64 Byte, Timer, I/O, 28 pin	M2876	SGS	
Microcomputer, 6K ROM, 64 + 64 Byte RAM, Timer, I/O	M3876	SGS	
Microcomputer, 8K ROM, 64 + 64 Byte RAM, Timer, I/O	M3878	SGS	
Microcomputer, 28-pin version of 3870	MK2870	Thomson	
Programmable CRT Video Control Unit	MK3807	Thomson	135

6000

Function	Device	Source	Line
Microcomputer, Piggyback EPROM, emulate S6010, S6011, S6012	S60P12	° SGS	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8 Bit

6000 (Cont'd)

Function	Device	Source
Microcomputer, ROM, 64 Byte RAM, A/D, I/O, Timer	S6010	◊° SGS
	S6011	◊° SGS
Microcomputer, ROM, 64 Byte RAM, A/D, I/O, Timer, Watchdog Timer	S6012	◊° SGS
Microcomputer, ROM, 64 Byte RAM, A/D, LCD drivers, 2 Timer, I/O	S6040	◊° SGS
Microcomputer, ROMless emulate S6040	S60R40	◊° SGS

6500

Function	Device	Source
Microcomputer	**6500/1**	**Commodore (2555)**
	NCR6500/1	◊ NCR
	R6500/1-10	**Rockwell (2988)**
	W65C124	◊ WDC
	W65C134	◊ WDC
Microprocessor	**G65SC02**	◊ **CMD Micro (2552)**
	G65SC03	**CMD Micro (2552)**
	G65SC04	**CMD Micro (2552)**
	G65SC05	**CMD Micro (2552)**
	G65SC06	**CMD Micro (2552)**
	G65SC07	**CMD Micro (2552)**
	G65SC102	◊ **CMD Micro (2552)**
	G65SC103	◊ **CMD Micro (2552)**
	G65SC104	◊ **CMD Micro (2552)**
	G65SC105	◊ **CMD Micro (2552)**
	G65SC106	◊ **CMD Micro (2552)**
	G65SC107	◊ **CMD Micro (2552)**
	G65SC112	◊ **CMD Micro (2552)**
	G65SC115	**CMD Micro (2552)**
	G65SC12	◊ **CMD Micro (2552)**
	G65SC13	**CMD Micro (2552)**
	G65SC14	**CMD Micro (2552)**
	G65SC15	**CMD Micro (2552)**
	65CE02	**Commodore (2555)**
	6501	Commodore
	6502	**Commodore (2558)**
	6503	**Commodore (2558)**
	6504	**Commodore (2558)**
	6505	**Commodore (2558)**
	6506	**Commodore (2558)**
	6507	**Commodore (2558)**
	6512	**Commodore (2558)**
	6513	**Commodore (2558)**
	6514	**Commodore (2558)**
	6515	**Commodore (2558)**
	6502-Cell	° Motorola
	NCR65CX02	NCR
	NCR65CX02-Cell	° NCR
	NCR65C00/1	NCR
	NCR65C00/2	NCR
	NCR65C00/3	NCR
	NCR65C02	NCR
	6502-Cell	° NCR
	RP65C02	Panatech
	RP65C02A	Panatech
	R6500	**Rockwell (2988)**
	R6501Q	**Rockwell (2988)**
	R6502	**Rockwell (2987, 2990)**
	R6503	Rockwell
	R6504	Rockwell
	R6505	Rockwell
	R6506	Rockwell
	R6507	Rockwell
	R6511Q	**Rockwell (2988)**
	R6512	Rockwell
	R6513	Rockwell
	R6514	Rockwell
	R6515	Rockwell
	L6506	SGS
	VL65NC02	VLSI Tech
	65C02-Cell	° VLSI Tech
	W65C02	WDC
Microprocessor, Clock, RAM, IO	NCR6500/11	◊ NCR
	R6500/11	**Rockwell (2988)**
	R6500/12	**Rockwell (2988)**
	R6500/13	**Rockwell (2988)**
	R6500/15	**Rockwell (2988)**
Microprocessor, Communications	**G65SC150**	**CMD Micro (2548)**
	G65SC151	CMD Micro
Microprocessor, I/O	**6510**	**Commodore (2558)**
Microprocessor, RAM, I/O	**6508**	**Commodore (2558)**
Microprocessor with Memory Management	**6509**	**Commodore (2558)**
Asynchronous Communications Interface Adapter	G65SC51	◊ CMD Micro
	6551	**Commodore (2556)**
	MD65SC51B	Mitel
	R65C51	**Rockwell (2990)**
	R6551	**Rockwell (2990)**
Asynchronous Communications Interface Adapter (Cont'd)	UM6551	UMC
	UM6551A	UMC
Communications, Dual Asynchronous Communications Interface Adapter (DACIA)	**R65C52**	**Rockwell (2990)**
CRT Controller	**6545-1**	**Commodore (2560)**
Dot-Matrix Printer Controller	**R6592**	**Rockwell (2990)**
Emulator Device	**R6500/1E**	**Rockwell (2988)**
Mini-Floppy Disk Controller	MB8876A	Fujitsu
	MB8877A	Fujitsu
Peripheral Interface Adapter	G65SC21	◊ CMD Micro
	G65SC22	CMD Micro
	6522	**Commodore (2559)**
	6526	**Commodore (2559)**
	MD65SC22	Mitel
	NCR65C21	NCR
	NCR65C22	NCR
	R65C21	**Rockwell (2990)**
	R65C22	**Rockwell (2990)**
	R6520	**Rockwell (2990)**
	R6522	**Rockwell (2990)**
	VL65C22	◊ VLSI Tech
	VL6522	VLSI Tech
	W65C22	WDC
	W65C29	WDC
	W65C90	WDC
Peripheral Interface Adapter/Timer	**R65C24**	**Rockwell (2990)**
RAM, ROM, I/O and Interval Timer	**6530**	**Commodore (2559)**
	R6530	**Rockwell (2990)**
RAM(128x8), I/O, and Timer	G65SC32	CMD Micro
	6532	**Commodore (2559)**
	R6532	Rockwell
	UM6532	UMC
	UM6532A	UMC
RAM(128x8), ROM, I/O, and Counter/Timer	**R6531**	**Rockwell (2990)**
Sound Interface Device	**6582**	**Commodore (2557)**
Tri-Port Interface	**6525**	**Commodore (2559)**
Single Port Interface	**6529**	**Commodore (2559)**

6800

Function	Device	Source
Microcomputer	MC68A01	Motorola
	MC68B01	Motorola
	MC6801	**Motorola (2900)**
	MC6801-1	**Motorola (2900)**
	MC6801C	**Motorola (2900)**

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8 Bit

6800 (Cont'd)

Function	Device	Source	Line
Microcomputer (Cont'd)			
	MC6801U4	◊ **Motorola (2900)**	
	MC6801U4-1	◊ **Motorola (2900)**	
	MC6803U4-1	**Motorola (2900)**	
	EF6801	Thomson	
	EF6805P2	Thomson	5
	EF6805P4	Thomson	
	EF6805P6	Thomson	
	EF6805U2	Thomson	
Microcomputer, A/D Converter, Serial Peripheral Interface, Three Timers			
	MC6805S2	**Motorola (2901)**	
	MC6805S3	**Motorola (2901)**	10
Microcomputer, Clock, ROM, EEPROM, RAM, I/O, Timers, Programmable Prescaler, Serial Interface			
	MC6805K3	Motorola	
Microcomputer, Clock, Timer, RAM, ROM, I/O			
	MC6804J1	**Motorola (2901)**	
	MC6804J2	**Motorola (2901)**	
	MC6804P2	**Motorola (2901)**	
	EF68HC04P3	◊ Thomson	15
	EF6804J2	Thomson	
	EF6804P2	Thomson	
Microcomputer, Clock, Timer, RAM, ROM, PLL, I/O			
	EF6805T2	Thomson	
Microcomputer (CMOS), EPROM, RAM, Timer, I/O			
	MC1468705G2	**Motorola (2901)**	
Microcomputer (CMOS), RAM, ROM, Timer, I/O			
	CDP6805F2	**GE/RCA (2641)**	20
	CDP6805G2	**GE/RCA (2641)**	
	MC68HC04J2	Motorola	
	MC68HC04J3	**Motorola (2901)**	
	MC68HC04P2	**Motorola (2901)**	
	MC68HC04P3	**Motorola (2901)**	25
Microcomputer (CMOS), RAM, Timer, I/O			
	CDP6805E2	**GE/RCA (2641)**	
	HD63A03R	◊ Hitachi	
	HD63B03R	◊ Hitachi	
	HD6303R	◊ Hitachi	
Microcomputer (EPROM)			
	MC1468705F2	**Motorola (2901)**	30
	MC68701	Motorola	
	MC68701-1	Motorola	
	MC68701C	Motorola	
	MC68701C-1	Motorola	
	MC68701U4	◊ Motorola	35
	MC68701U5	◊ Motorola	
	MC68704P2	◊ **Motorola (2901)**	
	MC68705P3	**Motorola (2901)**	
	MC68705P5	**Motorola (2901)**	
	MC68705R3	**Motorola (2901)**	40
	MC68705R5	**Motorola (2901)**	
	MC68705U3	**Motorola (2901)**	
	MC68705U5	**Motorola (2901)**	
Microcomputer, (EPROM), ROM, Clock, Timer, A/D, I/O			
	MC68705R3	**Motorola (2901)**	
Microcomputer (external ROM)			
	MC68A03	Motorola	45
	MC68B03	Motorola	
	MC6803	**Motorola (2900)**	
	MC6803-1	**Motorola (2900)**	
	MC6803C	**Motorola (2900)**	
	MC6803U4	**Motorola (2900)**	50
	EF68A03	Thomson	

(Continued)

Function	Device	Source	Line
Microcomputer (external ROM) (Cont'd)			
	EF68B03	Thomson	
	EF68HC05E9	◊ Thomson	
	EF6803	Thomson	
	EF6803U4	Thomson	55
Microcomputer, RAM, EEPROM, Timer, I/O			
	MC68HC11A1	**Motorola (2900)**	
Microcomputer, RAM, ROM, Clock, Timer, A/D, I/O			
	MC6805R2	**Motorola (2901)**	
Microcomputer, RAM, ROM, EEPROM, Timer, I/O			
	MC68HC11E9	**Motorola (2900)**	
	MC68HC811A2	**Motorola (2900)**	
Microcomputer, RAM, ROM, I/O			
	MC6805P2	**Motorola (2901)**	60
	MC6805P6	**Motorola (2901)**	
	MC6805U2	**Motorola (2901)**	
	MC6805U3	**Motorola (2901)**	
	EF6805U3	Thomson	
Microcomputer, RAM, ROM, I/O, A/D			
	MC6805R3	**Motorola (2901)**	65
Microcomputer, RAM, ROM, I/O, Timer			
	MC68HC05C2	**Motorola (2901)**	
	MC68HC05C3	**Motorola (2901)**	
	MC68HC805C4	Motorola	
Microcomputer, RAM, ROM, I/O, 2 Serial Interfaces, Timer	**CDP68HC05C4**	**GE/RCA (2641)**	
	CDP68HC05D2	**GE/RCA (2641)**	70
	MC68HC05C4	**Motorola (2901)**	
	MC68HC05C8	**Motorola (2901)**	
Microcomputer, RAM, ROM, Timer, I/O			
	MC68HC811D3	**Motorola (2900)**	
Microcomputer, RAM, Timer, I/O			
	MC68HC811A0	**Motorola (2900)**	
Microcomputer, ROM, EEPROM, RAM, 16-Bit Timer, 8-Bit Pulse Accumulator, Serial Interface			
	MC68HC11A8	**Motorola (2900)**	75
Microprocessor			
	HD68A00	Hitachi	
	HD68B00	Hitachi	
	MC68A00	Motorola	
	MC68B00	Motorola	
	MC6800	Motorola	80
	EF68A00	Thomson	
	EF68B00	Thomson	
	EF6800	Thomson	
	EF6805R2	Thomson	
Microprocessor, Cell			
	NCR68C05-Cell	◊° NCR	85
Microprocessor (CMOS), RAM, Timer, I/O			
	CDP6805E3	**GE/RCA (2641)**	
Microprocessor (external clock)			
	HD6309E	◊ Hitachi	
	MC68A09E	Motorola	
	MC68B09E	Motorola	
	MC6809E	**Motorola (2902)**	90
	EF68A09E	Thomson	
	EF68B09E	Thomson	
	EF6809E	Thomson	
Microprocessor (external clock, 192 x 8 RAM)			
	HD63A03X	◊ Hitachi	
	HD63B03X	◊ Hitachi	95
	HD6303X	◊ Hitachi	
Microprocessor (internal clock)			
	HD68A09	◊ Hitachi	
	HD68B09	Hitachi	
	HD6809	◊ Hitachi	
	MC68A09	Motorola	100

(Continued)

Function	Device	Source	Line
Microprocessor (internal clock) (Cont'd)			
	MC68B09	Motorola	
	MC6809	◊ **Motorola (2902)**	
	EF68A09	Thomson	
	EF68B09	Thomson	
	EF6809	Thomson	105
Microprocessor (internal clock, 128x8 RAM)			
	HD6303	◊ Hitachi	
	MC68A02	Motorola	
	MC68B02	Motorola	
	MC6802	**Motorola (2902)**	
	MC6802NS	**Motorola (2902)**	110
	EF68A02	Thomson	
	EF68B02	Thomson	
	EF6802	Thomson	
Microprocessor (6800 plus internal clock)			
	HD6808	◊ Hitachi	
	EF68A08	Thomson	115
	EF68B08	Thomson	
	EF6808	Thomson	
Advanced Data Link Controller			
	MC68A54	Motorola	
	MC68B54	Motorola	
	MC6854	**Motorola (2902)**	120
	EF68A54	Thomson	
	EF68B54	◊ Thomson	
	EF6854	Thomson	
Asynchronous Communications Interface Adapter (ACIA)			
	HD63A50	Hitachi	
	HD63B50	Hitachi	125
	HD6350	Hitachi	
	HD68A50	Hitachi	
	HD6850	Hitachi	
	MC68A50	Motorola	
	MC68B50	Motorola	130
	MC6850	**Motorola (2902)**	
	EF68A50	Thomson	
	EF68B50	◊ Thomson	
	EF6850	Thomson	
Bus Monitor	MD68SC49B	◊ Mitel	135
Bus Transceiver, (The 6880 is also called 8T26 and the 6889 the 8T28, See Interface-Transceivers)			
	MC6880A	**Motorola (2951)**	
	MC6889	**Motorola (2951)**	
Clock Buffer	MPQ6842	Motorola	
Clock Generator			
	8701	Commodore	
Clock Generator, 2 Phase			
	MC6875	Motorola	140
	MC6875A	Motorola	
Clock (real time) Plus RAM			
	CDP6818	**GE/RCA (2642)**	
	MC146818	◊ **Motorola (2902)**	
	MC146818A	**Motorola (2902)**	
Clock, 2 Phase (MC6870/71 from Motorola Component Products Dept., Franklin Park, IL)			
	MC6870	Motorola	145
	MC6871	Motorola	
CRT Controller	HD68A45	Hitachi	
	HD68B45	Hitachi	
	HD6845	Hitachi	
	MC68A45	Motorola	150
	MC68B45	Motorola	
	UM6845	UMC	
	UM6845A	UMC	
	UM6845B	UMC	
	UM6845E	UMC	155

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8 Bit

6800 (Cont'd)

CRT Controller (Cont'd)

Device	Source
UM6845EA	UMC
UM6845EB	UMC
UM6845R	UMC
UM6845RA	UMC
UM6845RB	UMC

CRT Controller, Character and Screen Programmable, Cursor, Light Pen Detection

Device	Source
MB89321	Fujitsu

D/A Converter

Device	Source
MC6890	**Motorola (2903)**
MC6890A	**† Motorola (2903)**

Data Security Device (data encryption standard)

Device	Source
MC6859	**Motorola (2903)**

Digital Time/Space Crosspoint Switch

Device	Source
MT8981D	Mitel

DMA Controller

Device	Source
HD68A44	Hitachi
HD68B44	Hitachi
HD6844	Hitachi
MC68A44	Motorola
MC68B44	Motorola
MC6844	**Motorola (2902)**
MC6844M	**† Motorola (2902)**

DMA Processor (serial)

Device	Source
MC6855	Motorola

Floating Point ROM (for MC6809)

Device	Source
MC68A39	Motorola
MC68B39	Motorola

Floppy Disc Controller

Device	Source
HD68A43	Hitachi
HD6843	Hitachi
FDC1793	SMC
FDC1793-02	◊ SMC
FDC1797	SMC
FDC1797-02	◊ SMC
FD1793-02	Western
FD1797-02	Western

General Purpose Interface Adapter (IEEE 488 bus)

Device	Source
MC68A488	Motorola
MC68B488	Motorola
HEF4738	Signetics

Industrial Interface Adaptor

Device	Source
MC6822	Motorola

Memory Controller for 4K to 64K Dynamic RAMs

Device	Source
MC3480	Motorola

Memory Management Unit

Device	Source
C68A29	Motorola

Parallel Interface

Device	Source
CDP6823	**GE/RCA (2642)**

Peripheral Interface Adapter, (PIA)

Device	Source
HD63A21	Hitachi
HD63B21	◊ Hitachi
HD6321	Hitachi
HD68A21	◊ Hitachi
HD68B21	Hitachi
HD6821	◊ Hitachi
MD68SC21	Mitel
MC146823	**◊ Motorola (2902)**
MC68A21	Motorola
MC68B21	◊ Motorola
MC6821	**◊ Motorola (2902)**
EF68A21	Thomson
EF68B21	Thomson
EF6821	Thomson

(Continued)

Peripheral Interface Adapter, (PIA) (Cont'd)

Device	Source
UM6522	UMC
UM6522A	UMC

Port Replacement Unit for MC68HC11, PIA

Device	Source
MC68HC24	**◊ Motorola (2902)**

Priority Interrupt Controller

Device	Source
MC8507	Motorola

Programmable Timer

Device	Source
HD63A40	Hitachi
HD6340	Hitachi
HD68A40	Hitachi
HD68B40	Hitachi
HD6840	Hitachi
MC68A40	Motorola
MC68B40	Motorola
MC6840	**Motorola (2902)**
MC6840M	**† Motorola (2902)**
EF68A40	Thomson
EF68B40	◊ Thomson
EF6840	Thomson

RAM, Dual Port

Device	Source
MC68HC34	**◊ Motorola (2902)**

ROM, I/O, Timer

Device	Source
MC68A46	Motorola
TMS70C40	◊ TI
TMS7040	◊ TI
EF6846	Thomson

Synchronous Address Multiplexer

Device	Source
MC6883	Motorola
SN74LS783	Motorola

Synchronous Receiver/Transmitter (USRT, See also Interface-Serial Transmitters-Receivers)

Device	Source
S2350	◊ Gould

Synchronous Serial Data Adapter (SSDA)

Device	Source
HD68A52	Hitachi
HD6852	Hitachi
MC68A52	Motorola
MC68B52	Motorola
MC6852	**Motorola (2902)**
EF68A52	Thomson
EF68B52	◊ Thomson
EF6852	Thomson

Video Converter

Device	Source
TS8306	Thomson
TS8307	Thomson
TS8308	Thomson
TS8328	Thomson
TS8408	◊ Thomson
TS8428	Thomson
UA1005	Thomson

Video Display Generator

Device	Source
MC6847	**Motorola (2903)**

Single Chip Color Palette

Device	Source
EF9369	Thomson

Triple Bidirectional Bus Switch (also MC3449)

Device	Source
MC6881	Motorola

Triple Timer

Device	Source
MD68SC40	◊ Mitel

Hex Buffers/Inverters (See also Digital-TTL-Buffers/Inverters 8T95, 8T96, 8T97, 8T98)

Device	Source
MC6885	**Motorola (2951)**
MC6886	**Motorola (2951)**
MC6887	**Motorola (2951)**
MC6888	**Motorola (2951)**

Octal Buffer/Latch, Three-State

Device	Source
MC3482A	Motorola
MC3482B	Motorola

(Continued)

Octal Buffer/Latch, Three-State (Cont'd)

Device	Source
MC6882A	Motorola
MC6882B	Motorola

7000

Microcomputer (CMOS), RAM, I/O (microlanguage processor)

Device	Source
TMS70C00	◊ TI

Microcomputer (CMOS), RAM, ROM, I/O (microlanguage processor)

Device	Source
TMS70C20	◊ TI

Microcomputer, RAM, E²PROM

Device	Source
72720	**SEEQ (2991)**

Microcomputer, RAM, I/O (microlanguage processor)

Device	Source
PIC7000	GIM
TMS7000	◊ TI

Microcomputer, RAM, ROM, I/O (microlanguage processor)

Device	Source
PIC7020	GIM
PIC7040	GIM
TMS70C40	◊ TI
TMS7020	TI
TMS7040	◊ TI

Microcomputer, RAM, ROM, Serial I/O

Device	Source
PIC7041	GIM

Microcomputer, ROM

Device	Source
PIC70100	GIM
PIC70120	GIM
PIC7060	GIM
PIC7080	GIM

Microcomputer with UART

Device	Source
PIC7001	GIM

Encryption, Federal Processing Standard Pub. 46

Device	Source
TMS75C00	TI
TMS7500	◊ TI

8048

Microcomputer, CMOS (mask programmed ROM)

Device	Source
TMP80C48A	**Toshiba (3306)**

Microcomputer (erasable PROM)

Device	Source
AM8748	AMD
MBL8749	Fujitsu
M8748	† Intel
8748-8	Intel
8748H	Intel
8749H	Intel
8749H-8	Intel
μPD8748	NEC
μPD8749	NEC

Microcomputer (external ROM)

Device	Source
MBL80C39	Fujitsu
MBL8035	Fujitsu
MBL8039	Fujitsu
IM80C35	GE/Intersil
IM80C39	GE/Intersil
M8035L	† Intel
80A35	Intel
80A39	Intel
80C35	Intel
80C39	Intel
8035AHL	Intel
8039AHL	Intel
8039HL	Intel
8040AHL	Intel
INS8035	National
INS8035L	National
INS8039	National
INS8039L	National
INS8040	National

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8 Bit

8048 (Cont'd)

Function	Device	Source	Line
Microcomputer (external ROM) (Cont'd)			
	INS8040L	National	
	NS8040U	National	
	NS8040UL	National	
	μPD80C35	◊ NEC	
	μPD80C39	◊ NEC	5
	μPD8035L	NEC	
	μPD8039L	NEC	
	MSM80C35	OKI	
	MSM80C39	OKI	
	MSM80C40	OKI	10
	SCC80C35	◊ Signetics	
	SCC80C39	Signetics	
	SCC80C40	Signetics	
	SCN8035A	Signetics	
	SCN8039A	Signetics	15
	SCN8040	◊ Signetics	
	TMP80C35A	**Toshiba (3306)**	
	TMP80C39A	**Toshiba (3306)**	
	TMP80C39A-6	**Toshiba (3306)**	
	TMP80C40A	**Toshiba (3306)**	20
	TMP80C40A-6	**Toshiba (3306)**	
	TMP8035	**Toshiba (3306)**	
	TMP8039	**Toshiba (3306)**	
	TMP8039-6	**Toshiba (3306)**	
Microcomputer (mask programmed ROM)			
	MBL80C49	Fujitsu	25
	MBL8048	Fujitsu	
	IM80C48	GE/Intersil	
	IM80C49	GE/Intersil	
	M8048H	† Intel	
	M8049H	Intel	30
	80A48L	Intel	
	80A49	Intel	
	80C48	Intel	
	80C49	Intel	
	8048	Intel	35
	8048AH	Intel	
	8048H	Intel	
	8049AH	Intel	
	8049H	Intel	
	8049HL	Intel	40
	8050AH	Intel	
	INS8048	◊ National	
	INS8048L	National	
	INS8049	◊ National	
	INS8049L	National	45
	INS8050	◊ National	
	INS8050L	National	
	NS8050U	National	
	NS8050UL	National	
	μPD80C48	◊ NEC	50
	μPD80C49	◊ NEC	
	μPD80C50	NEC	
	μPD8048	NEC	
	μPD8049	NEC	
	MSM80C48	◊ OKI	55
	MSM80C49	◊ OKI	
	MSM80C50	OKI	
	SCC80C48	Signetics	
	SCC80C49	Signetics	
	SCC80C50	◊ Signetics	60
	SCN8048A	Signetics	
	SCN8049A	**Signetics (3076)**	
	SCN8050A	Signetics	
	TMP80C49A	**Toshiba (3306)**	

(Continued)

Function	Device	Source	Line
Microcomputer (mask programmed ROM) (Cont'd)			
	TMP80C49A-6	**Toshiba (3306)**	65
	TMP80C50A	**Toshiba (3306)**	
	TMP80C50A-6	**Toshiba (3306)**	
	TMP8048	**Toshiba (3306)**	
	TMP8049	**Toshiba (3306)**	
	TMP8049-6	**Toshiba (3306)**	70
Microcomputer, Piggyback EPROM			
	NS87P50	National	
Microcomputer, RAM, ROM, I/O			
	M5L8035	Mitsubishi	
	M5L8035-6	Mitsubishi	
	M5L8039-11	Mitsubishi	
	M5L8039HL-14	Mitsubishi	75
	M5L8040H	Mitsubishi	
	M5L8042	Mitsubishi	
	M5L8048	Mitsubishi	
	M5L8049	Mitsubishi	
	M5L8049-6	Mitsubishi	80
	M5L8049H1	Mitsubishi	
	M5M80C39-6	◊ Mitsubishi	
	M5M80C39A	◊ Mitsubishi	
	M5M80C39H	◊ Mitsubishi	
	M5M80C49	◊ Mitsubishi	85
	M5M80C49A	◊ Mitsubishi	
	M5M80C49H	◊ Mitsubishi	
	M5M8040L	Mitsubishi	
	M5M8050H	Mitsubishi	
	M5M8050L	Mitsubishi	90
Microcomputer, RAM, ROM, I/O (11 MHz)			
	TMP8048A	**Toshiba (3306)**	
	TMP8049A	**Toshiba (3306)**	
Microcomputer, RAM, ROM, Tiny BASIC, Microinterpreter			
	INS8073	National	
Microcomputer, ROM, RAM, I/O			
	8020H	Intel	
	8021H	Intel	95
Microcomputer (ROM, RAM, I/O, on-board A/D)			
	8022	Intel	
Bidirectional Bus Driver. See 8216, 8226, etc. under 8080			
	8216	Intel	
	8226	Intel	
	μPB8216	NEC	
	μPB8226	NEC	100
CRT Controller. See 8275, etc. under 8080.			
	8275	Intel	
	μPD3301	NEC	
	SCN2672	◊ Signetics	
Decoder, 1 of 8. See 8205, etc. under 8080.			
	8205	Intel	
Floppy Disk Controller. See 8271, etc. under 8080.			
	GM9C765	GoldStar	105
	8271	Intel	
	8271-6	Intel	
	μPD765A	NEC	
	FDC1793	SMC	
	FDC1793-02	◊ SMC	110
	FDC1797	SMC	
	FDC1797-02	◊ SMC	
	FD1793-02	Western	
	FD1797-02	Western	
GPIB Talker/Listener			
	8291	Intel	115

Function	Device	Source	Line
I/O Expander for 8048 Family			
	MBL82C43	Fujitsu	
	MBL8243	Fujitsu	
	M8243	† Intel	
	8243	Intel	
	M5L8243	Mitsubishi	120
	M5M82C43	Mitsubishi	
	M50780	Mitsubishi	
	M50781	Mitsubishi	
	M50782	Mitsubishi	
	M50783	Mitsubishi	125
	M50784	Mitsubishi	
	M50786	Mitsubishi	
	M50790	◊ Mitsubishi	
	INS8243	National	
	μPD82C43	NEC	130
	μPD8243	NEC	
	MCM82C43	OKI	
	TMP82C43	**Toshiba (3306)**	
Multi-Universal Asynchronous Receiver Transmitter			
	SAB8256A	Siemens	
Priority Interrupt Control. See 8214, etc. under 8080.			
	8214	Intel	135
Programmable Communication Interface (USART) See 8251, etc. under 8080.			
	8251A	AMD	
	8251A	◊ Intel	
	μPD71051	◊ NEC	
	μPD8251	NEC	
	μPD8251A	NEC	140
	μPD8251AF	NEC	
	71051	NEC	
	MSM82C51A	OKI	
	TMP8251A	**Toshiba (3306)**	
Programmable Interrupt Controller. See 8259, etc. under 8080.	8259	Intel	145
	8259-5	Intel	
	8259A	Intel	
	8259A-2	Intel	
	8259A-8	Intel	
	μPD8259	NEC	150
	μPD8259-2	NEC	
	μPD9259A	NEC	
	TMP8259A	**Toshiba (3306)**	
	UM8259	UMC	
Programmable Interval Timer. See 8253, etc. under 8080.	8253	◊ AMD	155
	8253-2	AMD	
	μPD8253-2	NEC	
	μPD8253-5	NEC	
	SMC82C54A	◊ S-MOS	
Programmable Peripheral Interface. See 8255, etc. under 8080.	8255A	◊ AMD	160
	8255A-5	AMD	
	8255A	◊ Intel	
	μPD8255	NEC	
	μPD8255A-5	NEC	
	SMC82C55A-5	◊ S-MOS	165
PROM (erasable), I/O			
	8755A	Intel	
	μPD8755A	NEC	
RAM, I/O, Timer			
	8155	◊ AMD	
	8155-2	◊ AMD	
	8156-2	◊ AMD	170
	HS81C55RH	**‡ Harris (2709)**	
	HS81C56RH	**‡ Harris (2709)**	
	M8155H	† Intel	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8 Bit

8048 (Cont'd)

Function	Device	Source
RAM, I/O, Timer (Cont'd)		
	8155	Intel
	8155-2	Intel
	8155H	Intel
	8155H-2	Intel
	8156	Intel
	8156-2	Intel
	8156H	Intel
	8156H-2	Intel
	μPD8155	NEC
	μPD8156	NEC
	MSM81C55	OKI
	TMP8155	◊ **Toshiba (3306)**
	TMP8156	◊ **Toshiba (3306)**
ROM, I/O	HS83C55RH	‡ Harris
	8355	Intel
	8355-2	Intel
	MSM83C55	◊ OKI
SDLC/HDLC Protocol Controller. See 8273, etc. under 8080.		
	8273	Intel
	μPD7201A	NEC
Universal Peripheral Interface (slave microprocessor)		
	MBL8041A	Fujitsu
	M8741A	† Intel
	8041AH	Intel
	8041AH-2	Intel
	8042	Intel
	8641A	Intel
	8741A	Intel
	8742	Intel
	M5L8041A	Mitsubishi
	μPD8041	NEC
	μPD8041A	NEC
	μPD8741A	Signetics
Octal Bus Transceiver		
	M8286	† Intel
	M8287	† Intel

8051

Function	Device	Source
Microcomputer and HDLC/SDLC Serial Interface		
	8044	Intel
	8744	Intel
Microcomputer (erasable PROM)		
	AM9761	AMD
	8751H	AMD
	M8751H	† Intel
	8751	Intel
Microcomputer (external ROM)		
	8031AH	AMD
	8031AH-15	AMD
	MBL8031	Fujitsu
	80C31	◊ Intel
	8031AH	Intel
	8031	Siemens
	SCC80C31	◊ **Signetics (3072)**
	SCN8031	Signetics
Microcomputer (mask programmed ROM)		
	MBL8051	Fujitsu
	IM80C51	GE/Intersil
	IM8051	GE/Intersil
	M80C51	◊† Intel
	80C51	Intel
	8051AH	Intel
	8052	Intel

(Continued)

Function	Device	Source
Microcomputer (mask programmed ROM) (Cont'd)		
	MCM80C51	OKI
	8051	Siemens
	SCC80C51	◊ **Signetics (3072)**
	SCN8051	Signetics
Microcomputer (4K ROM)		
	SDA2040	Siemens
Microcomputer (6K ROM)		
	SDA2060	Siemens
Microcomputer, 8-Bit		
	SAB8031A-12	Siemens
	SAB8051A-12	Siemens
Microcomputer (8K ROM)		
	SDA2080	Siemens
Microcomputer (8K ROM), with external memory access		
	SDA2082	Siemens
Microcontroller, serial bus		
	SCC80C351	◊ Signetics
	SCC83C351	◊ Signetics
Microcontroller, 8-Bit (extended temp. range)		
	SAB8032A-T40/85	Siemens
	SAB8052A-T40/85	Siemens
Microcontroller, 8-Bit (for external ROM)		
	SAB80532	Siemens
	SAB80535	Siemens
Microcontroller, 8-Bit (mask programmable ROM)		
	SAB80512	Siemens
	SAB80515	Siemens
	SAB8052A	Siemens
Microcontroller, 8-Bit (plus RAM and I/O)		
	SAB8032A	Siemens
Microcontroller, 8-Bit (with RAM and I/O, for external ROM)	SAB8032A-16	Siemens
Microcontroller, 12 MHz (for external ROM)		
	SAB8031A	Siemens
Microcontroller, 12 MHz (mask programmable ROM)		
	SAB8051A	Siemens
Microcontroller, 16 MHz (for external ROM)		
	SAB8031A-16	Siemens
Microcontroller, 16 MHz (mask programmable ROM)		
	SAB8051A-16	Siemens
Microcontroller (32K RAM)		
	DS5000	Dallas
Clock/Calendar, Real-Time		
	CA01C50	**Calmos (2553)**

8080

Function	Device	Source
Microprocessor		
	AM9080A-1	AMD
	AM9080A-2	AMD
	8080A	AMD
	8080A-1	AMD
	8080A-2	AMD
	M8080A	† Intel
	8080A	Intel
	8080A-1	Intel
	8080A-2	Intel
	INS8080A	National
	INS8080A-1	National
	INS8080A-2	National
Analog Input, MUX, A/D Converter		
	ADC0816C	National
	μPD7001	NEC
	μPD7002	NEC

Function	Device	Source
Analog Input, 3 3/4 Digit DVM with Multiplexed Output		
	INS8294	National
Arithmetic Processing Unit		
	AM8231	† AMD
	AM9511A-1	AMD
	M8231A	† Intel
	8231A	◊ Intel
Asynchronous Communication Element		
	DP8250	National
	INS8250	National
	COM8251A	SMC
	VL82C50	**VLSI Tech (3329)**
Bidirectional Bus Driver		
	8216	Intel
	8226	Intel
Bidirectional Bus Driver (See also Digital-Miscellaneous-Bus Drivers, Interface-Line Transceivers.)		
	AM3216	◊ AMD
	AM3226	◊ AMD
	M3216	† AMD
	M3226	† AMD
	M8216	† AMD
	M8226	† AMD
	HS82C08RH	◊‡ **Harris (2710)**
	M8216	† Intel
	M8226	† Intel
	DP3216	National
	DP3226	National
	DP7304	◊† National
	DP8216	National
	DP8216M	† National
	DP8226	National
	DP8226M	† National
	DP8304	National
	DS8833	National
	DS8835	National
	INS8208	National
	INS8216	National
	INS8226	National
	μPB8216	NEC
	μPB8226	NEC
Bus Controller	8218	Intel
Bus Driver (See also Digital-Misc., Bus Drivers		
	INS8202	◊ National
	INS8203	◊ National
Bus Monitor	MD68SC49B	◊ Mitel
Clock/Calendar, Real-Time		
	CA01C50	**Calmos (2553)**
Clock Generator and Driver		
	M8224	† Intel
	8224	Intel
	DP8224	National
	INS8224	National
Counter, CMOS Programmable		
	VL82C54	VLSI Tech
CRT Controller	8275	Intel
	8276	Intel
	DP8350	National
	DP8352	National
	DP8353	National
	μPD3301	NEC
CRT Controller, Character and Screen Programmable, Cursor, Light Pen Detection		
	MB89322	Fujitsu

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8 Bit

8080 (Cont'd)

Function	Device	Source
Data Acquisition System, 8 Channel, 8-Bit Conversion	AD7581A	AD
	AD7581B	AD
	AD7581C	AD
	AD7581J	AD
	AD7581K	AD
	AD7581L	AD
Data Ciphering Processor	AM9518	AMD
Data-Encryption Device (encrypts and decrypts data according to NBS standard)	8294	Intel
Decoder, 1 of 8 (See also Digital-TTL-Decoders, 3222, 74LS138, etc.)	AM25LS138C	AMD
	AM25LS138M	† AMD
	8205	Intel
	DM74LS138	◊ National
	INS82LS05	National
	SN74LS138	TI
Display Controller	INS8247	National
	INS8248	National
Dynamic RAM Controller	82C03	Intel
	82C08	Intel
	8202A	Intel
	8203	Intel
Error Detection & Correction Chip	8206	Intel
Floating Point Processor	AM8232	AMD
	8232	Intel
Floppy Disk Controller	GM9C765	GoldStar
	8271	Intel
	μPD765A	NEC
	FDC1793	SMC
	FDC1793-02	◊ SMC
	FDC1797	SMC
	FDC1797-02	◊ SMC
	FD1793-02	Western
	FD1797-02	Western
GPIB Controller	8292	Intel
GPIB Interface Controller, Intelligent	COM7210	SMC
GPIB Talker/Listener Interface	8291A	Intel
GPIB Transceiver	8293	Intel
GPIB Universal Interface	μPD7210	NEC
I/O Expander for 8041/8741, CMOS	IM82C43I	GE/Intersil
	IM82C43M	† GE/Intersil
I/O Expander for 8041A/8741A	8243	Intel
	TMP8243	**Toshiba (3306)**
I/O Latch (see also Digital-CMOS and TTL, Latches)	INS82C06	National
I/O Port	AM3212	◊ AMD
	M3212	† AMD
I/O Port (Cont'd)	**CA82C12**	**Calmos (2553)**
	HS82C12RH	◊‡ **Harris (2710)**
	M8212	† Intel
	8212	Intel
	DP8212	National
	DP8212M	† National
	INS8212	National
	μPB8212	NEC
	MSM82C12	OKI
Keyboard Display Controller	8279	Intel
	8279-5	Intel
	μPD8279-5	NEC
	KR9600	SMC
	KR9601	SMC
	KR9602	SMC
Keyboard Encoder (See also Interface-Keyboard Encoders)	INS8244	National
	INS8245	National
	INS8246	National
Multi-Protocol Communications Circuit	SCN2652A	Signetics
Multi-Protocol Communications Controller (SDLC, ADDCP, BiSync, DDCMP)	SCN2652A	Signetics
Multi-Universal Asynchronous Receiver Transmitter	8256	Intel
	TIM8228	◊ TI
	TIM8238	◊ TI
Multifunction Microprocessor Support Controller	8256AH	Intel
Polynominal Generator/Checker	SCN2653A	Signetics
Programmable Communication Interface (USART) (See also Interface-Transmitters, Receivers)	AM9551	AMD
	8251	AMD
	M8251A	† Intel
	8251A	◊ Intel
	INS2651	National
	INS8251	National
	μPD8251	NEC
	μPD8251A	NEC
	71051	NEC
	MSM82C51A	OKI
	SMC82C51A	◊ S-MOS
	SCN2651C	Signetics
	SCN2661A	Signetics
	SCN2661B	Signetics
	SCN2661C	Signetics
	COM2651	SMC
	TMS5501	TI
Programmable Counter	μPD71054	◊ NEC
Programmable Direct Memory Access Controller	AM9517A-5	AMD
	M8257	† Intel
	8257	Intel
	8257-5	Intel
	μPD71055	◊ NEC
	μPD8257	NEC
	μPD8257-5	NEC
Programmable Interrupt Controller	8259A	Intel
	8259A-2	Intel
	8259A-8	Intel
Programmable Interrupt Controller (Cont'd)	INS8259	National
	μPD8259	NEC
	μPD8259-2	NEC
	μPD9259A	NEC
Programmable Interval Timer	8253	◊ AMD
	8253-2	AMD
	INS8253	National
	INS8253-5	National
	μPD8253-2	NEC
	μPD8253-5	NEC
	SMC82C54A	◊ S-MOS
Programmable Peripheral Interface	8255A	◊ AMD
	8255A-5	AMD
	M8255A	† Intel
Programmable Peripheral Interface	82C55A	Intel
Programmable Peripheral Interface	8255A	◊ Intel
	INS8254	National
	INS8255	National
	μPD8255	NEC
	μPD8255A-5	NEC
	MSM82C55A	OKI
	MSM8255A	OKI
	SMC82C55A-5	◊ S-MOS
RAM(128x8), ROM(2048x8), I/O	DP8356	National
RAM(128x8) with 16-Bit I/O	INS8154	National
SDLC/HDLC Protocol Controller	8273	Intel
	μPD7201A	NEC
Serial Data Communications Controller	8274	Intel
Synchronous Receiver/Transmitter (BiSync, SDLC)	μPD7201A	NEC
System Controller and Bus Driver	M8228	† Intel
	8228	Intel
	8238	Intel
	DP8228	National
	DP8228M	† National
	DP8238	National
	DP8238M	† National
	INS8228	National
	INS8238	National
Universal Peripheral Interface (slave microprocessor)	MBL8041A	Fujitsu
	8041AH	Intel
	8041AH-2	Intel
	8641A	Intel
	8741A	Intel
	μPD8041	NEC
	μPD8741A	NEC
Octal Bus Transceiver	M8286	† Intel
	M8287	† Intel
8-Bit I/O Port	**CA82C12**	**Calmos (2553)**

8085A

Function	Device	Source
Microprocessor	8085A	AMD
	8085A-1	AMD

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8 Bit

8085A (Cont'd)

Function	Device	Source	Line
Microprocessor (Cont'd)			
	8085A-2	AMD	
	8085AH	AMD	
	8085AH-1	AMD	
	8085AH-2	AMD	
	CA80C85B	**Calmos (2553)**	5
	HS80C85RH	**‡ Harris (2708)**	
	M8085A	† Intel	
	M8085AH	† Intel	
	8085AH	Intel	
	8085AH-2	Intel	10
	M5L8085A	Mitsubishi	
	M5M80C85A	Mitsubishi	
	µPD8085A-2	NEC	
	µPD8085AH	NEC	
	MSM80C85A	◊ OKI	15
	TMP8085A	**Toshiba (3306)**	
Microprocessor Bus Controller			
	CA82C88	**° † Calmos (2553)**	
Microprocessor, 8-Bit (3 MHz)			
	SAB8085AH	Siemens	
Microprocessor, 8-Bit (5 MHz)			
	SAB8085AH-2	Siemens	
A/D Converter, 8-Bit, 8-Channel			
	M58990	Mitsubishi	20
Bidirectional Bus Driver. See 8216, 8226, etc. under 8080.			
	8216	Intel	
	8226	Intel	
	M5L8226	Mitsubishi	
	µPB8216	NEC	
	µPB8226	NEC	25
Bus Controller	8219	Intel	
Bus Driver, Bi-Directional			
	M5L8216	Mitsubishi	
Bus Monitor	MD68SC49B	◊ Mitel	
Clock/Calendar, Real-Time			
	CA01C50	**Calmos (2553)**	
Clock Generator and Driver			
	CA82C84A	**° † Calmos (2553)**	30
	M5L8284A	Mitsubishi	
Counter, CMOS Programmable			
	VL82C54	VLSI Tech	
CRT Controller. See 8275, etc. under 8080.			
	8275	Intel	
	µPD3301	NEC	
Data Acquisition System, 8 Channel, 8-Bit Conversion			
	AD7581A	AD	35
	AD7581B	AD	
	AD7581C	AD	
	AD7581J	AD	
	AD7581K	AD	
	AD7581L	AD	40
Decoder, 1 of 8. See 8205, etc. under 8080.			
	8205	Intel	
DMA Controller			
	TMP82C37A-5	**Toshiba (3306)**	
Dynamic RAM Controller			
	82C03	Intel	
	8202A	Intel	
	8203	Intel	45
Erasable PROM, I/O			
	M8755A	† Intel	
	8755A	Intel	

(Continued)

Function	Device	Source	Line
Erasable PROM, I/O (Cont'd)			
	µPD8755A	NEC	
	MSM8755	OKI	
Floppy Disc Controller. See 8271, etc. under 8080.			
	GM9C765	GoldStar	50
	8271	Intel	
	µPD765A	NEC	
	FDC1793	SMC	
	FDC1793-02	◊ SMC	
	FDC1797	SMC	55
	FDC1797-02	◊ SMC	
	FD1793-02	Western	
	FD1797-02	Western	
GPIB Controller			
	8292	Intel	
GPIB Interface Controller, Intelligent			
	COM7210	SMC	60
GPIB Talker/Listener Interface			
	8291A	Intel	
I/O Expander	8243	Intel	
	µPD82C43	NEC	
	µPD8243	NEC	
I/O Port	M5L8212	Mitsubishi	65
Interrupt Controller, Programmable			
	TMP82C59	**Toshiba (3306)**	
Keyboard/Display Controller, Programmable			
	TMP82C79-2	**Toshiba (3306)**	
	TMP8279-5	**Toshiba (3306)**	
Keyboard Display Interface, Programmable			
	M5L8279-5	Mitsubishi	
Memory, 256x8-Bit Static RAM with I/O Port and Timer			
	SAB8155	◊ Siemens	70
	SAB8155-2	◊ Siemens	
Multi-Universal Asynchronous Receiver Transmitter			
	SAB8256A	Siemens	
Programmable Communication Interface (USART)			
	8251	AMD	
	8251A	◊ Intel	
	µPD8251	NEC	75
	µPD8251A	NEC	
	71051	NEC	
	MSM82C51A	OKI	
	SMC82AC51	S-MOS	
	SMC82C51A	◊ S-MOS	80
Programmable Communications Interface			
	TMP82C51A-2	**Toshiba (3306)**	
	TMP82C51A-8	**Toshiba (3306)**	
Programmable Communications Interface (USART)			
	M5L8251A-5	Mitsubishi	
Programmable Direct Memory Access Controller			
	8237A	AMD	
	8237A-4	AMD	85
	8237A-5	AMD	
	CA82C37A	**° † Calmos (2553)**	
	HS82C37ARH	‡ Harris	
	MD82C37	**† Harris (2702)**	
	82C37A	**◊ Harris (2731, 2768, 4249)**	90
	M8257	† Intel	
	8237A	Intel	
	8237A-4	Intel	
	8237A-5	Intel	
Programmable Direct Memory Access Controller.			
	8257	Intel	95
	8257-5	Intel	

Function	Device	Source	Line
Programmable Direct Memory Access Controller			
	M5L8257-5	Mitsubishi	
Programmable Direct Memory Access Controller.			
	µPD71055	◊ NEC	
Programmable Direct Memory Access Controller			
	µPD8237A-5	NEC	
Programmable Direct Memory Access Controller.			
	µPD8257	NEC	100
	µPD8257-5	NEC	
	MSM82C57	OKI	
Programmable Direct Memory Access Controller			
	SMC82C37AC	S-MOS	
	SMC82C37AC-4	S-MOS	
	SMC82C37AC-5	S-MOS	105
	VL82C37A	**VLSI Tech (3337)**	
Programmable DMA Controller			
	TMP8237A	**Toshiba (3306)**	
	TMP8237A-5	**Toshiba (3306)**	
Programmable Interrupt Controller			
	8259A	AMD	
	8259A-2	AMD	110
	8259A-8	AMD	
	CA82C59A	**Calmos (2553)**	
	M8259A	† Intel	
	8259A	Intel	
	8259A-2	Intel	115
	8259A-8	Intel	
	M5L8259A	Mitsubishi	
	M5M82C59A	◊ Mitsubishi	
	µPD8259	NEC	
	µPD8259-2	NEC	120
	µPD9259A	NEC	
	TMP82C59A-2	**Toshiba (3306)**	
Programmable Interval Timer			
	8253-5	AMD	
	CA82C54	**Calmos (2553)**	
	M8253	† Intel	125
Programmable Interval Timer			
	82C54	Intel	
Programmable Interval Timer			
	8253	Intel	
	8253-5	Intel	
	8254	◊ Intel	
	M5L8253-5	Mitsubishi	130
	M5M82C54	◊ Mitsubishi	
	INS8253-5	National	
	µPD8253-2	NEC	
	µPD8253-5	NEC	
	MSM82C53-5	OKI	135
	TMP82C53-2	**Toshiba (3306)**	
	TMP82C54	**Toshiba (3306)**	
	TMP82C54-2	**Toshiba (3306)**	
	TMP8253-5	**Toshiba (3306)**	
	UM8254	UMC	140
Programmable Peripheral Interface			
	8255A-5	AMD	
	CA82C55A	**° † Calmos (2553)**	
	8255A-5	Intel	
	M5L8255A-5	Mitsubishi	
	M5M82C55A	◊ Mitsubishi	145
	µPD8255A-2	NEC	
	µPD8255A-5	NEC	
	SMC82C55AC-5	◊ S-MOS	
	TMP8255A-5	**Toshiba (3306)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

8 Bit

8085A (Cont'd)

Function	Device	Source
PROM (erasable), I/O		
	8755A	Intel
	μPD8755A	NEC
RAM, I/O, Timer		
	8155	◊ AMD
	8155-2	◊ AMD
	8156-2	◊ AMD
	8156H	◊ AMD
	HS81C55RH	**‡ Harris (2709)**
	HS81C56RH	**‡ Harris (2709)**
	M8155	† Intel
	8155	Intel
	8155-2	Intel
	8156	Intel
	8156-2	Intel
	M5L8155	Mitsubishi
	M5L8156	Mitsubishi
	M5M81C55	◊ Mitsubishi
	M5M81C56	Mitsubishi
	μPD8155	NEC
	μPD8156	NEC
	MSM81C55	OKI
	MSM8155	OKI
RAM, I/O, Timer		
	TMP8155-2	**◊ Toshiba (3306)**
	TMP8156-2	**◊ Toshiba (3306)**
RAM (1024x8) (See also: Memory-RAMs)		
	M8185	† Intel
	8185	Intel
	8185-2	Intel
ROM, I/O	HS83C55RH	‡ Harris
	8355	Intel
	8355-2	Intel
	MSM83C55	◊ OKI
	TMP8355	**Toshiba (3306)**
SCSI Interface Controller		
	CA53C80	**° † Calmos (2553)**
SDLC/HDLC Protocol Controller. See 8273, etc. under 8080.		
	8273	Intel
	μPD7210	NEC
Static Microprocessor with Extended Instruction Set		
	CA80C85S	**° † Calmos (2553)**
Universal Peripheral Interface (slave microprocessor)		
	MBL8041A	Fujitsu
	8041A	Intel
	8741A	Intel
	μPD8041	NEC
	μPD8741A	NEC
Octal Bus Transceiver		
	M8286	† Intel
	M8287	† Intel
	M5L8287	Mitsubishi
Octal Bus Transceiver, Inverting		
	8287	◊ Intel
Octal Bus Transceiver, Non-Inverting		
	8286	◊ Intel
	M5L8286	Mitsubishi
Octal Latch, Inverting		
	M5L8283	Mitsubishi
	M5M82C83	Mitsubishi
Octal Latch, Non-Inverting		
	M5L8282	Mitsubishi
	M5M82C82	Mitsubishi
8-Bit I/O Port	**CA82C12**	**Calmos (2553)**

8086/88

Function	Device	Source
Bus Arbiter	M5L8289	Mitsubishi
Bus Arbiter (10 MHz)	SAB8289-1	Siemens
Bus Compatible Digital Pulse Width Modulator	IXPD610	IXYS
Bus Compatible Incremental Shaft Encoder Interface	IXSE501	IXYS
Bus Controller	M5L8288	Mitsubishi
Bus Monitor	MD68SC49B	◊ Mitel
Clock/Calendar, Real-Time	**CA01C50**	**Calmos (2553)**
Clock Generator and Driver for 8086 MPU (8 MHz)	SAB8284B	Siemens
Clock Generator and Driver for 8086 MPU (10 MHz)	SAB8284B-1	Siemens
Dynamic RAM Controller Interface Circuit	DP84432	National
IBM PC/XT Compatible Chip (replaces the main logic finctions of the IBM PC/XT motherboard)	POACH/XT88	ZyMOS
IBM PC/XT Compatible Chip (replacesaddress, data buffers and DRAM/ROM decode on the XT motherboard)	POACH/XTB	ZyMOS
Interrupt Controller, Programmable	**TMP82C59**	**Toshiba (3306)**
Multi-Protocol Serial Communications Controller	SAB7201A	Siemens
Programmable Interval Timer	**CA82C54**	**Calmos (2553)**

8088

Function	Device	Source
Microprocessor, 8-Bit (10 MHz)	SAB80188-1	◊ Siemens
	SAB8088-1	◊ Siemens
Bus Controller.	UC82C88	° Unicorn
Clock Generator/Driver.	UC82C84A	° Unicorn
DMA Controller.	UC82C37A	° Unicorn
Parallel I/O Port.	UC82C55A	° Unicorn
Priority Interrupt Controller.	UC82C59A	° Unicorn
Programmable Interval Timer.	UC82C54	° Unicorn

F8

Function	Device	Source
Microprocessor	MK3850	Thomson
Direct Memory Access	MK3854	Thomson
Dynamic Memory Interface	MK3852	Thomson
Peripheral Input/Output Interface	MK3861	Thomson
Program Storage Unit	MK3851	Thomson
Static Memory Interface	MK3853	Thomson

NSC800

Function	Device	Source
Microprocessor	NSC800	National
	MPU800	SMC
Microprocessor (CMOS)	NSC800-1	National
	NSC800-4	National
	MPU800-1	SMC
	MPU800-4	SMC
Bidirectional Transceiver	MM82PC08	National
Bidirectional Transceiver (CMOS)	MM82PC08	National
I/O, 3 Programmable Ports	NSC831	National
Intelligent I/O, 3 Programmable Ports (CMOS)	NSC831-1	National
	NSC831-4	National
	MPU831	SMC
Interrupt Control Unit	NSC859	National
RAM, I/O, Timer	NSC810	National
RAM, I/O, Timer (CMOS)	NSC810-1	National
	NSC810-4	National
	MPU810A	SMC
	MPU810A-1	SMC
	MPU810A-4	SMC
ROM, I/O	NSC830	National
ROM, I/O (CMOS)	NSC830-1	National
	NSC830-4	National
	MPU830	SMC
UART	NSC858	National
8-Bit I/O Port	MM82PC12	National

8X300

Function	Device	Source
Microprocessor	N8X300	Signetics
	N8X305	Signetics
	S8X300-1	† Signetics
	S8X300-2	† Signetics
	S8X305	† Signetics
FIFO RAM Controller	N8X60	Signetics
	S8X60	† Signetics
Floppy Disk Controller	N8X330	Signetics
I/O Port, Asynchronous, Field Programmable Address	N8T36	Signetics
	N8X376	◊ Signetics
	S8T35	† Signetics
	S8T36	† Signetics
	S8X376	† Signetics
I/O Port, Latched Bidirectional	N8T31	Signetics
	N8X371	◊ Signetics
	S8X371	† Signetics
I/O Port, Synchronous, Field Programmable Address	N8T32	Signetics
	N8T33	Signetics
	N8X372	◊ Signetics
	N8X382	Signetics
	N8X42	Signetics

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8 Bit

8X300 (Cont'd)

Function	Device	Source	Line
I/O Port, Synchronous, Field Programmable Address (Cont'd)			
	S8T32	† Signetics	
	S8T33	† Signetics	
	S8X372	† Signetics	
	S8X382	† Signetics	
I/O Port with Parity			
	N8X374	◊ Signetics	5
	S8X374	† Signetics	
I/O Register Array (16x8 or 8x16)			
	N8X320	Signetics	
Interrupt Controller			
	N8X310	Signetics	
	S8X310	† Signetics	
LIFO Stack Memory (32x8)			
	N8X355	Signetics	10
	S8X355	† Signetics	
Memory Address Director			
	N8X360	◊ Signetics	
	S8X360	† Signetics	
RAM, Static (32x8)			
	N8X353	Signetics	
	S8X353	† Signetics	15
RAM, Static (256x8)			
	N8X350	Signetics	
	S8X350	† Signetics	

Z8

Function	Device	Source	Line
Microcomputer			
	Z8681	◊‡ SGS	
	Z8681A	◊‡ SGS	
	Z8682	◊ SGS	20
	Z8684	◊ SGS	
	Z86C08-MCU	**Zilog (3419)**	
	Z86C10-MCU	**Zilog (3419)**	
	Z86C20-MCU	**Zilog (3419)**	
	Z86C21-MCU	**Zilog (3419)**	25
	Z86E21-MCU	**Zilog (3419)**	
	Z8601-MCU	**Zilog (3419)**	
	Z8671-MCU	**◊ Zilog (3419)**	
	Z8681-MCU	**◊ Zilog (3419)**	
	Z8800	Zilog	30
Microcomputer, FORTH Interpreter			
	Z8874	Zilog	
Microcomputer Prototyping Deivce, 2K EPROM Interface	**Z8603**	**Zilog (3419)**	
Microcomputer Prototyping Device, 4K EPROM	**Z8613**	**Zilog (3419)**	
Microcomputer, ROMless, DMA Controller	**Z8801**	**Zilog (3419)**	
Microcomputer, ROMless, 24 I/O Lines, UART			
	Z86C91	◊ Zilog	35
	Z8691	**Zilog (3419)**	
Microcomputer, Tiny Basic			
	Z8671	SGS	
Microcomputer, 2K bytes of ROM, 128 bytes of RAM, 22 I/O Lines	Z8600-MCU	Zilog	
Microcomputer, 2K RAM			
	Z8601	**◊ Zilog (3419)**	
Microcomputer, 2K ROM			
	Z8601	◊‡ SGS	40
	Z8601A	◊‡ SGS	
Microcomputer, 4K bytes of ROM, 128 Bytes of RAM, 32 I/O Lines	Z85C11	Zilog	
Microcomputer, 4K EPROM			
	Z86E11	† SGS	
	Z86E11A	† SGS	
Microcomputer, 4K ROM			
	Z8611	◊‡ SGS	45
	Z8611A	◊‡ SGS	
	Z8611	**◊ Zilog (3419)**	
Microcomputer, 8K ROM			
	Z8621	◊‡ SGS	
	Z8621A	◊‡ SGS	
Microcomputer, 8K ROM, DMA Controller			
	Z8820	Zilog	50
	Z8822	Zilog	
Microcomputer, 24 I/O Lines, ROMless			
	Z86C81	Zilog	

Z80

Function	Device	Source	Line
Microprocessor			
	Z8400	**GoldStar (2691)**	
	μPD70008	NEC	
	μPD70008A	NEC	55
	μPD780	NEC	
	μPD780-1	NEC	
	μPD780-2	NEC	
	SMC84C00	S-MOS	
	LH0080	Sharp	60
	LH0080A	Sharp	
	LH0800B	Sharp	
	MKB3880-80	† Thomson	
	MKB3880-84	† Thomson	
	MK3880-6	Thomson	65
	TMPZ84C00	**Toshiba (3306)**	
	TMPZ84C00-3	**Toshiba (3306)**	
	TMPZ84C01	**Toshiba (3306)**	
	Z80	**Zilog (3418)**	
	Z84C00-CPU	**Zilog (3417)**	70
	Z8400-CPU	**◊ Zilog (3417)**	
Microprocessor and Clock Generator Controller	**TMPZ84C02-6**	**Toshiba (3306)**	
Microprocessor (2.5 MHz)			
	Z8400	SGS	
Microprocessor, 4 MHz (Z80A)	**TMPZ84C00A**	**Toshiba (3306)**	
Microprocessor (4.0 MHz)			
	Z84C00A	◊‡ SGS	75
	Z8400A	◊‡ SGS	
Microprocessor, 6 MHz (Z80B)	**TMPZ84C00A-6**	**Toshiba (3306)**	
Microprocessor (6.0 MHz)			
	Z84C00B	◊‡ SGS	
	Z8400B	◊‡ SGS	
Microprocessor, 8 MHz (Z80H)	**TMPZ84C00A-8**	**Toshiba (3306)**	80
Microprocessor (8.0 MHz)			
	Z8400H	◊‡ SGS	
Microprocessor, 8-Bit			
	Z180-MPU	**Zilog (3417)**	
	Z80180-MPU	Zilog	
Microprocessor, 16-Bit			
	Z80280-MPU	◊ Zilog	
Microprocessor, 16-Bit with Enhanced Z80 Instruction Set	**Z280-MPU**	**Zilog (3417)**	85
Bus Compatible Digital Pulse Width Modulator			
	IXPD610	IXYS	
Bus Compatible Incremental Shaft Encoder Interface			
	IXSE501	IXYS	
Bus Monitor	MD68SC49B	◊ Mitel	
Clock Generator and Controller			
	T6497	Toshiba	
	VL86C81	◊ VLSI Tech	90
Clock/Generator Controller			
	TMPZ84C60	**Toshiba (3306)**	
	Z84C60-CPU	Zilog	
Clock Generator Controller (6/8 MHz)	**TMPZ84C61**	**Toshiba (3306)**	
Counter Timer Circuit			
	Z8430	**GoldStar (2691)**	
	Z84C30	◊‡ SGS	95
	Z8430	◊‡ SGS	
	LH0082	Sharp	
	LH0082A	Sharp	
	LH0082B	Sharp	
	LH0082E	Sharp	100
	MKB3882-80	† Thomson	
	MKB3882-84	† Thomson	
	MK3882	Thomson	
	TMPZ84C30	**Toshiba (3306)**	
	Z84C30-CTC	**Zilog (3417)**	105
	Z8430-CTC	**Zilog (3417)**	
Counter/Timer Circuit (4 MHz)	**TMPZ84C30A**	**Toshiba (3306)**	
Counter/Timer Circuit (6 MHz)	**TMPZ84C30A-6**	**Toshiba (3306)**	
Counter/Timer, Programmable	**TMP82C53**	**Toshiba (3306)**	
Data Acquisition System, 8 Channel, 8-Bit Conversion			
	AD7581A	AD	110
	AD7581B	AD	
	AD7581C	AD	
	AD7581J	AD	
	AD7581K	AD	
	AD7581L	AD	115
	AD8581B	AD	
Direct Memory Access Controller			
	Z8410	◊‡ SGS	
	LH0083	Sharp	
	LH0083A	Sharp	
	LH0083B	Sharp	120
	MK3883	Thomson	
	TMPZ84C10	**Toshiba (3306)**	
	Z84C10-DMA	**Zilog (3417)**	
	Z8410-DMA	**◊ Zilog (3417)**	
DMA Controller, Multimode	**TMP82C37**	**Toshiba (3306)**	125
	TMP8237	**Toshiba (3306)**	
DMA Controller (4 MHz)	**TMPZ84C10A**	**Toshiba (3306)**	
DMA Controller (6 MHz)	**TMPZ84C10A-6**	**Toshiba (3306)**	
DUART	Z8470	◊‡ SGS	
General Logic Unit (Interfaces the Z80 to a system environment)	**Z84C80-GLU**	**Zilog (3417)**	130
Keyboard/Display Interface, Programmable	**TMP82C79**	**Toshiba (3306)**	
	TMP8279	**Toshiba (3306)**	
Parallel I/O Controller			
	Z84C20	◊‡ SGS	
	Z8420	◊‡ SGS	
Parallel I/O Controller (4 MHz)	**TMPZ84C20A**	**Toshiba (3306)**	135

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8 Bit

Z80 (Cont'd)

Function	Device	Source	Line
Parallel I/O Controller (6 MHz)			
	TMPZ84C20A-6	**Toshiba (3306)**	
Parallel Input/Output Controller			
	Z8420	**GoldStar (2691)**	
	LH0081	Sharp	
	LH0081B	Sharp	
	LH0081E	Sharp	5
	MKB3881-80	† Thomson	
	MKB3881-84	† Thomson	
	MK3881	Thomson	
	TMPZ84C20	**Toshiba (3306)**	
	Z84C20-PIO	**Zilog (3417)**	10
	Z8420-PIO	**◊ Zilog (3417)**	
Programmable Peripheral Interface			
	TMP82C55	**Toshiba (3306)**	
Serial I/O Controller			
	Z84C40	‡ SGS	
	Z84C41	‡ SGS	
	Z84C42	‡ SGS	15
	Z84C44	◊‡ SGS	
	Z8440	◊‡ SGS	
	Z8441	◊‡ SGS	
	Z8442	◊‡ SGS	
	Z8444	◊‡ SGS	20
	TMPZ84C44A	**Toshiba (3306)**	
Serial I/O Controller (4 MHz)			
	TMPZ84C40A	**Toshiba (3306)**	
	TMPZ84C41A	**Toshiba (3306)**	
	TMPZ84C42A	**Toshiba (3306)**	
Serial I/O Controller (6 MHz)			
	TMPZ84C40A-6	**Toshiba (3306)**	25
	TMPZ84C41A-6	**Toshiba (3306)**	
	TMPZ84C42A-6	**Toshiba (3306)**	
Serial Input/Output Controller			
	Z8440	**GoldStar (2691)**	
	LH0084	Sharp	
	LH0084A	Sharp	30
	LH0084E	Sharp	
	LH0085	Sharp	
	LH0085A	Sharp	
	LH0085E	Sharp	
	LH0086	Sharp	35
	LH0086A	Sharp	
	LH0086E	Sharp	
	LH0087	Sharp	
	LH0087A	Sharp	
	LH0087B	Sharp	40
	MK14007	Thomson	
	MK3884	Thomson	
	MK3885	Thomson	
	MK3887	Thomson	
	TMPZ84C40	**Toshiba (3306)**	45
	TMPZ84C41	**Toshiba (3306)**	
	TMPZ84C42	**Toshiba (3306)**	
	TMPZ84C43	**Toshiba (3306)**	
	Z80-SIO	**Zilog (3418)**	
	Z84C40-SIO	**◊ Zilog (3417)**	50
	Z84C41-SIO	**◊ Zilog (3417)**	
	Z84C42-SIO	**◊ Zilog (3417)**	
	Z84C44-SIO	**◊ Zilog (3417)**	
	Z8440-SIO	**Zilog (3417)**	
	Z8441-SIO	**Zilog (3417)**	55
	Z8442-SIO	**Zilog (3417)**	
	Z8444-SIO	**Zilog (3417)**	

Function	Device	Source	Line
Dual Asynchronous Receiver/Transmitter			
	Z8470	**◊ GoldStar (2691)**	
	Z80-DART	**Zilog (3418)**	
	Z8470-DART	**Zilog (3417)**	60
Z80 MPU (4 MHz), Clock Generator Controller, Counter/Timer, I/O			
	TMPZ84C011A	**Toshiba (3306)**	
	TMPZ84C013A	**Toshiba (3306)**	
	TMPZ84C015A	**Toshiba (3306)**	
Z80 MPU (6 MHz), Clock Generator Controller, Counter/Timer Controller, I/O			
	TMPZ84C011A-6	**Toshiba (3306)**	
	TMPZ84C013A-6	**Toshiba (3306)**	65
	TMPZ84C015A-6	**Toshiba (3306)**	

μPD7810

Microcomputer			
	μPD78P09	NEC	
	μPD7807	◊ NEC	
	μPD7809	◊ NEC	
Microcomputer with A/D Converter			
	μPD7810	◊ NEC	70
	μPD7811	◊ NEC	

8/16 Bit

1600

Asynchronous/Synchronous Transmitter/Receiver (ASTRO) (See also Interface-Serial Transmitters-Receivers)			
	COM1671	◊ SMC	
	UC1671	Western	
Floppy Disc Controller/Formatter			
	MB8866	Fujitsu	
	INS1771	◊ National	75
	FDC1791-02	SMC	
	FDC1795-02	SMC	
	FD1791-02	Western	
	FD1795-02	Western	

8086

Microprocessor, High Integration			
	iAPX186	AMD	80
Microprocessor, Operating System			
	80130	Intel	
Microprocessor, 16-Bit			
	8086	◊ AMD	
	8086-1	AMD	
	8086-2	AMD	
	MBL8086	Fujitsu	85
	MBL8086-1	Fujitsu	
	MBL8086-2	Fujitsu	
	M8086	† Intel	
	80286	Intel	
	8086	◊ Intel	90
	8086-1	Intel	
	8086-2	Intel	
	μPD8086	NEC	
	μPD8086-2	NEC	
	SAB8086C	Siemens	95
Microprocessor, 16-Bit (CMOS)			
	HS80C86RH	**‡ Harris (2708)**	
	80C86	**◊ Harris (2730, 2768)**	
	80C86-2	**Harris (2730, 2768)**	
	MSM80C86	OKI	

Function	Device	Source	Line
Microprocessor, 16-Bit (CMOS			
	MD80C86	**† Harris (2702)**	100
Bus Controller	82288	AMD	
	MBL82288	◊ Fujitsu	
	82288	Intel	
	UM82C88	UMC	
Clock and Ready Interface, for iAPX286			
	MBL82284	◊ Fujitsu	105
	82284	Intel	

8086/88

Microprocessor			
	LH70108C-5	Sharp	
	LH70108C-8	Sharp	
	LH70108D-5	Sharp	
	LH70108D-8	Sharp	110
	LH70108G-5	Sharp	
	LH70108G-8	Sharp	
	LH70108L-5	Sharp	
	LH70108L-8	Sharp	
Microprocessor Bus Controller			
	CA82C88	**° † Calmos (2553)**	115
Microprocessor, High Integration			
	MBL80186	Fujitsu	
	MBL80186-6	Fujitsu	
	80186	Intel	
Microprocessor, I/O Preprocessor			
	8089	AMD	
	MBL8089	Fujitsu	120
	8089	◊ Intel	
Microprocessor, 8-Bit			
	80188-1	AMD	
	80188-3	AMD	
	80188-6	AMD	
	SAB80188	Siemens	125
Microprocessor, 8-bit data, 16-bit CPU			
	80188	Intel	
Microprocessor, 8-Bit (5 MHz)			
	SAB8088	Siemens	
Microprocessor, 8-Bit (8 MHz)			
	SAB8088-2	Siemens	
Microprocessor, 16-Bit			
	80186-1	AMD	
	80186-3	AMD	130
	80186-6	AMD	
	SAB80186	Siemens	
A Clock Generator and Driver (5 MHz)			
	82C84A-5	Intel	
Analog Data Separator (For Floppy Disk System)			
	82C764	Chips&Tech	
Asynchronous Communications Element			
	MD82C50	**† Harris (2702)**	135
	82C50-Cell	**° Harris (2731, 2768, 4249)**	
	82C50A	**◊ Harris (2731, 2768, 4249)**	
Asynchronous Communications Element (ACE)			
	UM82450	**UMC (3316)**	
	UM8250	**UMC (3315)**	
Bus Arbiter	AM8289	AMD	140
	MBL8289	Fujitsu	
	MD82C89	**◊† Harris (2702)**	
	82C89	**◊ Harris (2734, 2768)**	
	M8289	† Intel	
	8289	◊ Intel	145

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8/16 Bit

8086/88 (Cont'd)

Function	Device	Source
Bus Arbiter		(Cont'd)
	M5M82C89	Mitsubishi
	μPB8289	NEC
	SAB8289	Siemens
Bus Controller	AM8288	AMD
	82C288	◇ AMD
	8288	AMD
	MBL8288	Fujitsu
	MD82C88	**◇† Harris (2702)**
	82C88	**◇ Harris (2734, 2768, 4249)**
	82C88-Cell	**° Harris (2734, 2768, 4249)**
	M8288	† Intel
	8288	◇ Intel
	μPB8288	NEC
	μPD71088	◇ NEC
	MSM82C88	OKI
	SAB8288	Siemens
Bus Controller.	UC82C88	° Unicorn
Bus Controller for 10 MHz systems	8288-1	Intel
Bus Controller (supports 8086/88, 80C86/88, 80188, 80186)	82C88	Intel
Bus Controller, 80186–8087 Interface	82188	Intel
Bus Interface Controller	SAB82220	Siemens
Chipset, 8088/V20 (PC/XT Compatible)	82C101	Chips&Tech
Chipset, 8088/8086/V30 (PC/XT Compatible)	82C100	Chips&Tech
CHIPSpak, PC Compatible Multifunction Controller	82C606	Chips&Tech
CHIPSport, PC Compatible Multifunction Controller	82C605	Chips&Tech
Clock Generator and Controller	VL85C81	VLSI Tech
Clock Generator and Drive, CMOS	VL82C84A	VLSI Tech
Clock Generator and Driver	8284A	AMD
	CA82C84A	**° † Calmos (2553)**
	MBL8284A	Fujitsu
	M8284	† Intel
	M5M82C84A	Mitsubishi
	μPB8284A	◇ NEC
	μPD71084	◇ NEC
	SAB8248A	Siemens
Clock Generator and Driver, (8 MHz)	82C84A	Intel
Clock Generator and Driver (10 MHz)	8284A-1	Intel
Clock Generator and Driver (5/8 MHz)	8284A	◇ Intel
Clock Generator/Controller, Static	**HS82C85RH**	**‡ Harris (2713)**
	MD82C85	**◇† Harris (2702)**
	82C85	**◇ Harris (2734, 2768)**
Clock Generator/Driver	**MD82C84**	**◇† Harris (2702)**
	82C84A	**◇ Harris (2734, 2768, 4249)**
	82C84A-Cell	**° Harris (2734, 2768, 4249)**
	MSM82C84A	OKI
Clock Generator/Driver.	UC82C84A	° Unicorn
Clock Generator/Driver	UM82C84A	UMC
Control Buffer (For 80386/AT Chipset)	82A306	Chips&Tech
Controller, CMOS Bus Controller	VL82C88	VLSI Tech
Controller, CMOS Programmable Interrupt Controller	VL82C59A	VLSI Tech
Counter, CMOS Programmable	VL82C54	VLSI Tech
Data Buffer (For 80386/AT Chipset)	82A305	Chips&Tech
DMA Controller	**82C37A**	**◇ Harris (2731, 2768, 4249)**
	82258	Intel
	SMC82C37	S-MOS
DMA Controller.	UC82C37A	° Unicorn
Dynamic RAM Controller	8202A	Intel
	8203	Intel
	8207	Intel
	8208	Intel
Dynamic RAM Controller Interface Circuit	DP84332	National
	DP84422	National
GPIB Interface Controller, Intelligent	COM7210	SMC
GPIB Talker/Listener	8291A	Intel
Keyboard Encoder, CMOS	**UM82C01**	**UMC (3314)**
Local Bus Arbiter	SAB82200	Siemens
Multi-Universal Asynchronous Receiver Transmitter	8256	Intel
	SAB8256A	Siemens
Multiprotocol Serial I/O Controller	μPD7210	NEC
Parallel I/O Port.	UC82C55A	° Unicorn
Printer Adapter Interface (PAI), CMOS	**UM82C11**	**UMC (3314)**
Priority Interrupt Controller	**HS82C59ARH**	**‡ Harris (2713)**
	MD82C59	**† Harris (2702)**
	82C59A	**◇ Harris (2732, 2768, 4249)**
	82C59A-Cell	**° Harris (2732, 2768, 4249)**
	MSM82C59A	OKI
	SMC82C59AC	◇ S-MOS
Priority Interrupt Controller.	UC82C59A	° Unicorn
Programmable Asychronous Communications Interface	**HD6406**	**◇ Harris (2735, 2768, 4249)**
	HD6406-Cell	**° Harris (2735, 2768, 4249)**
Programmable DMA Controller	**CA82C37A**	**° † Calmos (2553)**
Programmable Interrupt Controller	**CA82C59A**	**° † Calmos (2553)**
	MBL8259A	Fujitsu
	82C59A-2	Intel
	8259A	Intel
	SMC82C59AC	◇ S-MOS
	SAB8259A	Siemens
	SAB8259A-2	Siemens
	SAB8259A-8	Siemens
Programmable Interval Timer	**HS82C54RH**	**‡ Harris (2712)**
	82C54	**◇ Harris (2731, 2768, 4249)**
	82C54-Cell	**° Harris (2731, 2768, 4249)**
	SMC82C54AC	◇ S-MOS
Programmable Interval Timer.	UC82C54	° Unicorn
Programmable Peripheral Interface	**CA82C55A**	**° † Calmos (2553)**
	HS82C55ARH	**‡ Harris (2712)**
	MD82C55	**† Harris (2702)**
	82C55A	**◇ Harris (2732, 2768, 4249)**
	82C55A-Cell	**° Harris (2732, 2768, 4249)**
	UM82C55A	UMC
Serial Communications Interface	**HS82C52RH**	**‡ Harris (2711)**
	MD82C52	**† Harris (2702)**
	82C52	**◇ Harris (2731, 2768, 4249)**
	82C52-Cell	**° Harris (2731, 2768, 4249)**
Text Coprocessor	82730	◇ Intel
Universal DMA Controller, 16-Bit, 10 MHz	AM9516A-1	AMD
Universal DMA Controller, 16-Bit, 4 MHz	AM9516A-4	AMD
Universal DMA Controller, 16-Bit, 6 MHz	AM9516A-6	AMD
Universal DMA Controller, 16-Bit, 8 MHz	AM9516A-8	AMD
Video Interface Controller	82731	◇ Intel
Octal Bus Transceiver, Inverting	8287	AMD
	MBL8287	Fujitsu
	MD82C87	**◇† Harris (2702)**
	82C87	**Harris (2733, 2768)**
	M8287	† Intel
	M5M82C87	Mitsubishi
	μPB8287	NEC
	μPD71087	◇ NEC
	SAB8287	Siemens
Octal Bus Transceiver, Non-Inverting	8286	AMD
	MBL80286-6	Fujitsu

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

8/16 Bit

8086/88 (Cont'd)

Function	Device	Source	Line
Octal Bus Transceiver, Non-Inverting (Cont'd)			
	MBL80286-8	Fujitsu	
	MBL8286	Fujitsu	
	MD82C86	**◇† Harris (2702)**	
	82C86	**Harris (2733, 2768)**	
	M8286	† Intel	5
	M5M82C86	Mitsubishi	
	μPB8286	NEC	
	μPD71086	◇ NEC	
	SAB8286	Siemens	
Octal Latch, Inverting			
	MBL8283	Fujitsu	10
	MD82C83	**◇† Harris (2702)**	
	82C83	**Harris (2733, 2768)**	
	M8283	† Intel	
	8283	◇ Intel	
	μPB8283	◇ NEC	15
	μPD71083	◇ NEC	
	SAB8283	Siemens	
Octal Latch, Non-Inverting			
	MBL8282	Fujitsu	
	MD82C82	**◇† Harris (2702)**	
	82C82	**◇ Harris (2733, 2768)**	20
	M8282	† Intel	
	8282	◇ Intel	
	μPB8282	◇ NEC	
	μPD71082	◇ NEC	
	SAB8282	Siemens	25
8-Bit I/O Port	**CA82C12**	**Calmos (2553)**	

8088

Function	Device	Source	Line
Microprocessor, 8-Bit			
	8088	◇ AMD	
	8088-1	AMD	
	8088-2	AMD	
	MBL8088	Fujitsu	30
	MBL8088-2	Fujitsu	
	80C88	**◇ Harris (2730, 2768)**	
	80C88-2	**Harris (2730, 2768)**	
	8088	◇ Intel	
	8088-2	Intel	35
	μPD8088	NEC	
	μPD8088-2	NEC	
	MSM80C88	OKI	
Microprocessor, 8-bitB8-Bit			
	MD80C88	**† Harris (2702)**	

9900

Function	Device	Source	Line
Microcomputer ROM-Less			
	TM9995	TI	40
Microprocessor			
	TMS9981	TI	
Microprocessor, 16-Bit			
	TMS9900	TI	
A Video Timer/Controller			
	TMS9927	TI	
	TMS9937	TI	

Function	Device	Source	Line
Addressable Latch, 8-Bit			
	SN54LS259B	◇† TI	45
	SN74LS259B	TI	
	TIM9906	TI	
Asynchronous Communications Controller			
	TMS9902A	TI	
Clock Generator and Driver (4-phase for 9900)			
	TIM9904	TI	
Data Selector/Multiplexer (See also Digital-TTL-Multiplexers 74LS251)			
	SN54LS251	◇† TI	50
	SN74LS251	TI	
	TIM9905	TI	
FSK Modem	SC11002	Sierra	
	SC11003	Sierra	
GPIB Controller			
	SMJ9914A	**† TI (3222)**	55
	TMS9914A	TI	
Multi-Processor Interface			
	TMS99650	TI	
Priority Encoder (See also Digital-TTLMiscellaneous, Priority Encoder, 74LS148)			
	TIM9907	TI	
Priority Encoder, 8-Line to 3-Line			
	SN74LS148	TI	
Priority Encoder, 8-Line to 3-Line, Three State			
	SN74LS348	TI	60
	TIM9908	TI	
Programmable Systems Interface			
	TMS9901	TI	
Pulse DTMF Encoder			
	TMS99531	TI	
Synchronous Communications Controller			
	TMS9903	TI	
Four-Phase Clock Generator and Driver			
	TMS9904A	TI	65

80286

Function	Device	Source	Line
Microprocessor, Numeric Data			
	80287	Intel	
Processor Signal Converter (80286 to 8088)			
	EL286-88	EdsunLabs	

μCOM-70K

Function	Device	Source	Line
Microprocessor (8-Bit external bus)			
	μPD70108-5	NEC	
	μPD70108-8	NEC	
Microprocessor (16-Bit external bus)			
	μPD70116-5	NEC	70
	μPD70116-8	NEC	

12 Bit

2900

Function	Device	Source	Line
Microprogram Sequencer, 12-Bit			
	GE29C10	GE Semi	
	IDT39C10B	**◇ IDT (2801)**	
	IDT39C10C	**◇ IDT (2801)**	

2900 Controller

Function	Device	Source	Line
Microprogram Controller, 12-Bit			
	AM2910C	AMD	75
	AM2910M	† AMD	
	CY7C910C	**Cypress (2569)**	
	CY7C910M	**† Cypress (2569)**	

(Continued)

Function	Device	Source	Line
Microprogram Controller, 12-Bit (Cont'd)			
	GP502AD	‡ GE/RCA	
	SFC2910	Thomson	80
Microprogram Sequencer, 8-Bit			
	AM29112	AMD	

6100

Function	Device	Source	Line
Universal Asynchronous Receiver-Transmitter (UART) (See also Interface-Serial Transmitters-Receivers)			
	IM6402	**◇ GE/Intersil (2678)**	
	IM6402-1I	**◇ GE/Intersil (2678)**	
	IM6402-1M	**◇† GE/Intersil (2678)**	
	IM6402AI	**◇ GE/Intersil (2678)**	85
	IM6402AM	**◇† GE/Intersil (2678)**	
	IM6403	**◇ GE/Intersil (2678)**	
	IM6403-1I	**◇ GE/Intersil (2678)**	
	IM6403AI	**◇ GE/Intersil (2678)**	
	IM6403AM	**◇† GE/Intersil (2678)**	90
	HD6402-Cell	**° Harris (2703, 2735, 4249)**	

16 Bit

2900

Function	Device	Source	Line
Error Detection and Correction			
	IDT39C60A	**IDT (2801)**	
Microprogram Sequencer, 16-Bit			
	GE29C10-16	GE Semi	
	IDT49C410	**◇ IDT (2801, 2816)**	
	IDT49C410A	**IDT (2801, 2816)**	95
Quad 2901 with 64x16 Dual Port Memory Capacity			
	IDT49C402	**◇ IDT (2801, 2813)**	
	IDT49C402A	**IDT (2801, 2813)**	
16-Bit Microprocessor Slice			
	CY7C9101	**◇ Cypress (2569)**	
	IDT49C401	**IDT (2801)**	
	IDT49C401A	**IDT (2801)**	100
	IDT49C403	**IDT (2801, 2814)**	
	IDT49C403A	**IDT (2801, 2814)**	

6500

Function	Device	Source	Line
Microprocessor (software compatible with 8-bit 6500 series)	**G65SC802**	**◇ CMD Micro (2549)**	
	G65SC816	**◇ CMD Micro (2549)**	
	VL65C816	VLSI Tech	105

8000

Function	Device	Source	Line
Microprocessor			
	LH70116C-5	Sharp	
	LH70116C-8	Sharp	
	LH70116D-5	Sharp	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

16 Bit

8000 (Cont'd)

Function	Device	Source	
Microprocessor			(Cont'd)
	LH70116D-8	Sharp	
	LH70116G-5	Sharp	
	LH70116G-8	Sharp	
	LH70116L-5	Sharp	
	LH70116L-8	Sharp	
Microprocessor, Non-Segmented			
	Z8002	AMD	
	Z8002A	AMD	
	Z8002A-8	AMD	
	Z8002	◊ SGS	
	Z8002A	SGS	
	LH8002	Sharp	
	LH8002A	Sharp	
Microprocessor, Non-Segmented 10 MHz			
	Z8002B	◊‡ SGS	
Microprocessor, Segmented			
	Z8001	AMD	
	Z8001A	AMD	
	Z8001A-8	AMD	
	Z8001	SGS	
	Z8001A	SGS	
	LH8001	Sharp	
	LH8001A	Sharp	
	Z8000	**Zilog**	**(3418)**
	Z8001-CPU	◊ **Zilog**	**(3418)**
Microprocessor, Segmented 10 MHz			
	Z8001B	◊‡ SGS	
Asynchronous Serial Communications Controller			
	Z8031	AMD	
	Z8031A	AMD	
	Z8031	SGS	
	Z8031A	SGS	
Burst Error Processor			
	AMZ8065	AMD	
Clock Generator			
	AM8127	AMD	
Clock Generator and Controller			
	Z8581-CGC	**Zilog**	**(3418)**
Counter Timer I/O			
	Z8036	AMD	
	Z8036A	AMD	
	Z8036-CIO	SGS	
	Z8036A-CIO	SGS	
	LH8036	◊ Sharp	
	LH8036A	◊ Sharp	
	Z8036-Z-CIO	**Zilog**	**(3418)**
CRT Controller	AM8052	◊ AMD	
Data Ciphering Processor (for data encryption)			
	Z9518-DCP	**Zilog**	**(3418)**
Data Cyphering Processor			
	AMZ8068	AMD	
	Z8068-DCP	**Zilog**	**(3418)**
	Z8068-Z-DCP	**Zilog**	**(3418)**
Direct Memory Access			
	AMZ8016	AMD	
	AMZ8016A	AMD	
	Z8016-Z-DTC	**Zilog**	**(3418)**
DMA Transfer Controller			
	Z8516-DTC	**Zilog**	**(3418)**
DMA Transfer Controller			
	Z9516-DTC	**Zilog**	**(3418)**
FIFO Buffer Unit (128x8)			
	Z8560-FIFO	**Zilog**	**(3418)**
First In/First Out Buffer			
	Z8060-FIFO	SGS	
	Z8060A-FIFO	SGS	
	LH8060	Sharp	
	LH8060A	Sharp	
	Z8060-Z-FIFO	**Zilog**	**(3418)**
First In/First Out I/O			
	Z8038	AMD	
	Z8038-FIO	SGS	
	Z8038A-FIO	SGS	
	LH8038	Sharp	
	LH8038A	Sharp	
	Z8038-Z-FIO	**Zilog**	**(3418)**
Floppy Disc Controller			
	FDC1793	SMC	
	FDC1793-02	◊ SMC	
	FDC1797	SMC	
	FDC1797-02	◊ SMC	
	FD1793-02	Western	
	FD1797-02	Western	
Intelligent Peripheral Controller			
	LH8090	Sharp	
	LH8090A	Sharp	
Memory Management Unit			
	Z8010-MMU	SGS	
	Z8010A-MMU	SGS	
	LH8010	Sharp	
	LH8010A	Sharp	
Output Interface Unit (with 128 byte FIFO Unit)			
	Z8538-FIO	**Zilog**	**(3418)**
Real-Time Clock/Calendar (8 and 10 MHz)			
	CA82C55A	**Calmos**	**(2553)**
SCSI Interface Chip			
	Z53C80-SCSI	Zilog	
Serial communication controller			
	Z8030A	◊‡ SGS	
Serial Communications Controller			
	Z85C30-SCC	**Zilog**	**(3418)**
Serial Controller Multi-Protocol			
	Z8530-SCC	**Zilog**	**(3418)**
Serial Input/Output			
	Z8030	AMD	
	Z8030A	AMD	
	Z8030-SCC	SGS	
	Z8030-Z-SCC	**Zilog**	**(3418)**
Serial Input/Output Controller			
	LH8030	◊ Sharp	
	LH8030A	◊ Sharp	
Timing, Refresh and EDC Controller (16 MHz)			
	AM8163	AMD	
Octal Register	AM8120	AMD	
8-Bit Equal-to Comparator			
	AM8121	AMD	

8086

Function	Device	Source	
Microprocessor, 16-Bit (10 MHz)			
	SAB80186-1	◊ Siemens	
	SAB80286-1	◊ Siemens	
Bus Controller	UC82C88	° Unicorn	
Bus Controller for SAB80286 Processor (8 MHz)			
	SAB82288	Siemens	
Bus Controller for SAB80286 Processor (10 MHz)			
	SAB82288-1	Siemens	
Clock Generator and Interface for SAB80286 Processor (16 MHz)			
	SAB82284	◊ Siemens	
	SAB82284-1	◊ Siemens	
Clock Generator/Driver.			
	UC82C84A	° Unicorn	
DMA Controller			
	UC82C37A	° Unicorn	
Parallel I/O Port.			
	UC82C55A	° Unicorn	
Priority Interrupt Controller.			
	UC82C59A	° Unicorn	
Programmable Interval Timer.			
	UC82C54	° Unicorn	
256x8-Bit CMOS Static RAM			
	SAB81C52	Siemens	
	SAE81C52	Siemens	

8096

Function	Device	Source
Microcomputer, 232x8 RAM, 10-Bit A/D, IO, 12 MHz		
	8096	Intel
Microcomputer, 232x8 RAM, 10-Bit A/D, 8Kx8 ROM, I/O, 12 MHz	8396	Intel

9440

Function	Device	Source
Microprocessor		
	F9440M	† Fairchild
	F944516	† Fairchild
	F944518	† Fairchild
	F944520	† Fairchild
	F944524	† Fairchild

9450

Function	Device	Source
Block Protect Unit		
	F9452	◊† Fairchild
Memory Management Unit		
	F9451	◊† Fairchild

16000

Function	Device	Source
Microprocessor		
	F16032	Fairchild
Microprocessor, 16-Bit		
	HPC16030	† National
	HPC16040	◊ National
	HPC26040	National
	HPC36030	National
	HPC36040	National
	HPC46030	† National
	HPC46040	National
Microcontroller with HDLC Controller		
	HPC16400	National
	HPC36400	National
	HPC46400	National
Serial Network Interface		
	DP8391	National

65C8XX

Function	Device	Source
Microprocessor (Software compatible with the 6500)		
	W65C802	WDC
	W65C816	WDC

68000

Function	Device	Source
Microprocessor		
	HD68000	Hitachi
	HD68000-10	Hitachi

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
16 Bit			
68000 (Cont'd)			
Microprocessor			(Cont'd)
	HD68000-12	Hitachi	
	HD68000-4	Hitachi	
	HD68000-6	Hitachi	
	HD68000-8	Hitachi	
	MC68000-10	**Motorola (2896)**	5
	MC68000-12	**Motorola (2896)**	
	MC68000-8	**Motorola (2896)**	
	R68000	◊ **Rockwell (2987, 2989)**	
	SCN68000	◊ Signetics	
	EF68000	Thomson	10
	EF68000-10	Thomson	
	EF68000-12	Thomson	
	EF68000-16	Thomson	
	EF68000-8	Thomson	
	MKB68000	† Thomson	15
	MK68HC200	Thomson	
	MK68000-10	Thomson	
	MK68000-4	Thomson	
	MK68000-6	Thomson	
	MK68000-8	Thomson	20
	MK68200	Thomson	
Microprocessor 8-Bit (bus interface version of MC68000)	**MC68008**	**Motorola (2896)**	
	EF68008	Thomson	
Microprocessor 16-Bit (virtual machine version of MC68000)	**MC68010**	**Motorola (2896)**	
	SCN68010	◊ Signetics	25
Address Decoder, 68000 Compatible	USC68HC138	Universal	
Broadband Interface Controller (IEEE 802.4 Broadband Physical Layer)	**MC68184**	**Motorola (2897)**	
Bus Arbitration Module	**MC68452**	**Motorola (2898)**	
Bus Interrupter Module	**MC68153**	**Motorola (2898)**	
Bus Monitor	MD68SC49B	◊ Mitel	30
Carrierband Modem (IEEE 802.4 Phase Coherent Physical Layer)	MC68194	Motorola	
Clock Generator and Controller	VL85C81	VLSI Tech	
CMOS 16/32-Bit Microprocessor	SCC68070	◊ Signetics	
Communications, Asynchronous Communications Adapter Interface (ACIA)	USC68HC551	Universal	
Communications, Multi-protocol Communications Controller	MC2652	Motorola	35
Communications, Programmable Communications Interface	MC2661	Motorola	
	MC68661	**Motorola (2898)**	
Communications, Dual Asynchronous Communications Interface Adapter (DACIA)	**R68C552**	**Rockwell (2989)**	
Communications, Dual Universal Serial Communications Controller	**SCN68562**	◊ **Signetics (3060)**	
Controller, Programmable Interrupt	USC68HC908	Universal	40
Disk, Phase Locked Loop	**SCB68459**	**Signetics (3064)**	
Display Processor	EF68483	Thomson	
DMA Controller	HD68450-10	Hitachi	
	HD68450-4	Hitachi	
	HD68450-6	Hitachi	45
	HD68450-8	Hitachi	
	MC68450	**Motorola (2897)**	
	SCB68430	◊ Signetics	
DMA Controller, Extended Address	**MC68442**	**Motorola (2897)**	
DMA Controller, Dual	**MC68440**	**Motorola (2897)**	50
	EF68440	Thomson	
Dynamic RAM Controller Interface Circuit	DP84312	National	
	DP84322	National	
Error Detection and Correction Circuit	MC74F2960	◊ Motorola	
Ethernet, Local Area Network Controller	MK68540	Thomson	55
FIFO	MK68345	Thomson	
FIFO, 512x9	MK68345-12	Thomson	
	MK68345-15	Thomson	
	MK68345-20	Thomson	
Local Area Network Controller for Ethernet	**MK68590**	**Thomson (3286)**	60
Memory Access Controller	SCC68905	◊ Signetics	
Memory Access Controller, Basic	SCC68906	Signetics	
Memory Management Controller (supports 68010, 68020)	MC68641	Motorola	
Memory Management Unit	**MC68451**	**Motorola (2897)**	
	MK68451	Thomson	65
Multi-Function Peripheral	**MC68901**	**Motorola (2898)**	
	EF68901	Thomson	
	MK68901	Thomson	
Multibus II Message Passing Coprocessor	VL82C389	VLSI Tech	
Parallel Interface/Timer	**MC68230-12**	**Motorola (2898)**	70
	MC68230L10	Motorola	
	MC68230L8	Motorola	
	EF68230-10	Thomson	
	EF68230-8	Thomson	
	MK68230-10	**Thomson (3279)**	75
	MK68230-8	**Thomson (3279)**	
Parallel Port Interface, To 25 MHz	USC68HC221	Universal	
Programmable Counter/Timer	USC68HC331	Universal	
SCSI Interface Controller	**CA53C80**	° † **Calmos (2553)**	
Serial Input Output	EF68564	◊ Thomson	80
	MK68564	**Thomson (3280)**	
Serial Interface Adapter (SIA)	MK68592	Thomson	
Token Bus Controller (IEEE 802.4 Media Access Control sublayer)	**MC68824**	**Motorola (2897)**	
Video Display Generator	**MC6847**	**Motorola (2903)**	
VMEbus Controller (BUSCON)	**SCB68172**	◊ **Signetics (3066)**	85
X–25 Protocol Controller	**MC68605**	**Motorola (2898)**	
Dual UART	**MC68681**	**Motorola (2898)**	
	SCN68681C	**Signetics (3054)**	
80286			
Microprocessor Bus Controller	**CA82C88**	° † **Calmos (2553)**	
Microprocessor, 16-Bit	80286-1	AMD	90
	80286-6	AMD	
	80286-8	AMD	
	SAB80286	Siemens	
Bus Arbiter (synchronizes 80286 with Multi-Master bus.)	82289	Intel	
Bus Controller	UC82C288	° Unicorn	95
Bus Controller, CMOS	**VL82C288**	**VLSI Tech (3339)**	
Clock Generator and Driver	**CA82C84A**	° † **Calmos (2553)**	
Clock Generator and Driver, CMOS	**VL82C284**	**VLSI Tech (3338)**	
Clock Generator and Ready Interface (6 MHz)	82C284-6	Intel	
Clock Generator and Ready Interface (8 MHz)	82C284-8	Intel	100
Clock Generator and Ready Interface (10 MHz)	82C284-10	Intel	
Clock Generator and Ready Interface (12.5 MHz)	82C284-12	Intel	
Clock Generator/Driver	UC82C284	° Unicorn	
DMA Controller	UC82C37A	° Unicorn	
DMA Coprocessor for 16-Bit CPU (10 MHz)	SAB82258-1	Siemens	105
DMA Coprocessor (6 MHz)	SAB82257-6	Siemens	
DMA Coprocessor (8 MHz)	SAB82257	Siemens	
IBM PC/AT Compatible Chip Set (replaces major logic functions of all microprocessor peripherals)	POACH/AT	ZyMOS	
IBM PC/AT Compatible Chip Set (replaces most address and data buffers on the AT motherboard)	POACH/ATB	ZyMOS	
IBM PC/AT Compatible Chip Set (replaces the major logic functions of the AT motherboard)	POACH/ATF	ZyMOS	110
Integrated Peripherals Controller	UC82C206	° Unicorn	
Multibus II Message Passign Coprocessor for 80186/80286/80386 and 6800	VL82C389	VLSI Tech	
PC/AT Address Buffer (part of IBM PC/AT chipset)	VL82C103	VLSI Tech	
PC/AT Data Buffer (part of IBM PC/AT chipset)	VL82C104	VLSI Tech	
PC/AT Memory Controller (part of IBM PC/AT chipset)	VL82C102	VLSI Tech	115

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

16 Bit

80286 (Cont'd)

Function	Device	Source	
PC/AT Peripheral Controller (part of IBM PC/AT chipset)	VL82C100	VLSI Tech	
PC/AT System Controller (part of IBM PC/AT chipset)	VL82C101	VLSI Tech	
Priority Interrupt Controller	UC82C59A	° Unicorn	
Programmable DMA Controller	**CA82C37A**	**° † Calmos**	**(2553)**
Programmable Interrupt Controller	**CA82C59A**	**° † Calmos**	**(2553)**
Programmable Interval Timer	**CA82C54**	**° † Calmos**	**(2553)**
Programmable Peripheral Interface	**CA82C55A**	**° † Calmos**	**(2553)**
Real-Time Clock/Calendar	**CA01C50**	**° † Calmos**	**(2553)**
SCSI Interface Controller	**CA53C80**	**° † Calmos**	**(2553)**

SBP9989

Microprocessor	SBP9989	◊† TI	
Interrupt Control Circuit	SBP9966	† TI	
Programmable System Interface	SPB9901	† TI	

TMS380

Token-Ring LAN Communications Processor (Part of TMS380 Chip Set)	TMS38010	TI	
Token-Ring LAN Protocol Handler (Part of TMS380 Chip Set)	TMS38020	TI	
Token-Ring LAN Ring Interface Controller (Part of TMS380 Chip Set)	TMS38052	TI	
Token-Ring LAN Ring Interface Transceiver (Part of TMS380 Chip Set)	TMS38051	TI	
Token-Ring LAN System Interface (Part of TMS380 Chip Set)	TMS38030	TI	

Transputer

Microprocessor with External Memory Interface	**IMST212**	**Inmos**	**(2777)**
Microprocessor, Two Links, 1 Kbyte RAM, 4 Kbytes ROM, Floppy Disk Controller	M212B-G17	◊ Inmos	
Microprocessor, 10 or 20 Mb/s Serial Links, 2 Kbytes RAM	T212A-G17	Inmos	
	T212A-G22	Inmos	
Disk Processor	**IMSM212**	**Inmos**	**(2774)**
Link Adapter, 10 or 20 Mb/s	**IMSC011**	**Inmos**	**(2773)**
	IMSC012	**Inmos**	**(2773)**

Z8000

Bus Monitor	MD68SC49B	◊ Mitel	
Clock Generator and Controller	VL86C81	◊ VLSI Tech	
Counter/Timer, Parallel I/O	**Z8536-CIO**	**Zilog**	**(3418)**
DMA Transfer Controller	**Z8516-DTC**	**Zilog**	**(3418)**
FIFO Buffer Unit (128x8)	**Z8060**	**Zilog**	**(3418)**
General Logic Unit (Interfaces the Z80 to a system environment)	**Z80C20-Z-GLU**	**Zilog**	**(3418)**
Output Interface Unit (with 128 byte FIFO Unit)	**Z8038**	**◊ Zilog**	**(3418)**
SCSI Interface Chip	**Z5380-SCSI**	**Zilog**	**(3418)**
Serial Communications Controller	**Z80C30Z-SCC**	**Zilog**	**(3418)**
Serial Controller Multi-Protocol	**Z8530-SCC**	**Zilog**	**(3418)**

16/32 Bit

16000

Microprocessor, 32-Bit	F32032	Fairchild
LAN Coax Receiver Interface	DP8392	National

32000

Microprocessor, 8-Bit	TI32008	TI
Microprocessor, 16-Bit	TI32016	TI
Microprocessor, 32-Bit	TI32032	TI
Microprocessor, 32-Bit, CMOS, with 16-Bit External Data Bus	NS32C016	National
Microprocessor, 32-Bit, CMOS, with 32-Bit External Data Bus	NS32C032	National
Microprocessor, 32-Bit, with Virtual M	NS32332	National
Microprocessor, 32-Bit, with 32-Bit External Data Bus	NS32032	National
	NS32132	National
Microprocessor, 32-Bit, with 8-Bit External Data Bus	NS32008	National
Arithmetic, Floating Point, Advanced	NS32310	National
Arithmetic, Floating Point Processor	NS32081	National
Codec Interface for TMS32010 (programmable sampling rate)	PD32HC02	◊ Pacific
Codec Interface for TMS32010 (2400 baud)	PD32HC01	◊ Pacific
DMA Controller	NS32203	National
FIFO (16x16), Bidirectional	PD32C116	Pacific
Floating Point Unit	NS32081-10	National
	NS32081-15	National
	NS32081-6	National
	TI32081	TI
Floating Point Unit (16 or 32-bit slave protocol support)	NS32381	◊ National
Interrupt Control Unit	NS32202	National
	TI32202	TI
Memory Management Unit	NS32082	National
	NS32382	◊ National
	TI32082	TI
Memory Management Unit (MMU)	NS32382-10	◊ National
	NS32382-15	◊ National
Timing Control Unit	NS32201	National
	TI32201	TI
Timing Control Unit, Advanced	NS32301	National
Timing Control Unit, CMOS	NS32C201	National

32 Bit

Microprocessor	**WE32200**	**AT&T**	**(2522)**
DMA Controller	**WE32204**	**AT&T**	**(2523)**
Math Acceleration Unit	**WE32206**	**AT&T**	**(2524)**
Memory Management Unit	**WE32201**	**AT&T**	**(2523)**

32

Address Translation Chip, Memory Management	NCR/32-010	NCR
Extended Arithmetic Chip	NCR/32-020	NCR
System Interface Controller, LAN, CSMA/CD Arbitration or Token Passing	NCR/32-500	NCR
System Interface Receiver	NCR/32-590	NCR
System Interface Transmitter	NCR/32-580	NCR
32-Bit RISC Microprocessor	**VL86C010**	**VLSI Tech (3343)**

32000

Microprocessor	NS32016	National
Microprocessor, 32 bit, on Chip MMU, Instruction Data& Data Caches, CMOS.	NS32532	National
Asynchronous Communications Element with FIFOs	NS16550	National

32100

Microprocessor	**WE32100**	**† AT&T**	**(2518)**
Clock	**WE32102**	**AT&T**	**(2521)**
CPU and MMU Device Monitor (signal observation of target systems)	**WE322DM**	**AT&T**	**(2525)**
CPU and MMU Device Monitors (signal observation of target systems)	**WE321DM**	**AT&T**	**(2525)**

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

32 Bit

32100 (Cont'd)

Function	Device	Source	Line
DMA Controller	**WE32104**	**† AT&T (2520)**	
DRAM Controller	**WE32103**	**AT&T (2521)**	
Math Acceleration Unit	**WE32106**	**AT&T (2522)**	
Memory Management Unit	**WE32101**	**† AT&T (2519)**	

68000

Function	Device	Source	Line
Microprocessor, 16/32-Bit	**TS68000**	**Thomson (3281)**	5
Microprocessor, 32-Bit. See 16-Bit series for additional system components.	**MC68020**	**◊ Motorola (2896)**	
	32C032	National	
Floating-Point Co-processor	**MC68881**	**Motorola (2896)**	
Paged Memory Management Unit	**MC68851**	**Motorola (2897)**	

80000

Function	Device	Source	Line
Microprocessor	**Z80000-CPU**	**Zilog (3419)**	10
Microprocessor, 32-Bit	**Z80320**	**Zilog (3419)**	
Clock (2 frequencies: 10/14 MHz)	**Z32102-Clock**	**Zilog (3419)**	
Direct Memory Access Controller	**Z32104-DMA**	**Zilog (3419)**	
Dynamic RAM Controller	**Z32103-DRAM**	**Zilog (3419)**	
Math Acceleration Unit (32, 64, and 80-bit precision)	**Z32106-MAU**	**Zilog (3419)**	15
Memory Management Unit (4 GB)	**Z32101-MMU**	**Zilog (3419)**	

80286

Function	Device	Source	Line
Advanced Memory Controller	82202A	Chips&Tech	
CPU Controller	82C211	Chips&Tech	
Data Address Buffer	82C215	Chips&Tech	
Data Bus Buffer and Parity Generator, for PC/AT	82A205	Chips&Tech	20
High Address Bus Buffer and Port, for PC/AT	82A203	Chips&Tech	
Low Address Bus Buffer and Refresh Counter, for PC/AT	82A204	Chips&Tech	
Memory Interleave Controller	82C212	Chips&Tech	
Micro-Channel Controller I	82C611	Chips&Tech	
Micro-Channel Controller II	82C612	Chips&Tech	25
RAM/ROM Decode, I/O Control, for PC/AT	82C202	Chips&Tech	
System Control Chip, for PC/AT	82C201	Chips&Tech	

80386

Function	Device	Source	Line
Microprocessor	80386-16	Intel	
	80386-20	Intel	
	8086-20	Intel	30
Clock Generator	82384	Intel	
Clock Generator/Driver	UC82C384	° Unicorn	
DMA Controller	82258	Intel	
	8237	Intel	
	UC82C37A	° Unicorn	35
Floating Point Processor	80287	Intel	
	80387	Intel	
	80387	Weitek	
Graphics Processor	82786	Intel	
IBM PC/AT Compatible Chip (companion part for upgrading to 32-bit 80386 microprocessor)	POACH/AT386	ZyMOS	40
Integrated Peripherals Controller	UC82C206	° Unicorn	
LAN Processor	82586	Intel	
	82588	Intel	
Priority Interrupt Controller	UC82C59A	° Unicorn	
Programmable Interrupt Controller	8259	Intel	45

Transputer

Function	Device	Source	Line
Microprocessor with communication links, 2 Kbytes RAM, Memory and Peripheral Interfaces	T414	◊ Inmos	
Microprocessor, 10 or 20 Mb/s Links, 2 Kbytes RAM	**IMST414B-C15**	**Inmos (2775)**	
	IMST414B-C20	**Inmos (2775)**	
	IMST414B-G15	**Inmos (2775)**	
	IMST414B-G20	**Inmos (2775)**	50
Processor, Memory, Communications.	Transputer	Inmos	

Peripheral Controllers

Function	Device	Source	Line
Microprocessor Bus Controller	**CA82C88**	**° † Calmos (2553)**	
Microcontroller, Mask Programmable ROM	SAB8052A	Siemens	
Microcontroller, Mask Programmable ROM (8Kx8)	SAB80515	Siemens	
Microcontroller, RAM and I/O Facilities	SAB80535	Siemens	55
A Direct Memory Access Controller 6 MHz	NS32203-6	National	
A Direct Memory Access Controller 8 MHz	NS33203-8	National	
A Display/Terminal Management Processor	NS32405	National	
Address Bus Buffer Controller	82B305	Chips&Tech	
Advanced Memory Controller	82202A	Chips&Tech	60
Analog Data Separator Support Circuit (ADSSC)	HDC9223	SMC	

Function	Device	Source	Line
Arithmetic Processor, Floating Point	MSM6992	◊ OKI	
Asynchronous Communications Controller	NS16450	◊ National	
	SCN2641	◊ Signetics	
Asynchronous Communications Interface Adapter (ACIA)	UC6551	Unicorn	65
Asynchronous Communications Interface Adapter with Internal Baud-Rate Generator	S65C51	◊ Gould	
Asynchronous Serial Communication Controller	Z8531	◊‡ SGS	
	Z8531A	◊‡ SGS	
Asynchronous Serial Communications Controller	Z8531	AMD	
AT address buffer (CMOS)	FE3020	Faraday	70
AT bus control logic with wait state, clock, Bus control, refresh, and DMA	FE3000A	Faraday	
AT data buffer (CMOS)	FE3030	Faraday	
AT peripheral and control logic with interrupt, timer, and DMA	FE3010	Faraday	
Baud Rate Generator	AY-5-8126T	GIM	
	AY-5-8146	GIM	75
	AY-5-8146T	GIM	
	AY5-8126	GIM	
Buffer Management Controller	SSI453	SiliconSys	
Bus Arbiter for SAB80286 Processor Family	SAB82289	Siemens	
Bus Arbitration Module	**MC68452**	**Motorola (2898)**	80
Bus Compatible Digital PWM for Direct Control of a Power H-Bridge (provision for dead time, output protection)	IXPD610	IXYS	
Bus Compatible Incremental Shaft Encoder Interface with Quadrature Detection	IXSE501	IXYS	
Bus Controller for SAB80286 Processors	SAB82288	Siemens	
Bus Extender/Repeater	N8X41	Signetics	
Bus Interface Controller, Programmable	**5CBIC**	**Intel (4257)**	85
Cable Driver/Receiver, SCSI Interface for MC68HC99	**MC6898**	**◊ Motorola (2902)**	
CHIPSLink Protocol Controller	82C570	Chips&Tech	
Clock Generator and Driver	**CA82C84A**	**° † Calmos (2553)**	
Color/Monochrome Attributes Controller	**SCB2675**	**◊ Signetics (3048)**	
Communication Interface Programmable	AY2661A	GIM	90
	AY2661B	GIM	
	AY2661C	GIM	
	SCN2661A	Signetics	
	SCN2661B	Signetics	
	SCN2661C	Signetics	95
	COM2661	SMC	
Communications Circuit Multi-Protocol (includes SDLC, BiSync)	SCN2652A	Signetics	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

Peripheral Controllers (Cont'd)

Function	Device	Source	Line
Communications, Enhanced Programmable Communications Interface (EPCI)	MC2661A	Motorola	
	MC2661B	Motorola	
	MC2661C	Motorola	
	MC68661A	**Motorola (2898)**	
	MC68661B	**Motorola (2898)**	5
	MC68661C	**Motorola (2898)**	
	COM2661	SMC	
	VL2661	VLSI Tech	
Communications, Multi-Protocol Serial Controller (HDLC and SDLC)	SAB7201A	Siemens	
Controller, CRT Display	**TC8505AF**	**Toshiba (3306)**	10
	TC8505AP	**Toshiba (3306)**	
Controller, Digital Exchange (Multi-Protocol)	29C53	◊ Matra-Harris	
Controller, FDC (floppy disk controller)	**TC8565AF**	**◊ Toshiba (3306)**	
	TC8565AP	**◊ Toshiba (3306)**	
Controller, Hard Disk (ST406/512 format)	**UM83C001**	**UMC (3318)**	15
Controller, HDC (hard disk controller)	**TMPZ80C47P**	**Toshiba (3306)**	
Controller, IBM System/3X Interface Controller	COM52C50	◊ SMC	
Controller Programmable	AM9519A	AMD	
	CY750	Cybernetic	
Controller, RAM Buffer	**UM83C002**	**UMC (3319)**	20
Controller, Single Floppy Disk	**UM8398**	**UMC (3318)**	
Counter Timer and Parallel I/O	Z8536	◊‡ SGS	
	Z8536A	◊‡ SGS	
Counter/Timer, Parallel I/O	Z8536	AMD	
	Z8536A	AMD	25
	Z8536-CIO	**Zilog (3418)**	
CRT, Advanced Video Display Controller	MC2674	Motorola	
	SCN2674	**◊ Signetics (3046)**	
CRT, Bus Interface for EGA Controllers	82A436	Chips&Tech	
CRT, Color Graphics Controller (and Memory Interface Controller)	NCR7300	NCR	30
	NCR7301	NCR	
CRT, Color Lookup Table (RGB video DAC and 16x12 RAM)	BT452	Brooktree	
CRT, Color Lookup Table (RGB video DAC and 256x18 RAM)	IMSG170-35	Inmos	
	IMSG170-50	Inmos	
	IMSG175-25	Inmos	35
CRT, Color/Monochrome Attributes Controller	MC2675	Motorola	
	SCB2675	**Signetics (3048)**	
CRT, Color/Monochrome Attributes Controller (IBM Compatible)	82C433	Chips&Tech	
CRT, Color Video Display Generator, Videotex and Teletext. See also Telecommunications Circuits.	R6549	Rockwell	
CRT Controller	S6845E	Gould	40
	MC6845	**◊ Motorola (2903)**	
	R6545	**Rockwell (2990)**	
	SMJ34061	**† TI (3221)**	
	TMS34061	◊ TI	
	UC6845	Unicorn	45
	UC6845E	Unicorn	
	UC6845R	Unicorn	
	UM9007	**UMC (3319)**	
	VL68C45R	VLSI Tech	
	VL68C45S	VLSI Tech	50
	WD8276	Western	
CRT Controller, Advanced	HD63484	◊ Hitachi	
CRT Controller (IBM compatible)	82C434A	Chips&Tech	
CRT Controller, Mask-Programmable, Internal Dotclock, Cursor, and Row Start Address Registers, 50/60 Hz Refresh Rate	DP8350	National	
CRT Controller, Small System	8276	Intel	55
CRT Controller- Enhanced VGA Compatible Graphics Chip Set (Graphics/Attributes Chip)	CLGD510	Cirrus	
	CLGD520	Cirrus	
CRT Cursor Controller	BT431	Brooktree	
CRT Data Row Buffer	CRT9006-135	SMC	
	CRT9006-83	SMC	60
CRT, Display Refresh Controller	AM8150C	AMD	
CRT, Display/Terminal Management Processor	NS406	◊ National	
CRT, Double Row Buffer (RAM-based buffer that appears to the system as two octal shift registers of dynamically variable length)	CRT9212	◊ SMC	
	CRT9212H	Stantel-STC	
CRT, Graphic Display Processor	EF9365	Thomson	65
	EF9366	Thomson	
	EF9367	Thomson	
CRT, Graphics Color Palette (video DAC and 256x8 color map)	AM8151C	AMD	
CRT Graphics Controller	µPD7220A	NEC	
	µPD7220A-1	NEC	70
	µPD7220A-2	NEC	
CRT, Graphics Controller (IBM compatible)	82C431	Chips&Tech	
CRT, Graphics Display Controller	82720	Intel	
	µPD7220A	NEC	
	CRT7220A	SMC	75
	CRT7220A-1	SMC	
	CRT7220A-2	SMC	
CRT, High Resolution EGA Support	82C437	Chips&Tech	
CRT, Monochrome Attributes Controller, IBM-PC Compatible	FE2200	Faraday	
CRT Processor	EF9364	Thomson	80
CRT, Programmable CRT Controller	8275	Intel	
	WD8275	Western	
CRT, Programmable Video Timing Controller	SCN2672A	Signetics	
CRT, Raster Operations Device	VL16160	VLSI Tech	
CRT (RGB video DAC)	BT101	Brooktree	85
	BT101KC30	Brooktree	
	BT102	Brooktree	
	BT103	Brooktree	
	BT103KC30	Brooktree	
	BT106KC30	Brooktree	90
	BT109	Brooktree	
	BT444	Brooktree	
	HDAC34010	**HoneywellSPT (2997)**	
	HDAC34020	**HoneywellSPT (2997)**	
CRT (RGB video DAC and 16x12 RAM)	BT450	Brooktree	95
	BT454	Brooktree	
CRT (RGB video DAC and 256x2 RAM)	BT451	Brooktree	
CRT (RGB video DAC and 256x24 RAM)	BT453	Brooktree	
	BT458	Brooktree	
CRT, Sequencer (IBM compatible)	82C432A	Chips&Tech	100
CRT Terminal Controller	NS455	National	
CRT Text Coprocessor	82730	◊ Intel	
CRT, TV-CRT Processor; Performs Text Refresh, Character Writing and Cursor Management on TV Screen; 1.6 MHz Clock Rate (typ.)	SFF96364	Thomson	
CRT, TV-CRT Processor; 96364 with External Sync	SFF96366	Thomson	
CRT, VGA Bus Interface Controller	82A442	Chips&Tech	105
CRT, VGA Single-Chip Controller	82C441	Chips&Tech	
CRT, Video Attributes Controller	MC2673	Motorola	
	SAB8275	Siemens	
	SAB8276	Siemens	
	SCB2673A	Signetics	110
	SCB2673B	Signetics	
	SCB2677A	Signetics	
	SCB2677B	Signetics	
	CRT9041A	SMC	
	CRT9041B	SMC	115
	CRT9041C	SMC	
	UM8321	UMC	
CRT Video Attributes Controller (graphic logic, attributes logic, data and attributes latches, cusor control and shift register)	CRT9021B	SMC	
CRT Video Attributes Controller/Video Generator (video shift register, horizontal and vertical retrace blanking, graphics generation, attributes buffer)	CRT8021	SMC	
	CRT8021-003	SMC	120
CRT, Video Controller, composite output	**6560**	**Commodore (2560)**	
	6561	**Commodore (2560)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Peripheral Controllers (Cont'd)

Function	Device	Source
CRT, Video Controller, composite output (Cont'd)		
	6567	**Commodore (2560)**
	6569	**Commodore (2560)**
	6572	**Commodore (2560)**
	6573	**Commodore (2560)**
	8360	**Commodore (2560)**
	8365	**Commodore (2560)**
	8366	**Commodore (2560)**
	8562	**Commodore (2560)**
	8564	**Commodore (2560)**
	8565	**Commodore (2560)**
	8566	**Commodore (2560)**
	8569	**Commodore (2560)**
CRT Video Controller, digital RGB output		
	8563	**Commodore (2560)**
	8568	**Commodore (2560)**
CRT, Video Data Serializer	AM8177	AMD
CRT, Video Diaplsy Processor	TMS9118	TI
	TMS9128	TI
	TMS9129	TI
CRT, Video Display Generator, Reads Data from Memory to Produce Composite Video Signal, Internal Display Memory Mux	**MC6847**	**Motorola (2903)**
CRT Video Display-Controller Video Generator	CRT8002	SMC
CRT, Video Interface Controller	82731	◊ Intel
CRT, Video Palette (color lookup table and video DAC)	TMS34070	TI
CRT, Video Processor and Controller	CRT9007A	SMC
	CRT9007B	SMC
	CRT9007C	SMC
	CRT9007A	Stantel-STC
	CRT9007B	Stantel-STC
	CRT9007C	Stantel-STC
CRT, Video RGB DAC	**RGBDAC8E**	**Intech (2799)**
	VDAC444	Intech
CRT, Video Shift Register	AM8157	AMD
CRT, Video System Controller	TMS34061	◊ TI
CRT, Video System Controller (See 8052 CRT Controller)	AM8152AC	AMD
	AM8152AM	† AMD
CRT, Video Terminal Logic Controller	CRT9028	SMC
	CRT9053	◊ SMC
	CRT9128	SMC
	CRT9153	◊ SMC
CRT Video Timer-Controller	CRT5027	SMC
CRT Video Timer-Controller, Line Lock Feature	CRT5057	SMC
CRT Video Timer-Controller, Preprogrammed	CRT5047	SMC
CRT Video Timer-Controller, ROM Programmed	CRT5037	SMC
CRT, Video Timing Controller	AM8158C	AMD
CRT, Video Timing Controller, Programmable	MC2672	Motorola
CRT, Single-Chip Enhanced Graphics Controller for EGA Displays	82C435	Chips&Tech
CRT, Quad Row Buffer (part of CRT9007 family)	CRT94C12	◊ SMC
CRT, 3 Gun Color Palette	AM8159	AMD
Data Bit Processor	CT1555	† CTI
	CT1608	◊† CTI
Data Bus Buffer Controller	82A303	Chips&Tech
	82A304	Chips&Tech
Data Synchronizer for Hard Disk, PLL Controlled	SSI530	SiliconSys
Deflection Processor for Video Displays, Computer Controlled	TDA8432	Signetics
Digital FIR Filter Controller	**CA29C128**	**° † Calmos (2553)**
Direct Memory Access Controller	μPD71071	◊ NEC
Direct Memory Access Controller 10 MHz	NS33203-10	National
Disk Buffer Management Unit	HDC9225	SMC
Disk Drive VFO	HA16632A	Hitachi
Disk, Hard Disk Controller	HD63463	Hitachi
	μPD7261A	NEC
	μPD7261AH	NEC
Display Character and Graphics Generator	MC2670	Motorola
Display Controller (Dot), LED and Keyboard Interface	MTX-A1	Matrox
Display Controller (Segment), Keyboard Interface	MTX-B1	Matrox
Display Controller, 4-Character Alphanumeric	MM74C956	National
Display Controller, 14 to 18 Segment Vacuum Flourescent Displays (16 characters)	10937	Rockwell
Display, LCD/Console Controller for Alphanumeric 5x7 Dot Matrix Display	CY300	Cybernetic
Display/Terminal Management Processor	NS405	National
DMA, Advanced Coprocessor for 16-Bit Microcomputer Systems	SAB82258	Siemens
DMA Controller, Programmable	M5M82C37A	◊ Mitsubishi
DMA Direct Memory Access Controller	AM9517A-1	AMD
	AM9517A-4	AMD
DMA, Direct Memor601	AM9517A	AMD
DMA, Programmable DMA Controller	8237	Intel
	8257	Intel
	μPD71055	◊ NEC
	SAB8237A	Siemens
DMA, Programmable DMA Controller (5 MHz)	SAB8237A-5	Siemens
DMA, Dual Direct Memory Access Controller	**MC68440**	**Motorola (2897)**
	EF68440	Thomson
Dot Matrix LCD Controller/Driver, Intelligent	μPD7227	◊ NEC
	μPD7228	◊ NEC
Driver/Receiver for Disk Head Amplifier	MB4316	Fujitsu
Enhanced Programmable Communications Interface	IM26C61	GE/Intersil
Enhanced Programmable Communications Interface (EPCI)	SCN68661B	Signetics
	SCN68661C	Signetics
Enhanced Programmable Communications Interface with On-Board Crystal Oscillator	IM26C62	GE/Intersil
Enhanced Sound Generator	AY8930	◊ GIM
ESDI Disk Controller	MSD7262	SMC
ESDI-Winchester Controller	WD5020-10	Western
Ethernet Data Link Controller	AM7990	AMD
	MB87012	Fujitsu
	MB8795B	**Fujitsu (2625)**
	8003	**SEEQ (2991)**
	8005	**SEEQ (2991)**
Ethernet Local Area Network Controller	COM82C501	SMC
	COM82C502	SMC
	COM82586	SMC
Ethernet, Local Area Network Controller (LANCE)	AM7990	AMD
	MK68590	**Thomson (3286)**
Ethernet Manchester Code Converter	**8020**	**SEEQ (2991)**
	8023A	**SEEQ (2991)**
Ethernet, Serial Interface Adapter (Ethernet Controller Interface)	MK68591	Thomson
Ethernet Serial Interface Adapter (SIA)	AM7991A	AMD
Ethernet, Serial Interface Adaptor, 802.3 compatible	AM7992A	AMD
Ethernet Transceiver	AM7995	AMD
FDMC (Floppy Disk Mechanism Control, 3.5")	**TC8601F**	**Toshiba (3306)**
	TC8602F	**Toshiba (3306)**
FDMC (Floppy Disk Mechanism Control, 5–1/4")	TC8680F	Toshiba

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

Peripheral Controllers (Cont'd)

Function	Device	Source
Floppy Disk Controller/Formatter (single and double density)	MB89311	Fujitsu
	WD1770	Western
Floppy Disk Controller/Transmitter (IBM 3740 compatible)	MB8876A	Fujitsu
	MB8877A	Fujitsu
Floppy Disk Read Amplifier System	CS3470A	Cherry
Floppy Disk Write Control	CS3471	Cherry
Floppy Disk Controller	82C764A	Chips&Tech
	5710	Commodore
	HA16643	Hitachi
Floppy Disk Controller	82072	Intel
Floppy Disk Controller	MSM6291	OKI
	FDC72C65	SMC
	FDC72C66	SMC
	FDC765A-2	SMC
	FDC92C81	SMC
	Z765A-FDC	Zilog
Floppy Disk Controller, Data Separator	MSM6281	OKI
	FDC9267	◊ SMC
	FDC9268	◊ SMC
Floppy Disk Controller for Sony format	μPD7265	NEC
	R6265	Rockwell
Floppy Disk Controller/Formatter	DP8472	National
	DP8474	National
Floppy Disk Controller/Formatter (IBM 3740 and System 34)	FDC9791	SMC
	FDC9793	SMC
	FDC9795	SMC
	FDC9797	SMC
Floppy Disk Controller/Formatter (single and double density)	FDC1791	SMC
	FDC1791-02	SMC
	FDC1792	SMC
	FDC1793	SMC
	FDC1793-02	◊ SMC
	FDC1794	SMC
	FDC1795	SMC
	FDC1795-02	SMC
	FDC1797	SMC
	FDC1797-02	◊ SMC
	VL1772-02	VLSI Tech
	FD1791-02	Western
	FD1793-02	Western
	FD1795-02	Western
	FD1797-02	Western
	WD1772	Western
	WD1773	Western
	WD2791-02	Western
Floppy Disk Controller/Formatter, Single/Double Density	SAB2793B	Siemens
	SAB2797B	Siemens
Floppy Disk Controller, Head Driver	**XR3448**	**Exar (2606)**
	MC3469	**Motorola (2949)**
	MC3471	**◊ Motorola (2949)**
Floppy Disk Controller, IBM-PC Compatible	FE2100	Faraday
Floppy Disk Controller/Interface (single and double density)	FDC9266	◊ SMC
Floppy Disk Controller, Programmable	8271	Intel
Floppy Disk Controller (single or double density)	UC8272A	Unicorn
Floppy Disk Controller/Transmitter (IBM 3740 compatible)	MB8866	Fujitsu
	INS1771	◊ National
	μPD765A	NEC
Floppy Disk Controller/Transmitter, Single Chip	TMS2791	TI
	TMS2793	TI
	TMS2795	TI
	TMS2797	TI
	VL2793	VLSI Tech
	VL2797	VLSI Tech
	WD2791	Western
	WD2793-02	Western
	WD2795-02	Western
	WD2797-02	Western
Floppy Disk Controller (with VFO)	**TC8566AF**	**Toshiba (3306)**
Floppy Disk Controller, Single/Double Density	GM9C765	GoldStar
	8272A	Intel
	μPD72065	◊ NEC
	μPD765A	NEC
	R6765	**Rockwell (2990)**
	FDC765A	SMC
	UM8272A	UMC
	VL6765	VLSI Tech
	Z765A	Zilog
Floppy Disk Controller, Two-Sided	μPD765A	NEC
Floppy Disk Data Separator	MB4107	Fujitsu
	SED9420CAC	S-MOS
	SED9420D	S-MOS
	FDC9216	SMC
	FDC9216B	SMC
	FDC9236	SMC
	FDC9238	SMC
	UC9216	Unicorn
	UM8326	UMC
	UM8326B	UMC
	WD9216-01	Western
Floppy Disk Data Separator and Write Precompensation	DP8470	National
Floppy Disk Digital Data Separator	V3829	VDA
Floppy Disk Digital Data Separator, Enhanced	WD92C32	Western
Floppy Disk Interface Circuit	μPB9201	NEC
	FDC9229	◊ SMC
	FDC9229B	SMC
	FDC9239	◊ SMC
	UM8329	UMC
	UM8329B	UMC
Floppy Disk Logic Circuit and Stepper Motor Driver	CS279	Cherry
Floppy Disk Mechanism Control (5 1/4 '')	**TC8600F**	**Toshiba (3306)**
Floppy Disk Read Amplifier	HA16631	Hitachi
Floppy Disk Read/Write Amplifier	HA16642	Hitachi
Floppy Disk Read/Write Circuit, 2-Channel	CS570	Cherry
	CA570	GE/RCA
Floppy Disk Read/Write Circuit, 4-Channel	CA575	GE/RCA
Floppy Disk Subsystem Chip	WD37C65	Western
Floppy Disk Support Device	WD16C92A	Western
Floppy Disk Write Amplifier	XR3471	◊ Exar
Floppy Disk Write and Mechanism Controller	HA16640NT	Hitachi
Floppy Disk Write Control/Head Driver	CS283	Cherry
Floppy Disk-Programmable Formatter/Controllers	INS82891	National
	INS82893	National
Floppy/Hard Disk Controller	μPD7260	NEC
Floppy Support Logic	WD1691	Western
Function Generator, Peripheral Controller	CY360	◊ Cybernetic
GPIB Controller	8292	Intel
	WD9914	Western
GPIB, General Purpose Interface Adapter (IEEE 488 bus)	96LS488DC	Fairchild
	96LS488DM	† Fairchild
	HEF4738	Signetics
GPIB Interface Controller, Intelligent	COM7210	SMC
GPIB Talker/Listener/Control	F681488	Fairchild
GPIB Talker/Listener Interface	8291A	Intel
GPIB Transceiver	8293	Intel
GPIB Universal Interface	μPD7210	NEC
Graphic Display Processor	EF9345	Thomson
Graphics Display Controller	Z7220A	Zilog
	Z7220A-GDC	Zilog
Hard and Floppy Disk Data Separator	HDC9227	SMC
Hard Disk Buffer Controller	**SSI32C453**	**SiliconSys (3198)**
Hard Disk Controller	**MC68HC99**	**Motorola (2902)**
	HDC9234	SMC
Hard Disk Controller, Head Driver	**XR117**	**Exar (2606)**
Hard Disk Data Separator	DP8460	National
	DP8461	National
Hard Disk Data Synchronizer	DP8451	National

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

Peripheral Controllers (Cont'd)

Function	Device	Source	Line
Hard Disk/Floppy Disk Controller	Z7260-H/FDC	Zilog	
Hard Disk Interface Circuit	µPD9306	NEC	
Hard Disk Pulse Detector	XR541	◊ Exar	
	XR8464B	Exar	
	ML8464X	MicroLinear	5
	DP8464	National	
Hard Disk Read/Write Controller with Internal Damping Resistance (6 channel)	XR501R-6	Exar	
	XR501R-8	Exar	
	XR510R	Exar	
Hard Disk Read/Write Controller (4 channel)	XR510	Exar	10
Hard Disk Read/Write Controller (6 channel)	XR501-6	Exar	
Hard Disk Read/Write Controller (8 channel)	XR501-8	Exar	
Hard Disk Read/Write Interface with Internal Damping Resistors (2 heads)	**XR117R-2C**	**Exar (2606)**	
	XR117R-4C	**Exar (2606)**	
	XR117R-6C	**Exar (2606)**	15
Hard Disk Read/Write Interface (2 heads)	**XR117-2C**	**Exar (2606)**	
Hard Disk Read/Write Interface (4 heads)	**XR117-4C**	**Exar (2606)**	
Hard Disk Read/Write Interface (6 heads)	**XR117-6C**	**Exar (2606)**	
Hard/Floppy Disk Controller	HDC7260	SMC	
HDLC Protocol Controller	MT8952B	◊ Mitel	20
Hub Controller, STARLAN	82C551x2	Chips&Tech	
I/O Controller (IOC)	**VL86C410**	**VLSI Tech (3346)**	
IEEE 802.3 Ethernet Controller	**8001**	**SEEQ (2991)**	
IEEE 802.3 STARLAN Hub Controller	**MK5030**	**Thomson (3283)**	
IEEE 802.3 STARLAN Manchester Encoder/Decoder	**MK5035**	**Thomson (3285)**	25
Integrated Controller with on-chip DMA, Interrupt, Timer/Counter, Real-Time Clock	82C206	Chips&Tech	
Intelligent Slave Physical Interface Controller (ISPIC)	S61393	Gould	
Interpolation, Pulse Generator	KM3701	Toko	
Interrupt Controller Programmable	8259A-2	Intel	
	8259A-5	Intel	30
Interval Timer, Programmable, High Performance	µPD71054	◊ NEC	
Keyboard and Communications Controller Programmable	MC2671	Motorola	
Keyboard/Display Interface	8279	Intel	
LCD Alphanumeric Controller/Driver. See also Interface-Display Drivers	µPD7225	◊ NEC	
LCD/CRTC Controller (640x400 dot matrix)	**T7779**	**Toshiba (3306)**	35
LCD Display Timing Controller	HD63645F	Hitachi	
Local Area Network Coax Receiver Interface	DP8392	National	
Local Area Network Communications, Ethernet Serial Interface	82501	Intel	
	82586	Intel	
Local Area Network Communications, STARLAN	82C550x3	Chips&Tech	40
Local Area Network Controller	**R68802**	**Rockwell (2989)**	
	COM90C26	SMC	
	COM9026	SMC	
Local Area Network Controller/Transceiver	COM90C62	SMC	
Local Area Network Transceiver	COM90C32	SMC	
	COM9032	SMC	45
	HYC9058	SMC	
	HYC9068	◊ SMC	
Local Area Network Transceiver (integral clock and reset circuits)	COM91C32	SMC	
Local Network Token Access Controller	WD2840A	Western	50
Manchester Encoder/Decoder	**MB502A**	**Fujitsu (2626)**	
	HS15530RH	**◊‡ Harris (2719)**	
	MA15530	**Marconi (2880)**	
Manchester Encoder/Decoder.	JMEDM-2010	† Technitrol	
	JMEDM-2020	† Technitrol	55
	JMEDM-2050	† Technitrol	
	JMEDM-2100	† Technitrol	
	JMEDM-2200	† Technitrol	
	JMEDM-2250	† Technitrol	
	JMEDM-2500	† Technitrol	60
Manchester Encoder/Decoder	MEDM2010	Technitrol	
	MEDM2020	Technitrol	
	MEDM2050	Technitrol	
	MEDM2100	Technitrol	
	MEDM2200	Technitrol	65
Manchester Encoder/Decoder.	MEDM2250	Technitrol	
	MEDM2500	Technitrol	
Manchester Encoder/Decoder	USCL3000	Universal	
Manchester Encoder/Decoder, Remote Control	MC145030	Motorola	
Manchester Encoder/Decoder, STARLAN	82C550x2	Chips&Tech	70
MAP Broadband Interface Controller (IEEE 802.4 Broadband Physical Layer)	**MC68184**	**Motorola (2897)**	
MAP Carrierband Modem (IEEE 802.4 Phase Coherent Physical Layer)	MC68194	Motorola	
MAP Token Bus Controller (IEEE 802.4 Media Access Control sublayer)	**MC68824**	**Motorola (2897)**	
Memory Interleaving Controller	82C302	◊ Chips&Tech	
Microfloppy Disc Controller for Sony Format	FDC7265	SMC	75
MIL-STD-1553B Remote Terminal Controller	**MA805**	**◊ Marconi (2882)**	
	COM1553A	SMC	
	COM1553B	◊ SMC	
MIL-STD-1553B Subsystem Interface Circuit	**MA8055**	**Marconi (2882)**	
MIL-STD-1555 Interface Circuit	**CT1611**	**◊† CTI (2554)**	80
MIL-STD-1750A MBU Peripheral	**L64550**	**LSI Logic (2872)**	
Modem Circuits, Controller for 300, 1200, and 2400 bps Modem, Parallel Bus Interface	SC11009	Sierra	
	SC11010	Sierra	
Motion Control/Buffer Manager and Read Write Formatter (WD2400 Chip Set)	WD24C02	Western	
Motor, Intelligent Stepper Motor Controller	SMC23	° AdvMicroSys	85
	CY500	Cybernetic	
	CY512	Cybernetic	
Multi-Protocol Communications Controller	R65560	Rockwell	
	R68561	**Rockwell (2989)**	
Multi-Protocol Serial Controller	Z8530A	AMD	90
Multi-System Control Chip. Interfaces any two CYxxx Devices to a Computer, Keyboard or RS232 Terminal	CY250	Cybernetic	
Multibus II Bus Arbiter/Controller	**BAC84110**	**Toshiba (3306)**	
Multibus II Message Interrupt Controller	**MIC84120**	**Toshiba (3306)**	
Optical Storage Support Device	WD60C80	Western	
Parallel to Serial Interface	CY232	Cybernetic	95
PC bus CPU and peripheral control, DMA, clock, interrupt, timer and Bus controller	FE2010A	Faraday	
PC Mouse Controller (CMOS)	**5720**	**Commodore (2555)**	
Peripheral, Programmable Peripheral Interface	8255A	◊ Intel	
Phase-Locked Oscillator For Winchester	ML405	◊ MicroLinear	
Polynomial Generator Checker	SCN2653A	Signetics	100
Printer Adapter Interface	COM82C11	SMC	
Printer Controller, for 5x7 Dot Matrix Printer	CY480	Cybernetic	
Printer, Dot Matrix Printer Controller	8295	Intel	
Programmable Communication Interface	AM95C85	AMD	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR–System Components (Cont'd)

Peripheral Controllers (Cont'd)

Function	Device	Source	Line
Programmable Communications Interface	M5M82C51A	◊ Mitsubishi	
Programmable Interval Timer	M5M82C54	◊ Mitsubishi	
Programmable Peripheral Interface	**CA82C55A**	**°† Calmos (2553)**	
Programmable Sound Generator	AY3-8913	GIM	
Protocol Controller, LAPD (link access procedure protocol for ISDN networks)	**MC68606**	**Motorola (2898)**	5
Protocol Controller, X.25 (supports 8-bit data bus)	**T7100A**	**AT&T (2474)**	
Protocol Controller, X.25/X.75 (supports 8/16-bit data bus)	**T7102A**	**AT&T (2475)**	
Protocol Data Formatter, Synchronous with Serial Interface	**T7110**	**AT&T (2476)**	
Protocol Processor, MIL-STD–1553	**CT1560**	**† CTI (2554)**	
	CT1561	**† CTI (2554)**	10
	CT1562	**† CTI (2554)**	
	CT1563	**† CTI (2554)**	
	CT1601	† CTI	
	CT1602	**† CTI (2554)**	
	CT1603	† CTI	15
	CT1604	† CTI	
	CT1605	◊† CTI	
	CT1606	**◊† CTI (2554)**	
	CT1610	**◊† CTI (2554)**	
	CT1612	**◊† CTI (2554)**	20
	CT1615	**◊† CTI (2554)**	
	CT1617	**◊† CTI (2554)**	
Real-Time Clock	MM58167A	National	
	MM58174A	National	
	RP5C01	Panatech	25
	RP5C15	Panatech	
	TC8250	**Toshiba (3306)**	
Real-Time Clock/Calendar	**TC8250A**	**Toshiba (3306)**	
Real-Time Clock Interface (allows time of day info to be retrieved over µP bus)	**HI8000**	**◊ Holt (2769)**	
Real-Time Clock/µP Interface	MSM5832	OKI	30
	L5832	SGS	
Real-Time Clock with Independent Counter/Timer	**HI8024**	**Holt (2769)**	
RTC (real time clock/calendar)	TC8205P	Toshiba	
SCSI Bus Controller	**UM53C80**	**UMC (3312)**	
SCSI Bus Controller Device	WD33C92A	Western	35
	WD33C93A	Western	
SCSI Bus Interface Adapter	V8500	VDA	
SCSI Bus Interface Controller	V8580	VDA	
SCSI Bus Interface Controller for External Drivers	WD33C92	Western	
SCSI Bus Interface Controller with 48 mA Drivers	WD33C93	Western	40
SCSI controller	L53C80-2	LogicDev	
	L53C80-4	LogicDev	
	L5380-2	LogicDev	
	L5380-4	LogicDev	
	MSD95C00	SMC	45
SCSI Controller (asynchronous transfer to 2 Mbps)	SSI32B450A	SiliconSys	
SCSI Interface	SSI450A	SiliconSys	
SCSI Interface Controller	**CA53C80**	**°† Calmos (2553)**	
SCSI Protocol Controller	UC53C80	Unicorn	
SCSI Protocol Controller, Small Computer Systems Interface	**MB87030**	**Fujitsu (2624)**	50
	MB89351	Fujitsu	
	NCR53C81	NCR	
	NCR538C80	NCR	
	NCR5380	◊ NCR	
	NCR5381	NCR	55
	NCR5385	NCR	
	NCR5385E	◊ NCR	
	NCR5386	◊ NCR	
	NCR5386S	NCR	
Serial Communication Controller-Multi Protocol	Z8530	◊‡ SGS	60
Serial Controller Multi-Protocol	Z8530	◊ AMD	
	µPD7210	NEC	
	VL85C30	**VLSI Tech (3342)**	
Serial Controller-Multi Protocol	Z8530A	◊‡ SGS	
Serial Timer Interrupt Controller	MK3801-6	Thomson	65
Servo Controller Hard Disk Drive	SSI568	SiliconSys	
Servomechanism	KM3702	Toko	
Small Computer System Interface	AM9582	AMD	
	5380	AMD	
SMD Controller/Formatter	WD1050	◊ Western	70
Sound Generator	AY3-8910A	GIM	
	AY3-8912A	GIM	
StarLAN Hub Controller	**WD83C510**	**Western (3383)**	
STARLAN, Hub Controller (IEEE 802.3)	82C551	◊ Chips&Tech	
StarLAN Mini Hub Controller	**WD83C503**	**Western (3383)**	75
StarLAN PC Bus Interface Controller	**WD83C580**	**Western (3383)**	
STARLAN, Serial Interface (IEEE 802.3)	82C550	◊ Chips&Tech	
StarLAN Transceiver	**XRT82C516**	**Exar (2611)**	
	XRT82515	**Exar (2611)**	
Storage Controller	SSI452	SiliconSys	80
	MSD95C02	SMC	
Storage Controller (20 Mbps)	**SSI32C452**	**SiliconSys (3198)**	
String Proximity Computer and Ranker	PF474C	Proximity	
Synchronous Data Link Controller	COM5025	◊ SMC	
	VL1935	VLSI Tech	85
Synchronous Packet Data Formatter	**T7111**	**AT&T (2470, 2477)**	
System Clock Generator	µPD71011	◊ NEC	
System Controller for 80386 Based Systems	82C301	◊ Chips&Tech	
Tape Drive Clock Synchronizer	**VT210**	**VTC (3375)**	
Tape Drive Controller Device	ADS4360	Western	90
Tape Drive Magnetic Write Driver	**VT211**	**VTC (3375)**	
Trajectory Generator For Winchester	ML404	◊ MicroLinear	
TV Display Controller	**MB88303**	**Fujitsu (2627)**	
UART, Programmable High-Speed CMOS (with baud rate generator)	COM81C17	SMC	
Universal Peripheral Interface, I/O Expander	8243	Intel	95
Universal Peripheral Interface (slave I/O processor)	UPI-452	Intel	
Universal Peripheral Interface (8-Bit slave microcontroller–6 MHz)	UPI-41	Intel	
	UPI-42	Intel	
Universal Peripheral Interface, 1K EPROM	8741A	Intel	
Universal Peripheral Interface, 1K ROM	8041AH	Intel	100
Universal Peripheral Interface, 2K EPROM	8742	Intel	
Universal Peripheral Interface, 2K ROM	8042	Intel	
Universal Peripheral Interface, 4K EPROM	8744	Intel	
Universal Peripheral Interface, 4K ROM	8044	Intel	
User-configurable Microprocessor Peripheral Device with 8-bit Bus Port (expandable to 16 and 32-bits)	EPB1400	◊°† Altera	105
Video Attribute Controller (part of EGA chipset)	Renegade-AC	Renaissance	
Video Controller (VIDC)	**VL86C310**	**VLSI Tech (3345)**	
Video Controller, 640x480 Resolution (part of EGA chipset)	Legacy-VC	Renaissance	
Video Frame Controller, 640x480 Resolution (part of EGA chipset)	Legacy-FC	Renaissance	
Video Storage and Display (up to 512 Kbytes of display memory)	82716/VSDD	Matra-Harris	110
Video System Controller–12 MHz (generates user programmable control signals, horizontal sync, vertical sync, and blanking)	TMS34061-12	◊ TI	
Video Timing Controller (part of EGA chipset)	Renegade-TC	Renaissance	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Peripheral Controllers (Cont'd)

Function	Device	Source
Videotext CRT Display Processor	EF9340	Thomson
	EF9341	Thomson
Videotext, Error Correction	MSM6254	OKI
VMEbus, Bus Controller	SCB68175	Signetics
VMEbus, Interrupt Controller	SCB68155	Signetics
VMEbus, Interrupt Generator	SCB68154	Signetics
Winchester Controller/Formatter	WD1010A	Western
Winchester Data Separator	HDC9226	◊ SMC
Winchester Disk Address Mark Detector	HDC1100-03	SMC
Winchester Disk Buffer Storage Manager, Customizable	CLSH120	Cirrus
Winchester Disk Controller	HDC7261	SMC
	HDC9224	◊ SMC
Winchester Disk Controller Chip Set	WD1100	Western
Winchester Disk Controller Device	ADS1000	Western
	WD10C00	◊ Western
	WD30C30	◊ Western
Winchester Disk Controller, Error Correction Circuit	WD11C00-13	Western
Winchester Disk Controller/Formatter	82062	Intel
	WD2010	Western
	WD5010	Western
	WD5011	Western
Winchester Disk Controller, PC/XT Host Interface Logic Device	WD11C00-17	Western
Winchester Disk Controller, SCSI, Customizable.	CLSH130	Cirrus
Winchester Disk Controller (with on-chip EDAC)	82064	Intel
Winchester Disk CRC Checker/Generator	HDC1100-04	SMC
Winchester Disk Data Separator/Encoder, MFM or 2, 7	μA2490	◊ Fairchild
	μA2491	◊ Fairchild
	μA2492	◊ Fairchild
Winchester Disk Data Separator (self-adjusting)	SYSC	Western
	WD10C20	Western
Winchester Disk Encoder/Decoder RLL	CLSH110	Cirrus
Winchester Disk Formatter, Enhanced ECC	CLSH135	Cirrus
Winchester Disk Head Actuator Control Circuit	μA2460	Fairchild
	μA2461	Fairchild
Winchester Disk Improved MFM Generator	HDC1100-12	SMC
Winchester Disk Memory Head Read/Write Circuit, for thin film heads	**SSI32R114**	◊ **SiliconSys (3198)**
Winchester Disk Memory Read/Write Circuit	MB4111	Fujitsu
	MB4112	Fujitsu
	SSI105	SiliconSys
	SSI108	SiliconSys
	SSI122	◊ SiliconSys
	SSI32R104B	◊ **SiliconSys (3198)**
	SSI32R115	**SiliconSys (3198)**
Winchester Disk Memory Servo Preamplifier, for thin-film heads	**VM114**	**VTC (3375)**
Winchester Disk Memory Video Amplifier, for Magnetic Servo Head	**SSI32H101A**	**SiliconSys (3198)**
Winchester Disk Memory Video Amplifier, for Thin Film Magnetic Heads	**SSI32H116**	◊ **SiliconSys (3198)**
Winchester Disk Parallel-to-Serial Converter	HDC1100-05	SMC
Winchester Disk Read/Write Amplifier	**VM104**	**VTC (3375)**
	VM104L	**VTC (3375)**
	VM108	VTC
	VM122	VTC
Winchester Disk Read/Write Amplifier with Damping Resistors, 2-Channel	VM117R2	VTC
	VM117R4	VTC
	VM117R6	VTC
	VM217R6	VTC
	VM217R8	VTC
Winchester Disk Read/Write Amplifier, 2-Channel	VM1172	VTC
	VM1182	VTC
Winchester Disk Read/Write Amplifier, 4-Channel	VM1174	VTC
	VM1184	VTC
	VM314	**VTC (3375)**
Winchester Disk Read/Write Amplifier, 5-Channel	**VM115**	**VTC (3375)**
Winchester Disk Read/Write Amplifier, 6-Channel	VM1176	VTC
	VM1186	VTC
	VM2176	VTC
	VM2186	VTC
Winchester Disk Read/Write Amplifier, 8-Channel	VM2178	VTC
	VM2188	VTC
Winchester Disk Read/Write Preamplifier	μA2482	◊ Fairchild
	μA2484	◊ Fairchild
	μA2485	◊ Fairchild
	μA2486	◊ Fairchild
	μA2486x2	Fairchild
	μA2488	◊ Fairchild
	μA2488x2	Fairchild
	SSI101A	Fairchild
	SSI114	Fairchild
	SSI116	Fairchild
	SSI117-2	Fairchild
	SSI117-4	Fairchild
Winchester Disk Read/Write Preamplifier (Cont'd)	SSI117-5	Fairchild
	SSI117-6	Fairchild
	SSI117-8	Fairchild
	ML117	MicroLinear
	VM117	**VTC (3375)**
	VM118	**VTC (3375)**
	VM217	**VTC (3375)**
	VM218	**VTC (3375)**
Winchester Disk Read/Write Preamplifier with Internal Damping Resistor	μA2482R	◊ Fairchild
	μA2484x2	◊ Fairchild
	μA2485x2	Fairchild
Winchester Disk Serial to Parallel Converter	HDC1100-01	SMC
Winchester Disk Servo Preamplifier	μA24H80	Fairchild
	μA2480	◊ Fairchild
	VM101	**VTC (3375)**
	VM116	VTC
	VM216	**VTC (3375)**
Winchester Disk Servo Preamplifier, for thin-film heads	**VM214**	**VTC (3375)**
Winchester Disk Support Device	ADS3570	Western
	ADS5050	Western
	WD10C20B	Western
	WD10C21A	Western
	WD11C00-14	Western
	WD11C00B-20	Western
	WD11C00C-22	Western
	WD50C12	Western
	WD50C20A	Western
Winchester, Error Detection and Support Logic	WD1014	Western
Winchester, Error Detection (Support Logic for WD1015)	WD1014	Western
Winchester, Head Positioning Set, Quad di'bit servo	ML401	MicroLinear
	ML402	MicroLinear
	ML403	MicroLinear
Winchester Motor Speed Control	**SSI32M590**	**SiliconSys (3198)**
	SSI32M591	**SiliconSys (3198)**
Winchester Pulse Detector Circuit	ML541	MicroLinear
	SSI32P541	◊ **SiliconSys (3198)**
Winchester, Read Data Path	**SSI32P540**	◊ **SiliconSys (3198)**
Winchester Read/Write Amplifier (for ferrite heads)	**SSI32R511**	**SiliconSys (3198)**
	SSI32R514	**SiliconSys (3198)**
Winchester Read/Write Amplifier (for thin-film heads)	**SSI32R512**	**SiliconSys (3198)**
	SSI32R522	**SiliconSys (3198)**

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MICROPROCESSOR—System Components (Cont'd)

Peripheral Controllers (Cont'd)

Function	Device	Source	Line
Winchester Read/Write Channel	**VM442**	**VTC (3375)**	
	VM542	VTC	
Winchester Read/Write Circuit	CS117	Cherry	
Winchester, Read/Write Circuit for thin-film heads	ML502	MicroLinear	
	MC4290	NEC	5
Winchester Read/Write Circuit, 2- 4- or 6-Channel	**SSI32R117**	**SiliconSys (3198)**	
	SSI32R117A	**SiliconSys (3198)**	
Winchester Read/Write Circuit, 4-Channel	SSI32R510A	SiliconSys	
Winchester Read/Write Circuit, 8-Channel	ML501	MicroLinear	
	SSI32R501	◇ **SiliconSys (3198)**	10
Winchester Spindle Motor Controller (three-phase)	**SSI32M593**	**SiliconSys (3198)**	
Winchester, Support Logic	**SSI32B545**	◇ **SiliconSys (3198)**	
Winchester Thin-Film Head Read/Write Circuit	**SSI32R520**	**SiliconSys (3198)**	
	SSI32R521	**SiliconSys (3198)**	
X.25 Protocol Controller	**MC68605**	**Motorola (2898)**	15
Dual Channel NRZI Encoder/Decoder	USCL2002	Universal	
Dual Data Link Controller (DDLC)	MC145488	Motorola	
Dual-Channel Multiprotocol Controller	8274	Intel	
Four Phase Clock Generator	WD2143-03	Western	

General Purpose

Function	Device	Source	Line
Microcomputer with Tone Generator and LCD Driver	LR4810	Sharp	20
Microprocessor Compatible Analog I/O Subsystem, 4-Channel Multiplexer, 8-Bit ADC, 8-Bit DAC Output	HS9460	HybridSys	
Microprocessor Monitor (monitors voltage, system activity)	DS1232	Dallas	
Microprocessor Watchdog, Battery Switchover, Reset Generator	MAX690C	Maxim	
	MAX690M	† Maxim	
	MAX691C	Maxim	25
	MAX692	Maxim	
	MAX693	Maxim	
Microprocessor, 32-Bit (MIL-STD-1750A or RISC mode)	UT1750AR	UTMC	
Microcontroller, 8-Bit (four separately configurable 8-Bit I/O ports, programmable UART, and 4Kbytes of ROM)	TMS70A2400	TI	
Analog Input Data Acquisition Controller for A/D Converter	CY600	Cybernetic	30
Analog Input, Multiplexer, A/D (analog to pulse width output)	μA9708	Fairchild	
Analog Input, Multiplexer, A/D Converter	μPD7001	NEC	
	μPD7002	NEC	
Analog Output, D/A Converter, Latched Input	**NE5018**	**Signetics (3117)**	
Arithmetic Game Advanced Educational	MM57455	National	35
Arithmetic Logic/Multiplier, Floating Point Set	**IDT721265**	**IDT (2806, 2831)**	
	IDT72264	◇ IDT	
	WTL1064	Weitek	
	WTL1064A	Weitek	
	WTL1065	Weitek	40
	WTL1065A	Weitek	
	WTL1164	Weitek	
	WTL1164A	Weitek	
	WTL1165	Weitek	
	WTL1165A	Weitek	45
	WTL1264	Weitek	
	WTL1264A	Weitek	
	WTL1265	Weitek	
	WTL1265A	Weitek	
Arithmetic Processor	AM9511A	AMD	50
	AM9511A-4	AMD	
	AM9512	AMD	
	AM9512-1	AMD	
	8231A	◇ Intel	
Arithmetic Processor, 2-chip set	WTL1032AC	◇ Weitek	55
	WTL1032AM	◇† Weitek	
	WTL1032C	◇ Weitek	
	WTL1032M	◇† Weitek	
	WTL1033AC	◇ Weitek	
	WTL1033AM	◇† Weitek	60
	WTL1033C	◇ Weitek	
	WTL1033M	◇† Weitek	
Asynchronous Bidirectional Bus Extender and Repeater	N8X41	Signetics	
Asynchronous Communication Interface Adapter	HD63A50	Hitachi	
	HD63B50	Hitachi	65
	HD6350	Hitachi	
	MC68A50	Motorola	
	MC68B50	Motorola	
	MC6850	**Motorola (2902)**	
	EF68A50	Thomson	
	EF68B50	◇ Thomson	70
	EF6850	Thomson	
Bar Code Processor	NCR8301	◇ NCR	
Battery Backup Circuit	**ICL7673**	◇ **GE/Intersil (2675)**	
BITBLT Processing Unit	DP8510	National	75
Bounds Checker, 16-Bit	S61C337	Gould	
Burst Error Processor	AMZ8065	AMD	
	AM9520	AMD	
Bus Compatible Digital PWM for Direct Control of a Power H-Bridge (provisions for dead time, output protection)	IXPD610	IXYS	
Bus Compatible Incremental Shaft Encoder Interface with Quadrature Detection	IXSE501	IXYS	80
Bus Interrupter Module	**MC68153**	**Motorola (2898)**	
Bus Transceiver, SCSI (48 mA)	NCR8310	NCR	
Centronics I/O Interface and RS-232C	**TC8576AF**	◇ **Toshiba (3306)**	
Centronics Input and RS-232C	**TC8578AP**	◇ **Toshiba (3306)**	
Centronics Output and RS-232C	**TC8577AP**	◇ **Toshiba (3306)**	85
Clear/Acquisition Coder (generates the C/A codes and other timing information required in GPS receivers)	**STEL1023**	**STI (3209)**	
Clock/Calendar with Serial I/O	μPD1990A	NEC	
Clock/Calendar with Serial I/O (Inter IC interface)	**PCF8573**	◇ **Signetics (3139)**	
Clock/Calender, Real-Time	MSM68321	OKI	
Clock, Real Time	MM58174	National	90
	MM58274	National	
	MM58274A	National	
Clock, Real Time, 12/24 Hour Format (Uses 8-bit bidirectional data bus)	ICM7170	GE/Intersil	
Color Palette (Three 4-Bit Video DACs)	TMS34070-66	TI	
Controller, Programmable Integrated Controller/Sequencer (State machine with instruction processing for decision, control or timing applications)	**LS7270**	**LSIComp (2867)**	95
CRT Color/Monochrome Video Attributes Controller	**SCB2675T**	**Signetics (3048)**	
CRT Controller, ACRTC	**SCC63484**	**Signetics (3050)**	
CRT Programmable video Timing Controller, Turbo	SCN26727	◇ Signetics	
CRT Video Display Controller, Turbo	**SCN2674T**	◇ **Signetics (3046)**	
Data Access Arrangement (DAA)	DS6112	Dallas	100
Data Ciphering Processor (for data encryption)	**Z8068**	**Zilog (3418)**	
Data Encryption Set	F9414STC	Fairchild	
	F9414STM	† Fairchild	
Data Encryption Unit	8294	Intel	
Digital Crossbar Switch, 64-Bit	S618840	Gould	105
Digital FIR Filter Controller	**CA29C128**	°† **Calmos (2553)**	
Digital Signal Processor (Microcomputer including 16x16 Multiplier, RAM, ROM for rapid signal processing)	MB87064	Fujitsu	
	MB8764	Fujitsu	
Digital Signal Processor (Microcomputer including 24x24 Multiplier, RAM.ROM for rapid signal processing)	**DSP56000**	**Motorola (2893, 4754)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

General Purpose (Cont'd)

Function	Device	Source	Line
Document Image Compressor/Expander CCITT	AM7970	AMD	
Electronic Configurator (NV switch comparator and RAM), for remotely configuring equipment	DS1223	Dallas	
Electronic Key (128-bit NVRAM) with security system, user insertion	DS1204U	Dallas	
Electronic Key (1024-bit NVRAM), user insertion	DS1201	Dallas	
Enhanced Floating Point Coprocessor (HCMOS)	**MC68882**	**Motorola (2896)**	5
Floating Point Processing Unit	AM8232	AMD	
	8232	Intel	
Function Generator, D/A Controller	CY360	◊ Cybernetic	
I/O, Parallel (16 eight bit ports)	**GD9620**	**GoldStar (2694)**	
LAN (StarLAN Transceiver)	**XRT82C516**	**Exar (2611)**	10
	XRT82515	**Exar (2611)**	
Memory Management Controller	MC68461	Motorola	
Memory Mapper	UC74HCT612	Unicorn	
Nonvolatile Controller (converts CMOS RAMs to nonvolatile storage)	DS1210	Dallas	
	DS1211	Dallas	15
	DS1212	Dallas	
	DS1221	Dallas	
Parallel Interface Timer for MC68000 Systems	**MC68230**	**Motorola (2898)**	
Peripheral Clamping Array	**TCF6000**	**Motorola (2950)**	
Peripheral Driver Addressable	NE590	◊ Signetics	20
	NE591	◊ Signetics	
Peripheral Interface Adapter	HD63A21	Hitachi	
	HD63B21	◊ Hitachi	
	HD6321	Hitachi	
	MC68A21	Motorola	25
	MC68B21	◊ Motorola	
	MC6821	**◊ Motorola (2902)**	
	EF68A21	Thomson	
	EF68B21	Thomson	
	EF6821	Thomson	30
	UM6522	UMC	
	UM6522A	UMC	
Printer Adapter Interface For IBM PC	UC82C11	Unicorn	
Priority Interrupt Controller	AM25LS2513C	AMD	
	AM2914C	AMD	35
	AM2914M	† AMD	
	M8214	† Intel	
	MC8507	Motorola	
	SFC2914	Thomson	
Public Key Encription Processor	**CA34C168**	**† Calmos (2553)**	40
Real Time Clock Plus Ram	UC68C18	◊ Unicorn	
Real-Time Clock interface (allows time of day to be retrieved over μP bus)	C3008	LMS	
Real-Time Clock plus RAM (NVRAM)	DS1287	Dallas	
Real-Time Clock with RAM and Serial Interface	MC68HC68T1	Motorola	
Safety Counter, Non-Volatile	SLE4501	Siemens	45
Serial Data Receiver	**LIU01**	**PMI (2975)**	
Serial Memory Phantom Interface (adapts memory bus to three-wire serial port)	DS1206	Dallas	
Shuffle/Exchange Network, 32-Bit	S618839	Gould	
Signal Processing Interface (Microcomputer including 16x16 Multiplier, RAM, ROM for rapid signal processing)	S77C20	Gould	
	μPD77P20	NEC	50
	μPD7720	NEC	
Smart Socket (nonvolatile Ram control) with socket, battery	DS1213	Dallas	
	DS1213C	Dallas	
Smart Watch (watch or clock, nonvolatile RAM control) with socket, battery	DS1216	Dallas	
	DS1216C	Dallas	55
	DS1216E	Dallas	
Speech Synthesis System	Digitalker	National	
ST-Bus Parallel Access Circuit	MT8920	◊ Mitel	
Super Number Cruncher	MM57409	National	
Synchronous Serial Data Adapter	**MC6852**	**Motorola (2902)**	60
	EF6852	Thomson	
System Timing Controller	AM9513A	AMD	
Time Key with Security Clock (384-bit NVRAM)	DS1207	Dallas	
Timekeeper (watch or clock, nonvolatile RAM control)	DS1215	Dallas	
UART (Quad Channel)	**XR82C684**	**Exar (2613)**	65
Universal Microprocessor Power Supply Controller	TCA5600	Motorola	
	TCF5600	Motorola	
UPC/EAN Scanner	NCR8415	NCR	
Video Clock Generator (for medium to high performance CRT graphics systems)	DP8512	National	
Voltage Controller (converts CMOS RAMs to nonvolatile storage)	DS1215	Dallas	70
Voltage Regulator Controller, watch dog timer and power-on reset	HA1835	Hitachi	
Dual Bus Interface Circuit, MIL-STD-1553 Applications	R1553	Rockwell	
Eight-Channel Multiplexed Sample and Hold	SSM2300	SSM	
32 Way INMOS link crossbar switch.	**IMSC004**	**Inmos (2772)**	
8-Bit Binary Counters W/Output Registers	UC74HCT590	Unicorn	75

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Last Page This Section. Next Page 901.

IS THIS A BORROWED COPY?

Avoid the hassle and order your own personal two-volume set of IC MASTER. It's the surest way to simplify your IC selection efforts.

Only IC MASTER allows you to examine and compare the specifications, relative strengths, and weaknesses of all devices in serious contention for your application. And only IC MASTER brings you actual manufacturers' data sheets, allowing you to make complete and definitive device selections.

You can order IC MASTER simply by charging it to your VISA or MasterCard credit card. To place your order call Marie Botta at (516) 227-1314.

INTRODUCTION TO INTERFACE

In the Interface Section the selection parameters differ for each category; therefore each has its own format. Some of the products in this section, primarily analog to digital and digital to analog converters, may be hybrids; the hybrids listed are only those packaged to be compatible with ICs.

In addition to these circuits are devices used to interface to peripherals such as: display drivers, keyboard encoder-decoders, line circuits, and transmitter-receiver circuits.

Category	
Analog Switches	
Switches with Drivers	902
Switches without Drivers	910
Drivers	911
Multiplexers	911
Analog to Digital Converters	
Binary Output	916
Decimal Output	939
Digital to Analog Converters	940
Display Drivers	977
Error Checking Circuits	982
Keyboard Encoders-Decoders	984
Line Circuits	
Drivers	985
Receivers	990
Transceivers	994
Memory Drivers	999
Peripheral Drivers	1001
Sense Amplifiers	1008
Serial Transmitters-Receivers	1009

©IC MASTER 1988

INTERFACE—Analog Switches

Switches with Drivers

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
2xSPST	CMOS/DMOS	320	±10	±15	**CDG5341AK**	† **TopazSemi (3301)**	
					CDG5341BJ	**TopazSemi (3301)**	
					CDG5341CJ	**TopazSemi (3301)**	
4xSPST	CMOS	30	0 to 12	2 to 12	TLC4016	TI	
					TLC4066	◊ TI	5
		280	±7.5	±7.5	74HCT4066	Signetics	
					SN54HC4016	† TI	
					SN54HC4066	◊† TI	
					TLC4066M	◊† TI	
		850	±7.5	±7.5	74HCT4316	Signetics	10
					74HC4316	◊ Signetics	
					TLC4016M	† TI	
	CMOS/DMOS	160	±10	±15	**CDG201AK**	† **TopazSemi (3301)**	
					CDG201BJ	**TopazSemi (3301)**	
					CDG201BK	**TopazSemi (3301)**	15
					CDG201CJ	**TopazSemi (3301)**	
					CDG211CJ	**TopazSemi (3301)**	
					CDG211DY	**TopazSemi (3301)**	
					CDG308AK	† **TopazSemi (3301)**	
					CDG308BJ	**TopazSemi (3301)**	20
					CDG308BK	**TopazSemi (3301)**	
					CDG308CJ	**TopazSemi (3301)**	
					CDG309AK	† **TopazSemi (3301)**	
					CDG309BJ	**TopazSemi (3301)**	
					CDG309BK	**TopazSemi (3301)**	25
					CDG309CJ	**TopazSemi (3301)**	
					CDG4308BJ	**TopazSemi (3301)**	
					CDG4309BJ	**TopazSemi (3301)**	
SPST	CMOS	25	±15	±15	DG400A	† Siliconix	
					DG417	Siliconix	30
					DG418	Siliconix	
		30	±14	±15,5	DG5140A	† Siliconix	
					DG5240A	† Siliconix	
		50	±11	±15,5	**IH5140M**	† **GE/Intersil (2679)**	
			±15	±15	IH5040M	† Maxim	35
					IH5041M	† Maxim	
					IH5140M	◊† Maxim	
					IH5141M	◊† Maxim	
				±15,5	DG5040A	† Siliconix	

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
						(Cont'd)	
SPST	CMOS	75	±10	±15,5	**IH5140C**	**GE/Intersil (2679)**	40
			±11	±15,5	**IH5040M**	† **GE/Intersil (2679)**	
					HI5040-2	† **Harris (2707, 2737)**	
					HI5040-5	**Harris (2707, 2737)**	
			±15	±15	IH5140C	◊ Maxim	
			±60	±60	MAX340C	◊ Maxim	45
					MAX340E	◊ Maxim	
					MAX340M	◊† Maxim	
		80	±10	±15,5	**IH5040C**	**GE/Intersil (2679)**	
			±15	±15	IH5040C	Maxim	
	GaAs JFET	—	20 dBm	±5	TQ9151	TriQuint	50
		6	–5 to 10	±15	CAG6	† TeledyneC	
			–5 to 4	±15,5	CAG10A	† TeledyneC	
		10	–5 to 10	±15	CAG610	† TeledyneC	
			–5 to 4	±15,5	CAG10C	† TeledyneC	
		15	–10 to 5	±15,5	CAG10D	† TeledyneC	55
		30	±5	±5,5	CAG10	† TeledyneC	
		50	–10 to 4	±15,5	CAG10B	† TeledyneC	
			–10 to 5	–15,5	CAG14	† TeledyneC	
			±10	±15	2110BE	† TeledyneC	
		60	±10	–18,15	CS4R101A	† TeledyneC	60
				±18,5	CAG30	† TeledyneC	
		100	±5	±15	2107BE	† TeledyneC	
	PMOS	80–300	±10	–20,10	TL610I	TI	
		100–400	±10	–20,10	TL610C	TI	
2xSPST	Bipolar	15	±5	±9.5	LB1017AC	AT&T	65
	CMOS	25	±14	±15	**IH5148**	**GE/Intersil (2679)**	
			±15	±15	DG401A	† Siliconix	
					DG421A	† Siliconix	
					DG5048A	† Siliconix	
			±60	±60	MAX348C	◊ Maxim	70
					MAX348E	◊ Maxim	
		30	±14	±15,5	DG5141A	† Siliconix	
					DG5241A	† Siliconix	
		35	±10	±15,5	**IH5048M**	† **GE/Intersil (2679)**	
			±15	±15	IH5048C	Maxim	75
					IH5048M	† Maxim	
		45	±10	±15,5	**IH5048C**	**GE/Intersil (2679)**	
		50	±7.5	±15.5	**DGM181B**	**GE/Intersil (2679)**	
			±10	±15.5	**DGM182A**	† **GE/Intersil (2680)**	
			±11	±15,5	**IH5141M**	† **GE/Intersil (2680)**	80
			±15	±15	**HI300**	◊ **Harris (2707)**	
					HI304	◊ **Harris (2707)**	
					HI381	**Harris (2707)**	
					DG300AA	† Maxim	
					DG300AB	Maxim	85
					DG300AC	Maxim	
					DG304AA	† Maxim	
					DG304AB	Maxim	
					DG304AC	Maxim	
					DG381AA	† Maxim	90
					DG381AB	Maxim	
					DG381AC	Maxim	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Switches with Drivers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
2xSPST	CMOS	50	±15	±15		(Cont'd)	
					DG300AA	† Siliconix	
					DG304AA	† Siliconix	
					DG381AA	† Siliconix	
				±15,5	**HI5048-2**	**† Harris (2707, 2737)**	
					HI5048-5	**Harris (2707, 2737)**	5
					DG5041A	† Siliconix	
		70	±14	±15	**DG200M**	**† GE/Intersil (2679)**	
					IH5200	† GE/Intersil	
			±15	±15	ADG200A	† AD	
					HI200-2	**† Harris (2707, 2737, 2747)**	10
					MP200DIA	MicroPwr	
					DG200AA	† Siliconix	
		75	±10	±15,5	**DGM182B**	**GE/Intersil (2680)**	
					IH5141C	**GE/Intersil (2680)**	
			±11	±15,5	**DG200**	**◇ GE/Intersil (2679)**	15
					IH200M	† GE/Intersil	
					IH5041M	**† GE/Intersil (2680)**	
			±15	±15	IH5041C	Maxim	
					IH5141C	◇ Maxim	
					IH5341	◇ Maxim	20
				±15,5	**HI5041-2**	**† Harris (2707, 2737)**	
					HI5041-5	**Harris (2707, 2737)**	
			±60	±60	MAX341C	◇ Maxim	
					MAX341E	◇ Maxim	
					MAX341M	◇† Maxim	25
			rf	—	**IH5341**	**GE/Intersil (2681)**	
		80	±10	±15,5	IH200C	GE/Intersil	
					IH5041C	**GE/Intersil (2680)**	
			±14	±15	**DG200C**	**GE/Intersil (2679)**	
					IH5200C	GE/Intersil	30
			±15	±15	ADG200B	AD	
					ADG200C	AD	
					HI200-5	**Harris (2707, 2737, 2747)**	
					MP200DIB	MicroPwr	
					MP200DIC	MicroPwr	35
		90	±15	±15	AD7592DIB	AD	
					AD7592DIK	AD	
	CMOS/D-MOS						
		320	±10	±15	**CDG5341**	**TopazSemi (3301)**	
	CMOS/DMOS						
		320	±10	±15	**CDG5341BK**	**TopazSemi (3301)**	
	JFET	6	−6 to 10	−18,15	CAG27	† TeledyneC	40
		10	−6 to 10	−18,15	CAG27-10	† TeledyneC	
			−7.5 to 15	±15,5	**DG180A**	**† GE/Intersil (2679)**	

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
2xSPST	JFET	10	−7.5 to 15	±15,5		(Cont'd)	
					DG180B	**GE/Intersil (2679)**	
					DG180A	† Siliconix	
			±10	−18,12	**DG141A**	**† GE/Intersil (2679)**	45
					DG141A	† Siliconix	
				−20,10,5	**DG180A**	**† GE/Intersil (2679)**	
					DG180B	**GE/Intersil (2679)**	
					DG180A	† Siliconix	
		15	±7.5	±15	**DG151A**	**† GE/Intersil (2680)**	50
			±8	−18,12	**DG141B**	**GE/Intersil (2679)**	
		20	±5.5	±15	**DG151B**	**GE/Intersil (2680)**	
		30	−6 to 10	−18,15	CAG24	† TeledyneC	
			−7.5 to 15	±15,5	**DG181A**	**† GE/Intersil (2680)**	
					IH181M	† GE/Intersil	55
					AM181	† National	
					DG181A	† Siliconix	
			−12.5 to 10				
				−20,10,5	**DG181A**	**† GE/Intersil (2680)**	
					IH181M	† GE/Intersil	
					AM181	† National	60
					DG181A	† Siliconix	
			±10	−18,12	**DG133A**	**† GE/Intersil (2680)**	
					DG133A	† Siliconix	
				−20	CDA23	† TeledyneC	
		50	−7.5 to 15	±15,5	**DG181B**	**GE/Intersil (2680)**	65
					IH181C	GE/Intersil	
			−10 to 15	±15,5	AM281	National	
			−12.5 to 10				
				−20,10,5	**DG181B**	**GE/Intersil (2680)**	
					IH181C	GE/Intersil	
			−15 to 10	−20,10,5	AM281	National	70
			±7.5	±15	**DG152A**	**† GE/Intersil (2680)**	
			±8	−18,12	**DG133B**	**GE/Intersil (2680)**	
			±10	−18,15	CAG13	† TeledyneC	
					CAG42	† TeledyneC	
					CAG45A	† TeledyneC	75
		75	−7.5 to 15	±15,5	AM182	† National	
			−10 to 15	±15,5	**DG182A**	**† GE/Intersil (2680)**	
					IH182M	† GE/Intersil	
					DG182A	† Siliconix	
			−12.5 to 10				
				−20,10,5	AM182	† National	80
			−15 to 10	−20,10,5	**DG182A**	**† GE/Intersil (2680)**	
					IH182M	† GE/Intersil	
					AM281	National	
					DG182A	† Siliconix	
			±10	±15	SW05B	‡ PMI	85
		80	±10	−18,12	**DG134A**	**† GE/Intersil (2680)**	
					DG134A	† Siliconix	

(Continued)

DT[1] means four terminals with a pair of normally open and normally closed contacts.

© IC MASTER 1988

INTERFACE—Analog Switches (Cont'd)

Switches with Drivers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
2xSPST	JFET	80	±10			(Cont'd)	
				±15	SW05F	PMI	
					SW05G	PMI	
		100	−10 to 15	±15,5	**DG182B**	**GE/Intersil (2680)**	
					IH182C	GE/Intersil	
					AM282	National	5
			−15 to 10	−20,10,5	**DG182B**	**GE/Intersil (2680)**	
					IH182C	GE/Intersil	
					AM282	National	
			±8	−18,12	**DG134B**	**GE/Intersil (2680)**	
			±10	±15,5	TL182C	TI	10
					TL182I	TI	
4xSPST					DG202	◊ Maxim	
	CMOS	25	±15	±15	DG411A	† Siliconix	
					DG412A	† Siliconix	
					DG413A	† Siliconix	15
			0 to 10	−0.5 to 10.5	**CD54HCT4066**	† **GE/RCA (2631)**	
					CD54HC4066	† **GE/RCA (2631)**	
					CD74HCT4066	**GE/RCA (2631)**	
					CD74HC4066	**GE/RCA (2631)**	
		50	±15	±15	**HI201HS-2**	† **Harris (2707, 2737, 2747, 2768)**	20
					HI201HS-5	**Harris (2707, 2737, 2747, 2768)**	
					DG271B	◊ Siliconix	
		60	±15	±15	ADG221A	AD	
					ADG222A	AD	
		75	±11	±15,5	IH201M	† GE/Intersil	25
					IH202M	† GE/Intersil	
					IH5052M	† **GE/Intersil (2679)**	
					IH5053M	† **GE/Intersil (2680)**	
			±15	±15	IH5352	Maxim	
		80	±10	±15	MP201DIA	† MicroPwr	30
					MP201DIB	MicroPwr	
				±15,5	IH201C	GE/Intersil	
					IH202C	GE/Intersil	
					IH5052C	**GE/Intersil (2679)**	
					IH5053C	**GE/Intersil (2680)**	35
			±14	±15	**DG201M**	† **GE/Intersil (2679)**	
					IH5201M	† GE/Intersil	
			±15	±15	ADG201A	† AD	
					HI201-2	† **Harris (2707, 2737, 2747, 2768)**	
		90	±15	±15	AD7590DIB	AD	40
					AD7590DIK	AD	
					AD7591DIB	AD	
					AD7591DIK	AD	
					DG221A	† Siliconix	

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
4xSPST	CMOS					(Cont'd)	
		100	−60 to 50	±60	DG571A	† Siliconix	45
			±14	±15	**DG201C**	**GE/Intersil (2679)**	
					IH5201C	GE/Intersil	
			±15	±15	ADG201B	AD	
					ADG201C	AD	
					AD7510DIJ	AD	50
					AD7510DIK	AD	
					AD7510DIS	† AD	
					AD7511DIJ	AD	
					AD7511DIK	AD	
					AD7511DIS	† AD	55
					AD7511DIT	† AD	
					HI201-5	**Harris (2707, 2737, 2747, 2768)**	
					MP7510DIJ	◊ MicroPwr	
					MP7510DIK	◊ MicroPwr	
					MP7510DIS	◊† MicroPwr	60
					MP7511DIJ	◊ MicroPwr	
					MP7511DIK	◊ MicroPwr	
					MP7511DIS	◊† MicroPwr	
					MP7511DIT	◊† MicroPwr	
					DG308AA	† Siliconix	65
					DG309A	† Siliconix	
					DG309C	Siliconix	
		160	±10	±20	**CDG211C**	**TopazSemi (3301)**	
		175	±15	±15	ADG202A	† AD	
					DG211	**GE/Intersil (2679)**	70
					DG201C	Maxim	
					DG201M	† Maxim	
					DG211C	Maxim	
					MAX331	† Maxim	
					MAX332	† Maxim	75
					DG201AA	† Siliconix	
					DG202A	† Siliconix	
					DG211C	Siliconix	
					DG212C	Siliconix	
			±22	±22	DGP201AA	† Siliconix	80
		280	±7.5	±7.5	F4066BC	Fairchild	
					F4066BM	† Fairchild	
					CD4066A	† **GE/RCA (2635)**	
					CD4066AE	**GE/RCA (2635)**	
					CD4066B	‡ **GE/RCA (2635)**	85
					CD4066BE	**GE/RCA (2635)**	
					CD74HC4066	**GE/RCA (2631)**	
					GD4066B	‡ **GoldStar (2697)**	
					HD74HC4066	Hitachi	
					CD4066A	‡ Micrel	90
					CD4066B	‡ Micrel	
					MC14066BA	† Motorola	
					MC14066BC	Motorola	
					MC54HC4066	† Motorola	
					MC74HC4066	Motorola	95
					CD4066BC	National	
					CD4066BM	† National	
					MM54HC4066	◊† National	
					MM74HC4066	National	
					MN4066B	◊† Panasonic	100

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Switches with Drivers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
4xSPST	CMOS	280	±7.5	±7.5		(Cont'd)	
					MN74HC4066		
						◊ Panasonic	
					HCC4066B	† SGS	
					HCF4066B	◊ SGS	
					M74HC4066	SGS	
					HEF4066B	Signetics	5
					HEF4066BD	† Signetics	
					N4066A	Signetics	
					74HC4066	**◊ Signetics (3003)**	
					883C4066B	† Sprague	
					TC4066B	**Toshiba (3308)**	10
					TC50H4066	Toshiba	
					TC74HC4066	**Toshiba (3307)**	
		289	±7.5	±7.5	M74HC4066	Mitsubishi	
		400	±7.5	±7.5	MC14016BA	† Motorola	
					MC14016BC	Motorola	15
					883C4016B	† Sprague	
					TC4016B	**Toshiba (3308)**	
		800	±7.5	±7.5	F4016C	Fairchild	
					F4016M	† Fairchild	
		850	±7.5	±7.5	**CD4016A**	**† GE/RCA (2635)**	20
					CD4016AE	**GE/RCA (2635)**	
					CD4016B	**† GE/RCA (2635)**	
					CD4016BE	**GE/RCA (2635)**	
					GD4016B	**† GoldStar (2697)**	
					CD4016A	‡ Micrel	25
					CD4016B	‡ Micrel	
					MC54HC4016		
						† Motorola	
					MC54HC4316		
						† Motorola	
					MC74HC4016	Motorola	
					MC74HC4316	Motorola	30
					CD4016BC	National	
					CD4016BM	† National	
					MM54HC4016		
						† National	
					MM54HC4316		
						◊† National	
					MM74HC4016	National	35
					MM74HC4316		
						◊ National	
					MN4016B	◊† Panasonic	
					HCC4016B	† SGS	
					HCF4016B	◊ SGS	
					HEF4016	† Signetics	40
					HEF4016B	† Signetics	
					74HC4016	**Signetics (3003)**	
			Inverted Control	±7.5			
				±7.5	883C4416B	† Sprague	
	CMOS/D-MOS						
		160	±10	±15	**CDG308**	**TopazSemi (3301)**	
					CDG309	**TopazSemi (3301)**	45
					CDG4308	**TopazSemi (3301)**	
					CDG4309	**TopazSemi (3301)**	

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
4xSPST						(Cont'd)	
	D-MOS						
		70	15	15	SD5101	TopazSemi	
			30	30	SD5100	TopazSemi	
		80	30	30	SD5200	TopazSemi	50
	DMOS	160	±10	±20	**CDG201B**	**TopazSemi (3301)**	
	FET	80	±10	±15	**SW201B**	**‡ PMI (2975)**	
					SW202B	**‡ PMI (2975)**	
		100	±10	±15	**SW201F**	**PMI (2975)**	
					SW202F	**PMI (2975)**	55
		150	±10	±15	**SW201G**	**PMI (2975)**	
	J-FET	50	±10	±10	SD5000	Siliconix	
					SD5001	Siliconix	
					SD5002	Siliconix	
					SD5400	Siliconix	60
					SD5401	Siliconix	
					SD5402	Siliconix	
	JFET	30	±7.5	±15,5	AM193	National	
		50	−10 to 5	−15,5	CAG49	† TeledyneC	
			±10	±18,−7	CAG50	† TeledyneC	65
		60	±10	−18,5	CAG49	† TeledyneC	
		75	±10	±15	**SW7510A**	**† PMI (2975)**	
					SW7510B	**◊† PMI (2975)**	
					SW7510E	**PMI (2975)**	
					SW7510F	**PMI (2975)**	70
					SW7511A	**† PMI (2975)**	
					SW7511B	**† PMI (2975)**	
					SW7511E	**PMI (2975)**	
					SW7511F	**PMI (2975)**	
				±15,5	AM194	National	75
4xSPST Common Output							
	PMOS	100–450	±10	−20,10,5	DG118	◊† GE/Intersil	
		150–450	±10	−20,10,5	DG172A	† Siliconix	
		200–600	±10	−20,10,5	DG172C	Siliconix	
4xSPST Var. Comb. of Normally On/Off, with Disable							
	FET	80	±10	±15	**SW06B**	**◊‡ PMI (2975)**	
		100	±10	±15	**SW06F**	**PMI (2975)**	80
		150	±10	±15	**SW06G**	**PMI (2975)**	
4xSPST Various Combinations of Normally On/Off							
	FET	80 *	±10	±15	**SW201B**	**‡ PMI (2975)**	
					SW202B	**‡ PMI (2975)**	
		85	±10	±15	**SW01B**	**‡ PMI (2975)**	
					SW01F	**PMI (2975)**	85
					SW02B	**‡ PMI (2975)**	
					SW02F	**PMI (2975)**	
		100	±10	±15	**SW201F**	**PMI (2975)**	
					SW202F	**PMI (2975)**	
	JFET	200	±10	±15,0	LF11201	† National	90
					LF11202	† National	
					LF11331	† National	
					LF11332	† National	
					LF11333	† National	
		250	±10	±15,0	LF13201	National	
					LF13202	National	95
					LF13331	National	
					LF13332	National	
					LF13333	National	
5xSPST Common Output							
	PMOS	100–450	±10	−20,10	**DG123**	**◊† GE/Intersil (2679)**	100
					DG123A	† Siliconix	

(Continued)

DT[1] means four terminals with a pair of normally open and normally closed contacts.

INTERFACE—Analog Switches (Cont'd)

Switches with Drivers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
5xSPST Common Output							
	PMOS	100–450	± 10			(Cont'd)	
				–20,10,5	**DG125**	◊† **GE/Intersil (2680)**	
					DG125A	† Siliconix	
		125–500	± 10	–20,10	**DG123B**	**GE/Intersil (2679)**	
				–20,10,5	**DG125B**	**GE/Intersil (2680)**	
2xSPDT	CMOS/DMOS						
		80	± 10	± 15	CDG2269CJ	TopazSemi	5
					CDG2269CY	TopazSemi	
3xSPDT	CMOS	280	± 7.5	± 7.5	74HCT4353	Signetics	
					74HC4353	Signetics	
SPDT	CMOS	25	± 14	± 15	**IH5150**	**GE/Intersil (2680)**	
			± 15	± 15	DG402A	† Siliconix	10
					DG419D	Siliconix	
					DG5050A	† Siliconix	
		35	± 15	± 15	IH5050C	Maxim	
					IH5050M	† Maxim	
		75	± 60	± 60	MAX342C	◊ Maxim	15
					MAX342E	◊ Maxim	
					MAX342M	◊† Maxim	
	JFET	50	–10 to 5	–15,5	CDA18	† TeledyneC	
	PMOS	100	± 10	–20 to 10			
					Si3002	◊ Siliconix	
		100–400	± 10	–20,10	TL601I	TI	20
					TL607I	TI	
		200–600	± 10	–20,10	TL601C	TI	
					TL607C	TI	
SPDT for D/A							
	NPN-PNP						
		10	± 10	–15,5	CDA23	† TeledyneC	
			± 15		CDA6	† TeledyneC	25
			0 to –10	–15	CDA13	† TeledyneC	
			10	10	CDA4A	† TeledyneC	
SPDT [1]	CMOS	30	± 14	± 15,5	DG5142A	† Siliconix	
					DG5242A	† Siliconix	
		35	± 10	± 15,5	**IH5050M**	**† GE/Intersil (2680)**	30
		45	± 10	± 15,5	**IH5050C**	**GE/Intersil (2680)**	
		50	± 11	± 15,5	**IH5142M**	**† GE/Intersil (2680)**	
			± 15	± 15	**HI301**	◊ **Harris (2707)**	
					HI305	◊ **Harris (2707)**	
					HI387	**Harris (2707)**	35
					DG301AA	† Maxim	
					DG301AB	Maxim	
					DG301AC	Maxim	
					DG305AA	† Maxim	
					DG305AB	Maxim	40
					DG305AC	Maxim	
					DG387AA	† Maxim	
					DG387AB	Maxim	
					DG387AC	Maxim	
					IH5142M	◊† Maxim	45
					DG301AA	† Siliconix	
					DG305AA	† Siliconix	
					DG387AA	† Siliconix	

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
SPDT [1]	CMOS	50	± 15			(Cont'd)	
				± 15,5	**HI5050-2**	**† Harris (2707, 2737, 2747)**	
					HI5050-5	**Harris (2707, 2737, 2747)**	50
					DG5042A	† Siliconix	
		75	± 10	± 15,5	**IH5142C**	**GE/Intersil (2680)**	
			± 11	± 15,5	**IH5042M**	**† GE/Intersil (2680)**	
			± 15	± 15	IH5042M	† Maxim	
					IH5142C	◊ Maxim	55
				± 15,5	**HI5042-2**	**† Harris (2707, 2737)**	
					HI5042-5	**Harris (2707, 2737)**	
		80	± 10	± 15,5	**IH5042C**	**GE/Intersil (2680)**	
			± 15	± 15	IH5042C	Maxim	
	JFET	10	–7.5 to 15	± 15,5	**DG186A**	**† GE/Intersil (2680)**	60
					DG186B	**GE/Intersil (2680)**	
					DG186A	† Siliconix	
			–12.5 to 10	–20,10,5	**DG186A**	**† GE/Intersil (2680)**	
					DG186B	**GE/Intersil (2680)**	
					DG186A	† Siliconix	65
			± 10	± 18,12	**DG146A**	**† GE/Intersil (2680)**	
					DG146A	Siliconix	
		15	± 7.5	± 15	**DG161A**	**† GE/Intersil (2680)**	
			± 8	± 18,12	**DG146B**	**GE/Intersil (2680)**	
		30	–7.5 to 15	± 15,5	**DG187A**	**† GE/Intersil (2680)**	70
					IH187M	† GE/Intersil	
					AM187	† National	
					DG187A	† Siliconix	
			–12.5 to 10	–20,10,5	**DG187A**	**† GE/Intersil (2680)**	
					IH187M	† GE/Intersil	75
					AM187	† National	
					DG187A	† Siliconix	
			± 10	± 18,12	**DG144A**	**† GE/Intersil (2680)**	
					DG144A	† Siliconix	
		50	–7.5 to 15	± 15,5	**DG187B**	**GE/Intersil (2680)**	80
					IH187C	GE/Intersil	
			–10 to 15	± 15,5	AM287	National	
			–12.5 to 10	–20,10,5	**DG187B**	**GE/Intersil (2680)**	
					IH187C	GE/Intersil	
			–15 to 10	–20,10,5	AM287	National	85
			± 7.5	± 15	**DG162A**	**† GE/Intersil (2680)**	
			± 8	± 15	2126BG	† TeledyneC	
				± 18,12	**DG144B**	**GE/Intersil (2680)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Switches with Drivers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
SPDT [1]	JFET					(Cont'd)	
		75	−7.5 to 15	±15,5	AM188	† National	
			−10 to 15	±15,5	**DG188A**	**† GE/Intersil (2680)**	
					IH188M	† GE/Intersil	
					DG188A	† Siliconix	
			−12.5 to 10				
				−20,10,5	AM188	† National	5
			−15 to 10	−20,10,5	**DG188A**	**† GE/Intersil (2680)**	
					IH188M	† GE/Intersil	
					DG188A	† Siliconix	
		80	±10	−18,12	**DG143**	**◇† GE/Intersil (2680)**	
					DG143A	† Siliconix	10
		100	−10 to 15	±15,5	**DG188B**	**GE/Intersil (2680)**	
					IH188C	GE/Intersil	
					AM288	National	
			−15 to 10	−20,10,5	**DG188B**	**GE/Intersil (2680)**	
					IH188C	GE/Intersil	15
					AM288	National	
			±10	±15,5	TL188C	TI	
					TL188I	TI	
	PMOS	100–400	±10	−20,10	TL604I	TI	
		200–600	±10	−20,10	TL604C	TI	20
2xSPDT	CMOS	25	±14	±15	**IH5149**	**GE/Intersil (2680)**	
					IH5151	**GE/Intersil (2680)**	
			±15	±15	DG403A	† Siliconix	
					DG423A	† Siliconix	
					DG5051A	† Siliconix	25
		35	±15	±15	IH5051C	Maxim	
					IH5051M	† Maxim	
		40	±15	±15	IH5362	GE/Intersil	
		50	±22	±22	DGP303A	† Siliconix	
					DGP303D	Siliconix	30
		75	±15	±15	**HS303RH**	**‡ Harris (2719)**	
					HS307RH	**‡ Harris (2719)**	
					HS390RH	**‡ Harris (2719)**	
			±60	±60	MAX343C	◇ Maxim	
					MAX343E	◇ Maxim	35
					MAX343M	◇† Maxim	
2xSPDT [1]							
	CMOS	35	±10	±15,5	**IH5051M**	**† GE/Intersil (2680)**	
		45	±10	±15,5	**IH5051C**	**GE/Intersil (2680)**	
		50	±11	±15,5	**IH5143M**	**† GE/Intersil (2680)**	
			±15	±15	**HI303**	**◇ Harris (2707)**	40
					HI307	**◇ Harris (2707)**	
					HI390	**Harris (2707)**	
					DG303AA	† Maxim	
					DG303AB	Maxim	
					DG303AC	Maxim	45
					DG307AA	† Maxim	
					DG307AB	Maxim	
					DG307AC	Maxim	
					DG390AA	† Maxim	
					DG390AB	Maxim	50

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
2xSPDT [1]							
	CMOS	50	±15	±15		(Cont'd)	
					DG390AC	Maxim	
					IH5143M	◇† Maxim	
					MP303DIA	MicroPwr	
					MP303DIC	MicroPwr	
					DG303AA	† Siliconix	55
					DG307AA	† Siliconix	
					DG390AA	† Siliconix	
				±15,5	**HI5051-2**	**† Harris (2707, 2737, 2747)**	
					HI5051-5	**Harris (2707, 2737, 2747)**	
					DG243A	† Siliconix	60
					DG5043A	† Siliconix	
		60	±14	±15,5	DG5143A	† Siliconix	
					DG5243A	† Siliconix	
		75	±10	±15,5	**IH5143C**	**GE/Intersil (2680)**	
			±11	±15,5	**IH5043M**	**† GE/Intersil (2680)**	65
			±15	±15	IH5043M	† Maxim	
					IH5143C	◇ Maxim	
				±15,5	**HI5043-2**	**† Harris (2707, 2737, 2747, 2768)**	
					HI5043-5	**Harris (2707, 2737, 2747, 2768)**	
		80	±10	±15,5	**IH5043C**	**GE/Intersil (2680)**	70
			±15	±15	IH5043C	Maxim	
		100	±15	±15	AD7512DIJ	AD	
					AD7512DIK	AD	
					AD7512DIS	† AD	
					AD7512DIT	† AD	75
					MP7512DIJ	◇ MicroPwr	
					MP7512DIK	◇ MicroPwr	
					MP7512DIS	◇† MicroPwr	
					MP7512DIT	◇† MicroPwr	
	JFET	10	−7.5 to 15	±15,5	**DG189A**	**† GE/Intersil (2680)**	80
					DG189B	**GE/Intersil (2680)**	
					DG189A	† Siliconix	
			−12.5 to 15				
				−20,15,5	**DG189A**	**† GE/Intersil (2680)**	
					DG189B	**GE/Intersil (2680)**	
					DG189A	† Siliconix	85
		30	−7.5 to 15	±15,5	**DG190A**	**† GE/Intersil (2680)**	
					DG190B	**GE/Intersil (2680)**	
					IH190M	† GE/Intersil	
					AM190	† National	
					DG190A	† Siliconix	90
			−12 to 15	−20,15,5	**DG190A**	**† GE/Intersil (2680)**	
					DG190B	**GE/Intersil (2680)**	
					IH190M	† GE/Intersil	
					AM190	† National	
					DG190A	† Siliconix	95

(Continued)

DT[1] means four terminals with a pair of normally open and normally closed contacts.

INTERFACE—Analog Switches (Cont'd)

Switches with Drivers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
2xSPDT [1]							
	JFET					(Cont'd)	
		50	−10 to 15	±15,5	AM290	National	
			−15 to 10	−20,10,5	AM290	National	
		75	−7.5 to 15	±15,5	AM191	† National	
			−10 to 15	±15,5	**DG191A**	**† GE/Intersil (2680)**	
					IH191M	† GE/Intersil	5
					DG191A	† Siliconix	
			−12.5 to 15				
				−20,10,5	AM191	† National	
			−15 to 10	−20,10,5	**DG191A**	**† GE/Intersil (2680)**	
					IH191M	† GE/Intersil	
					DG191A	† Siliconix	10
		100	−10 to 15	±15,5	**DG191B**	**GE/Intersil (2680)**	
					IH191C	GE/Intersil	
					AM291	National	
			−15 to 10	−20,10,5	**DG191B**	**GE/Intersil (2680)**	
					IH191C	GE/Intersil	15
					AM291	National	
		150	±10	±15,5	TL191C	TI	
					TL191I	TI	
3xSPDT	CMOS	280	±7.5	±7.5	F4053BC	Fairchild	
					F4053BM	† Fairchild	20
					CD4053B	**† GE/RCA (2635)**	
					CD4053BE	**GE/RCA (2635)**	
					CD54HCT4053	**† GE/RCA (2632)**	
					CD54HC4053	**† GE/RCA (2632)**	
					CD74HCT4053	**GE/RCA (2632)**	25
					CD74HC4053	**GE/RCA (2632)**	
					GD4053B	**† GoldStar (2697)**	
					CD4053A	‡ Micrel	
					CD4053B	‡ Micrel	
					MC14053BA	◊† Motorola	30
					MC14053BC	◊ Motorola	
					MC54HC4053	† Motorola	
					MC54HC4353	† Motorola	
					MC74HC4053	Motorola	
					MC74HC4353	Motorola	35
					CD4053BC	National	
					CD4053BM	† National	
					MN4053B	◊† Panasonic	
					MN74HC4053	Panasonic	
					HCC4053B	† SGS	40
					HCF4053B	◊ SGS	
					M74HC4053	SGS	
					HEF4053B	Signetics	
					HEF4053BD	† Signetics	
					883C4053B	† Sprague	45
					TC4053B	**Toshiba (3308)**	
4xSPDT	CMOS	—	—	8	MC14551BA	† Motorola	
					MC14551BC	Motorola	
		100	−60 to 50	±60	DG575A	† Siliconix	
						(Continued)	

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
4xSPDT						(Cont'd)	
	JFET	35	±10	−15,5	HCS310	HyComp	50
	PNP	7	0 to −10	−15	CDA11-S12	TeledyneC	
		10	0 to −10	−15	CDA11	TeledyneC	
4xSPDT [1]							
	PNP	10	±10	±15	CDA29A	† TeledyneC	
DPST	CMOS	25	±15	±15	DG404	Siliconix	
		30	±14	±15,5	DG5144A	† Siliconix	55
					DG5244A	† Siliconix	
		50	±15	±15	DG384AA	† Siliconix	
		75	±11	±15,5	**IH5044M**	**† GE/Intersil (2680)**	
					IH5144C	**GE/Intersil (2680)**	
					IH5144M	**† GE/Intersil (2680)**	60
					DG5044A	† Siliconix	
			±15	±15	IH5044M	† Maxim	
					IH5144C	◊ Maxim	
					IH5144M	◊† Maxim	
				±15,5	**HI5044-2**	**† Harris (2707, 2737, 2747)**	65
					HI5044-5	**Harris (2707, 2737, 2747)**	
			±60	±60	MAX344C	◊ Maxim	
					MAX344E	◊ Maxim	
					MAX344M	◊† Maxim	
		80	±10	±15,5	**IH5044C**	**GE/Intersil (2680)**	70
					IH5044M	**† GE/Intersil (2680)**	
			±15	±15	IH5044C	Maxim	
	JFET	6	−5 to 10	±15	CAG7	† TeledyneC	
		10	−5 to 10	±15	CAG710	† TeledyneC	
2xDPST	CMOS	25	±15	±15	DG405A	† Siliconix	75
					DG425A	† Siliconix	
					DG5049A	† Siliconix	
		30	±14	±15,5	DG5145A	† Siliconix	
					DG5245A	† Siliconix	
		35	±10	±15,5	**IH5049M**	**† GE/Intersil (2680)**	80
			±15	±15	IH5049C	Maxim	
					IH5049M	† Maxim	
		45	±10	±15,5	**IH5049C**	**GE/Intersil (2680)**	
		50	±11	±15,5	**IH5145M**	**† GE/Intersil (2680)**	
			±15	±15	**HI302**	**◊ Harris (2707)**	85
					HI306	**◊ Harris (2707)**	
					HI384	**Harris (2707)**	
					DG302AA	† Maxim	
					DG302AB	Maxim	
					DG302AC	Maxim	90
					DG306AA	† Maxim	
					DG306AB	Maxim	
					DG306AC	Maxim	
					DG384AA	† Maxim	
					DG384AB	Maxim	95
					DG384AC	Maxim	
					IH5145M	◊† Maxim	
					MP302DIA	† MicroPwr	
					MP302DIC	MicroPwr	
					DG302AA	† Siliconix	100
					DG306AA	† Siliconix	
						(Continued)	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Switches with Drivers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
2xDPST	CMOS	50	±15			(Cont'd)	
				±15,5	**HI5049-2**	**† Harris (2707, 2737, 2747)**	
					HI5049-5	**Harris (2707, 2737, 2747)**	
					DG5045A	† Siliconix	
		75	±10	±15,5	**IH5145C**	**GE/Intersil (2680)**	
			±11	±15,5	**IH5045M**	**† GE/Intersil (2680)**	5
			±15	±15	IH5045M	† Maxim	
					IH5145C	◊ Maxim	
				±15,5	**HI5045-2**	**† Harris (2707, 2737, 2747, 2768)**	
					HI5045-5	**Harris (2707, 2737, 2747, 2768)**	
			±60	±60	MAX345C	◊ Maxim	10
					MAX345E	◊ Maxim	
					MAX345M	◊† Maxim	
		80	±10	±15,5	**IH5045C**	**GE/Intersil (2680)**	
			±15	±15	IH5045C	Maxim	
	CMOS-RH						
		75	±15	±15	**HS302RH**	**‡ Harris (2719)**	15
					HS306RH	**‡ Harris (2719)**	
					HS384RH	**‡ Harris (2719)**	
	JFET	10	-7.5 to 15	±15,5	**DG183A**	**† GE/Intersil (2680)**	
					DG183B	**GE/Intersil (2680)**	
					DG183A	† Siliconix	20
			-12.5 to 10	-20,10,5	**DG183A**	**† GE/Intersil (2680)**	
					DG183B	**GE/Intersil (2680)**	
					DG183A	† Siliconix	
			±10	-18,12	**DG140A**	**† GE/Intersil (2680)**	
					DG140A	† Siliconix	25
		15	±7.5	±15	**DG153A**	**† GE/Intersil (2680)**	
		20	±5.5	±15	**DG153B**	**GE/Intersil (2680)**	
		30	-7.5 to 15	±15,5	**DG184A**	**† GE/Intersil (2680)**	
					IH184M	† GE/Intersil	
					AM184	† National	30
					DG184A	† Siliconix	
			-12.5 to 10	-20,10,5	**DG184A**	**† GE/Intersil (2680)**	
					IH184M	† GE/Intersil	
					AM184	† National	
					DG184A	† Siliconix	35
			±10	-18,12	**DG129A**	**† GE/Intersil (2680)**	
					DG129A	† Siliconix	
		50	-7.5 to 15	±15,5	**DG184B**	**GE/Intersil (2680)**	
					IH184C	GE/Intersil	

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
2xDPST	JFET	50				(Cont'd)	
			-10 to 15	±15,5	AM284	National	40
			-12.5 to 15				
				-20,10,5	**DG184B**	**GE/Intersil (2680)**	
					IH184C	GE/Intersil	
			-15 to 10	-20,10,5	AM284	National	
			±7.5	±15	**DG154A**	**† GE/Intersil (2680)**	
		75	-7.5 to 15	±15,5	AM185	† National	45
			-10 to 15	±15,5	**DG185A**	**† GE/Intersil (2680)**	
					IH185M	† GE/Intersil	
					DG185A	† Siliconix	
			-12.5 to 10				
				-20,10,5	AM185	† National	
			-15 to 10	-20,10,5	**DG185A**	**† GE/Intersil (2680)**	50
					IH185M	† GE/Intersil	
					DG185A	† Siliconix	
		80	±10	-18,12	**DG126A**	**† GE/Intersil (2679)**	
					DG126A	† Siliconix	
		100	-10 to 15	±15,5	**DG185B**	**GE/Intersil (2680)**	55
					IH185C	GE/Intersil	
					AM285	National	
			-15 to 10	-20,10,5	**DG185B**	**GE/Intersil (2680)**	
					IH185C	GE/Intersil	
					AM285	National	60
			±5.5	±15	**DG154B**	**GE/Intersil (2680)**	
			±10	-18,15	CAG48A	† TeledyneC	
		150	±10	±15,5	TL185C	TI	
					TL185I	TI	
DPDT[1]	CMOS	50	±15	±15,5	**HI5046A-2**	**† Harris (2707, 2737, 2747)**	65
					HI5046A-5	**Harris (2707, 2737, 2747)**	
		75	±11	±15,5	**IH5046M**	**† GE/Intersil (2680)**	
			±15	±15,5	**HI5046-2**	**† Harris (2707, 2737, 2747)**	
					HI5046-5	**Harris (2707, 2737, 2747)**	
		80	±10	±15,5	**IH5046C**	**GE/Intersil (2680)**	70
	JFET	10	±10	-18,12	**DG145A**	**† GE/Intersil (2680)**	
					DG145A	† Siliconix	
		15	±7.5	±15	**DG163A**	**† GE/Intersil (2680)**	
		20	±5.5	±15	**DG163B**	**GE/Intersil (2680)**	
		30	±10	-18,12	**DG139A**	**† GE/Intersil (2679)**	75
					DG139A	† Siliconix	
		50	±7.5	±15	**DG164A**	**† GE/Intersil (2680)**	
		80	±10	-18,12	**DG142A**	**† GE/Intersil (2680)**	
					DG142A	† Siliconix	
		100	±5.5	±15	**DG164B**	**GE/Intersil (2680)**	80

DT[1] means four terminals with a pair of normally open and normally closed contacts.

INTERFACE—Analog Switches (Cont'd)

Switches with Drivers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
1xSPST	CMOS/DMOS	160	±10	±15	**CDG2214BJ**	**TopazSemi (3301)**	
4PDT for D/A	PNP	10	±10	±15,5	CDA28A	† TeledyneC	
4PST	CMOS	50	±15	±15,5	**HI5047A-2**	**† Harris (2707, 2737, 2747)**	
					HI5047A-5	**Harris (2707, 2737, 2747)**	5
		75	±11	±15,5	**IH5047M**	**† GE/Intersil (2680)**	
			±15	±15,5	**HI5047-2**	**† Harris (2707, 2737, 2747)**	
					HI5047-5	**Harris (2707, 2737, 2747)**	
		80	±10	±15,5	**IH5047C**	**GE/Intersil (2680)**	
8xSPST	CMOS	100	−60 to 50	±60	DG566A	† Siliconix	10

Switches without Drivers

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
4xSPST	NMOS/DMOS	70	±5		**SD5001N**	**TopazSemi (3301)**	
			±7.5		**SD5002N**	**TopazSemi (3301)**	
					SD5402CY	**◇ TopazSemi (3301)**	
			±10		**SD5000N**	**TopazSemi (3301)**	
					SD5400CY	**◇ TopazSemi (3301)**	15
					SD5401CY	**◇ TopazSemi (3301)**	
SPST	CMOS	50	±10	±20	**CDG2214**	**TopazSemi (3301)**	
	JFET	30	±10		AM1000	† National	
		50	±15		AM1001	† National	
		100	±0.2		**IH5021C**	**† GE/Intersil (2681)**	20
					IH5021M	**† GE/Intersil (2681)**	
					IH5023C	**GE/Intersil (2681)**	
					IH5023M	**† GE/Intersil (2681)**	
			±10		AM1002	† National	
			0 to (Drive−4)		IH5037C	GE/Intersil	25
					IH5037M	† GE/Intersil	
		150	±0.2		**IH5022C**	**GE/Intersil (2681)**	
					IH5022M	**† GE/Intersil (2681)**	
					IH5024C	**GE/Intersil (2681)**	
					IH5024M	**† GE/Intersil (2681)**	30
			0 to (Drive−4)		IH5038C	GE/Intersil	
					IH5038M	† GE/Intersil	
2xSPST	JFET	100	±0.2		**IH5017C**	**GE/Intersil (2681)**	
					IH5017M	**† GE/Intersil (2681)**	
						(Continued)	

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
						(Cont'd)	
2xSPST	JFET	100	0 to (Drive−4)		IH5033C	GE/Intersil	35
					IH5033M	† GE/Intersil	
		150	±0.2		**IH5020C**	**GE/Intersil (2681)**	
					IH5020M	**† GE/Intersil (2681)**	
			0 to (Drive−4)		IH5036C	GE/Intersil	
					IH5036M	† GE/Intersil	40
2xSPST Common Output	JFET	100	±0.2		**IH5019C**	**GE/Intersil (2681)**	
					IH5019M	**† GE/Intersil (2681)**	
			0 to (Drive−4)		IH5035C	GE/Intersil	
					IH5035M	† GE/Intersil	
		150	±0.2		**IH5018C**	**GE/Intersil (2681)**	45
					IH5018M	**† GE/Intersil (2681)**	
			0 to (Drive−4)		IH5034C	GE/Intersil	
					IH5034M	† GE/Intersil	
3xSPST	JFET	100	±0.2		IH5015C	GE/Intersil	
					IH5015M	† GE/Intersil	50
			0 to (Drive−4)		IH5031C	GE/Intersil	
					IH5031M	† GE/Intersil	
		150	±0.2		IH5016C	GE/Intersil	
					IH5016M	† GE/Intersil	
			0 to (Drive−4)		IH5032C	GE/Intersil	55
					IH5032M	† GE/Intersil	
	PMOS	200–600			MM455	† GE/Intersil	
					MM555	GE/Intersil	
3xSPST Common Output	JFET	100	±0.2		IH5013C	GE/Intersil	
					IH5013M	† GE/Intersil	60
			0 to (Drive−4)		IH5029C	GE/Intersil	
					IH5029M	† GE/Intersil	
		150	±0.2		IH5014C	GE/Intersil	
					IH5014M	† GE/Intersil	
			0 to (Drive−4)		IH5030C	GE/Intersil	65
					IH5030M	† GE/Intersil	
4xSPST	D-MOS	70	±5	10	**SD5001**	**TopazSemi (3301)**	
			±7.5	15	**SD5002**	**TopazSemi (3301)**	
			±10	20	**SD5000**	**TopazSemi (3301)**	
	JFET	—			G128	◇† GE/Intersil	70
		100	±0.2		**IH5011C**	**GE/Intersil (2681)**	
					IH5011M	**† GE/Intersil (2681)**	
					AH5011C	National	
					AM9711C	National	
			0 to (Drive−4)		IH5027C	GE/Intersil	75
					IH5027M	† GE/Intersil	
		150	±0.2		**IH5012C**	**GE/Intersil (2681)**	
					IH5012M	**† GE/Intersil (2681)**	
					AH5012C	National	
					AM9712C	National	80
						(Continued)	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog Switches (Cont'd)

Switches without Drivers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
4xSPST	JFET	150				(Cont'd)	
			0 to (Drive–4)		IH5028C	GE/Intersil	
					IH5028M	† GE/Intersil	
	PMOS	200–600			MM452	† GE/Intersil	
					MM552	GE/Intersil	
4xSPST Common Output							
	JFET	100	±0.2		**IH5009C**	**GE/Intersil (2681)**	5
					IH5009M	**† GE/Intersil (2681)**	
					AH5009C	National	
					AM97C09	National	
					AM9709C	National	
			0 to (Drive–4)		IH5025C	GE/Intersil	10
					IH5025M	† GE/Intersil	
		150	±0.2		**IH5010C**	**GE/Intersil (2681)**	
					IH5010M	**† GE/Intersil (2681)**	
					AH5010C	National	
					AM9710C	National	15
			0 to (Drive–4)		IH5026C	GE/Intersil	
					IH5026M	† GE/Intersil	
	PMOS	—			MM451	† GE/Intersil	
					MM551	GE/Intersil	
5xSPST Common Output							
	PMOS	—			G116A	† GE/Intersil	20
					G116B	GE/Intersil	
6xSPST Common Output							
	PMOS	—			G115A	† GE/Intersil	
					G115B	GE/Intersil	
					G118A	† GE/Intersil	
					G118B	GE/Intersil	25
					G118A	† Siliconix	
2xDPST Common Output							
	PMOS	—			MM450	† GE/Intersil	
					MM550	GE/Intersil	
3xDPST Common Output							
	PMOS	—			G119A	† GE/Intersil	
					G119B	GE/Intersil	30
					G119A	† Siliconix	
					G119B	Siliconix	

Drivers

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
High Current Switch (to drive power transistor switches)					SG1629	◊† SiliconG	
					SG3629	◊ SiliconG	
2 Channel					**IH6201**	**GE/Intersil (2679)**	35
					D139A	† Siliconix	
4 Channel					**D129A**	**† GE/Intersil (2679)**	
					D129B	**GE/Intersil (2679)**	
					D129A	† Siliconix	
					D469A	◊ Siliconix	40
					SI7250	Siliconix	
6 Channel					**D123A**	**† GE/Intersil (2679)**	
					D123B	**GE/Intersil (2679)**	
					D125A	**† GE/Intersil (2679)**	

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
6 Channel						(Cont'd)	
					D125B	**GE/Intersil (2679)**	45
					D125A	† Siliconix	
					D125B	Siliconix	
					CDR125A	† TeledyneC	

Multiplexers

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
Audio Signals, Dual 2-Mode					M51551	Mitsubishi	
Audio/Video Switch					**GL3812**	**◊ GoldStar (2699)**	50
CMOS Analog Multiplexer, 4-Channel Differential		1200	±15	±15	HI509A	† Burr-Brown	
CMOS Analog Multiplexer, 8-Channel Differential		1200	±15	±15	HI507A	† Burr-Brown	
CMOS Analog Multiplexer, 8-Channel Single-Ended		1200	±15	±15	HI508A	† Burr-Brown	
CMOS Analog Multiplexer, 16-Channel Differential		1200	±15	±15	HI506A	† Burr-Brown	
Crosspoint Switches					**CD22100**	**GE/RCA (2638)**	55
					CD22101	**GE/RCA (2638)**	
					CD22102	**GE/RCA (2638)**	
					CD74HCT22106E	**◊ GE/RCA (2638)**	
					CD74HC22106E	**GE/RCA (2638)**	
					GD4741B	**GoldStar (2698)**	60
					GM62093	**GoldStar (2701)**	
					MC142100	Motorola	
					MC145100	Motorola	
					MC3416	Motorola	
					RC4444	Raytheon	65
					RM4444	† Raytheon	
					SSI22100	SiliconSys	
					SSI22101	SiliconSys	
					SSI22102	SiliconSys	
					SSI22106	SiliconSys	70
					EFB7310	Thomson	
Dual 4-Channel Analog Multiplexer	HC				M74HC4052	SGS	
Triple 2-Channel Analog Multiplexer	HC				M74HC4053	SGS	
Triple 2-Channel Analog Multiplexer/Demultiplexer					HD74HC4053	Hitachi	
2-Channel Differential	CMOS	90	–5 to 10	–5,15	DG534A	◊† Siliconix	75
4 Channel	CMOS	40	±10	±70	HV1014	Supertex	
					HV1714	Supertex	
				±80	HV1016	Supertex	
					HV1716	Supertex	
	JFET	10	±10	–18,2.8	CAM604A	◊† TeledyneC	80
4 Channel Differential	CMOS	230	±15	±15	MP7502S	◊† MicroPwr	
					MP7509S	◊† MicroPwr	
		250	±15	±15	**MVD409**	**◊ Datel (2577)**	
		270	±7.5	±7.5	MC14529BA	† Motorola	
					MC14529BC	Motorola	85
					CD4529BC	National	
					CD4529BM	† National	
		280	±7.5	±7.5	F4052BC	Fairchild	
					F4052BM	† Fairchild	
					CD4052B	**† GE/RCA (2635)**	90
					CD4052BE	**GE/RCA (2635)**	
					CD54HCT4052	**† GE/RCA (2632)**	

(Continued)

DT[1] means four terminals with a pair of normally open and normally closed contacts.

INTERFACE—Analog Switches (Cont'd)

Multiplexers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
4 Channel Differential						(Cont'd)	
	CMOS	280	±7.5	±7.5	**CD54HC4052** †	**GE/RCA (2632)**	
					CD74HCT4052	**GE/RCA (2632)**	
					CD74HC4052	**GE/RCA (2632)**	
					GD4052B †	**GoldStar (2697)**	
					HD74HC4051	Hitachi	5
					HD74HC4052	Hitachi	
					CD4052A ‡	Micrel	
					CD4052B ‡	Micrel	
					MC14052BA ◇†	Motorola	
					MC14052BC ◇	Motorola	10
					MC54HC4052 †	Motorola	
					MC54HC4352 †	Motorola	
					MC74HC4052	Motorola	
					MC74HC4352	Motorola	
					CD4052BC	National	15
					CD4052BM †	National	
					MM54HC4052 ◇†	National	
					MM54HC4352 †	National	
					MM74HC4052 ◇	National	
					MM74HC4352	National	20
					MN4052B ◇†	Panasonic	
					MN74HC4052	Panasonic	
					HCC4052B †	SGS	
					HCF4052B ◇	SGS	
					74HCT4352	Signetics	25
					74HC4352	Signetics	
					883C4052B †	Sprague	
					TC4052B	**Toshiba (3308)**	
		300	±15	±15	AD7502J	AD	
					AD7502K	AD	30
					AD7502S †	AD	
					IH6208M †	**GE/Intersil (2681)**	
					HI509-2 †	**Harris (2703, 2738, 2748, 2768)**	
					HI509-5	**Harris (2703, 2738, 2748, 2768)**	
					HI509-8 †	**Harris (2703, 2738, 2748, 2768)**	35
					IH6208M †	Maxim	
		320	±15	±15	MP7502J ◇	MicroPwr	
					MP7502K ◇	MicroPwr	
					MP7509K ◇	MicroPwr	
		350	±15	±15	**IH6208C**	**GE/Intersil (2681)**	40
					IH6208C	Maxim	
		400 *	±10	±15	HS7509DIK	HybridSys	
					HS7509DIS †	HybridSys	

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
4 Channel Differential						(Cont'd)	
	CMOS	400	±15	±15	**HI1828A-2** †	**Harris (2703, 2738, 2748, 2768)**	
					HI1828A-5	**Harris (2703, 2738, 2748, 2768)**	45
					HI1828A-8 †	**Harris (2703, 2738, 2748, 2768)**	
					DG509AA †	Maxim	
					DG506AA †	Siliconix	
					DG509AA †	Siliconix	
		450	±15	±15	DG509AB	Maxim	50
					DG509AC	Maxim	
		750	±15	±15	MPC801K	Burr-Brown	
					MPC801S †	Burr-Brown	
		900	±10	±15	**HI539-2** †	**Harris (2738, 2749, 2768)**	
					HI539-5	**Harris (2738, 2749, 2768)**	55
		1000	±13	±15	**IH5208M** †	**GE/Intersil (2681)**	
		1200	±13	±15	**IH5208C**	**GE/Intersil (2681)**	
		1300	±15	±15	**MPC4D**	**Burr-Brown (2543)**	
		1500	±15	±15	**MXD409**	**Datel (2577)**	
					HI509A-2 †	**Harris (2703, 2738, 2748, 2768)**	60
					HI509A-2 ◇†	Maxim	
					MAX359M †	Maxim	
					MAX369C	Maxim	
				±20	**HI549-2** ◇†	**Harris (2703, 2738, 2740, 2748)**	
		1800	±15	±15	**HI509A-5**	**Harris (2703, 2738, 2748, 2768)**	65
					HI509A-5 ◇	Maxim	
					MAX359C	Maxim	
					MAX369M †	Maxim	
				±20	**HI549-5** ◇	**Harris (2703, 2738, 2740, 2748)**	
	JFET	260	−15 to 11.5	±15	**MUX24A** †	**PMI (2975)**	70
					MUX24E	**PMI (2975)**	
		350 *	−15 to 12	±15	LF11509 †	National	
					LF13509	National	
		370	−15 to 12	±15	**MUX24B** †	**PMI (2975)**	
					MUX24F	**PMI (2975)**	75
4 Channel Differential, Latched							
	CMOS	1500	±15	±15	HI509L-2 ◇†	Maxim	
		1800	±15	±15	HI509L-5 ◇	Maxim	
4 Channel Differential, Video							
	CMOS	150	±15	±15	MAX311C	Maxim	
					MAX311E	Maxim	
					MAX311M †	Maxim	80
					MAX313C	Maxim	
					MAX313E	Maxim	
					MAX313M †	Maxim	
4 Channel Differential with Input Latch							
	CMOS		30 *	±50	DG569B	Siliconix	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Multiplexers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
4 Channel Video							
	CMOS	270	±7.5	±7.5	MC14529BA †	Motorola	
					MC14529BC	Motorola	
					CD4529BC	National	
					CD4529BM †	National	
		450	±15	±15	**HI524-2 †**	**Harris (2703, 2738, 2749, 2768)**	5
					HI524-5	**Harris (2703, 2738, 2749, 2768)**	
4 Channel, with Enable							
	CMOS/D-MOS						
		160	±10	±15	**CDG4500**	**TopazSemi (3301)**	
4 Channel with Input Latch							
	CMOS	400	±15	±15	DG529A ◊†	Siliconix	
4 Channel Dual, with Decode							
	CMOS	50	±10	±70	HV1314	Supertex	
				±80	HV1316	Supertex	10
4-Channel Differential							
	CMOS	90	−5 to 10	−5,15	DG538A ◊†	Siliconix	
		400	±15	±15	DGP509AA †	Siliconix	
4-Channel Video					**AD9300J**	**AD (2429)**	
					AD9300S †	**AD (2429)**	
4-Channel, with Enable							
	CMOS/DMOS						
		160	±10	±15	**CDG4500AK †**	**TopazSemi (3301)**	15
					CDG4500BJ	**TopazSemi (3301)**	
					CDG4500BK	**TopazSemi (3301)**	
					CDG4500CJ	**TopazSemi (3301)**	
6 Channel							
	CMOS	150	±8	±8	MS504	RTC	
	JFET	60	±10	−18,2.8	CAM601A ◊†	TeledyneC	20
8 Channel							
	CMOS	50 *			HV11	Supertex	
		50	±10	±70	HV1214	Supertex	
					HV1614	Supertex	
					HV1814 ◊	Supertex	
				±80	HV1216	Supertex	25
					HV1616	Supertex	
					HV1816 ◊	Supertex	
		230	±15	±15	MP7501S ◊†	MicroPwr	
					MP7503S ◊†	MicroPwr	
					MP7508S ◊†	MicroPwr	30
		250	±15	±15	**MV808 ◊**	**Datel (2577)**	
		280	±7.5	±7.5	F4051BC	Fairchild	
					F4051BM †	Fairchild	
					CD4051B †	**GE/RCA (2635)**	
					CD4051BE	**GE/RCA (2635)**	35
					CD54HCT4051 †	**GE/RCA (2632)**	
					CD54HC4051 †	**GE/RCA (2632)**	
					CD74HCT4051	**GE/RCA (2632)**	
					CD74HC4051	**GE/RCA (2632)**	
					GD4051B †	**GoldStar (2697)**	40
					CD4051A ‡	Micrel	

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
8 Channel							
	CMOS	280	±7.5	±7.5		(Cont'd)	
					CD4051B ‡	Micrel	
					MC14051BA ◊†	Motorola	
					MC14051BC ◊	Motorola	
					MC54HC4051 †	Motorola	45
					MC54HC4351 †	Motorola	
					MC74HC4051	Motorola	
					MC74HC4351	Motorola	
					CD4501BC	National	
					CD4501BM †	National	50
					MM54HC4051 ◊†	National	
					MM54HC4351 †	National	
					MM74HC4051 ◊	National	
					MM74HC4351	National	
					MN74HC4051	Panasonic	55
					HCC4051B †	SGS	
					HCF4051B ◊	SGS	
					HEF4051B	Signetics	
					HEF4051BD †	Signetics	
					HEF4052B	Signetics	60
					HEF4052BD †	Signetics	
					74HCT4351	Signetics	
					74HC4351	Signetics	
					883C4051B †	Sprague	
					TC4051B	**Toshiba (3308)**	65
		300	±15	±15	AD7501J	AD	
					AD7501K	AD	
					AD7501S †	AD	
					AD7503J	AD	
					AD7503K	AD	70
					AD7503S †	AD	
					IH6108M †	**GE/Intersil (2681)**	
					HI508-2 †	**Harris (2703, 2738, 2748, 2768)**	
					HI508-5	**Harris (2703, 2738, 2748, 2768)**	
					HI508-8 †	**Harris (2703, 2738, 2748, 2768)**	75
					HS508ARH ‡	**Harris (2702, 2718)**	
					IH6108M †	Maxim	
		320	±15	±15	MP7501J ◊	MicroPwr	
					MP7501K ◊	MicroPwr	
					MP7503J ◊	MicroPwr	80
					MP7503K ◊	MicroPwr	
					MP7508K ◊	MicroPwr	
		350	±15	±15	**IH6108C**	**GE/Intersil (2681)**	
					IH6108C	Maxim	
		400 *	±10	±15	HS7508DIK	HybridSys	85
					HS7508DIS †	HybridSys	
		400	±15	±15	DG508AA †	Maxim	
					DG508AA †	Siliconix	

(Continued)

DT[1] means four terminals with a pair of normally open and normally closed contacts.

© IC MASTER 1988

INTERFACE—Analog Switches (Cont'd)

Multiplexers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
8 Channel							
	CMOS	400	±15			(Cont'd)	
				±15,5	**HI1818A-2**	**† Harris (2703, 2738, 2748, 2768)**	
					HI1818A-5	**Harris (2703, 2738, 2748, 2768)**	
					HI1818A-8	**† Harris (2703, 2738, 2748, 2768)**	
		450	±15	±15	DG508AB	Maxim	
					DG508AC	Maxim	5
		1000	±13	±15	**IH5108M**	**† GE/Intersil (2681)**	
		1200	±13	±15	**IH5108C**	**GE/Intersil (2681)**	
		1300	±15	±15	**MPC8S**	**Burr-Brown (2543)**	
		1500	±15	±15	**MX808**	**Datel (2577)**	
					MX808M	**† Datel (2577)**	10
					HI508A-2	**† Harris (2703, 2738, 2748, 2768)**	
					HI508A-2	◇† Maxim	
					MAX358M	◇† Maxim	
					MAX368M	† Maxim	
				±20	**HI548-2**	**◇† Harris (2703, 2738, 2740, 2748)**	15
					HI548-5	**◇ Harris (2703, 2738, 2740, 2748)**	
		1800	±15	±15	**HI508A-5**	**Harris (2703, 2738, 2748, 2768)**	
					HI508A-8	**† Harris (2703, 2738, 2748, 2768)**	
					HI508A-5	◇ Maxim	
					MAX358C	◇ Maxim	20
					MAX368C	Maxim	
	JFET	260	−15 to 11.5				
				±15	**MUX08E**	**PMI (2975)**	
					MUX88E	**PMI (2975)**	
		300	−15 to 12	±15	**MUX08A**	**† PMI (2975)**	
		350 *	−15 to 12	±15	LF11508	† National	
					LF13508	National	25
		370	−15 to 12	±25	**MUX08F**	**PMI (2975)**	
					MUX88F	**PMI (2975)**	
		400	−15 to 12	±15	DMX88E	PMI	
					MUX08B	**◇† PMI (2975)**	30
		520	−15 to 12	±15	DMX88F	PMI	
	PMOS	150–250	±5	−20,5	DG501A	† Siliconix	
		150–800	±10	−20,10	DG503A	† Siliconix	
		200–600	±5	−15,5	DG501A	† Siliconix	
		250–400	±5	−15,5	AM3705	† National	35
					AM3705	National	
		450	−15	−20	3708	Fairchild	
8 Channel Differential							
	CMOS	230	±15	±15	MP7507S	◇† MicroPwr	
		250	±7.5	±7.5	MC14097BA	† Motorola	
					MC14097BC	Motorola	40

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
8 Channel Differential							
	CMOS					(Cont'd)	
		270	±15	±15	**MVD807**	**Datel (2577)**	
		280	±7.5	±7.5	**CD4097B**	**† GE/RCA (2635)**	
					CD4097BE	**GE/RCA (2635)**	
					HCC4097B	† SGS	
					HCF4097B	SGS	45
		320	±15	±15	MP7507J	◇ MicroPwr	
					MP7507K	◇ MicroPwr	
		400	±15	±15	AD7507S	† AD	
					AD7507T	† AD	
					HI507-2	**† Harris (2703, 2738, 2748, 2768)**	50
					HI507-5	**Harris (2703, 2738, 2748, 2768)**	
					HI507-8	**† Harris (2703, 2738, 2748, 2768)**	
		400 *	±15	±15	HS7507S	† HybridSys	
					HS7507T	† HybridSys	
		400	±15	±15	DG507AA	† Siliconix	55
					DG527A	◇† Siliconix	
					DG528A	◇† Siliconix	
		450	±15	±15	AD7507J	AD	
					AD7507K	AD	
		450 *	±15	±15	HS7507J	HybridSys	60
					HS7507K	HybridSys	
		600	±10	±15	**IH6216C**	**GE/Intersil (2681)**	
					IH6216M	**† GE/Intersil (2681)**	
					HI518-2	**† Harris (2703, 2738, 2749, 2768)**	
					HI518-5	**Harris (2703, 2738, 2749, 2768)**	65
		750	±15	±15	**MPC800K**	**Burr-Brown (2543)**	
					MPC800S	**† Burr-Brown (2543)**	
		1300	±15	±15	**MPC8D**	**Burr-Brown (2543)**	
		1500	±15	±15	**MXD807**	**Datel (2577)**	
					HI507A-2	**† Harris (2703, 2738, 2748, 2768)**	70
				±20	**HI547-2**	**◇† Harris (2703, 2738, 2748)**	
		1800	±15	±15	**HI507A-5**	**Harris (2703, 2738, 2748, 2768)**	
					HI507A-8	**† Harris (2703, 2738, 2748, 2768)**	
				±20	**HI547-5**	**◇ Harris (2703, 2738, 2748)**	
	JFET	300	−15 to 11	±15	**MUX28A**	**† PMI (2975)**	75
					MUX28E	**PMI (2975)**	
		450	−15 to 11.5				
				±15	**MUX28B**	**† PMI (2975)**	
					MUX28F	**PMI (2975)**	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Multiplexers (Cont'd)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
8 Channel Latched							
	CMOS	30 *	±50	±60	DG568B	Siliconix	
		1500	±15	±15	HI508L-2	◇† Maxim	
		1800	±15	±15	HI508L-5	◇ Maxim	
8 Channel Video							
	CMOS	150	±15	±15	MAX310C	Maxim	
					MAX310E	Maxim	5
					MAX310M	† Maxim	
					MAX312C	Maxim	
					MAX312E	Maxim	
					MAX312M	† Maxim	
8 Channel, BCD Input, Latch							
	PMOS	—	60	0–70	**LS7110**	**LSIComp (2867)**	10
8 Channel, 1 of 8 Decode							
	CMOS	50	±10	±70	HV1414	Supertex	
					HV1514	Supertex	
				±80	HV1416	Supertex	
					HV1516	Supertex	
8-Bit Channel Analog Multiplexer							
	HC				M74HC4051	SGS	15
8-Channel with Enable							
	CMOS	100	±50	±60	DG565A	† Siliconix	
		150	±5	–20,5	Si3705	Siliconix	
		400	±15	±15	DGP508AA	† Siliconix	
16 Channel							
	CMOS	—	±15	±15	**TC5023B**	**Toshiba (3308)**	
		230	±15	±15	MP7506S	◇† MicroPwr	20
		250	±15	±15	MC14067BA	† Motorola	
					MC14067BC	Motorola	
		270	±15	±15	**MV1606**	**Datel (2577)**	
		280	±7.5	±7.5	F4067BC	Fairchild	
					F4067BM	Fairchild	25
					CD4067B	**† GE/RCA (2635)**	
					CD4067BE	**GE/RCA (2635)**	
					CD54HCT4067	**† GE/RCA (2632)**	
					CD54HC4067	**† GE/RCA (2632)**	
					CD74HCT4067	**GE/RCA (2632)**	30
					CD74HC4067	**GE/RCA (2632)**	
					GD4067B	**† GoldStar (2697)**	
					HCC4067B	† SGS	
					HCF4067B	SGS	
					HEF4067B	Signetics	35
					HEF4067BD	† Signetics	
					74HCT4067	Signetics	
					74HC4067	◇ Signetics	
		320	±15,5	±15,5	MP7506J	◇ MicroPwr	
					MP7506K	◇ MicroPwr	40
		400	±15	±15	AD7506S	† AD	
					AD7506T	† AD	
					HI506-2	**† Harris (2703, 2738, 2748, 2768)**	
					HI506-5	**Harris (2703, 2738, 2748, 2768)**	
					HI506/883	**† Harris (2703, 2738, 2748, 2768)**	45
		400 *	±15	±15	HS7506S	† HybridSys	
					HS7506T	† HybridSys	

(Continued)

Function	Switch Type	ON Resistance 25°C, Ω	Analog Signal Range V	Supply Voltage, V	Device	Source	Line
16 Channel							
	CMOS					(Cont'd)	
		400	±15	±15	DG526A	◇† Siliconix	
		450	±15	±15	AD7506J	AD	
					AD7506K	AD	50
		450 *	±15	±15	HS7506J	HybridSys	
					HS7506K	HybridSys	
		600	±10	±15	**IH6116C**	**GE/Intersil (2681)**	
					IH6116M	**† GE/Intersil (2681)**	
					HI516-2	**† Harris (2703, 2738, 2748, 2768)**	55
					HI516-5	**Harris (2703, 2738, 2748, 2768)**	
		750	±15	±15	**MX1616**	**Datel (2577)**	
					MX1616M	**† Datel (2577)**	
		1300	±15	±15	**MPC16S**	**Burr-Brown (2543)**	
		1500	±15	±15	**MX1606**	**Datel (2577)**	60
					HI506A-2	**† Harris (2703, 2738, 2748, 2768)**	
				±20	**HI546-2**	**◇† Harris (2703, 2738, 2748)**	
		1800	±15	±15	**HI506A-5**	**Harris (2703, 2738, 2748, 2768)**	
					HI506A-8	**† Harris (2703, 2738, 2748, 2768)**	
				±20	**HI546-5**	**◇ Harris (2703, 2738, 2748)**	65
		5000	±5 to 15	±15,5	**HS1840RH**	**‡ Harris (2702, 2718)**	
	D/CMOS						
		90	0 to 10	15	DG536	HybridSys	
	JFET	300	–15 to 11	±15	**MUX16A**	**† PMI (2975)**	
					MUX16E	**PMI (2975)**	
		450	–15 to 11.5	±15	**MUX16B**	**† PMI (2975)**	70
					MUX16F	**PMI (2975)**	
16-Channel Wideband Video							
	CMOS	90	±10	16.5	DG535A	◇† Siliconix	
16-Channel with Enable							
	CMOS	90	0 to 10	0 to 15	DG536	◇† Siliconix	

DT[1] means four terminals with a pair of normally open and normally closed contacts.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters

Binary Output

Bits Res.	Linearity Error ±LSB	Conversion Time ±½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
4	1/8	0.04	35 *	x										x		**CA3304A**	**GE/RCA (2651)**	
	1/4	0.033 *	250	x		x		x			x			x		TDC1021	◊† TRW-LSI	
				x		x		x			x			x		TDC1021	◊ TRW-LSI	
		0.05	30	x										x		**CA3304**	**GE/RCA (2651)**	
	1/2	0.03 *	800	x		x								x		UAB1005	Thomson	5
				x		x								x		UAC1005	† Thomson	
4 (Video A/D Converter)																		
	1/4	25		x				x						x		TDC1044	TRW-LSI	
	1	10 MSPS																
			350	x										x		HA19202	Hitachi	
				x										x		HA19203	Hitachi	
5	1/4	0.002	1700	x										x		SDA8200	Siemens	10
6	—	1	—										x			MAH0801	AD	
		75 MHz		x										x		**AD9000J**	**AD (2417)**	
				x										x		**AD9000S**	**† AD (2417)**	
	1/8	—														AD5010K	AD	
																AD6020K	AD	15
	1/4	0.02	450	x	x						x			x		SDA6020	Siemens	
		0.066	70 *	x										x		**CA3306A**	**GE/RCA (2651)**	
		0.66	150	x										x		MP7682XC	MicroPwr	
				x										x		MP7682XL	MicroPwr	
				x										x		MP7682XU	† MicroPwr	20
	1/2	0.01	1600	x	x		x							x		TDC1029	◊† TRW-LSI	
		0.033 *	1000	x		x		x			x			x		TDC1014	† TRW-LSI	
				x		x		x			x			x		TDC1014	TRW-LSI	
		0.04	150	x										x		MP7682YB	MicroPwr	
				x										x		MP7682YK	MicroPwr	25
			240											x		HS9582YK	HybridSys	
		0.06	240											x		HS9582XK	HybridSys	
														x		HS9582XT	† HybridSys	
		0.066	70 *	x										x		**CA3306**	**GE/RCA (2651)**	
		0.07	700	x	x									x		ZN440CJ	Ferranti	30
				x	x									x		SSI6040	SiliconSys	
		0.10	55 *	x										x		**CA3306C**	**GE/RCA (2651)**	
			700	x	x									x		ZN441CJ	Ferranti	
				x	x									x		SSI6041	SiliconSys	
		0.66	150	x										x		MP7682XB	MicroPwr	35
				x										x		MP7682XK	MicroPwr	
				x										x		MP7682XT	† MicroPwr	
		90	120	x											x	NE5036	Signetics	
		100	100	x										x		NE5037	Signetics	
		100MHz	—	x	x		x							x		TDC1029	◊ TRW-LSI	40
	3/4	0.067	176 *										x	x		CA3300	GE/RCA	
	1	0.03	240											x		HS9582ZJ	HybridSys	
		0.04	150	x										x		MP7682YA	MicroPwr	
				x										x		MP7682YJ	MicroPwr	
				x										x		MP7682ZJ	MicroPwr	45
			240											x		HS9582YJ	HybridSys	
		0.06	240											x		HS9582XJ	HybridSys	
														x		HS9582XS	† HybridSys	
		0.66	150	x										x		MP7682XA	MicroPwr	
				x										x		MP7682XJ	MicroPwr	
				x										x		MP7682XS	† MicroPwr	50
		100	270											x		MB40576	Fujitsu	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

INTERFACE

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ±LSB	Conversion Time ±½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
7	1/2	0.03	385	x												**ADC207MC**	**Datel (2571, 2575)**	
				x												**ADC207MM †**	**Datel (2571, 2575)**	
		0.04		x			x	x				x				**MC10321**	**Motorola (2937)**	
		0.045	400	x				x			x			x		**PNA7509**	**◇ Signetics (3121)**	
		0.05	1000	x				x						x		TDC1047	TRW-LSI	5
		15 MHz		x				x								TDC1147	TRW-LSI	
8	—	1	—										x			MAH1001	AD	
	1/4	0.2	75	x										x		MP7683XC	MicroPwr	
				x										x		MP7683XL	MicroPwr	
		5	225	x	x								x	x		SSI6080AC	SiliconSys	10
				x	x								x	x		SSI6080AM †	SiliconSys	
		9	125	x	x								x	x		**ADC847B**	**Datel (2575)**	
			125 *	x	x								x	x		ZN447E	Ferranti	
			125	x	x								x	x		SSI6050C	◇ SiliconSys	
				x	x								x	x		SSI6050M	◇† SiliconSys	15
		15		x									x	x		AD670B	AD	
				x									x	x		AD670K	AD	
		30 Msps*																
			270 *	x										x		HA19216	Hitachi	
		110	15	x										x		ADC0801	† National	
				x										x		ADC0801C	National	20
			875	x										x		ADC0801	† Signetics	
				x										x		ADC0801C	† Signetics	
	1/2	0.004	2200	x	x	x	x	x						x		**HADC77300A †**	**HoneywellSPT (2997)**	
		0.007	7	x							x			x		TKAD20C	◇ Tektronix	
		0.01	1352	x		x		x						x		AC30308	Analogic	25
			3100	x	x	x	x							x		**ADC303**	**◇ Datel (2572, 2575)**	
			3750	x	x	x	x	x					x	x		**ADCB303E**	**Datel (2575)**	
		0.02	550	x	x	x	x							x		**ADC302**	**◇ Datel (2572, 2575)**	
			684	x		x		x						x		AC30208	Analogic	
		0.03	420	x	x	x	x							x		**ADC301**	**◇ Datel (2572, 2575)**	30
		0.033 *	2500	x		x		x			x			x		TDC1007	† TRW-LSI	
				x		x		x			x			x		TDC1007	TRW-LSI	
		0.05		x										x		THC1068	† TRW-LSI	
			300											x		HS9584Q	HybridSys	
														x		HS9584V	† HybridSys	35
				x										x		MP7684Q	MicroPwr	
				x										x		MP7684V	† MicroPwr	
			320	x	x	x	x							x		**ADC304**	**Datel (2575)**	
			399	x		x		x						x		AC30108	Analogic	
			500 *	x		x		x						x		**IDT75C48**	**◇† IDT (2807, 2836)**	40
				x										x		**IDT75C58**	**◇† IDT (2807, 2837)**	
			600	x										x		**ADC208MC**	**Datel (2575)**	
				x										x		**ADC208MM**	**Datel (2575)**	
			700	x	x	x	x							x		**ADC300**	**◇ Datel (2572, 2575)**	
		0.05 *	910 *		x		x	x	x	x	x	x	x		x	IR3K03	Sharp	45

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
8	1/2	0.05	1320	x										x		TDC1048 ◇†	TRW-LSI	
			4075	x	x	x	x	x					x	x		**ADCB304E**	**Datel (2575)**	
		0.06 *	1000 *		x		x	x	x	x	x	x	x		x	IR3K04A	Sharp	
		0.07	300	x										x		MP7684	† MicroPwr	
		0.1	160											x		HS9583XT	† HybridSys	5
			300											x		HS9584K	HybridSys	
														x		HS9584T	† HybridSys	
		0.10	300	x										x		MP7684K	MicroPwr	
				x										x		MP7684T	† MicroPwr	
		0.2	75	x										x		MP7683XB	MicroPwr	10
				x										x		MP7683XK	MicroPwr	
				x										x		MP7683XT	MicroPwr	
			160											x		HS9583XK	HybridSys	
		0.35	130	x			x	x		x					x	ADC0831BC	TI	
				x			x	x		x					x	ADC0832BC	TI	15
		0.4	400	x										x		TDC1001	TRW-LSI	
		0.6	1250	x	x			x						x	x	**ADC815MC ◇**	**Datel (2575)**	
				x	x			x						x	x	**ADC815MM ◇†**	**Datel (2574)**	
						x	x	x					x	x	x	MN5815	† MicroNet	
		0.9	1550	x	x									x	x	**ADC5101**	**Datel (2575)**	20
				x		x								x	x	**ADC5101H †**	**Datel (2574)**	
				x		x	x						x	x	x	MN5101	MicroNet	
				x		x	x						x	x	x	MN5101H	† MicroNet	
		1 *	800	x				x					x		x	AM6148C	AMD	
		1	1250	x	x			x						x	x	**ADC825MC**	**Datel (2575)**	25
				x	x			x						x	x	**ADC825MM †**	**Datel (2574)**	
						x	x	x					x	x	x	MN5825	† MicroNet	
		1.2	1800			x	x						x			HAS0802	AD	
		1.3	25	x							x			x		MAX150	† Maxim	
		1.5	75	x	x	x	x	x			x					**PM0820A ◇†**	**PMI (2973)**	30
				x	x	x	x	x			x					**PM0820E ◇**	**PMI (2973)**	
				x	x	x	x	x			x					**PM0820G ◇**	**PMI (2973)**	
			1550	x		x	x						x	x	x	MN5100	MicroNet	
				x		x	x						x	x	x	MN5100H	† MicroNet	
			4500	x			x	x								**ADC881**	**Datel (2575)**	35
		1.6	50	x							x			x		ADC0820BCD	Maxim	
				x							x			x		ADC0820BCN	Maxim	
				x							x			x		ADC0820BD †	Maxim	
				x							x			x		AD7820C	Maxim	
				x							x			x		AD7820L	Maxim	
				x							x			x		AD7820U	† Maxim	40
				x							x		x	x		MAX150BE	Maxim	
				x							x		x	x		MAX150BL	Maxim	
				x							x		x	x		MAX150BM	† Maxim	
			75	x							x					AD7820L	AD	45
				x							x					AD7820U	† AD	
		2 *	—	x				x					x			**MC6108A**	**Motorola (2937)**	
		2	50	x						x	x		x	x		MAX154BC	Maxim	
				x						x	x		x	x		MAX154BE	Maxim	
				x						x	x		x	x		MAX154BM	† Maxim	50
				x						x	x		x	x		MAX158BC	Maxim	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ±½LSB μS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
																		(Cont'd)
8	1/2	2	50	x						x	x		x	x		MAX158BE	Maxim	
				x						x	x		x	x		MAX158BM †	Maxim	
			80	x						x	x			x		AD7824C	Maxim	
				x						x	x			x		AD7824L	Maxim	
				x						x	x			x		AD7824U †	Maxim	5
				x						x	x			x		AD7828C	Maxim	
				x						x	x			x		AD7828L	Maxim	
				x						x	x			x		AD7828U †	Maxim	
			800	x				x					x		x	AM6108C	AMD	
		2.5	35 *	x							x			x		ADC0820B	National	10
			50 *	x			x	x					x	x		TLC0820BC	TI	
				x			x	x					x	x		TLC0820BM †	TI	
			75	x						x	x			x		MAX154 †	Maxim	
				x						x	x			x		MAX158 †	Maxim	
			650			x	x	x					x	x	x	ADC542B-8 †	HybridSys	15
						x	x	x					x	x	x	ADC542C-8	HybridSys	
			915			x							x	x	x	MN5140	MicroNet	
						x							x	x	x	MN5140H †	MicroNet	
					x								x	x	x	MN5141	MicroNet	
					x								x	x	x	MN5141H †	MicroNet	20
					x								x	x	x	MN5142	MicroNet	
					x								x	x	x	MN5142H †	MicroNet	
				x									x	x	x	MN5143	MicroNet	
				x									x	x	x	MN5143H †	MicroNet	
			1000	x										x		HS5150B	HybridSys	25
				x										x		HS5150C	HybridSys	
						x							x	x	x	MN5130	MicroNet	
						x							x	x	x	MN5130H †	MicroNet	
					x								x	x	x	MN5131	MicroNet	
					x								x	x	x	MN5131H †	MicroNet	30
					x								x	x	x	MN5132	MicroNet	
					x								x	x	x	MN5132H †	MicroNet	
				x									x	x	x	MN5133	MicroNet	
				x									x	x	x	MN5133H †	MicroNet	
				x	x	x							x	x	x	MN5150	MicroNet	35
		2.8	650			x	x	x					x	x	x	HSADC82	HybridSys	
		4	25	x										x		MAX160 †	Maxim	
		5	15 *								x					AD7575K	AD	
			30	x										x		MAX160C	Maxim	
				x										x		MAX160E	Maxim	
				x										x		MAX160M †	Maxim	40
			225	x	x								x	x		SSI6080BC	SiliconSys	
				x	x								x	x		SSI6080BM †	SiliconSys	
		6	15	x							x				x	ML2271B	MicroLinear	
				x						x	x				x	ML2272B	MicroLinear	45
				x						x	x				x	ML2274B	MicroLinear	
				x						x	x				x	ML2278B	MicroLinear	
			1000			x							x	x	x	**ADC5120**	**Intech (2799)**	
						x							x	x	x	**ADC5130**	**Intech (2799)**	
						x							x	x	x	**ADC5140**	**Intech (2799)**	50
						x							x	x	x	MN5120	MicroNet	
						x							x	x	x	MN5120H †	MicroNet	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int Ref.	Par. Out	Ser. Out	Device	Source	Line
																		(Cont'd)
8	1/2	6	1000		x								x	x	x	MN5121	MicroNet	
					x								x	x	x	MN5121H	† MicroNet	
					x								x	x	x	MN5122	MicroNet	
					x								x	x	x	MN5122H	† MicroNet	
				x									x	x	x	MN5123	MicroNet	5
				x									x	x	x	MN5123H	† MicroNet	
		9	4	x						x	x				x	TLC540	TI	
				x						x	x				x	TLC540M	† TI	
				x						x	x				x	TLC541M	† TI	
			125 *	x	x								x	x		ZN448E	Ferranti	10
				x	x								x	x		ZN448J	† Ferranti	
			125	x	x								x	x		SSI6051C	◊ SiliconSys	
				x	x								x	x		SSI6051M	◊† SiliconSys	
		10	11	x						x	x		x		x	**MC145040**	**◊ Motorola (2937)**	
		15		x									x	x		AD670A	AD	15
				x									x	x		AD670J	AD	
				x									x	x		AD670S	† AD	
			6.5 *	x						x	x			x		TLC532A	TI	
				x						x	x			x		TLC532M	† TI	
			15	x						x	x	x		x		SDA0808A	Siemens	20
				x						x	x	x		x		SDA0808B	Siemens	
			30	x	x		x						x			AD7574B	AD	
				x	x		x						x			AD7574K	AD	
				x	x		x						x			AD7574T	† AD	
				x	x		x						x	x		AD7574B	Maxim	25
				x	x		x						x	x		AD7574K	Maxim	
				x	x		x						x	x		AD7574T	† Maxim	
			125 *	x	x								x	x		ZN427E-8	Ferranti	
				x	x								x	x		ZN427J-8	† Ferranti	
			450	x	x	x	x	x						x		**PM7574A**	**† PMI (2973)**	30
				x	x	x	x	x						x		**PM7574E**	**PMI (2973)**	
				x	x	x	x	x						x		**PM7574G**	**PMI (2973)**	
		17	300	x										x		NE5034	Signetics	
		19	6*	x							x				x	TLC549	TI	
				x							x				x	TLC549M	† TI	35
		20	11	x						x	x		x		x	**MC145041**	**◊ Motorola (2937)**	
			25	x						x				x		MAX161	† Maxim	
		25	14	x						x	x			x		SI8601	Siliconix	
			35	x						x				x		MAX161C	Maxim	
				x						x				x		MAX161E	Maxim	40
				x						x				x		MAX161M	† Maxim	
		30	—	x									x			AD673J	AD	
				x									x			AD673S	† AD	
			6.5 *	x						x	x			x		TLC533A	TI	
				x						x	x			x		TLC533M	† TI	45
		30 Msps*																
			250 *	x										x		HA19209	Hitachi	
				x										x		HA19210	Hitachi	
		32		x						x	x				x	ADC0811	◊ National	
				x						x					x	ADC0838B	TI	
			15 *							x	x				x	ADC0811BC	National	50
										x	x				x	ADC0811BJ	† National	
			55	x						x	x			x		**MC14442**	**◊ Motorola (2937)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
																	(Cont'd)	
8	1/2	40	5 *	x	x									x	x	MP7570J	MicroPwr	
			10 *	x						x				x		ADC0844B	National	
			15	x						x				x		ADC0848B	National	
				x						x				x		ADC0848C	National	
			175 *	x	x								x	x		AD570J	AD	5
				x	x								x	x		AD570S	† AD	
				x	x								x	x		MCE570J	◊ MCE	
				x	x								x	x		MCE570S	◊† MCE	
		50 MHz		x												TDC1025	◊ TRW-LSI	
		60	15 *	x												ADC0841B	† National	10
		66.6	—	x												AD8581L	AD	
			40	x						x				x		AD7581C	◊ Maxim	
				x						x				x		AD7581L	◊ Maxim	
		70	2.5 *	x						x	x			x		SI520	Siliconix	
		75 MSPS																
			1000	x												**AD9012**	**◊ AD (2420)**	15
		80	10	x											x	**ADC0832**	**GoldStar (2700)**	
				x											x	ADC0831B	National	
				x											x	ADC0832B	National	
				x											x	ADC0833B	National	
				x											x	ADC0834B	National	20
				x											x	ADC0838B	National	
			875	x						x					x	ADC0832B	TI	
				x						x					x	ADC0834B	TI	
		100 *	15	x										x		**ADC0802**	**† GE/Intersil (2667)**	
				x										x		**ADC0802C**	**GE/Intersil (2667)**	25
				x										x		**ADC0803**	**† GE/Intersil (2667)**	
				x										x		**ADC0803C**	**GE/Intersil (2667)**	
				x										x		ADC0802	◊† National	
				x										x		ADC0802C	National	
				x										x		ADC0803C	National	30
		100	15	x						x				x		ADC0808	◊ National	
				x						x				x		ADC0816C	National	
		100 *	15	x										x		ADC0803M	TI	
		100	30	x						x				x		ADC0816	† National	
			70			x							x	x	x	**ADC830C**	**Datel (2575)**	35
							x						x	x	x	MN5065	MicroNet	
							x						x	x	x	MN5065H	† MicroNet	
						x							x	x	x	MN5066	MicroNet	
						x							x	x	x	MN5066H	† MicroNet	
			75							x					x	MB4052	Fujitsu	40
		100 *	875	x										x		ADC0802	† Signetics	
				x										x		ADC0802C	Signetics	
				x										x		ADC0803C	Signetics	
		100	875	x										x		ADC0803C	TI	
			900					x							x	MB40547-8	Fujitsu	45
		100 MSPS																
			1200	x		x		x				x				CX20116	Sony	
		150 MSPS		x								x				**HADC77100A**	**HoneywellSPT (2997, 2999)**	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Conversion Time ±½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
Binary Output																		**(Cont'd)**
8	1/2																	(Cont'd)
		200 MSPS	860	x		x		x				x				CXA1076K	Sony	
		256		x						x				x		ADC0829	National	
		300	15 *	x						x						L530	◊ SGS	
		300 MSPS	1500	x		x		x				x				CXA1176K	Sony	
		1250 *	20 *	x	x									x		4140	TeledyneP	5
				x	x									x		4142	TeledyneP	
		1800	20	x	x							x		x		**ADCEK8B**	**Datel (2575)**	
			25	x								x		x		TSC8700	TeledyneS	
				x								x		x		TSC8703	TeledyneS	
			50	x										x		**ADCET8BC**	**Datel (2575)**	10
	3/4	0.004	2200	x	x	x	x	x						x		**HADC77300B †**	**HoneywellSPT (2997)**	
		6	25	x	x									x		**ADC908A**	**† PMI (2963, 2973)**	
				x	x									x		**ADC908E**	**† PMI (2963, 2973)**	
				x	x									x		**ADC908G**	**PMI (2963, 2973)**	
		15	30	x	x		x						x			AD7574A	AD	15
				x	x		x						x			AD7574J	AD	
				x	x		x						x			AD7574S	† AD	
				x	x		x						x	x		AD7574A	Maxim	
				x	x		x						x	x		AD7574J	Maxim	
				x	x		x						x	x		AD7574S	† Maxim	20
				x	x		x						x			MP7574A	† MicroPwr	
				x	x		x						x			MP7574B	MicroPwr	
				x	x		x						x			MP7574J	MicroPwr	
				x	x		x						x			MP7574K	MicroPwr	
					x		x						x			MP7574T	MicroPwr	25
			450	x	x	x	x	x						x		**PM7574B**	**† PMI (2973)**	
				x	x	x	x	x						x		**PM7574F**	**PMI (2973)**	
				x	x	x	x	x						x		**PM7574H**	**PMI (2973)**	
		20 MSPS	420	x		x	x	x			x					**AD9048**	**AD (2421)**	
		66.6	—	x												AD7581K	AD	30
			40	x						x				x		AD7581B	◊ Maxim	
				x						x				x		AD7581K	◊ Maxim	
		116	15	x		x	x	x		x				x	x	ADC0808M	† TI	
	7/8	6	25	x	x									x		**ADC908B**	**† PMI (2963, 2973)**	
				x	x									x		**ADC908F**	**PMI (2963, 2973)**	35
				x	x									x		**ADC908H**	**PMI (2963, 2973)**	
		15	30	x	x		x						x			MP7574S	† MicroPwr	
	0.5	9.0		x												TLC545I	TI	
				x												TLC545M	† TI	
		17		x												TLC546I	TI	40
				x												TLC546M	† TI	
	0.75	25	2.5	8							X			X		Si8603	◊† Siliconix	
				8							x			x		Si8604	◊† Siliconix	
		100	1.5	x						x	x			x		TL0808	◊ TI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
8	0.75	100	30	x						x	x			x		ADC0808	◇† TI	
	1	0.0067	750	X										X		**AD9002**	**† AD (2418)**	
		0.05	300											x		HS9584L	HybridSys	
														x		HS9584U	† HybridSys	
				x										x		MP7684L	MicroPwr	5
				x										x		MP7684U	† MicroPwr	
		0.1	75	x										x		MP7683YJN	MicroPwr	
			160											x		HS9583YJ	HybridSys	
			300											x		HS9584J	HybridSys	
														x		HS9584S	† HybridSys	10
		0.10	300	x										x		MP7684S	† MicroPwr	
		0.15	1750			X							X	X		AD9502	† AD	
		0.2	75	x										x		MP7683XA	MicroPwr	
				x										x		MP7683XJ	MicroPwr	
				x										x		MP7683XS	MicroPwr	15
			160											x		HS9583XJ	HybridSys	
														x		HS9583XS	† HybridSys	
		0.35	130	x			x	x		x					x	ADC0831AC	TI	
				x			x	x		x					x	ADC0832AC	TI	
		1.2	75	x							x			x		TLC0820A	◇ TI	20
		1.5	75	x							x			x		ADC0820C	National	
				x	x	x	x	x			x					**PM0820B**	**◇† PMI (2973)**	
				x	x	x	x	x			x					**PM0820F**	**◇ PMI (2973)**	
				x	x	x	x	x			x					**PM0820H**	**◇ PMI (2973)**	
		1.6	40													AD7824K	AD	25
																AD7824T	† AD	
																AD7828K	AD	
																AD7828T	† AD	
			50	x							x			x		ADC0820CCD	Maxim	
				x							x			x		ADC0820CCN	Maxim	30
				x							x			x		ADC0820CD	† Maxim	
				x							x			x		AD7820B	Maxim	
				x							x			x		AD7820K	Maxim	
				x							x			x		AD7820T	† Maxim	
				x							x		x	x		MAX150CC	Maxim	35
				x							x		x	x		MAX150CE	Maxim	
				x							x		x	x		MAX150CM	† Maxim	
			75	x							x					AD7820K	AD	
				x							x					AD7820T	† AD	
		2	50	x						x	x		x	x		MAX154CC	Maxim	40
				x						x	x		x	x		MAX154CE	Maxim	
				x						x	x		x	x		MAX154CM	† Maxim	
				x						x	x		x	x		MAX158CC	Maxim	
				x						x	x		x	x		MAX158CE	Maxim	
				x						x	x		x	x		MAX158CM	† Maxim	45
			60	X							X		X	X		**AD7569**	**◇† AD (2428)**	
			80	x						x	x			x		AD7824B	Maxim	
				x						x	x			x		AD7824K	Maxim	
				x						x	x			x		AD7824T	† Maxim	
				x						x	x			x		AD7828B	Maxim	50
				x						x	x			x		AD7828K	Maxim	
				x						x	x			x		AD7828T	† Maxim	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ±LSB	Conversion Time ±½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
																	(Cont'd)	
8	1																	
		2.5	50 *	x			x	x					x	x		TLC0820AC	TI	
				x			x	x					x	x		TLC0820AM †	TI	
			1010		x										x	HS5131B †	HybridSys	
					x										x	HS5131C	HybridSys	
		5	15 *								x					AD7575J	AD	5
			225	x	x								x	x		SSI6080CC	SiliconSys	
				x	x								x	x		SSI6080CM †	SiliconSys	
		6	15	x							x				x	ML2271C	MicroLinear	
				x						x	x				x	ML2272C	MicroLinear	
				x						x	x				x	ML2274C	MicroLinear	10
				x						x	x				x	ML2278C	MicroLinear	
		8.3 ms	100 *		x	x	x	x	x	x	x				x	IR3K01	Sharp	
		9	125	x	x								x	x		**ADC847A**	**Datel (2575)**	
				x	x								x	x		ZN449E	Ferranti	
				x	x								x	x		ZN449J	Ferranti	15
				x	x								x	x		SSI6052C ◊	SiliconSys	
				x	x								x	x		SSI6052M ◊†	SiliconSys	
		10	15 *	x										x		**AD7576B**	**AD (2414)**	
				x										x		**AD7576K**	**AD (2414)**	
				x										x		**AD7576S †**	**AD (2414)**	20
		18	4	x						x	x				x	TLC541	TI	
		32		x						x					x	ADC0834A	TI	
				x						x					x	ADC0838A	TI	
			12.5	x						x					x	ADC0831C	National	
				x						x					x	ADC0832C	National	25
				x						x					x	ADC0833C	National	
				x						x					x	ADC0834C	National	
				x						x					x	ADC0838C	National	
			15 *							x	x				x	ADC0811CC	National	
										x	x				x	ADC0811CJ †	National	30
		40	12.5	x						x				x		ADC0844B	National	
		100 *	12.5	x										x		**ADC0804**	**† GE/Intersil (2667)**	
				x										x		**ADC0804C**	**GE/Intersil (2667)**	
				x										x		ADC0804C	National	
				x										x		ADC0804C	Signetics	35
		100	15	x						x				x		ADC0809C	National	
				x						x				x		ADC0817	National	
			160												x	MB4056	Fujitsu	
			875	x										x		ADC0805C	TI	
			900					x							x	MB40547-7	Fujitsu	40
		110 *	1.5 *	x							x			x		MSM5204 ◊	OKI	
		110	12.5	x										x		ADC0805C	National	
				x										x		ADC0805C	Signetics	
		112 *	15	x						x					x	µPD7001	NEC	
		114	15	x			x	x						x	x	ADC0804C	TI	45
		300	25												x	MB4063 ◊	Fujitsu	
		2000	6.5 *	x									›		x	**TC5091A**	**Toshiba (3308)**	
			300	x									›		x	**TC5090A**	**Toshiba (3308)**	
				x												**CA3318C**	**◊ GE/RCA (2651)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
8	1/2	0.0067	2200	x	x	x	x	x	x			x		x		**HADC77100 †**	**HoneywellSPT (2997, 2999)**	
		17	15	x							x				x	TLC548C	TI	
				x							x				x	TLC548M †	TI	
				x							x				x	TLC549C	TI	
	1/4	0.0067	2200	x	x	x	x	x	x			x		x		**HADC77200 †**	**HoneywellSPT (2997, 3000)**	5
	1.25	100	1.5	x						x	x			x		TL0809 ◊	TI	
			15	x						x	x			x		ADC0809 ◊	TI	
	1 1/4	4	300	x										x		µPD7003	NEC	
	1.5	0.04	x								x		x	x		**TDA5703**	**Signetics (3120)**	
	1 1/2	0.067	150 *	x											x	41051	GE/RCA	10
	1 7/8	66.6	40	x						x				x		AD7581A ◊	Maxim	
				x						x				x		AD7581J ◊	Maxim	
	2	10	15 *	x										x		**AD7576A**	**AD (2414)**	
				x										x		**AD7576J**	**AD (2414)**	
				x										x		**AD7576S †**	**AD (2414)**	15
		50	255	x										x		ADC0800P †	National	
				x										x		ADC0800PC	National	
		300	25							x	x	x			x	MB4053	Fujitsu	
8 (A/D and 10 D/A Video)	1/2	38.5 MHz	1200										x	x		KSV3100A	Samsung	
8 (analog to pulse width converter for microprocessor systems)	1/2	—	15 *							x						**MC14443**	**Motorola (2937)**	20
		32	50 *							x						**MC14447**	**Motorola (2937)**	
			75 *							x						µA9708C	Fairchild	
										x						µA9708M †	Fairchild	
		350	25 *	x						x	x					MB4053	Fujitsu	
8 (D/A, A/D, with counter)	1/2	500	150	x	x								x	x		ADCMC8BC	Datel	25
8 (video digital converter)	1/4	0.05	1000	x	x		x							x		TDC1046	TRW-LSI	
	1/2	—	400	x				x							x	**PNA7518**	**Signetics (3118)**	
		0.05		x										x		µPD6950	NEC	
			1320	x										x		TDC1048	TRW-LSI	
8 Video Flash Converter	1/2	0.05														**MC10319**	**Motorola (2937)**	30
9	1/2	0.03		x										x		THC1069 †	TRW-LSI	
		30 MSPS		x			x	x								TDC1049	TRW-LSI	
9 (Video A/D Converter)	1/2	15 MHz	4700	x				x								TDC1019 ◊	TRW-LSI	
		18 MHz	4700	x				x								TDC1019-1 ◊	TRW-LSI	
10	—	3	—										x			MAS1202 ◊	AD	35
		100		x												**CDP68HC68A1 ◊**	**GE/RCA (2651)**	
	—	100								x			x		x	CDP68H68	GE/RCA	
	1/2	0.01	4000	x	x	x	x	x	x					x		**HADC77600 †**	**HoneywellSPT (2997)**	
		0.05		x										x		TDC1020 ◊†	TRW-LSI	
		0.425	1700	x	x		x									**ADC510MC**	**Datel (2575)**	40
		0.45	1700	x	x		x									**ADC510MM †**	**Datel (2575)**	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

INTERFACE—Analog to Digital Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int Ref.	Par. Out	Ser. Out	Device	Source	Line
Binary Output																		**(Cont'd)**
																		(Cont'd)
10	1/2	0.65	1700	x	x		x									**ADC515MC**	**Datel (2575)**	
		0.7	1700	x	x		x									**ADC515MM †**	**Datel (2574)**	
		0.8		x									x	x	x	ADADC816	AD	
			3600	x	x			x					x	x	x	**ADC816MC ◊**	**Datel (2575)**	
				x	x			x					x	x	x	**ADC816MM ◊†**	**Datel (2574)**	5
		1	500 *	x	x								x	x	x	**ADC856C**	**Datel (2575)**	
				x	x								x	x	x	**ADC856M †**	**Datel (2575)**	
				x	x								x	x	x	ZN433BJ-10	Ferranti	
				x	x								x	x	x	ZN433CJ-10	Ferranti	
				x	x								x	x	x	ZN433J-10 †	Ferranti	10
			500	x	x								x	x	x	SSI6020C	SiliconSys	
				x	x								x	x	x	SSI6020M †	SiliconSys	
		1.4	1800 *			x	x						x			HAS1002 ◊	AD	
			3600	x	x			x					x	x	x	ADC826MC	Datel	
				x	x			x					x	x	x	**ADC826MM †**	**Datel (2574)**	15
		1.8	755 *	x	x								x	x	x	AD579B	AD	
				x	x								x	x	x	AD579K	AD	
				x	x								x	x	x	AD579T †	AD	
		2.2	755 *	x	x								x	x	x	AD579J	AD	
		5	1400 *			x	x	x					x	x	x	MN5240	MicroNet	20
		6	500	x	x								x	x		**ADC910 †**	**PMI (2973)**	
		8	1400 *			x	x	x					x	x	x	MNADC84-10 ◊	MicroNet	
						x	x	x					x	x	x	MNADC85-10 ◊†	MicroNet	
		10	1500			x	x	x					x	x	x	**ADC84K-10**	**Burr-Brown (2541)**	
			1800			x	x	x					x	x	x	ADADC85-10	AD	25
					x	x	x	x					x	x	x	**ADC85-10**	**Burr-Brown (2541)**	
		13	15													**CA3310A ◊**	**GE/RCA (2651)**	
		15	—	x									x			AD573K	AD	
				x									x			AD573S †	AD	
			15	x						x	x	x		x		SDA0810A	Siemens	30
				x						x	x	x		x		SDA0810B	Siemens	
			360	x	x								x	x		ZN501AJ	Ferranti	
				x	x								x	x		SSI6070M ◊†	SiliconSys	
		20		x									x		x	AD575K	AD	
			350 *	x	x								x	x	x	ZN432BJ-10	Ferranti	35
				x	x								x	x	x	ZN432CJ-10	Ferranti	
				x	x								x	x	x	ZN432E-10	Ferranti	
				x	x								x	x	x	ZN432J-10 †	Ferranti	
			380	x		x	x	x					x	x	x	ZN503AJ †	Ferranti	
				x		x	x	x					x	x	x	ZN504CJ	Ferranti	40
				x		x	x	x					x	x	x	ZN504E	Ferranti	
			500	x			x	x	x						x	LTC1090C	LinearTech	
				x			x	x	x						x	LTC1090M †	LinearTech	
				x			x	x	x	x					x	LTC1091C	LinearTech	
				x			x	x	x	x					x	LTC1091M †	LinearTech	45
		21	15	x			x	x		x	x	x			x	TLC1540M †	TI	
			800			x	x	x					x	x	x	ADADC80-15	AD	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
10	1/2	21	800			x	x	x					x	x	x	ADADC80Z-10	† AD	
		30	300	x	x								x	x		AD571K	AD	
		40	300	x	x									x	x	µA571KC	Fairchild	
		50	875	x										x		ADC1005	◊ National	
		80 *												x		AD7573K	AD	5
														x		AD7573T	† AD	
		120	5 *	x	x									x	x	MP7570L	MicroPwr	
		5000	20 *	x	x									x		4144	TeledyneP	
		6000	20	x	x							x		x		**ADCEK10B**	◊ **Datel** **(2575)**	
			25	x								x		x		TSC8701	TeledyneS	10
				x								x		x		TSC8704	TeledyneS	
			50	x										x		ADCET10BC	Datel	
	1	0.05	360	x									x			AC30110	Analogic	
		1	15	x						x				x		µPD7004	NEC	
		6	1100			x	x	x					x	x	x	ADADC84-10	AD	15
		13	15													**CA3310**	◊ **GE/RCA** **(2651)**	
		15	—	x									x			AD573J	AD	
			360	x	x								x	x		ZN502CJ	Ferranti	
				x	x								x	x		ZN502E	Ferranti	
				x	x								x	x		SSI6070C	◊ SiliconSys	20
		18.5	100	X							X			X		**AD7579**	**† AD** **(2415)**	
			100	X							X			X		**AD7580**	**† AD** **(2415)**	
		20		x									x		x	AD575J	AD	
				x									x		x	AD575S	† AD	
		21	15	x			x	x		x	x	x			x	TLC1541M	† TI	25
		30	300	x	x								x	x		AD571J	AD	
				x	x								x	x		AD571S	† AD	
				x	x								x	x		MCE571J	◊ MCE	
				x	x								x	x		MCE571S	◊† MCE	
		40	300	x	x									x	x	µA571JC	Fairchild	30
				x	x									x	x	µA571SM	Fairchild	
		80 *												x		AD7573J	AD	
														x		AD7573S	† AD	
		200	—	x										x		ADC1001C	◊ National	
				x										x		ADC1021C	National	35
	1 3/4	0.05	360	x	x									x		**ADC310**	**Datel** **(2572, 2575)**	
		0.08	8550	x	x						x		x	x		**ADCB310E**	**Datel** **(2575)**	
10 Plus Sign																		
	1/2	80	—	x	x		x							x	x	AD7571K	AD	
				x	x		x							x	x	AD7571T	† AD	
	1	80	—	x	x		x							x	x	AD7571J	AD	40
				x	x		x							x	x	AD7571S	† AD	
10 with anti-aliasing filter																		
	1	40 kHz		x										x	x	RT5640	EG&G-Reticon	
11	1	15	500	x	x								x	x		HS574J	HybridSys	
				x	x								x	x		HS574S	† HybridSys	
12		1/2	27.5	300				x	x		x			x		ML2233B	MicroLinear	45
		100		x						4				x		AD7582B	AD	
				x						4				x		AD7582K	AD	
				x						4				x		AD7582T	† AD	
	1/4	13	390			x	x						x	x	x	**ADC5211**	**‡ Intech** **(2799)**	
			590			x	x						x	x	x	ADC5210	‡ Intech	50

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	In. Ref.	Par. Out	Ser. Out	Device	Source	Line
Binary Output																		**(Cont'd)**
12	1/4	13	590															(Cont'd)
						x	x						x	x	x	ADC5213	‡ Intech	
						x	x						x	x	x	ADC5214	‡ Intech	
						x	x						x	x	x	ADC5215	‡ Intech	
						x	x						x	x	x	ADC5216	‡ Intech	
						x	x						x	x	x	ADC5217	‡ Intech	5
						x	x						x	x	x	**ADC5610**	**◇‡ Intech (2799)**	
						x	x						x	x	x	ADC5611	◇‡ Intech	
						x	x						x	x	x	ADC5612	◇‡ Intech	
						x	x						x	x	x	ADC5613	◇‡ Intech	
						x	x						x	x	x	ADC5614	◇‡ Intech	10
						x	x						x	x	x	ADC5615	◇‡ Intech	
						x	x						x	x	x	ADC5616	◇‡ Intech	
						x	x						x	x	x	ADC5617	◇‡ Intech	
		50	590			x	x						x	x	x	ADC5200	‡ Intech	
						x	x						x	x	x	ADC5201	‡ Intech	15
						x	x						x	x	x	ADC5202	‡ Intech	
						x	x						x	x	x	ADC5203	‡ Intech	
						x	x						x	x	x	ADC5204	‡ Intech	
						x	x						x	x	x	ADC5205	‡ Intech	
						x	x						x	x	x	ADC5206	‡ Intech	20
						x	x						x	x	x	ADC5207	‡ Intech	
		50 ms	215	x					x	x		x		x		MAX133	Maxim	
		50000 ms	215	x					x	x		x		x		MAX134	Maxim	
	1/2			x		x	x	x			x					**AD368**	**AD (2427)**	
		—	1500									x	x			MP2316	◇ Analogic	25
					x			x	x			x	x			MP2321	Analogic	
			2735	x	x			x		x	x		x	x		**DAS5712**	**Intech (2799)**	
		0.4	225										x			DAC4565S	Raytheon	
		0.5	1500	x	x								x	x		**ADC500MC**	**Datel (2571, 2575)**	
				x	x								x	x		**ADC505MM**	**† Datel (2575)**	30
				x	x								x	x		MN5247	† MicroNet	
			3000			x	x	x					x	x	x	**ADC6002**	**‡ Intech (2799)**	
		0.75	1750	x	x	x	x						x	x		**ADC520MC**	**Datel (2575)**	
				x	x	x	x						x	x		**ADC520MM**	**Datel (2574)**	
		0.77	2400	x	x	x	x				x		x	x		**ADS21AC**	**Datel (2571, 2575)**	35
		0.8	1900	x	x	x	x						x	x		**ADC508MC**	**Datel (2575)**	
				x	x	x	x						x	x		**ADC508MM**	**† Datel (2574)**	
		1		x												MN5246	† MicroNet	
			1500			x	x	x					x	x	x	MN5245A	MicroNet	
			2200	x							x			x		**AD9003**	**† AD (2419)**	40
				x							x			x		**ADC9003**	**† Intech (2799)**	
			2400	x	x	x	x				x		x	x		**ADS22AC**	**Datel (2571, 2575)**	
			2700			x	x	x					x	x	x	**ADC5246**	**‡ Intech (2799)**	
			2700			x	x	x					x	x	x	**ADC5245**	**‡ Intech (2799)**	
		1 MHz											x	x		AD375	AD	45
			3000	x	x			x			x			x		HAS1201K	AD	
				x	x			x			x			x		HAS1201S	† AD	
		1.5	950	x			x						x	x	x	ADC4450	ILC-DDC	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ±½LSB μS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
12	1/2	1.5	1800	x				x						x		HS9520B	HybridSys	
				x				x						x		HS9520K	HybridSys	
			2350 *		x	x							x	x	x	**ADC803B ◇**	**Burr-Brown (2541)**	
					x	x							x	x	x	**ADC803S ◇**	**Burr-Brown (2541)**	
		1.56	1800			x	x						x			HAS1202A	AD	5
		2	1000	x	x									x		**VC594J**	**VTC (3373)**	
				x	x									x		**VC594S †**	**VTC (3373)**	
			1800 *	x	x			x					x	x	x	ADH8516-12	ILC-DDC	
			1900	x	x			x					x	x	x	**ADC817MC ◇**	**Datel (2575)**	
				x	x			x					x	x	x	**ADC817MM ◇†**	**Datel (2574)**	10
			2700			x	x	x						x	x	**ADC810MC ◇**	**Datel (2575)**	
						x	x	x						x	x	**ADC810MM ◇†**	**Datel (2574)**	
			2850	x							x				x	**HAS1204**	**AD (2422)**	
			3050			x	x	x	x					x	x	ADC00404-102	† ILC-DDC	
		2.2	1800 *			x	x						x			HAS1202	AD	15
		3	775 *	x	x								x	x		AD578L	AD	
				x	x								x	x	x	AD578L	Maxim	
			775	x	x								x	x	x	AD578T	† Maxim	
			1900	x	x			x					x	x	x	**ADC827MC**	**Datel (2575)**	
				x	x			x					x	x	x	**ADC827MM †**	**Datel (2574)**	20
		4	1550			x	x	x			x		x	x	x	**ADC6010 †**	**Intech (2799)**	
			2700			x	x	x						x	x	**ADC811MC ◇**	**Datel (2575)**	
						x	x	x						x	x	**ADC811MM ◇†**	**Datel (2574)**	
		4.5	755 *	x	x								x	x	x	AD578K	AD	
			775 *	x	x								x	x	x	AD578K	Maxim	25
			775	x	x								x	x	x	AD578S	† Maxim	
			875 *	x		x	x	x							x	AD578T	† AD	
		5	100 *										x			**AD7572K**	**AD (2413)**	
													x			**AD7572T †**	**AD (2413)**	
			215	x									x	x		AD7572	† Maxim	30
			1100			x	x	x					x	x	x	AD5240K	AD	
						x	x	x					x	x	x	AD5240S	AD	
						x	x	x					x	x	x	AD5240ZK	AD	
						x	x	x					x	x	x	AD5240ZS	† AD	
			1120		x								x	x		HS9342B	† HybridSys	35
					x								x	x		HS9342C	HybridSys	
		6	775 *	x	x								x	x	x	AD578J	AD	
				x	x								x	x	x	AD578J	Maxim	
			875 *	x		x	x	x							x	AD578S	† AD	
		6.5	2275	x	x					x	x		x	x		ADAM812	Analogic	40
		7											x	x		**HI774AKD-5**	**Harris (2738, 2746, 2748)**	
													x	x		**HI774ALD-5**	**Harris (2738, 2746, 2748)**	
		8	1400 *			x	x	x					x	x	x	MNADC84-12 ◇	MicroNet	
						x	x	x					x	x	x	MNADC85-12 ◇	MicroNet	
						x	x	x					x	x	x	MNADC87 ◇	MicroNet	45

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ±LSB	Conversion Time ±½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
																	(Cont'd)	
12	1/2	8	1500			x	x	x					x	x	x	**ADC87/883B †**	**Burr-Brown (2541, 2543)**	
						x	x	x					x	x	x	**ADC87U**	**Burr-Brown (2541, 2543)**	
			2000			x	x	x					x	x	x	ADCHZ12BGC	Datel	
						x	x	x					x	x	x	**ADCHZ12BMM †**	**Datel (2574)**	
		9	2150			x	x				x		x	x	x	ADCHS12BMC	Datel	5
						x	x				x		x	x	x	**ADCHS12BMM †**	**Datel (2574)**	
		9 *	2845	x	x					x	x		x	x		**HDAS16MC**	**Datel (2577)**	
				x	x					x	x		x	x		**HDAS8MC**	**Datel (2577)**	
		10		x		x	x	x						x	x	**AD7672**	**AD (2416)**	
			745			x	x	x					x	x	x	**ADC84 †**	**Intech (2799)**	10
						x	x	x					x	x	x	**ADC85 †**	**Intech (2799)**	
					x	x	x	x					x	x	x	**ADC87 †**	**Intech (2799)**	
			1100			x	x	x					x	x	x	ADADC84-12	AD	
						x	x	x					x	x	x	ADC85-12	Datel	
			1200			x	x	x					x	x	x	HSADC85B †	HybridSys	15
						x	x	x					x	x	x	HSADC85C	HybridSys	
			1550			x	x	x					x	x	x	**ADC84K-12**	**Burr-Brown (2541)**	
			1800			x	x	x					x	x	x	ADADC85-12	AD	
						x	x	x					x	x	x	**ADC85-12**	**Burr-Brown (2541)**	
			2000	x	x					x	x		x	x		HS9403B ◇†	HybridSys	20
				x	x					x	x		x	x		HS9403C ◇	HybridSys	
		12	85	x		x	x	x								**ADC9012A †**	**PMI (2973)**	
				x		x	x	x								**ADC9012E**	**PMI (2973)**	
				x		x	x	x								**ADC9012G**	**PMI (2973)**	
			720			x	x	x					x	x	x	**ADC674A †**	**Intech (2799)**	25
		13				x	x									**ADC5212**	**Intech (2799)**	
			744			x	x							x	x	ADC5213 ◇	Datel	
						x	x							x	x	ADC5213H ◇†	Datel	
						x	x							x	x	**ADC5214 ◇**	**Datel (2575)**	
						x	x							x	x	**ADC5214H ◇†**	**Datel (2574)**	
						x	x							x	x	**ADC5215 ◇**	**Datel (2575)**	30
						x	x							x	x	**ADC5215H ◇†**	**Datel (2574)**	
			745	x										x	x	MN5213 ◇	MicroNet	
				x										x	x	MN5213H ◇†	MicroNet	
							x							x	x	MN5214 ◇	MicroNet	35
							x							x	x	MN5214H ◇†	MicroNet	
							x							x	x	MN5215 ◇	MicroNet	
							x							x	x	MN5215H ◇†	MicroNet	
			913			x	x	x						x	x	MN5610 ◇†	MicroNet	
			915			x	x						x	x	x	ADC5210 ◇	Datel	40
						x	x						x	x	x	ADC5210H ◇†	Datel	
						x	x						x	x	x	**ADC5211 ◇**	**Datel (2575)**	
						x	x						x	x	x	**ADC5211H ◇†**	**Datel (2574)**	
						x	x						x	x	x	**ADC5212 ◇**	**Datel (2575)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
12	1/2	13	915														(Cont'd)	
						x	x						x	x	x	**ADC5212H ◇†**	**Datel (2574)**	
						x	x						x	x	x	**ADC5216 ◇**	**Datel (2575)**	
						x	x							x	x	**ADC5216H ◇†**	**Datel (2574)**	
						x	x						x	x	x	MN5210 ◇	MicroNet	
						x	x						x	x	x	MN5210H ◇†	MicroNet	5
						x	x						x	x	x	MN5211 ◇	MicroNet	
						x	x						x	x	x	MN5211H ◇†	MicroNet	
						x	x						x	x	x	MN5212 ◇	MicroNet	
						x	x						x	x	x	MN5212H ◇†	MicroNet	
						x	x						x	x	x	MN5216 ◇	MicroNet	10
						x	x						x	x	x	MN5216H ◇†	MicroNet	
						x	x						x			TP5210	TeledyneP	
						x	x						x			TP5211	TeledyneP	
						x	x						x			TP5211-HR †	TeledyneP	
						x	x						x			TP5212	TeledyneP	15
						x	x						x			TP5212-HR †	TeledyneP	
						x	x									TP5213	TeledyneP	
						x	x									TP5213-HR †	TeledyneP	
						x	x									TP5214	TeledyneP	
						x	x									TP5214-HR †	TeledyneP	20
						x	x									TP5215	TeledyneP	
						x	x									TP5215-HR †	TeledyneP	
						x	x						x			TP5216	TeledyneP	
						x	x						x			TP5216-HR †	TeledyneP	
						x	x									TP5217	TeledyneP	25
						x	x									TP5217-HR †	TeledyneP	
			1000				x						x	x	x	AD5211B	AD	
							x						x	x	x	AD5211T †	AD	
							x						x	x	x	AD5212B	AD	
							x						x	x	x	AD5212T †	AD	30
							x							x	x	AD5214B	AD	
							x							x	x	AD5214T †	AD	
							x							x	x	AD5215B	AD	
							x							x	x	AD5215T	AD	
		15		x	x		x	x					x	x	x	**AD674S †**	**AD (2411)**	35
				x	x		x	x					x	x	x	**AD674T †**	**AD (2411)**	
				x	x		x	x					x	x	x	**AD674U †**	**AD (2411)**	
			500	x	x								x	x		HS574K	HybridSys	
				x	x								x	x		HS574L	HybridSys	
			720	x	x								x	x		ADC674AK	Burr-Brown	40
				x	x								x	x		ADC674AT †	Burr-Brown	
		20													x	**ADC804 ◇**	**Burr-Brown (2541)**	
			595												x	**ADC804S ◇†**	**Burr-Brown (2541)**	
			720										x			**ADC574A †**	**Intech (2799)**	
			2000			x	x	x					x	x	x	ADCHX12BGC	Datel	45
						x	x	x					x	x	x	**ADCHX12BMM †**	**Datel (2574)**	
		25	720	x	x								x	x		**ADC574AK**	**Datel (2575)**	
				x	x								x	x		**ADC574AL**	**Datel (2575)**	
			725	x	x								x		x	AD574AK	AD	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref	Par. Out	Ser. Out	Device	Source	Line
12	1/2	25	725	x	x								x	x		MN574A	† MicroNet	
			780	x	x								x	x		**ADC574AK**	**Burr-Brown (2541)**	
				x	x								x	x		**ADC574AS**	**† Burr-Brown (2541)**	
			800			x	x	x					x	x	x	ADADC80-12	AD	
						x	x	x					x	x	x	ADADC80Z-12	† AD	5
			925	x	x			x					x	x	x	AD572A	AD	
				x	x			x					x	x	x	AD572B	AD	
				x	x			x					x	x	x	AD572S	† AD	
			950 *			x	x	x					x	x	x	**ADC80A-12**	**Burr-Brown (2541)**	
			950			x	x	x					x	x	x	MNADC80	MicroNet	10
		27.5	300					x	x	x	x		x	x		ML2200B	MicroLinear	
								x	x		x			x		ML2230B	MicroLinear	
		30	750	x	x								x	x		HS574AK	HybridSys	
				x	x								x	x		HS574AL	HybridSys	
				x	x								x	x		HS574ATB	† HybridSys	15
				x	x								x	x		HS574AUB	† HybridSys	
			780	x	x								x		x	AD574AT	† AD	
				x	x								x		x	AD574K	AD	
				x									x		x	AD574L	AD	
				x	x								x		x	AD574S	† AD	20
				x	x								x		x	AD574T	† AD	
				x									x		x	AD574U	† AD	
			800	x	x						x		x	x		HS9474K	HybridSys	
				x	x						x		x	x		HS9474TB	† HybridSys	
			1100	x	x					x	x		x	x		HS9410K	HybridSys	25
				x	x					x	x		x	x		HS9410TB	† HybridSys	
			1340	x	x					x	x		x	x		HS9408K	HybridSys	
				x	x					x	x		x	x		HS9408TB	† HybridSys	
			1520	x	x					x	x		x	x		HS9404K	◊ HybridSys	
				x	x					x	x		x	x		HS9404TB	◊† HybridSys	30
		35	620	x	x								x		x	AD574ZL	AD	
				x	x								x		x	AD574ZS	† AD	
				x	x								x		x	AD574ZT	† AD	
				x	x								x		x	AD574ZU	† AD	
			3000			x	x	x					x	x	x	**ADC6001**	**‡ Intech (2799)**	35
		50	725	x									x	x	x	AD5201B	AD	
				x									x	x	x	AD5201T	† AD	
				x									x	x	x	AD5202B	AD	
				x									x	x	x	AD5202T	† AD	
				x										x	x	AD5204T	† AD	40
				x										x	x	AD5205B	AD	
				x										x	x	AD5205T	† AD	
			745	x										x	x	MN5203	◊ MicroNet	
				x										x	x	MN5203H	◊† MicroNet	
							x							x	x	MN5204	◊ MicroNet	45
							x							x	x	MN5204H	◊† MicroNet	
							x							x	x	MN5205	◊ MicroNet	
							x							x	x	MN5205H	◊† MicroNet	
			770	x	x			x					x	x	x	**ADC10HT**	**† Burr-Brown (2541)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ±LSB	Conversion Time ±½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
12	1/2	50	915	x									x	x	x	MN5200	◊ MicroNet	
				x									x	x	x	MN5200H	◊† MicroNet	
							x						x	x	x	MN5201	◊ MicroNet	
							x						x	x	x	MN5201H	◊† MicroNet	
							x						x	x	x	MN5202	◊ MicroNet	5
							x						x	x	x	MN5202H	◊† MicroNet	
						x							x	x	x	MN5206	◊ MicroNet	
						x							x	x	x	MN5206H	◊† MicroNet	
		175	80			x							x	x		HS5250C	HybridSys	
							x						x	x		HS5251C	HybridSys	10
							x						x	x		HS5252C	HybridSys	
						x							x	x		HS5253C	HybridSys	
				x									x	x	x	MN5250	MicroNet	
				x									x	x	x	MN5250H	† MicroNet	
							x						x	x	x	MN5251	MicroNet	15
							x						x	x	x	MN5251H	† MicroNet	
							x						x	x	x	MN5252	MicroNet	
							x						x	x	x	MN5252H	† MicroNet	
						x							x	x	x	MN5253	MicroNet	
						x							x	x	x	MN5253H	† MicroNet	20
		250	311													MN5700	MicroNet	
		300	112	x	x			x					x	x	x	ADCHC12BMC	Datel	
				x	x			x					x	x	x	**ADCHC12BMM †**	**Datel (2574)**	
		5000	15	x										x		µPD7002	NEC	
		20000	20	x	x									x		4145	TeledyneP	25
		24000	20	x	x							x		x		**ADCEK12B ◊**	**Datel (2575)**	
			25	x								x		x		TSC8702	TeledyneS	
				x								x		x		TSC8705	TeledyneS	
		100000	20	x					x			x	x	x		**ICL7109 ◊**	**GE/Intersil (2667)**	
				x					x			x	x	x		ICL7109 ◊†	Maxim	30
				x								x	x	x	x	TSC7109BC	TeledyneS	
				x					x			x	x	x	x	TSC7109C	TeledyneS	
				x					x			x	x	x	x	TSC7109M	† TeledyneS	
	3/4	1.5	2350 *		x	x							x	x	x	**ADC803C ◊**	**Burr-Brown (2541)**	
		25	705	x		x	x	x			x			x	x	**ADC80MAH-12**	**Burr-Brown (2541)**	35
		200	210	x										x	x	ADC1210	† National	
				x										x	x	ADC1210C	National	
	1	—	500						x			x		x		**ADC7109**	**Datel (2575)**	
		0.5	4300	x	x		x	x	x		x	x			x	ADC00300	† ILC-DDC	
		1.5	3050			x	x	x					x	x	x	ADC00403-103	† ILC-DDC	40
						x	x	x					x	x	x	ADC00403-203	ILC-DDC	
						x	x	x					x	x	x	ADC00404-103	† ILC-DDC	
						x	x	x					x	x	x	ADC00404-203	ILC-DDC	
		2	2700	x	x			x					x	x	x	ADH8516-11	ILC-DDC	
		5	100 *										x			**AD7572J**	**AD (2413)**	45
													x			**AD7572S**	**† AD (2413)**	
		7											x	x		**HI774AJD-5**	**Harris (2738, 2746, 2748)**	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ±LSB	Conversion Time ±½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
12	1	7											x	x		**HI774ASD-2**	**Harris (2738, 2746, 2748)**	
													x	x		**HI774ATD-2**	**Harris (2738, 2746, 2748)**	
		10	600	x				x					x	x		AM6112	AMD	
		12	85	x		x	x	x								**ADC9012B †**	**PMI (2973)**	
				x		x	x	x								**ADC9012F**	**PMI (2973)**	5
				x		x	x	x								**ADC9012H**	**PMI (2973)**	
		15	500	x	x								x	x		HS574T †	HybridSys	
				x	x								x	x		HS574U †	HybridSys	
			720	x	x								x	x		ADC674AJ	Burr-Brown	
				x	x								x	x		ADC674AS †	Burr-Brown	10
				x	x								x	x		**HI674AJD-5**	**Harris (2703, 2738, 2745, 2748)**	
				x	x								x	x		**HI674ASD-2 †**	**Harris (2703, 2738, 2745, 2748)**	
				x	x								x	x		**HI674ASD/883 †**	**Harris (2703, 2738, 2745, 2748)**	
			850	x									x	x		HY9674J	Harris	
		25	720	x	x								x	x		**ADC574AJ**	**Datel (2575)**	15
				x	x								x	x		**HI574AJD-5**	**Harris (2703, 2738, 2744, 2748)**	
				x	x								x	x		**HI574ASD-2 †**	**Harris (2703, 2738, 2744, 2748)**	
				x	x								x	x		**HI574ASD/883 †**	**Harris (2703, 2738, 2744, 2748)**	
				x	x								x	x		TP574AJ	TeledyneP	
				x	x								x	x		TP574AS †	TeledyneP	20
			725	x	x								x			AD574AJ	AD	
				x	x								x			AD574AS †	AD	
			750	x	x								x	x		MP574J	MicroPwr	
				x	x								x	x		MP574S †	MicroPwr	
			780	x	x								x	x		**ADC574AJ**	**Burr-Brown (2541)**	25
				x	x								x	x		**ADC574AT †**	**Burr-Brown (2541)**	
		27.5	300					x	x	x	x		x	x		ML2200C	MicroLinear	
								x	x		x			x		ML2230C	MicroLinear	
								x	x		x			x		ML2233C	MicroLinear	
		30	750	x	x								x	x		HS574AJ	HybridSys	30
				x	x								x	x		HS574ASB †	HybridSys	
			780	x	x								x		x	AD574J	AD	
			800	x	x						x		x	x		HS9474J	HybridSys	
				x	x						x		x	x		HS9474S †	HybridSys	
				x	x						x		x	x		HS9474SB †	HybridSys	35
				x	x						x		x	x		HS9474T †	HybridSys	
			1100	x	x					x	x		x	x		HS9410J	HybridSys	
				x	x					x	x		x	x		HS9410SB †	HybridSys	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ±LSB	Conversion Time ±½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
																	(Cont'd)	
12	1	30	1340	x	x					x	x		x	x		HS9408J	HybridSys	
				x	x					x	x		x	x		HS9408SB	† HybridSys	
			1520	x	x					x	x		x	x		HS9404J	◊ HybridSys	
				x	x					x	x		x	x		HS9404SB	◊† HybridSys	
		35	620	x	x								x		x	AD574ZJ	AD	5
				x	x								x		x	AD574ZK	AD	
		50	725	x										x	x	AD5204B	AD	
		100											x			AD7578K	AD	
													x			AD7578T	† AD	
		175	80			x							x	x		HS5250B	† HybridSys	10
							x						x	x		HS5251B	† HybridSys	
							x						x	x		HS5252B	† HybridSys	
						x							x	x		HS5253B	† HybridSys	
	1/2	15	150	x	x				x		x	x	x	x		**HADC674Z**	**† HoneywellSPT (2997, 2999)**	
			720	x	x								x	x		**HI674AKD-5**	**Harris (2703, 2738, 2745, 2748)**	15
				x	x								x	x		**HI674AL**	**Harris (2703, 2738, 2745, 2748)**	
				x	x								x	x		**HI674ATD-2**	**† Harris (2703, 2738, 2745, 2748)**	
				x	x								x	x		**HI674ATD/883**	**† Harris (2703, 2738, 2745, 2748)**	
		25	150	x	x				x		x	x	x	x		**HADC574Z**	**† HoneywellSPT (2998, 3000)**	
			720	x	x								x	x		**HI574AKD-5**	**Harris (2703, 2738, 2744, 2748)**	20
				x	x								x	x		**HI574ALD-5**	**Harris (2703, 2738, 2744, 2748)**	
				x	x								x	x		**HI574ATD-2**	**† Harris (2703, 2738, 2744, 2748)**	
				x	x								x	x		**HI574ATD/883**	**† Harris (2703, 2738, 2744, 2748)**	
				x	x								x	x		**HI574AUD-2**	**† Harris (2703, 2738, 2744, 2748)**	
				x	x								x	x		**HI574AUD-8**	**† Harris (2703, 2738, 2744, 2748)**	25
				x	x								x	x		TP574AK	TeledyneP	
				x	x								x	x		TP574AT	† TeledyneP	
				x	x								x	x		TP574AU	† TeledyneP	
			750	x	x								x	x		MP574K	MicroPwr	
				x	x								x	x		MP574L	MicroPwr	30
				x	x								x	x		MP574T	† MicroPwr	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Conversion Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
Binary Output																		**(Cont'd)**
12	1/2	25	750	x	x								x	x		MP574U	† MicroPwr	
	1 1/2	2400	50	x										x		ADCET12BC	Datel	
	2	200	210	x										x	x	ADC1211	† National	
				x										x	x	ADC1211C	National	
	4	21	950 *			x	x	x					x	x	x	**ADC80A-10**	**Burr-Brown (2541)**	5
12 Plus Sign																		
	—	160 ms	—	x												AD7552	AD	
	1/2	100 *	15 *					x						x		ADC1205BC	National	
								x						x		ADC1205BC-1	National	
								x						x		ADC1225BC	National	
								x						x		ADC1225BC-1	National	10
								x						x		TLC1205M	† TI	
								x						x		TLC1225M	† TI	
	1	100 *	15 *					x						x		ADC1205CC	National	
								x						x		ADC1205CC-1	National	
								x						x		ADC1225CC	National	15
								x						x		ADC1225CC-1	National	
12 (2 device set)																		
	1/2	15	785	x									x	x	x	HS5210B	† HybridSys	
				x									x	x	x	HS5210C	HybridSys	
				x									x	x	x	HS5211B	† HybridSys	
				x									x	x	x	HS5211C	HybridSys	20
				x									x	x	x	HS5212B	† HybridSys	
				x									x	x	x	HS5212C	HybridSys	
				x										x	x	HS5213B	† HybridSys	
				x										x	x	HS5213C	HybridSys	
				x										x	x	HS5214B	† HybridSys	25
				x										x	x	HS5214C	HybridSys	
				x										x	x	HS5215B	† HybridSys	
				x										x	x	HS5215C	HybridSys	
				x									x	x	x	HS5216B	† HybridSys	
				x									x	x	x	HS5216C	HybridSys	30
		250000	40	x					x			x	x	x		**ICL7104-12**	**GE/Intersil (2667)**	
			360	x					x			x	x	x		**ICL8052A**	**GE/Intersil (2667)**	
12 (3-Digit BCD)																		
	1/4	1200	20									x		x		ADCEK12DC	◊ Datel	
	1	6000 *	50									x	x		x	AD2020	AD	
13	1/2	10	2400	x				x					x	x	x	MP2713C	Analogic	35
		40000 *	64					x						x		MP7550B	MicroPwr	
			72					x				x		x	x	AD7550B	AD	
13 (D/A, A/D)																		
	1/2	30		x												**MC145402**	◊ **Motorola (2938)**	
14	1/2		2735	x	x			x		x	x		x	x		**DAS5714**	**Intech (2799)**	
		7	2000	x				x					x	x		MP2734	Analogic	40
		10	2400	x				x					x	x	x	MP2714C	Analogic	
				x				x					x	x	x	**ADC2714**	**Intech (2799)**	
			3000	x	x			x					x	x	x	MP8014	Analogic	
		16	150 *	x	x	x	x	x			x		x			CS5014	Crystal	
		40		x										x		**ICL7115**	◊ **GE/Intersil (2667)**	45
		50	1100	x	x			x			x		x	x		AD/AM-824	Analogic	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ±LSB	Conversion Time ±½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref.	Par. Out	Ser. Out	Device	Source	Line
14	1/2																(Cont'd)	
		60	800	x	x			x			x		x	x		AD/AM-834	Analogic	
		125 kHz									x					HAS1409	AD	
		250	300				x						x	x	x	MN5260	MicroNet	
	1/2	—	—	x	x								x		x	TDA1534	Signetics	
14 (2 device set)																		
	1/2	250000	40	x					x			x	x	x		**ICL7104-14**	**GE/Intersil (2667)**	5
			360	x					x			x	x	x		**ICL8052A**	**GE/Intersil (2667)**	
14 (3 1/2-Digit BCD)																		
	1/2	10000	20											x		4146	TeledyneP	
15	1/2	5	1750				x						x	x		MP2735-2	Analogic	
		6.8	1750				x				x		x	x		**ADC2735**	**Intech (2799)**	
		8	1750				x				x		x	x		MP2735-1	Analogic	10
		15	3000	x	x			x					x	x	x	MP8015	Analogic	
		50	1100	x	x			x			x		x	x		AD/AM-825	Analogic	
		60	800	x	x			x			x		x	x		AD/AM-835	Analogic	
	1	400 ms	20	x			x	x								**ADC800**	**Datel (2575)**	
	2	400000	20	x					x						x	TSC800C	TeledyneS	15
16	1/2		2735	x	x			x		x	x		x	x		**DAS5716**	**Intech (2799)**	
		2			x		x				x			x		ADC-1600-2	Intech	
			3500	x	x			x			x		x	x		AD/AM-826	Analogic	
		4			x		x				x			x		**ADC1600**	**Intech (2799)**	
		8	3000	x	x			x					x	x	x	**A8016-8**	**Intech (2799)**	20
		10	1400 *	x						x				x		HS9588	HybridSys	
			3000	x	x			x					x	x	x	**A8016-10**	**Intech (2799)**	
		15	950	x		x								x		HS9576	HybridSys	
		16	3000	x	x			x					x	x	x	**A8016-16**	**Intech (2799)**	
		20	3000	x	x			x					x	x	x	**A8016**	**Intech (2799)**	25
		32	3000	x	x			x					x	x	x	MP8016	Analogic	
		100	1200	x	x			x						x		HS9516-4	HybridSys	
				x				x					x	x		HS9516B-6	† HybridSys	
				x				x					x	x		HS9516C-6	HybridSys	
		3000	750									x	x		x	MP2344	Analogic	30
	3/4	1.5	3350	x	x								x	x		AB3-16-XX	Analogic	
			4100	x	x						x		x	x		AB4-16-XX	Analogic	
	1	2MSPS	200 *	x	x									x		CS5316	Crystal	
		16	120 *	x	x						x			x		CS5016	Crystal	
	1 *	17	1550			x	x	x					x	x	x	**PCM75K**	**Burr-Brown (2541)**	35
	1	22	725					x				x			x	AC30116	Analogic	
		35	1000	x	x								x	x	x	**ADC5290**	† **Intech (2799)**	
				x	x								x	x	x	**ADC5291**	† **Intech (2799)**	
		50	—	x		x	x	x						x	x	ADADC71K	AD	
				x		x	x	x						x	x	ADADC72K	AD	40
		100	1200	x	x			x						x		HS9516-5	HybridSys	
				x				x					x	x		HS9516B-5	† HybridSys	
				x				x					x	x		HS9516C-5	HybridSys	
	2	14	645	x	x	x	x	x					x	x	x	**AD1376**	**AD (2412)**	
		15 (14B)		x									x	x	x	AD376K	AD	45
		17	900			x	x						x	x	x	**ADC76K**	**Burr-Brown (2541)**	
	2 *	17	1550			x	x	x					x	x	x	**PCM75J**	**Burr-Brown (2541)**	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int. Ref.—Internal Reference
Mux. In—Multiplexed Inputs
S&H—Sample and Hold
Par. Out—Parallel Output
Ser. Out—Serial Output

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Binary Output (Cont'd)

Bits Res.	Linearity Error ±LSB	Conversion Time ±½LSB µS	Power Dis. mW (max.)	Bin. Output	Off. Bin. Output	Compl. Bin. Output	Compl. Off. Bin. Output	CTC or 2's Compl. Output	Sign. Magn. Output	Mux. In.	S&H	Integrating	Int. Ref	Par. Out	Ser. Out	Device	Source	Line
16	2	35	1600	x	x			x					x			**ADC1140**	**Intech (2799)**	
		40	1000			x	x	x					x	x	x	MN5290	† MicroNet	
						x	x	x					x	x	x	MN5291	† MicroNet	
		50	—	x		x	x	x						x	x	ADADC71J	AD	
				x		x	x	x						x	x	ADADC72J	AD	5
			1550 *			x	x	x					x	x	x	**ADC71K**	**Burr-Brown (2541)**	
						x	x	x					x	x		**ADC72B**	**Burr-Brown (2541)**	
		60	200			x	x	x					x	x	x	MN5284	MicroNet	
		100	1200	x	x			x						x		HS9516-6	HybridSys	
				x				x					x	x		HS9516B-4	† HybridSys	10
				x				x					x	x		HS9516C-4	HybridSys	
	4	2.5	8000					x					x	x		ADC974	Datel	
		15 (14B)		x									x	x	x	AD376J	AD	
		17	900			x	x						x	x	x	**ADC76A**	**Burr-Brown (2541)**	
						x	x						x	x	x	**ADC76J**	**Burr-Brown (2541)**	15
		50	1440			x	x	x					x	x	x	MN5282	MicroNet	
			1550 *			x	x	x					x	x		**ADC72A**	**Burr-Brown (2541)**	
						x	x	x					x	x		**ADC72J**	**Burr-Brown (2541)**	
						x	x	x					x	x		**ADC72K**	**Burr-Brown (2541)**	
			1800 *			x	x	x					x	x	x	**ADC71J**	**Burr-Brown (2541)**	20
		100	1440			x	x	x					x	x	x	MN5280	MicroNet	
16 (2 device set)	1/2	250000	40	x					x			x	x	x		**ICL7104-16**	**GE/Intersil (2667)**	
			360	x					x			x	x	x		**ICL8052A**	**GE/Intersil (2667)**	
17	1/2	400	1550						x			x	x	x		MP8037	Analogic	
20 Floating Point	512	3														MN5420	MicroNet	25

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Analog to Digital Converters (Cont'd)

Decimal Output

Digits	Device	Source	Line
LCD Bargraph Output, 2.5% Resolution	TSC826	◊ TeledyneS	
Dual Slope, Integrating, Analog Subsystem	TSC500	◊ TeledyneS	
3 1/2 Digit LDC Display Drive, Autoranging	TSC815	◊ TeledyneS	
3 Digits, Dual Slope, 2 Device Sets	**CA3161**	**GE/RCA (2653)**	
	CA3162	**GE/RCA (2651)**	5
	CA3162A	**GE/RCA (2651)**	
3 1/2 Digit LCD	**GL7136**	**GoldStar (2700)**	
3 1/2 Digits	TSC8750	TeledyneS	
3 1/2 Digits, Auto-Ranging	TSC805	◊ TeledyneS	
3 1/2 Digits, Drives LCD DVM Display	ZN450	Ferranti	10
	ZN451	Ferranti	
3 1/2 Digits, Integrating	**ICL7106**	◊ **GE/Intersil (2666)**	
	ICL7107	**GE/Intersil (2666)**	
	ICL7116	◊ **GE/Intersil (2666)**	15
	ICL7117	◊ **GE/Intersil (2666)**	
	ICL7126	◊ **GE/Intersil (2666)**	
	ICL7136	**GE/Intersil (2666)**	
	ICL7137	**GE/Intersil (2666)**	
	ICL7106	◊ Maxim	
	ICL7107	◊ Maxim	20
	ICL7116	◊ Maxim	
	ICL7117	◊ Maxim	
	ICL7126	◊ Maxim	
	ICL7136	◊ Maxim	
	MP7138	MicroPwr	25
	MP7138A	MicroPwr	
	MC14433	**Motorola (2937)**	
	ADC3511	National	
	ADD3501	National	
	KS7126	Samsung	30
	TSC14433	◊ TeledyneS	
	TSC14433A	◊ TeledyneS	
	TSC14433B	◊ TeledyneS	
	TSC7106	◊ TeledyneS	
	TSC7106A	TeledyneS	35
	TSC7107	TeledyneS	
	TSC7107A	TeledyneS	
	TSC7116	◊ TeledyneS	
	TSC7116A	TeledyneS	
	TSC7117	◊ TeledyneS	40
	TSC7126	◊ TeledyneS	
	TSC7126A	TeledyneS	
3 1/2 Digits, Integrating, LCD Drive, Low Power, Low Noise, Data Hold	MAX136	Maxim	
3 1/2 Digits, Integrating, LED Drive, Low Power, Low Noise	ICL7137	◊ Maxim	45
3 1/2 Digits, Integrating, 2 Device Sets	**ICL8052**	**GE/Intersil (2667)**	
	ICL8053	GE/Intersil	
	ICL8068	**GE/Intersil (2667)**	
	LD110C	◊ Siliconix	50
	LD111AC	◊ Siliconix	
3 1/2 Digits, Dual Slope	TSC8751	TeledyneS	
3 3/4 Digits, Integrating	ZNA216E	Ferranti	
	ZNA216J	† Ferranti	
	ADC3711	National	55
	ADD3701	National	
4 1/2 Digits, Integrating, for microprocessor or UART systems	**ICL7135**	**GE/Intersil (2667)**	
	SI7135	◊ Siliconix	
	TSC7135	◊ TeledyneS	
4 1/2 Digits, Integrating, LCD Drive	ICL7129	◊ Maxim	60
	ICL7129A	Maxim	
4 1/2 Digits, Integrating, BCD Output	ICL7135	◊ Maxim	
4 1/2 Digits, Successive Integration	**ICL7129**	◊ **GE/Intersil (2666)**	
4 1/2 Digits, Dual Slope, 2 Device Sets	ICL8053A	GE/Intersil	
	ICL8068A	**GE/Intersil (2667)**	65
	LD120C	◊ Siliconix	
	LD121AC	◊ Siliconix	
	LD122C	◊ Siliconix	
7	TL507	TI	
10	TL505	TI	70
10–13	TL501	TI	
14	TL500	TI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
4	1/16	0.01	1050	x						xx			x		x	**NE5152**	**Signetics (3115)**	
	1/8	0.025	1000	x						x	x				x	BT456	Brooktree	
		100		x	x			x		x						416BCD	Intech	
	1/4	0.3	85		x					x	X		x			ZN434E	Ferranti	5
4 (triple)	1/2	0.005	1500	x						x		x				AD9702	◊ AD	
4 (triple color video DAC)	1/4	0.008	1000*			x				x			x			SSI6280	SiliconSys	
4 (triple color video RAM/DAC)	1/8	0.0012 *	500 *	x						x	x		x		x	BT103	† Brooktree	
	1/2	0.0012 *	500 *	x						x	x				x	BT102	† Brooktree	
4 (triple video DAC)	1/4	0.008				x				x			x			ZN454CJ	Ferranti	10
	1/2	0.0004	2100	x								x	x		x	**HDAC34010**	**HoneywellSPT (2997)**	
				x						x	x		x		x	**HDAC34020**	**HoneywellSPT (2997)**	
		0.0005 *	600 *	x						x					x	BT444	Brooktree	
4 (triple video 16x12 RAM DAC)	1/2	0.0003 *	1000	x						x	x		x	x	x	BT454	Brooktree	
4 (triple video 16x12 RAMDAC)	1/2	0.0003 *	1200 *	x	x					x					x	BT452	Brooktree	15
		0.0012 *	1000	x						x						FVG450	Fairchild	
4 (triple video 256x12 RAMDAC)	1/2	0.0003 *	1500	x						x	x			x	x	BT451	Brooktree	
				x						x						FVG451	Fairchild	
4 (video)	1/2	0.007	1250	x	x							x			x	AH8304E	Analogic	
				x	x					x					x	AH8304T	Analogic	20
			1500	x	x					x					x	AH8304T	† Analogic	
		0.04	600	x	x					x					x	AH8404T	Analogic	
		0.05	800	x	x					x					x	AH8404T	† Analogic	
		6.4	1125	x						x			x			HDG0407	AD	
4 (video DAC)	1/2	0.004		x	x					x		x				**VDAC0405H**	**Intech (2799)**	25
4 (video digital converter)		0.01		x						x					x	TMS34070	TI	
	1/8	125 MHz	800	x								x			x	TDC1034	◊ TRW-LSI	
	1/2	0.004				x						x			x	**DAC0405**	**Datel (2576)**	
		0.004 *	1040				x					x			x	HDG0405	AD	
						x						x			x	0405H	Intech	30
		0.005	2200		x							x			x	VDAC444E	Intech	
			4200		x							x			x	**RGBDAC4E**	**Intech (2799)**	
4 (Triple color RAM/DAC)	1/2	125 MHz	x													**MC10320**	**Motorola (2938)**	
4 (Triple color video)	1/2	0.01		x						x	x				x	RGBDAC3400	† Intech	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
4 (Triple color video)																		
	1/2	0.01		x						x	x				x	**RGBDAC3404A †**	**Intech (2799)**	
				x						x	x				x	**RGBDAC3405 †**	**Intech (2799)**	
				x						x	x				x	**RGBDAC3408 †**	**Intech (2799)**	
				x						x	x				x	**VDAC3400S †**	**Intech (2799)**	
		0.012		x						x	x				x	**RGBDAC3405S †**	**Intech (2799)**	5
4 (Triple color video DAC)																		
	1/2	150 MHZ		x						x		x	x			**NE5151**	**Signetics (3115)**	
4 (Triple color video RAMDAC)																		
	1/2	80 MHz		x						x		x	x			**NE5150**	**Signetics (3115)**	
4 1/2	1/8	100		x	x			x		x						**418BCD**	**Intech (2799)**	
6	—	2	120	x							x				x	**MC144111**	**Motorola (2938)**	
			185	x							x				x	**MC144110**	**Motorola (2938)**	10
	1/8	0.004	500	x								x		x	x	TKDA10B	Tektronix	
		3	250			x	x			x			x			DAC01A	† PMI	
	1/4	3	250			x	x			x			x			DAC01	MicroPwr	
						x	x			x			x			DAC01B	† MicroPwr	
						x	x			x			x			DAC01C	MicroPwr	15
						x	x			x			x			DAC01D	MicroPwr	
						x	x			x			x			DAC01F	† MicroPwr	
						x	x			x			x			DAC01H	MicroPwr	
						x	x	x		x			x			MP5520A	† MicroPwr	
						x	x	x		x			x			MP5520B	† MicroPwr	20
						x	x	x		x			x			MP5520C	MicroPwr	
						x	x	x		x			x			MP5520F	† MicroPwr	
						x	x	x		x			x			MP5520H	MicroPwr	
						x	x									µPC603	NEC	
						x	x			x			x			DAC01	† PMI	25
						x	x			x			x			DAC01B	† PMI	
						x	x			x			x			DAC01C	PMI	
						x	x			x			x			DAC01F	† PMI	
						x	x			x			x			DAC01H	PMI	
	1/2	1	25*	x	x					x	x					SSI6260C	SiliconSys	30
				x	x					x	x					SSI6260M	† SiliconSys	
		1.0	25 *	x						x						ZN436E	Ferranti	
				x						x						ZN436J	† Ferranti	
		3	200			x	x	x		x			x			MP5520D	MicroPwr	
			250			x	x			x			x			DAC01D	PMI	35
	1	-	800	x						x	x				x	BT471	Brooktree	
		30 MSPS	220							x						MB40776	Fujitsu	
	2		60	x						x	x			x	x	tda8444	Signetics	
	3			x						x	x				x	TDA8442	Signetics	
	1/64	0.004	500	x								x		x	x	TKDA10A	Tektronix	40
6 (triple color video RAM/DAC)																		
	1/2	20 MHz		x						x					x	IMSG175-25	Inmos	
		35 MHz		x						x					x	IMSG170-35	Inmos	
		50 MHz		x						x					x	IMSG170-50	Inmos	
6 (video DAC)																		
	1/2	0.006		x	x					x		x				**VDAC0605H**	**Intech (2799)**	
6 (video digital converter)																		
	1/2	0.006				x						x			x	**DAC0605**	**Datel (2576)**	45
		0.006 *	1350			x						x			x	HDG0605	AD	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int Ref.	Mult.	Latches	Device	Source	Line
6 (video digital converter)																		
	1/2	0.006*	1500			x						x			x	0605H	Intech	
6/8	1	-	800	x						x	x				x	BT478	Brooktree	
6/12-Binary Serial																		
	1/2	—	5							x	x			x	x	µA9706C	Fairchild	
8	—	0.005	—	x								x	x	x		AD9768	◊† AD	5
		0.008		x								x	x		x	AD9700B	◊ AD	
				x								x	x		x	AD9700S	◊† AD	
	1/8	0.08	15	x	x	x	x			x	x			x	x	MP7528XQ	MicroPwr	
		0.1	5	x						x	x			x	x	AD7524	† Maxim	
		0.1 *	10 *	x	x	x	x				x			x	x	MP7524L	MicroPwr	10
				x	x	x	x				x			x	x	MP7524U	† MicroPwr	
		0.15	1.0 *	x	x	x	x				x			x		MP7523L	MicroPwr	
			1.5 *	x	x	x	x				x			x		AD7523L	AD	
				x	x	x	x				x			x		**AD7523L**	**GE/Intersil (2668)**	
				x	x	x	x				x			x		**AD7523U**	**† GE/Intersil (2668)**	
			1.5	x	x	x	x				x			x		AD7523L	Maxim	15
				x	x	x	x				x			x		AD7523U	† Maxim	
		0.15 *	20 *	x	x					x	x			x	x	AD7524C	AD	
				x	x	x	x				x			x	x	AD7524L	AD	
				x	x	x	x			x	x			x	x	AD7524U	† AD	
			670	x	x	x	x				x			x		**AD7523J**	**GE/Intersil (2668)**	20
				x	x	x	x				x			x		**AD7523S**	**† GE/Intersil (2668)**	
		0.35	450	x						x	x			x	x	**PM7524A**	**† PMI (2973, 2976)**	
				x						x	x			x	x	**PM7524E**	**PMI (2973, 2976)**	
				x						x	x			x	x	**PM7524G**	**PMI (2973, 2976)**	
		0.8 *	15 *	x						x	x			x	x	MP7628L	MicroPwr	25
				x						x	x			x	x	MP7628U	† MicroPwr	
		1	30	x						x	x			x		DAC0830	National	
		10 *	20	x	x	x	x				x			x	x	MP7524C	MicroPwr	
	1/4	0.01	850	x								x				HDS0810E	AD	
				x								x				HDS0810EM	† AD	30
				x								x				**MC10318-9**	**Motorola (2938)**	
		0.045	700	x							x	x				HI5618A-2	† Harris	
				x							x	x				HI5618A-5	Harris	
		0.08	15	x	x	x	x			x	x			x	x	MP7528XC	MicroPwr	
				x	x	x	x			x	x			x	x	MP7528XL	MicroPwr	35
				x	x	x	x			x	x			x	x	MP7528XU	† MicroPwr	
		0.085	33	x	x	x	x			x	x	x		x		DAC080QF	AMD	
				x	x	x	x			x	x	x		x		IR9K08	Sharp	
		0.135	174	x	x	x	x			x	x	x		x		DAC08A	† AMD	
				x	x	x	x			x	x	x		x		ADDAC08A	◊† AD	40
					x	x	x			x	x	x		x		ADDAC08H	◊ AD	
				x	x	x	x			x	x	x		x		**DAC08A**	**† Motorola (2938, 2958)**	
				x	x	x	x			x	x	x		x		**DAC08H**	**Motorola (2938, 2958)**	
				x	x	x	x			x				x		DAC0802	† National	
				x	x	x	x			x				x		DAC0802C	National	45
				x	x	x	x			x	x	x		x		**DAC08A**	**‡ PMI (2973)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
8	1/4	0.135	174	x	x	x	x			x	x	x		x		**DAC08H**	**PMI (2973)**	
				x	x	x	x			x	x	x		x		DAC08A	† Raytheon	
				x	x	x	x			x	x	x		x		DAC08H	Raytheon	
				x	x	x	x			x	x	x		x		DAC08A	† Signetics	
				x	x	x	x			x	x	x		x		DAC08H	Signetics	5
		0.15	1 *	x	x	x	x				x			x		MP7523K	MicroPwr	
			1.5 *	x	x	x	x				x			x		AD7523K	AD	
				x	x	x	x				x			x		**AD7523K**	**GE/Intersil (2668)**	
				x	x	x	x				x			x		**AD7523T**	**† GE/Intersil (2668)**	
			1.5	x	x	x	x				x			x		AD7523K	Maxim	10
				x	x	x	x				x			x		AD7523T	† Maxim	
			10 *	x	x	x	x				x			x	x	MP7524B	MicroPwr	
		0.15 *	10 *	x	x	x	x				x			x	x	MP7524K	MicroPwr	
				x	x	x	x				x			x	x	MP7524T	† MicroPwr	
			20 *	x	x					x	x			x	x	AD7524B	AD	15
				x	x	x	x			x	x			x	x	AD7524K	AD	
				x	x	x	x			x	x			x	x	AD7524T	† AD	
		0.15	330	x	x	x	x			x	x		x		x	DAC4888	Raytheon	
				x	x	x	x			x	x		x		x	DAC4888B	† Raytheon	
		0.2 *	255 *	x						x	x	x	x	x	x	NE5119	Signetics	20
				x						x	x	x	x	x	x	SE5119	† Signetics	
			1300 *			x	x				x	x		x		HDH0802	AD	
						x	x				x	x		x		HDH0802M	† AD	
		0.25	5	x						x	x			x	x	**DAC8408A**	**◇† PMI (2973, 2976)**	
				x						x	x			x	x	**DAC8408E**	**◇ PMI (2973, 2976)**	25
				x						x	x			x	x	**DAC8408G**	**◇ PMI (2973, 2976)**	
			170	x	x					x				x	x	**DAC888A**	**◇† PMI (2973)**	
				x	x					x				x	x	**DAC888E**	**◇ PMI (2973)**	
		0.25 *	265	x	x					x	x			x		AD1408-9	AD	
				x	x					x	x			x		AD1508-9	† AD	30
		0.27	450	x	x					x	x			x	x	HS7528L	HybridSys	
				x	x					x	x			x	x	HS7528U	† HybridSys	
		0.35	50	x						x	x			x	x	**PM7524B**	**† PMI (2973, 2976)**	
				x						x	x			x	x	**PM7524F**	**PMI (2973, 2976)**	
				x						x	x			x	x	**PM7524H**	**PMI (2973, 2976)**	35
			450	x						x	x			x	x	TLC7524M	† TI	
		0.8 *	15 *	x						x	x			x	x	MP7628K	MicroPwr	
				x						x	x			x	x	MP7628T	† MicroPwr	
		1	30	x						x	x			x		DAC0831	National	
		1.5	375	x						x	x		x		x	AD558K	AD	40
		2 *	255	x						x	x	x	x	x	x	NE5019	Signetics	
				x						x	x	x	x	x	x	SE5019	† Signetics	
		2.5	330	x	x	x	x	x	x	x	x		x	x	x	DAC4888F	Raytheon	
		20 *	735 *	x	x						x	x				HDS0820	AD	
				x	x						x	x				HDS0820M	† AD	45
	1/3	2.5	330	x	x	x	x	x	x	x	x		x	x	x	DAC4888D	Raytheon	
	3/8	1.5	375	x						x	x		x		x	AD558T	† AD	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
8																	(Cont'd)	
	1/2	.007	495	x								x				SDA8005	Siemens	
		0.0003 *																
			800 *	x						x		x		x	x	BT108	Brooktree	
				x						x		x		x	x	FVG108	Fairchild	
		0.001	500	x						x				x	x	IDT75C28	† IDT	
		0.002	1000	x								x	x	x	x	BT107	Brooktree	5
		0.0075	2250	x						x					x	**DAC8308**	**Datel (2576)**	
				x						x					x	**DAC8318**	**Datel (2576)**	
		0.008		x	x					x		x				**VDAC0805H**	**Intech (2799)**	
			400 *	x								x	x	x	x	**IDT75C18**	**◊† IDT (2807, 2834)**	
			3750	x								x	x		x	**HDAM51100**	**HoneywellSPT (2997)**	10
		0.01 *	675	x								x				**MC10318**	**Motorola (2938)**	
		0.025	600	x		x				x					x	IR3K02	Sharp	
			630	x	x					x			x			DACHFBMC	Datel	
				x	x					x			x			**DACHF8BMM**	**† Datel (2574)**	
		0.04	385	x						x			x		x	**TDA5702**	**Signetics (3119)**	15
		0.045	700	x						x	x					HI5618B-2	† Harris	
				x						x	x					HI5618B-5	Harris	
		0.08	15	x	x	x	x			x	x			x	x	MP7528XB	MicroPwr	
				x	x	x	x			x	x			x	x	MP7528XK	MicroPwr	
				x	x	x	x			x	x			x	x	MP7528XT	† MicroPwr	20
		0.1	5	x			x	x			x				x	TLC7524C	TI	
				x			x	x			x				x	TLC7524I	TI	
		0.1 *	10 *	x	x	x	x				x			x	x	MP7524A	MicroPwr	
				x	x	x	x				x			x	x	MP7524J	MicroPwr	
				x	x	x	x				x			x	x	MP7524S	† MicroPwr	25
		0.12	255	x						x	x	x	x	x	x	NE5118	Signetics	
				x						x	x	x	x	x	x	SE5118	† Signetics	
		0.13	305	x						x	x			x		µA0802AC	Fairchild	
				x						x	x			x		µA0802M	† Fairchild	
		0.135	174	x	x	x	x			x	x	x		x		DAC08	◊† AMD	30
				x	x	x	x			x	x	x		x		ADDAC08	◊† AD	
				x	x	x				x	x	x		x		DAC08M	† Fairchild	
				x	x	x	x			x	x	x		x		**DAC08**	**† Motorola (2938, 2958)**	
				x	x	x	x			x	x	x		x		**DAC08**	**◊‡ PMI (2973)**	
				x	x	x	x			x	x	x		x		DAC08	† Raytheon	35
				x	x	x	x			x	x	x		x		DAC08	◊† Signetics	
		0.15	1 *	x	x	x	x				x			x		MP7523J	MicroPwr	
			1.5 *	x	x	x	x				x			x		AD7523J	AD	
				x	x	x	x				x			x		AD7523S	† AD	
			1.5	x	x	x	x				x			x		AD7523J	Maxim	40
				x	x	x	x				x			x		AD7523S	† Maxim	
		0.15 *	20 *	x	x					x	x			x	x	AD7524A	AD	
				x	x	x	x				x			x	x	AD7524J	AD	
				x	x	x	x				x			x	x	AD7524S	† AD	
		0.15	136	x	x					x	x	x		x		**DAC08BC**	**Datel (2576)**	45
				x	x					x	x	x		x		**DAC08BM**	**† Datel (2576)**	
			174	x	x	x	x			x	x	x		x		DAC08E	AMD	
				x	x	x	x			x	x	x		x		ADDAC08E	◊ AD	
				x	x	x	x			x	x	x		x		DAC08EC	Fairchild	
				x	x	x	x			x	x	x		x		HA17008R	Hitachi	50

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value ᶜ Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
8	1/2	0.15	174	x	x	x	x			x	x	x		x		**DAC08E**	**Motorola (2938, 2958)**	
				x	x	x				x				x		µPC624	NEC	
				x	x	x	x			x	x	x		x		**DAC08E**	**PMI (2973)**	
				x	x	x	x			x	x	x		x		DAC08E	Raytheon	
				x	x	x	x			x	x	x		x		DAC08E	Signetics	5
		0.15 *	305	x						x	x			x		DAC0808	† National	
				x						x	x			x		DAC0808C	National	
		0.16 *	222	x	x	x	x	x		x	x			x	x	AM6080C	AMD	
				x	x	x	x	x		x	x			x	x	AM6080M	† AMD	
				x	x	x	x	x	x	x	x			x	x	AM6081C	AMD	10
				x	x	x	x	x	x	x	x			x	x	AM6081M	† AMD	
		0.2	670	x	x					x	x			x		**DAC7523**	**Datel (2576)**	
		0.25	5	x						x	x			x	x	**DAC8408B ◇†**	**PMI (2973, 2976)**	
				x						x	x			x	x	**DAC8408F ◇**	**PMI (2973, 2976)**	
				x						x	x			x	x	**DAC8408H ◇**	**PMI (2973, 2976)**	15
			170	x	x					x				x	x	**DAC888B ◇†**	**PMI (2973)**	
				x	x					x				x	x	**DAC888F ◇**	**PMI (2973)**	
		0.25 *	265	x						x	x			x		SSS1408A-8	AMD	
				x						x	x			x		SSS1508A-8 †	AMD	
				x	x					x	x			x		AD1408-8	AD	20
				x	x					x	x			x		AD1508-8	† AD	
				x						x	x			x		HA17408	Hitachi	
				x	x					x	x			x		DAC1408A-8	PMI	
				x	x					x	x			x		DAC1508A-8 †	PMI	
		0.25/2	900			x	x	x		x			x	x		DAC82K	Burr-Brown	25
		0.27	20	x	x					x	x			x	x	HS7528K	HybridSys	
				x	x					x	x			x	x	HS7528T	† HybridSys	
		0.3 *	305	x						x	x			x		AM1408-8	◇ AMD	
				x						x	x			x		AM1508-8	† AMD	
				x	x					x	x			x		**DACIC8BC**	**Datel (2576)**	30
				x						x	x			x		DAC1408	† Fairchild	
				x						x	x			x		DAC1408AC	Fairchild	
				x										x		**MC1408-8**	**Motorola (2938)**	
				x										x		**MC1508-8 ◇†**	**Motorola (2938)**	
				x						x				x		MC1408-8	National	35
				x						x				x		MC1508-8	† National	
				x						x				x		MC1408-8	Signetics	
				x						x				x		MC1508-8	† Signetics	
		0.5	15 *	x						x	x			x	x	MP7628J	MicroPwr	
				x						x	x			x	x	MP7628S	† MicroPwr	40
		0.6 *	500	x		x				x			x		x	XR9201	Exar	
		0.7	20	x	x					x	x			x	x	HS7628K	HybridSys	
				x	x					x	x			x	x	HS7628T/883	† HybridSys	
		0.8	100 *	x	x					x	x		x		x	ZN428E-8	Ferranti	
				x	x					x	x		x		x	ZN428J-8	† Ferranti	45
			100	x						x	x		x		x	ZN558E-8	Ferranti	
				x						x	x		x		x	ZN558J-8	† Ferranti	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int Ref.—Internal Reference
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
8	1/2	0.8	100	x	x					x	x		x		x	SSI6270C	SiliconSys	
				x	x					x	x		x		x	SSI6270M †	SiliconSys	
		1												x	x	**DAC608**	**Datel (2576)**	
			30	x						x	x			x		DAC0832	National	
			45 *	x						x	x		x			ZN426E-8	Ferranti	5
				x						x	x		x			ZN426J-8 †	Ferranti	
				x						x	x					ZN429E-8	Ferranti	
				x						x	x					ZN429J-8 †	Ferranti	
			45*	x						x	x		x			SSI6220C	SiliconSys	
				x						x	x		x			SSI6220M †	SiliconSys	10
				x						x	x					SSI6240C	SiliconSys	
				x						x	x					SSI6240M †	SiliconSys	
			750	x						x			x			MN3008	MicroNet	
				x						x			x			MN3008H †	MicroNet	
					x					x			x			MN3009	MicroNet	15
					x					x			x			MN3009H †	MicroNet	
		1.25			x					x	x		x		x	ZN438E	Ferranti	
					x					x	x		x		x	ZN438J †	Ferranti	
		1.5		x						x	x			x		AD7548K	AD	
				x						x	x			x		AD7548T †	AD	20
			75 *	x						x	x		x		x	AD558J	AD	
			300	x	x					x	x			x		DAC331B-8 †	HybridSys	
				x	x					x	x			x		DAC331C-8	HybridSys	
		2 *	255	x	x					x			x			**DACUP8BC**	**Datel (2576)**	
				x	x					x			x			**DACUP8BM †**	**Datel (2576)**	25
			255 *	x						x	x	x	x	x	x	**NE5018**	**Signetics (3117)**	
				x						x	x	x	x	x	x	SE5018 †	Signetics	
		2 ns	3500 *	x								x			x	TQ6112 ◊	TriQuint	
		2.5	570	x	x	x				x			x			MN3014	MicroNet	
				x	x	x				x			x			MN3014H †	MicroNet	30
		3		x								x	x	x		**HDAC51600**	**HoneywellSPT (2997)**	
			15	x						x	x			x	x	TDA1721	Signetics	
			680	x	x								x			HS3020B †	HybridSys	
				x	x								x			HS3020C	HybridSys	
			830	x	x	x				x			x		x	MN3020	MicroNet	35
				x	x	x				x			x		x	MN3020H †	MicroNet	
		4	1080	x	x		x			x	x		x		x	DAC336B-8 †	HybridSys	
				x	x		x			x	x		x		x	DAC336C-8	HybridSys	
		5		x						x	x		x			AD7225L	AD	
			75	x						x	x			x	x	AD7224 †	Maxim	40
			450	x			x	x		x						**PM7224A †**	**PMI (2973, 2976)**	
				x			x	x		x						**PM7224E**	**PMI (2973, 2976)**	
				x			x	x		x						**PM7224G**	**PMI (2973, 2976)**	
		20	285	x						x	x		x			DAC336B-1 †	HybridSys	
				x						x	x		x			DAC337B-0 †	HybridSys	45
				x						x	x		x			DAC337B-2 †	HybridSys	
				x						x	x		x			DAC337C-0	HybridSys	
				x						x	x		x			DAC337C-1	HybridSys	
				x						x	x		x			DAC337C-2	HybridSys	
		23 *	585			x				x	x		x			MN3000	MicroNet	50
																	(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value ' Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
8	1/2	23 *	585			x				x	x		x			MN3000H	† MicroNet	
					x					x	x		x			MN3001	MicroNet	
					x					x	x		x			MN3001H	† MicroNet	
				x						x	x		x			MN3002	MicroNet	
				x						x	x		x			MN3002H	† MicroNet	5
					x					x	x		x			MN3006	MicroNet	
					x					x	x		x			MN3006H	† MicroNet	
		30	570	x	x	x				x			x			MN3013	MicroNet	
				x	x	x				x			x			MN3013H	† MicroNet	
		40	300		x					x	x		x			DAC337B-6	† HybridSys	10
					x					x	x		x			DAC337C-6	HybridSys	
		100	5	x							x			x	x	TLC7528C	TI	
				x							x			x	x	TLC7528I	TI	
		250	5	x						x	x					ALD1801	◇† AdvLinear	
		250 MSPS		x			x						x			**AD9701S**	**◇† AD (2410)**	15
		350	20	x	x					x	x			x	x	AD7628	AD	
	3/4	1.5	375	x						x	x		x		x	AD558S	† AD	
	1			x						x	x					BT457KG100	Brooktree	
				x						x	x					BT457KG125	Brooktree	
				x						x	x					BT457KG75	Brooktree	20
		0.002 *	250 *	x						x					x	BT106	Brooktree	
		0.005		x			x			x	x					TDC1018-1	TRW-LSI	
		0.008	1800	x						x	x				x	BT461	Brooktree	
		0.01	200	x		x					x		x		x	SC11401	Sierra	
				x							x		x		x	SC11402	Sierra	25
			250	x		x					x		x		x	SC11403	Sierra	
				x							x		x		x	SC11404	Sierra	
		0.01 *	675	x								x		x		**MC10318C-7**	**Motorola (2938)**	
		0.07	305	x						x	x			x		MC1408-7	Signetics	
		0.08	15	x	x	x	x			x	x			x	x	MP7528XA	MicroPwr	30
				x	x	x	x			x	x			x	x	MP7528XJ	MicroPwr	
				x	x	x	x			x	x			x	x	MP7528XS	† MicroPwr	
		0.085	33							x	x	x				MB4072	◇ Fujitsu	
		0.13	305	x						x	x			x		µA0802BC	Fairchild	
				x						x	x			x		µA0802CC	Fairchild	35
		0.15	174	x	x	x	x			x	x	x		x		DAC08C	AMD	
				x	x	x	x			x	x	x		x		ADDAC08C	◇ AD	
				x	x	x	x			x	x	x		x		DAC08C	Fairchild	
				x	x	x	x			x	x	x		x		**DAC08C**	**Motorola (2938, 2958)**	
				x	x	x				x				x		DAC0801C	◇ National	40
				x	x	x	x			x	x	x		x		**DAC08C**	**‡ PMI (2973)**	
				x	x	x	x			x	x	x		x		DAC08C	Raytheon	
				x	x	x	x			x	x	x		x		DAC08C	Signetics	
		0.25 *	265	x	x					x	x			x		SSS1408A-7	AMD	
				x	x					x	x			x		AD1408-7	AD	45
				x	x					x	x			x		DAC1408BC	Fairchild	
				x	x					x	x			x		DAC1408A-7	PMI	
		0.27	20	x	x					x	x			x	x	HS7528J	HybridSys	
				x	x					x	x			x	x	HS7528S	† HybridSys	
		0.3 *	305	x						x	x			x		AM1408-7	◇ AMD	50
				x										x		**MC1408-7**	**Motorola (2938)**	
				x						x				x		DAC0807C	National	
				x						x				x		MC1408-7	National	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
8	1	0.7	20	x	x					x	x			x	x	HS7628J	HybridSys	
				x	x					x	x			x	x	HS7628S/883	† HybridSys	
		0.8	100	x	x					x	x		x		x	ZN559E	‡ Ferranti	
				x	x					x	x		x		x	ZN559J	† Ferranti	
		1	60	X						X	X		X		X	**AD7569**	**◇† AD (2428)**	5
		1.5								x				x		AD7548J	AD	
										x				x		AD7548S	† AD	
		1.6	50	x							x		x	x		MAX1500LL	Maxim	
		3	300	x				x		x						µPD7011	NEC	
		5		x						x	x			x	x	AD7224C	AD	10
				x						x	x			x	x	AD7224L	AD	
				x						x	x		x			AD7225K	AD	
			240	X						X	X			X	X	**AD7228**	**◇† AD (2406)**	
			450	x			x	x		x						**PM7224B**	**† PMI (2973, 2976)**	
				x			x	x		x						**PM7224F**	**PMI (2973, 2976)**	15
				x			x	x		x						**PM7224H**	**PMI (2973, 2976)**	
		30 MSPS	250							x						MB40778	Fujitsu	
	1/2	200 MSPS	3820	x									x	x	x	**HDAM51200**	**HoneywellSPT (2997)**	
				x									x	x	x	HDAM51210	HoneywellSPT	
	1/16			x							x			x		IXDP610	IXYS	20
	2	0.01 *	675	x								x		x		**MC10318C-6**	**Motorola (2938)**	
		0.25 *	265	x	x					x	x			x		DAC1408CC	Fairchild	
				x	x					x	x			x		DAC1408A-6	PMI	
		0.3 *	305	x						x	x			x		AM1408-6	◇ AMD	
				x										x		**MC1408-6**	**Motorola (2938)**	25
				x						x				x		DAC0806C	National	
				x						x				x		MC1408-6	National	
		5		x						x	x			x	x	AD7224B	AD	
				x						x	x			x	x	AD7224K	AD	
			200	x						x	x			x	x	AD7226B	Maxim	30
				x						x	x			x	x	AD7226K	Maxim	
				x						x	x			x	x	AD7226T	† Maxim	
8 (A/D, D/A, with counter)																		
	1/2	2	175	x						x	x		x			ZN425E-8	Ferranti	
	1	2	175	x						x	x		x			ZN425J-8	† Ferranti	
8 (D/A, A/D with Counter, Clock, Logic)																		
	1/2	0.8	—	x						x	x		x			SSI6030C	SiliconSys	35
				x						x	x		x			SSI6030M	† SiliconSys	
8 (D/A, with counter/clock)																		
	1/2	0.8	—	x						x	x		x			ZN435E	Ferranti	
				x						x	x		x			ZN435J	† Ferranti	
8 (dual)																		
	1/2	0.18	5	x						x	x			x	x	AD7528	† Maxim	
8 (dual matched)																		
	1/2	0.35	5	x						x	x			x	x	**PM7528A**	**◇† PMI (2973, 2976)**	40
				x						x	x			x	x	**PM7528B**	**† PMI (2973, 2976)**	
				x						x	x			x	x	**PM7528E**	**PMI (2973, 2976)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
8 (dual matched)																		
	1/2	0.35	5															(Cont'd)
				x						x	x			x	x	**PM7528F**	**PMI**	**(2973, 2976)**
				x						x	x			x	x	**PM7528G**	**PMI**	**(2973, 2976)**
				x						x	x			x	x	**PM7528H**	**PMI**	**(2973, 2976)**
8 (octal)																		
	1/2	50	1000	x						x					x	BT110	Brooktree	
8, (quad)																		
	1/2	5	144	x						x	x				x	**PM7226A** †	**PMI**	**(2973, 2976)** 5
				x						x	x				x	**PM7226E**	**PMI**	**(2973, 2976)**
				x						x	x				x	**PM7226G**	**PMI**	**(2973, 2976)**
			195	x						x	x			x	x	AD7225	† Maxim	
	1	5	144	x						x	x				x	**PM7226B** †	**PMI**	**(2973, 2976)**
				x						x	x				x	**PM7226F**	**PMI**	**(2973, 2976)** 10
			500	x			x	x		x	x					**PM7226H**	**PMI**	**(2973, 2976)**
8 (triple color video RAM/DAC)																		
	1/2	0.008 *	8000	x								x			x	**RGBDAC8E**	**Intech**	**(2799)**
	1	0.002	500 *	x						x	x				x	BT101	† Brooktree	
				x						x					x	FVG101	† Fairchild	
8 (triple video RAM/DAC)																		
	1.0	0.01		x						x	x				x	**RGBDAC3800** †	**Intech**	**(2799)** 15
				x						x	x				x	**RGBDAC3808** †	**Intech**	**(2799)**
8 (triple video 256x24 RAM/DAC)																		
	1/2	0.0012 *	1000	x						x						FVG453	Fairchild	
	1	0.0003 *	2000	x						x						BT458	Brooktree	
		0.0012 *	1000	x						x						BT453	Brooktree	
8 (video)																		
	1/2	0.4	1125	x						x			x			HDG0807	AD	20
8 (video DAC)																		
	1.0	.0075		x						x	x				x	**VDAC8308TH** †	**Intech**	**(2799)**
		0.008		x						x	x				x	**VDAC1850**	**Intech**	**(2799)**
				x						x	x				x	**VDAC1852**	**Intech**	**(2799)**
		0.015		x						x	x				x	**VDAC1840**	**Intech**	**(2799)**
				x						x	x				x	**VDAC1842**	**Intech**	**(2799)** 25
8 (video digital converter)																		
	1/4	0.01	1976	x								x				HDD0810	AD	
				x								x				HDD0810M †	AD	
			2028	x								x				HDD0810C	AD	
				x								x				HDD0810CM †	AD	
	1/2	0.005	—									x		x		SP9768	Plessey	30
		0.008				x						x			x	**DAC0805**	**Datel**	**(2576)**
			800	x								x			x	TDC1018	TRW-LSI	
			1660			x						x				HDG0805	AD	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
8 (video digital converter)																		
	1/2																(Cont'd)	
		0.008 *																
			1800			x						x			x	0805	Intech	
		0.008	3640		x							x			x	**VDAC888E**	**Intech (2799)**	
		0.05		x						x						µPD6900	NEC	
		0.07	1000	x								x			x	AH8308E	Analogic	
				x						x					x	AH8308T	Analogic	5
			1600	x								x			x	MP8308ECL	Analogic	
				x								x			x	MP8318ECL	Analogic	
			2200	x						x					x	MP8308	Analogic	
				x						x					x	MP8318	Analogic	
		165 MSPS		x								x			x	**HDAC10180B**	**HoneywellSPT (2997, 2999)**	10
				x								x	x		x	**HDAC10181B**	**HoneywellSPT (2997)**	
		275 MSPS		x								x			x	**HDAC10180A**	**HoneywellSPT (2997, 2999)**	
				x								x	x		x	**HDAC10181A**	**HoneywellSPT (2997)**	
		400 MSPS		x								x	x		x	**HDAC51400**	**HoneywellSPT (2997)**	
	200 MSPS																	
		0.0004	2100	x								x	x		x	**HDAC97000 †**	**HoneywellSPT (2997)**	15
8 (Dual, Matched)																		
	1/2	0.2		x						x	x			x	x	AD7528B	AD	
				x						x	x			x	x	AD7528C	† AD	
				x						x	x			x	x	AD7528K	AD	
				x						x	x			x	x	AD7528L	AD	
				x						x	x			x	x	AD7528T	† AD	20
				x						x	x			x	x	AD7528U	† AD	
	1	0.2		x						x	x			x	x	AD7528A	AD	
				x						x	x			x	x	AD7528J	AD	
				x						x	x			x	x	AD7528S	† AD	
				x						x	x			x	x	TLC7528M	† TI	25
8 (Quad)																		
	2	5		x						x	x			x	x	AD7226B	AD	
				x						x	x			x	x	AD7226K	AD	
				x						x	x			x	x	AD7226T	† AD	
8 (7-Bits plus Sign) Companding																		
	—	0.5 *	192							x						AM6072C	AMD	
										x						AM6072M	† AMD	30
	1/2 step																	
		0.5	192							x	x	x		x		DAC86E	PMI	
			207							x	x	x		x		**DAC88E**	**PMI (2974)**	
			500							x	x	x		x		**DAC89E**	**PMI (2974)**	
	1 step	0.5	192							x						AM6070C	AMD	
										x						AM6070M	† AMD	35
		0.5 *	192							x	x	x		x		DAC86C	PMI	
8–2 Digit BCD																		
	1/2	0.15	194							x	x	x		x		**DAC20C**	**PMI (2973)**	
9	1/2	0.008	400 *	x								x		x	x	**IDT75C19 ◇†**	**IDT (2807)**	
9 (8-Bits plus Sign)																		
	1/4	0.75	500	x					x	x	x		x	x		**DAC208A †**	**PMI (2973)**	
				x					x	x	x		x	x		**DAC208E**	**PMI (2973)**	40
	1/2	0.75	500	x					x	x	x		x	x		**DAC208B †**	**PMI (2973)**	
				x					x	x	x		x	x		**DAC208F**	**PMI (2973)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
10	1/8	0.6 *	30 *	x	x	x	x			x	x			x		MP7533R	MicroPwr	
				x	x	x	x			x	x			x		MP7533Y †	MicroPwr	
	1/4	0.025 *																
			735	x	x					x	x					HDS1025	AD	
				x	x					x	x					HDS1025M †	AD	
		0.25 *	275	x	x					x	x		x			AD561K	AD	5
				x	x					x	x		x			AD561T †	AD	
		0.3 *	1300			x	x			x	x		x			HDH1003	AD	
		0.6 *	30 *	x	x	x	x			x	x			x		MP7533Q	MicroPwr	
				x	x	x	x			x	x			x		MP7533W †	MicroPwr	
	1/2	0.0052	520	x	x	x						x			x	AC50110	Analogic	10
		0.01	700	x		x		x		x		x			x	TDC1016-10	TRW-LSI	
			990	x								x				HDS1015E	AD	
				x								x				HDS1015EM †	AD	
		0.012		x								x	x	x		SP9770	Plessey	
		0.025	705	x	x					x			x			**DACHF10BMC**	**Datel (2576)**	15
				x	x					x			x			**DACHF10BMM †**	**Datel (2574, 2576)**	
		0.135	276	x		x				x	x			x		DAC10B	Raytheon	
				x		x				x	x			x		DAC10C	Raytheon	
		0.15	450	x	x	x	x			x	x	x		x		**DAC10B †**	**PMI (2974)**	
				x	x	x	x			x	x	x		x		**DAC10C †**	**PMI (2974)**	20
				x	x	x	x			x	x	x		x		**DAC10F**	**PMI (2974)**	
				x	x	x	x			x	x	x		x		**DAC10G**	**PMI (2974)**	
		0.25 *	275	x	x					x	x		x			AD561J	AD	
				x	x					x	x		x			AD561S	AD	
			300	x						x	x		x	x		NE5410	Signetics	25
				x						x	x		x	x		SE5410	Signetics	
		0.25	380	x							x			x		MC3410	Signetics	
				x						x	x			x		MC3510	Signetics	
			390	x	x					x	x					**DACIC10B**	**Datel (2576)**	
		0.3 *	1300			x	x			x	x		x			HDH1003M †	AD	30
		0.375	250			x	x	x		x			x			ADDAC100K	AD	
						x	x	x		x			x			ADDAC100L	AD	
						x	x	x		x			x			ADDAC100T †	AD	
			300			x	x			x			x			**DAC100A ◇‡**	**PMI (2974)**	
		0.5												x	x	**DAC610**	**Datel (2576)**	35
		0.5 *	0.025	x	x					x	x			x		**DACHA10BC**	**Datel (2576)**	
				x	x					x	x			x		**DACHA10BM †**	**Datel (2576)**	
			20 *	x	x	x	x			x	x			x		AD7520L	AD	
				x	x	x	x			x	x			x		AD7520U †	AD	
				x	x	x	x			x	x			x		AD7530L	AD	40
				x	x	x	x							x		**AD7520L**	**GE/Intersil (2668)**	
				x	x	x	x							x		**AD7520U †**	**GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7530L**	**GE/Intersil (2668)**	
		0.5	20	x	x	x	x			x	x			x		AD7520U †	Maxim	
				x	x	x	x			x	x			x		AD75206	Maxim	45
				x	x	x	x			x	x			x		AD7530L	Maxim	
		0.5 *	20 *	x	x	x	x			x	x			x		MP7520L	MicroPwr	
		0.5	20	x	x	x	x			x	x			x		MP7520R	MicroPwr	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB μS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
10	1/2	0.5 *	20 *	x	x	x	x			x	x			x		MP7520U	† MicroPwr	
		0.5	20	x	x	x	x			x	x			x		MP7520Y	† MicroPwr	
		0.5 *	20 *	x	x					x	x			x	x	MP7522L	MicroPwr	
				x	x	x	x			x	x			x	x	MP7522U	† MicroPwr	
			20 *	x	x	x	x			x	x			x		MP7530	MicroPwr	5
															x	MP7633	MicroPwr	
			20 *	x						x	x			x	x	DAC1000	† National	
				x						x	x			x	x	DAC1000C	National	
				x	x	x	X			x	x			x	x	DAC1006	† National	
				x	x	x	X			x	x			x	x	DAC1006C	National	10
		0.5	30	x	x					x	x			x		**DACHA10BC-1**	**Datel (2576)**	
				x	x					x	x			x		**DACHA10BM-1 †**	**Datel (2576)**	
		0.5 *	40	x	x	x	X			x	x			x	x	AD7522L	AD	
				x	x	x	X			x	x			x	x	AD7522U	† AD	
		0.6	10	x	x					x	x			x		**PM7533A**	**† PMI (2974, 2976)**	15
				x	x					x	x			x		**PM7533E**	**PMI (2974, 2976)**	
				x	x					x	x			x		**PM7533G**	**PMI (2974, 2976)**	
			30	x	x	x	x			x	x			x		AD7533C	AD	
				x	x	x	x			x	x			x		AD7533L	AD	
				x	x	x	x			x	x			x		AD7533U	† AD	20
			30	x	x	x	x			x	x			x		AD7533C	Maxim	
				x	x	x	x			x	x			x		AD7533L	Maxim	
				x	x	x	x			x	x			x		AD7533U	† Maxim	
		0.6 *	30 *	x	x	x	x			x	x			x		MP7533L	MicroPwr	
				x	x	x	x			x	x			x		MP7533U	† MicroPwr	25
		0.8 *	30 *	x	x	x	x			x	x			x		**AD7533L**	**GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7533U**	**† GE/Intersil (2668)**	
		0.8	670	x	x					x	x			x		**DAC7533**	**Datel (2576)**	
		1.5	30	x	x					x	x			x		DAC331B-10	† HybridSys	
				x	x					x	x			x		DAC331C-10	HybridSys	30
		4 *	255	x						x	x	x	x	x	x	NE5020	Signetics	
		10	715			x	x			x			x			MN3040	MicroNet	
						x	x			x			x			MN3040H	† MicroNet	
		15	165	x				x		x	x			x		DAC348B-10	† HybridSys	
				x				x		x	x			x		DAC348C-10	HybridSys	35
		20	150			x	x			x	x		x			DAC347LPB-10B	† HybridSys	
						x				x	x		x			DAC347LPB-10U	† HybridSys	
						x	x			x	x		x			DAC347LPC-10B	HybridSys	
						x				x	x		x			DAC347LPC-10U	HybridSys	
			285		x					x	x		x			DAC337B-4	† HybridSys	40
				x						x	x		x			DAC337B-5	† HybridSys	
					x					x	x		x			DAC337C-4	HybridSys	
				x						x	x		x			DAC337C-5	HybridSys	
		23 *	585			x				x			x			**DAC3003**	**Intech (2799)**	
						x				x			x			MN3003	MicroNet	45
						x				x			x			MN3003H	† MicroNet	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value ᶜMacrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
10	1/2	23 *	585		x					x			x			MN3004	† MicroNet	
					x					x			x			MN3004H	† MicroNet	
				x						x			x			MN3005	MicroNet	
				x						x			x			MN3005H	† MicroNet	
					x					x			x			MN3007	MicroNet	5
					x					x			x			MN3007H	† MicroNet	
		30	—		x					x				x		M/D2005-1	HyComp	
			195									x		x	x	**MDAC6003**	**Intech (2799)**	
		30 MSPS	300									x				MB40748-9	Fujitsu	
		40	300			x				x	x		x			DAC337B-3	† HybridSys	10
					x					x	x		x			DAC337B-7	† HybridSys	
						x				x	x		x			DAC337C-3	HybridSys	
					x					x	x		x			DAC337C-7	HybridSys	
		500 *	24	x						x	x			x		AD7520L	National	
				x						x	x			x		AD7520U	† National	15
				x						x	x			x		DAC1020	† National	
				x						x	x			x		DAC1020C	National	
	1	0.01	700	x		x				x					x	TDC1016-9	TRW-LSI	
		0.21	1480	x								x		x		**DAC330**	**Datel (2572, 2576)**	
		0.25	380	x						x	x			x		MC3410C	Signetics	20
			390	x	x					x	x			x		**DACIC10BC**	**Datel (2576)**	
		0.3	300			x	x			x			x			**DAC100B** ◇‡	**PMI (2974)**	
		0.375	250			x	x	x		x			x			ADDAC100J	AD	
						x	x	x		x			x			ADDAC100S †	AD	
		0.5 *	20 *	x	x	x	x			x	x			x		AD7520K	AD	25
				x	x	x	x			x	x			x		AD7520T	† AD	
				x	x	x	x			x	x			x		AD7530K	AD	
				x	x	x	x			x	x			x		**AD7520K**	**GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7520T**	**† GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7530K**	**GE/Intersil (2668)**	30
		0.5	20	x	x	x	x			x	x			x		AD7520K	† Maxim	
				x	x	x	x			x	x			x		AD7520T	† Maxim	
				x	x	x	x			x	x			x		AD7530K	Maxim	
		0.5 *	20 *	x	x	x	x			x	x			x		MP7520K	MicroPwr	
		0.5	20	x	x	x	x			x	x			x		MP7520Q	MicroPwr	35
		0.5 *	20 *	x	x	x	x			x	x			x		MP7520T	† MicroPwr	
		0.5	20	x	x	x	x			x	x			x		MP7520W	† MicroPwr	
		0.5 *	20 *	x	x	x	x			x	x			x	x	MP7522K	MicroPwr	
				x	x	x	x			x	x			x		MP7530K	MicroPwr	
				x	x	x	x			x	x			x	x	DAC1001	† National	40
				x	x	x	x			x	x			x	x	DAC1001C	National	
				x	x	x	x			x	x			x	x	DAC1007	† National	
				x	x	x	x			x	x			x	x	DAC1007C	National	
			40	x	x	x	x			x	x			x	x	AD7522K	AD	
				x	x	x	x			x	x			x	x	AD7522T	† AD	45
			40 *	x	x	x	x			x	x			x	x	MP7522T	† MicroPwr	
		0.6	10	x	x					x	x			x		**PM7533B**	**† PMI (2974, 2976)**	
				x	x					x	x			x		**PM7533F**	**PMI (2974, 2976)**	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB μS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
10	1	0.6	10	x	x	·				x	x			x		**PM7533H**	**PMI (2974, 2976)**	
			30	x	x	x	x			x	x			x		AD7533B	AD	
				x	x	x	x			x	x			x		AD7533K	AD	
				x	x	x	x			x	x			x		AD7533T	† AD	
				x	x	x	x			x	x			x		AD7533B	Maxim	5
				x	x	x	x			x	x			x		AD7533K	Maxim	
				x	x	x	x			x	x			x		AD7533T	† Maxim	
		0.6 *	30 *	x	x	x	x			x	x			x		MP7533K	MicroPwr	
		0.8 *	30 *	x	x	x	x			x	x			x		**AD7533K**	**GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7533T**	**† GE/Intersil (2668)**	10
		1.5 *	300		x			x		x	x		x			**DAC06E**	**PMI (2974)**	
			350	x						x	x		x			**DAC03AD**	**PMI (2974)**	
				x						x	x		x			**DAC03BD**	**PMI (2974)**	
		5	435	x	x								x			**DACUP10B**	**◇ Datel (2576)**	
		30 MSPS																
			300									x				MB40748-8	Fujitsu	15
			450									x				MB40788	Fujitsu	
		500 *	24	x						x	x			x		AD7520K	National	
				x						x	x			x		AD7520T	National	
				x						x	x			x		DAC1021	† National	
				x						x	x			x		DAC1021C	National	20
	2	0.01	700	x		x		x		x		x			x	TDC1016-8	TRW-LSI	
		0.225	300			x	x			x			x			**DAC100C**	**◇‡ PMI (2974)**	
		0.5 *	20 *	x	x	x	x			x	x			x		AD7520J	AD	
				x	x	x	x			x	x			x		AD7520S	† AD	
				x	x	x	x			x	x			x		AD7530J	AD	25
				x	x	x	x			x	x			x		**AD7520J**	**GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7520S**	**† GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7530J**	**GE/Intersil (2668)**	
		0.5	20	x	x	x	x			x	x			x		AD7520J	Maxim	
				x	x	x	x			x	x			x		AD7520S	† Maxim	30
				x	x	x	x			x	x			x		AD7530J	Maxim	
		0.5 *	20 *	x	x	x	x			x	x			x		MP7520J	MicroPwr	
				x	x	x	x			x	x			x		MP7520S	MicroPwr	
				x	x	x	x			x	x			x	x	MP7522J	MicroPwr	
				x	x	x	x			x	x			x	x	MP7522S	† MicroPwr	35
				x	x	x	x			x	x			x		MP7530J	MicroPwr	
				x	x	x	x			x	x			x		DAC1002	† National	
				x	x	x	x			x	x			x	x	DAC1002C	National	
							x			x	x					DAC1008	† National	
							x			x	x			x	x	DAC1008C	National	40
			40	x	x	x	x			x	x			x	x	AD7522J	AD	
				x	x	x	x			x	x			x	x	AD7522S	† AD	
		0.6	30	x	x	x	x			x	x			x		AD7533A	AD	
				x	x	x	x			x	x			x		AD7533J	AD	
				x	x	x	x			x	x			x		AD7533S	† AD	45
				x	x	x	x			x	x			x		AD7533A	Maxim	
				x	x	x	x			x	x			x		AD7533J	Maxim	
				x	x	x	x			x	x			x		AD7533S	† Maxim	
		0.8 *	30 *	x	x	x	x			x	x			x		**AD7533J**	**GE/Intersil (2668)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value ³Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
10	2	0.8 *	30 *	x	x	x				x	x			x		**AD7533S**	**† GE/Intersil (2668)**	
				x	x	x	x			x	x			x		MP7533S	† MicroPwr	
				x	x	x	x			x	x			x		MP7533T	† MicroPwr	
				x	x	x	x			x	x			x		MP7533T	MicroPwr	
		1.5 *	300		x			x		x	x		x			**DAC06F**	**PMI (2974)**	5
			350	x						x	x		x			**DAC03CD**	**PMI (2974)**	
		500 *	24	x						x	x			x		AD7520J	National	
				x						x	x			x		AD7520S	† National	
				x						x	x			x		DAC1022	† National	
				x						x	x			x		DAC1022C	National	10
	3	0.225	300			x	x			x			x			**DAC100D**	**◇‡ PMI (2974)**	
		1.5 *	350		x			x		x	x		x			**DAC06B**	**PMI (2974)**	
	4	0.2	—		x	x				x	x		x			**DAC10G**	**PMI (2974)**	
		1.5 *	300		x			x		x	x		x			**DAC06G**	**PMI (2974)**	
			350	x						x	x		x			**DAC03DD**	**PMI (2974)**	15
	5	1.5 *	350					x		x	x		x			**DAC06C**	**† PMI (2974)**	
10 (D/A and 8 A/D Video)																		
	1/2	38.5 MHz		x									x	x		KSV3100A	Samsung	
10 Plus Sign																		
	1/2	1.5 *	350	x					x	x	x		x			DAC05E	PMI	
			500	x					x	x	x		x			**DAC210A**	**† PMI (2974)**	
				x					x	x	x		x			**DAC210B**	**† PMI (2974)**	20
				x					x	x	x		x			**DAC210E**	**PMI (2974)**	
		6	300	x												µPC610	NEC	
	1	1.5 *	300	x					x	x	x		x			**DAC210G**	**PMI (2974)**	
			350	x					x	x	x		x			DAC02AC	PMI	
				x					x	x	x		x			DAC02BC	PMI	25
			500	x					x	x	x		x			**DAC210F**	**PMI (2974)**	
	2	1.5 *	300	x					x	x	x		x			DAC02CC	PMI	
			350	x					x	x	x		x			DAC05A	† PMI	
	3	1.5 *	350	x					x	x	x		x			DAC05C	PMI	
	4	1.5 *	300	x					x	x	x		x			DAC05G	PMI	30
		2.5 *	350	x					x	x	x		x			DAC02DD	PMI	
10 Video Digital Converter																		
	1/2	0.015	2340	x									x			HDD1015	AD	
				x									x			HDD1015C	AD	
				x									x			HDD1015M	† AD	
		75 MHz		x								x	x	x		SP9770	Plessey	35
11 Plus Sign Dynamic Range (7-Bit plus sign format)																		
	1/2 step																	
		0.5 *	207							x	x	x		x		DAC86E	PMI	
		0.5	207							x	x	x		x		**DAC88E**	**PMI (2974)**	
										x	x	x		x		**DAC89E**	**PMI (2974)**	
	1 step	0.5	207							x	x	x		x		DAC86C	PMI	
12	1/4	0.01								x	x				x	AD667K	AD	40
		0.25	345	x	x					x	x		x			AD565AK	AD	
				x	x					x	x		x			AD565AT	† AD	
				x	x					x	x		x			AD565AK	Maxim	
				x	x					x	x		x			AD565AT	† Maxim	
				x	x					x	x		x			MN565AK	MicroNet	45
				x	x					x	x		x			MN565AT	† MicroNet	
		0.3	270	x						x	x			x		DAC1266A	National	
				x						x	x			x		DAC1266AC	National	
			345	x						x	x		x	x		DAC1265A	National	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
12	1/2	0.3	345	x						x	x		x	x		DAC1265AC	National	
			800			x	x	x		x	x					TPDAC80I	TeledyneP	
		0.35	300	x	x					x	x			x		AD566AK	Maxim	
				x	x					x	x			x		AD566AT †	Maxim	
		0.4	300	x	x					x	x		x	x		AD566AK	AD	5
				x	x					x	x		x	x		AD566AT †	AD	
				x	x					x	x		x			AD566K	AD	
				x	x					x	x		x			AD566T †	AD	
				x	x					x	x		x			MCE566AK ◊	MCE	
				x	x					x	x		x	x		MCE566AT ◊†	MCE	10
				x	x					x	x		x	x		MCE566K ◊	MCE	
				x	x					x	x		x			MCE566T ◊†	MCE	
			345	x	x					x	x		x			AD565K	AD	
				x	x					x	x		x			AD565T †	AD	
				x	x					x	x		x			µA565KC	Fairchild	15
				x	x					x	x		x			µA565TM †	Fairchild	
				x	x					x	x		x			MCE565K ◊	MCE	
				x	x					x	x		x			MCE565T ◊†	MCE	
			780	x						x	x			x		**HI562A-2 ◊†**	**Harris (2703, 2738, 2749, 2768)**	
				x						x	x			x		**HI562A/883 ◊**	**Harris (2703, 2738, 2749, 2768)**	20
		0.5	312 *	x	x	x	x	x		x	x	x		x		AM6012C	AMD	
			375	x	x					x	x		x			**HI565AKD-5**	**Harris (2738, 2749)**	
				x	x					x	x		x			**HI565ATD-5 †**	**Harris (2738, 2749)**	
			495	x	x					x	x		x		x	AD567K	AD	
				x	x					x	x		x		x	MN567K	MicroNet	25
		1	64 *	x	x					x	x			x		HI754ITD-2 †	Harris	
		1 *	975	x	x					x	x		x		x	**DAC811B**	**Burr-Brown (2541)**	
				x	x					x	x		x		x	**DAC811S †**	**Burr-Brown (2541)**	
		1.5 *		x	x					x	x			x		**PM562A †**	**PMI (2974)**	
		1.5	465	x	x					x	x			x		AD562S/BIN	AD	30
			475	x	x					x	x		x			AD563K/BIN	AD	
				x	x					x	x		x			AD563S/BIN †	AD	
				x	x					x	x		x			AD563T/BIN †	AD	
			800			x	x	x		x	x					TPDAC80V	TeledyneP	
		4	800	x	x					x	x		x		x	**DAC811K**	**Burr-Brown (2541)**	35
		6	450			x	x			x	x		x		x	HSDAC87AUB †	HybridSys	
	1/3	6 *	360 *	x		x	x			x	x					HSDAC87AU †	HybridSys	
	1/2			x	x		x			x				x		**AD664**	**AD (2404)**	
				x	x		x			x						**AD7245**	**AD (2407)**	
		—	35		x			x	x	x					x	AD7545C	AD	40
					x			x	x	x					x	AD7545GC	AD	
					x			x	x	x					x	AD7545GL	AD	
					x			x	x	x					x	AD7545GU	AD	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
12	1/2	—	35														(Cont'd)	
					x			x	x	x					x	AD7545L	AD	
					x			x	x	x					x	AD7545U	AD	
		0.003 *		x						x			x			BT104	† Brooktree	
				x						x			x		x	BT105	† Brooktree	
		0.01								x	x				x	AD667J	AD	5
										x	x				x	AD667S	† AD	
		0.020	1000	x								x		x	x	TKDA20H	Tektronix	
		0.035								x	x					**AD568J**	**AD (2403)**	
										x	x					**AD568K**	**AD (2403)**	
										x	x					**AD568S**	**† AD (2403)**	10
			855	x	x					x	x					HDS1250	AD	
				x	x					x	x					HDS1250M	† AD	
		0.04	1160	x	x							x	x			**DAC63BM**	**Burr-Brown (2542)**	
				x	x							x	x			**DAC63CG**	**Burr-Brown (2542)**	
				x	x							x	x			**DAC63CM**	**Burr-Brown (2542)**	15
				x	x							x	x			**DAC63T**	**† Burr-Brown (2542)**	
		0.045	1160	x	x							x	x			**DAC63BG**	**Burr-Brown (2542)**	
		0.05	—			x	x			x		x	x			ADH030II-12	◊ ILC-DDC	
			780	x	x					x			x			DACHF12BMC	Datel	
				x	x					x			x			**DACHF12BMM**	**† Datel (2574)**	20
			800	x	x					x	x					HS9393B	◊† HybridSys	
				x	x					x	x					HS9393C	◊ HybridSys	
				x	x					x	x					HS9394B	◊† HybridSys	
				x	x					x	x					HS9394C	◊ HybridSys	
			1200	x	x					x				x		DAC391B-12	† HybridSys	25
				x	x					x				x		DAC391C-12	HybridSys	
			1350			x	x					x	x			DAC397B-12	† HybridSys	
						x	x					x	x			DAC397C-12	HybridSys	
			1485			x	x					x	x			HC4000	HyComp	
						x	x					x	x			HC4000-883	† HyComp	30
		0.06	395	x	x					x			x			4065	† TeledyneP	
				x	x					x			x			4065HR	† TeledyneP	
		0.06/1	675			x	x			x			x			DAC8528-12	† ILC-DDC	
		0.065	1600			x	x			x			x			**DAC812C**	**Burr-Brown (2542)**	
		0.1	645	x	x					x						4065HR	† TeledyneP	35
		0.2	430 *	x	x			x		x	x					DAC10HT	† Burr-Brown	
		0.25	312 *	x	x	x	x	x		x	x	x		x		AM6012AC	Maxim	
				x	x	x	x	x		x	x	x		x		AM6012AM	† Maxim	
			345	x	x					x	x		x			AD565AJ	AD	
				x	x					x	x		x			AD565AS	† AD	40
				x	x					x	x		x			AD565AJ	Maxim	
				x	x					x	x		x			AD565AS	† Maxim	
				x	x					x	x		x			MCE565AJ	◊ MCE	
				x	x					x	x		x			MCE565AS	◊† MCE	
				x	x					x	x		x			MN565AJ	MicroNet	45
				x	x					x	x		x			MN565AS	† MicroNet	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
CTC—Compl. 2's Compl.
Int Ref.—Internal Reference
Mult.—Multiplying

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
12	1/2	0.25	900			x	x			x			x			4080	† TeledyneP	
						x	x			x			x			4080HR	† TeledyneP	
						x	x			x			x			4081	TeledyneP	
						x	x			x			x			4081HR	† TeledyneP	
						x	x			x			x			4082	TeledyneP	5
						x	x			x			x			4082HR	† TeledyneP	
		0.3 *				x	x			x			x			**DAC85H-CBI-I**	**Burr-Brown (2542)**	
						x	x			x			x			**DAC87H-CBI-I †**	**Burr-Brown (2542, 2544)**	
		0.3	270	x						x	x			x		DAC1266L	National	
				x						x	x			x		DAC1266LC	National	10
			345	x						x	x		x	x		DAC1265L	National	
				x						x	x		x	x		DAC1265LC	National	
		0.3 *	800 *			x	x	x		x			x			DAC850-CBI-I	Burr-Brown	
						x	x	x		x			x			DAC851-CBI-I †	Burr-Brown	
		0.3	1000			x				x			x			**HI5680I**	**Harris (2738, 2749)**	15
						x				x	x		x			**HI5685I**	**Harris (2738, 2749)**	
						x	x			x			x			**HI5687I †**	**Harris (2703, 2738, 2749)**	
			1200			x	x	x			x		x			**DAC80Z-CBI-I**	**Burr-Brown (2542)**	
		0.3/1.5 *																
			800 *			x	x	x		x			x			DAC800-CBI-I	Burr-Brown	
						x	x	x		x			x			DAC800-CBI-V	Burr-Brown	20
						x	x	x		x			x			DAC851-CBI-I †	Burr-Brown	
		0.3/3 *																
			800			x	x	x		x			x			**DAC80-CBI-I**	**Burr-Brown (2542)**	
			850			x	x	x		x			x			ADDAC87/CBI	† AD	
						x	x	x		x			x			DAC85-CBI	MicroNet	
			925			x	x	x		x			x			ADDAC80/CBI	AD	25
						x	x	x		x			x			ADDAC85/CBI	† AD	
						x	x	x		x			x			ADDAC85C/CBI	AD	
		0.35	300	x	x					x	x			x		AD566AJ	Maxim	
				x	x					x	x			x		AD566AS	† Maxim	
		0.4	—	x	x					x	x					**DAC562C**	**Datel (2576)**	30
						x	x	x		x						HIDAC801	◊ Harris	
			225										x			DAC4565	Raytheon	
			300	x	x					x	x		x	x		AD566AJ	AD	
				x	x					x	x		x	x		AD566AS	† AD	
				x	x					x	x		x			AD566J	AD	35
				x	x					x	x		x			AD566S	† AD	
				x	x					x	x		x			MCE565J	◊ MCE	
				x	x					x	x		x			MCE565S	◊† MCE	
				x	x					x	x		x	x		MCE566AJ	◊ MCE	
				x	x					x	x		x	x		MCE566AS	◊† MCE	40
				x	x					x	x		x			MCE566J	◊ MCE	
				x	x					x	x		x			MCE566S	◊† MCE	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
12	1/2	0.4														(Cont'd)		
			345	x	x					x	x		x			AD565J	AD	
				x	x					x	x		x			AD565S	† AD	
				x	x					x	x		x			µA565JC	Fairchild	
				x	x					x	x		x			µA565SM	† Fairchild	
			400	x	x	x	x			x	x	x		x		µPC6012	NEC	5
				x	x	x	x			x	x	x		x		µPC648	NEC	
			780	x						x	x			x		**HI562A-5**	◇ **Harris (2703, 2738, 2749, 2768)**	
		0.5												x		**HDAC50500AC**	◇ **HoneywellSPT (2997)**	
														x		**HDAC50500AI**	◇ **HoneywellSPT (2997)**	
														x		**HDAC50500AM**	◇† **HoneywellSPT (2997)**	10
										x	x			x		**HDAC7541ZAC**	**HoneywellSPT (2997, 2999)**	
										x	x			x		**HDAC7541ZAI**	**HoneywellSPT (2997, 2999)**	
										x	x			x		**HDAC7541ZAM**	† **HoneywellSPT (2997, 2999)**	
														x		**HDAC7542AAC**	**HoneywellSPT (2997, 2999)**	
														x		**HDAC7542AAI**	**HoneywellSPT (2997, 2999)**	15
														x		**HDAC7542AAM**	† **HoneywellSPT (2997, 2999)**	
														x		**HDAC7543AAC**	**HoneywellSPT (2997, 2999)**	
														x		**HDAC7543AAI**	**HoneywellSPT (2997, 2999)**	
														x		**HDAC7543AAM**	† **HoneywellSPT (2997, 2999)**	
														x		**HDAC7545AAC**	**HoneywellSPT (2997, 2999)**	20
														x		**HDAC7545AAI**	**HoneywellSPT (2997, 2999)**	
														x		**HDAC7545AAM**	† **HoneywellSPT (2997, 2999)**	
			0.05	x	x					x	x			x		**DACHA12BC**	**Datel (2576)**	
				x	x					x	x			x		**DACHA12BM**	† **Datel (2576)**	
			20	x	x					x	x			x		**DACHA12BC-1**	**Datel (2576)**	25
				x	x					x	x			x		**DACHA12BM-1**	† **Datel (2576)**	
			312 *	x	x	x	x	x		x	x	x		x		AM6012M	† AMD	
				x	x	x	x	x		x	x	x		x		AM6012C	Maxim	
				x	x	x	x	x		x	x	x		x		AM6012M	† Maxim	
				x	x	x	x	x		x	x	x		x		MCE6012C	MCE	30
				x	x	x	x	x		x	x	x		x		MCE6012M	† MCE	
			375	x	x					x	x		x			**HI565AJD-5**	**Harris (2738, 2749)**	
				x	x					x	x		x			**HI565ASD-5**	† **Harris (2738, 2749)**	
			495	x	x					x	x		x		x	AD567J	AD	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
12	1/2	0.5	495	x	x					x	x		x		x	AD567S	† AD	
				x	x					x	x		x		x	MN567J	MicroNet	
				x	x					x	x		x		x	MN567S	† MicroNet	
		0.5 *	1300			x	x			x	x					HDH1205	AD	
						x	x			x	x					HDH1205M	† AD	5
		0.6	450	x	x	x	x	x		x	x					**DAC7541AB**	**Burr-Brown (2541)**	
				x	x	x	x	x		x	x					**DAC7541AK**	**Burr-Brown (2541)**	
				x	x	x	x	x		x	x					**DAC7541AT**	**† Burr-Brown (2541)**	
		0.6 *	470	x			x			x	x			x		Si7541AK	Siliconix	
				x			x			x	x			x		Si7541K	Siliconix	10
			900	x			x			x	x			x		Si7541AT	† Siliconix	
				x			x			x	x			x		Si7541T	† Siliconix	
		0.6	1410	x	x					x				x		DAC392B-12	HybridSys	
				x	x					x				x		DAC392C-12	HybridSys	
		0.75 *	555	x	x	x				x	x		x			**HI5690V**	**Harris (2738, 2741, 2749)**	15
				x	x	x				x	x		x			**HI5695V**	**Harris (2738, 2741, 2749)**	
				x	x	x				x	x		x			**HI5697V**	**† Harris (2703, 2738, 2741, 2749)**	
		1		x			x	x			x					**DAC8012**	**Burr-Brown (2541)**	
														x	x	**DAC612**	**Datel (2576)**	
			10	x			x	x					x			**DAC8221**	**PMI (2974)**	20
		1 *	11 *	x	x	x	x			x	x			x	x	MP7622K	MicroPwr	
		1	20 *	x	x	x	x			x	x			x		AD7541B	AD	
				x	x	x	x			x	x			x		AD7541K	AD	
				x	x	x	x			x	x			x		AD7541T	† AD	
				x	x	x	x			x	x			x		**AD7541B**	**GE/Intersil (2668)**	25
				x	x	x	x			x	x			x		**AD7541K**	**GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7541T**	**GE/Intersil (2668)**	
			20	x	x	x	x			x	x			x		AD7541AB	Maxim	
				x	x	x	x			x	x			x		AD7541AK	Maxim	
				x	x	x	x			x	x			x		AD7541AT	† Maxim	30
				x	x	x	x			x	x			x		AD7541B	Maxim	
				x	x	x	x			x	x			x		AD7541K	Maxim	
				x	x	x	x			x	x			x		AD7541T	† Maxim	
				x	x	x	x			x	x			x		MP7541B	MicroPwr	
				x	x	x	x			x	x			x		MP7541K	MicroPwr	35
		1 *	20 *		x			x	x	x				x	x	MP7545	MicroPwr	
		1	20 *	x	x	x	x			x	x			x		MP7621B	MicroPwr	
				x	x	x	x			x	x			x		MP7621K	MicroPwr	
				x	x	x	x			x	x			x		MP7621T	† MicroPwr	
				x	x	x	x			x	x			x		MP7623B	MicroPwr	40
			30 *	x	x					x	x			x		HS7541-4	HybridSys	
			30	x	x					x	x			x		HS7541B-2	† HybridSys	
				x	x					x	x			x		HS7541C-2	HybridSys	
				x						x	x			x		DAC1208	National	
				x						x	x			x		DAC1218	National	45
				x						x	x			x		DAC1230	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB μS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
12	1/2	1	30	x	x					x	x				x	**PM7541A** ◇†	**PMI (2974, 2976)**	
				x	x					x	x				x	**PM7541E**	**PMI (2974, 2976)**	
				x	x					x	x				x	**PM7541G**	**PMI (2974, 2976)**	
		1 *	40 *	x	x	x	x			x	x			x	x	MP7622B	MicroPwr	
		1	45	x	x					x	x			x	x	**PM7548A** †	**PMI (2974, 2976)**	5
				x	x					x	x			x	x	**PM7548B** †	**PMI (2974, 2976)**	
				x	x					x	x			x	x	**PM7548E**	**PMI (2974, 2976)**	
				x	x					x	x			x	x	**PM7548F**	**PMI (2974, 2976)**	
				x	x					x	x			x	x	**PM7548G**	**PMI (2974, 2976)**	
				x	x					x	x			x	x	**PM7548H**	**PMI (2974, 2976)**	10
			50	x	x					x	x			x		**DAC8012A** †	**PMI (2974)**	
				x	x					x	x			x		**DAC8012E**	**PMI (2974)**	
				x	x					x	x			x		**DAC8012G**	**PMI (2974)**	
				x	x					x	x			x		**DAC8212A** †	**PMI (2964, 2974, 2976)**	
				x	x					x	x			x		**DAC8212E**	**PMI (2964, 2974, 2976)**	15
				x	x					x	x			x		**DAC8212G**	**PMI (2964, 2974, 2976)**	
			450	x	x					x	x			x		**DAC7541**	**Datel (2576)**	
				x	x	x	x			x	x			x		MP7623K	MicroPwr	
				x	x	x	x			x	x			x		MP7623T †	MicroPwr	
				x		x	x				x			x		**DAC8043**	**PMI (2974)**	20
				x		x	x			x	x			x		**PM7542A** †	**PMI (2974, 2976)**	
				x		x	x			x	x			x		**PM7542B** †	**PMI (2974, 2976)**	
				x		x	x			x	x			x		**PM7542E**	**PMI (2974, 2976)**	
				x		x	x			x	x			x		**PM7542F**	**PMI (2974, 2976)**	
				x		x	x			x	x			x		**PM7542G**	**PMI (2974, 2976)**	25
				x		x	x			x	x			x		**PM7542H**	**PMI (2974, 2976)**	
				x		x	x			x	x			x		**PM7543A** †	**PMI (2974, 2976)**	
				x		x	x			x	x			x		**PM7543B** †	**PMI (2974, 2976)**	
				x		x	x			x	x			x		**PM7543E**	**PMI (2974, 2976)**	
				x		x	x			x	x			x		**PM7543G**	**PMI (2974, 2976)**	30
				x		x	x			x	x			x		**PM7543H**	**PMI (2974, 2976)**	
				x	x					x	x					TP7541B	TeledyneP	
				x	x					x	x			x		TP7541K	TeledyneP	
				x	x			x		x	x			x		TP7541T †	TeledyneP	
			470	x		x	x	x	x		x			x	x	Si7545L	Siliconix	35
		1 *	750		x	x				x	x		x			HSDAC80CBI-I	HybridSys	
																	(Continued)	

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
12	1/2	1	900	x		x	x	x	x		x			x	x	Si7545U	† Siliconix	
		1 *	975	x	x					x	x		x		x	**DAC811A**	**Burr-Brown (2541)**	
				x	x					x	x		x		x	**DAC811R**	**† Burr-Brown (2541)**	
			1000	x	x	x	x			x	x			x	x	MP7622T	† MicroPwr	
		1.0	30	x	x					x	x			x	x	**PM7545A**	**† PMI (2974, 2976)**	5
				x	x					x	x			x	x	**PM7545E**	**PMI (2974, 2976)**	
				x	x					x	x			x	x	**PM7545G**	**PMI (2974, 2976)**	
				x	x					x	x			x	x	**PM7645A**	**† PMI (2974, 2976)**	
				x	x					x	x			x	x	**PM7645G**	**PMI (2974, 2976)**	
		1.2	800	x	x					x	x		x		x	HI5811J-5	Harris	10
		1.5								x	x					AD7549K	AD	
		1.5 *		x	x					x	x			x		**PM562B**	**† PMI (2974)**	
				x	x					x	x			x		**PM562F**	**PMI (2974)**	
				x	x					x	x			x		**PM562H**	**PMI (2974)**	
		1.5	200	x	x					x	x	x		x		MP562H	MicroPwr	15
				x	x					x	x	x		x		MP562J	MicroPwr	
				x	x					x	x	x		x		MP562K	MicroPwr	
		1.5 *	465	x	x					x	x			x		AD562K/BIN	AD	
			475	x	x					x	x		x			AD563J/BIN	AD	
			750		x	x				x	x		x			HSDAC80CBI-V	HybridSys	20
			800 *			x	x	x		x			x			DAC850-CBI-V	Burr-Brown	
						x	x	x		x			x			DAC851-CBI-V	Burr-Brown	
		2		x			x	x			x					**DAC7545**	**Burr-Brown (2541)**	
				x	x					x						**DACHK-12**	**Intech (2799)**	
			20							x	x			x	x	HS7542K	HybridSys	25
										x	x			x	x	HS7542T	† HybridSys	
										x	x			x	x	HS7543K	HybridSys	
										x	x			x	x	HS7543T	† HybridSys	
										x	x			x	x	HS7545K	HybridSys	
				x	x					x	x			x	x	HS7545T	† HybridSys	30
			30	x	x					x	x			x	x	AD7545C	Maxim	
				x	x				x	x				x	x	AD7545GC	Maxim	
				x	x				x	x				x	x	AD7545GL	Maxim	
				x	x				x	x				x	x	AD7545GU	† Maxim	
				x	x				x	x				x	x	AD7545L	Maxim	35
				x	x					x	x			x	x	AD7545U	† Maxim	
			40	x	x					x	x			x		AD7542B	AD	
				x	x					x	x			x		AD7542K	AD	
				x	x					x	x			x		AD7542T	† AD	
				x						x				x		AD7543B	AD	40
				x						x				x		AD7543K	AD	
				x	x					x	x			x		AD7542B	Maxim	
				x	x					x	x			x		AD7542GB	Maxim	
				x	x					x	x			x		AD7542GK	Maxim	
				x	x					x	x			x		AD7542GT	† Maxim	45
				x	x					x	x			x		AD7542K	Maxim	
				x	x					x	x			x		AD7542T	† Maxim	
				x	x					x				x		AD7543B	Maxim	
				x	x					x				x		AD7543GB	Maxim	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB μS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
12	1/2	2	40	x	x					x				x		AD7543GK	Maxim	
				x	x					x				x		AD7543GT	† Maxim	
				x	x					x				x		AD7543K	Maxim	
				x	x					x				x		AD7543T	† Maxim	
			375 *	x	x	x				x	x			x		HS3120B-2	† HybridSys	5
				x	x	x				x	x			x		HS3120C-2	HybridSys	
			375	x	x					x			x			4058	† TeledyneP	
			1900			x	x			x						HDD1206J	AD	
						x	x			x						HDD1206S	† AD	
		2.5	—	x	x					x	x		x			DAC338B-12-2	HybridSys	10
			645	x	x					x			x			4058HR	† TeledyneP	
		3	30	x	x					x	x			x		DAC331B-12	† HybridSys	
				x	x					x	x			x		DAC331C-12	HybridSys	
			500	x				x		x	x					**DAC7134BJ**	**Datel (2576)**	
				x				x		x	x					**DAC7134UJ**	**Datel (2576)**	15
			675			x	x			x			x			**DAC870U**	**Burr-Brown (2544)**	
						x	x			x			x			**DAC870V**	**† Burr-Brown (2544)**	
			850			x	x			x			x			DAC80	MicroNet	
						x	x	x		x			x			MNDAC87	◊† MicroNet	
			900	x	x					x			x		x	**DACHK12BGC**	**Datel (2576)**	20
								x		x			x		x	**DACHK12BGC-2**	**Datel (2576)**	
				x	x					x			x		x	**DACHK12BMM**	**† Datel (2574, 2576)**	
								x		x			x		x	**DACHK12BMM-2**	**† Datel (2576)**	
				x	x					x			x		x	DACHK12BGC	Intech	
				x	x					x			x		x	DACHK12BMM	† Intech	25
			1000			x				x			x			**HI5680V**	**Harris (2738, 2749)**	
						x				x	x		x			**HI5685V**	**Harris (2738, 2749)**	
						x	x			x			x			**HI5687V**	**Harris (2703, 2738, 2749)**	
			1050			x	x			x			x			**DACHZ12BGC**	**Datel (2576)**	
						x	x			x			x			**DACHZ12BMM**	**† Datel (2574, 2576)**	30
		3.5	465	x	x					x	x			x		AD562A/BCD	AD	
				x	x					x	x			x		AD562A/BIN	AD	
		4	300	x	x					x	x		x		x	DAC336B-12	† HybridSys	
				x	x					x	x		x		x	DAC336C-12	HybridSys	
			975			x	x			x			x		x	DACHK	† MicroNet	35
			1955	x	x					x	x			x	x	**AD392**	**AD (2402)**	
		5 *				x	x			x			x			**DAC85H-CBI-V**	**Burr-Brown (2542)**	
						x	x			x			x			**DAC87H-CBI-V**	**† Burr-Brown (2542, 2544)**	
		5	400							x	x			x	x	HS33806	† HybridSys	
			450 *	x	x					x	x		x			HS9338-2	HybridSys	40
		5 *	525 *			x	x			x	x		x			MN3850	† MicroNet	
						x	x			x	x		x			MN3850H	MicroNet	
			675 *			x	x			x			x		x	MN3860	MicroNet	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
12	1/2	5 *	675 *			x	x			x			x		x	MN3860H	† MicroNet	
		5	1000		x	x							x			HS3860B	† HybridSys	
					x	x							x			HS3860C	HybridSys	
			1200			x	x	x			x		x			**DAC80-CBI-V**	**Burr-Brown (2542)**	
						x	x	x			x		x			**DAC80Z-CBI-V**	**Burr-Brown (2542)**	5
		6	450			x	x			x	x		x		x	HSDAC87ATB	† HybridSys	
			630	x	x					x			x		x	**DAC88**	**† Intech (2799)**	
		7	1000			x	x			x			x		x	AD3860K	AD	
						x	x			x			x		x	AD3860S	† AD	
			1025			x	x	x		x			x			**DAC87/CBI**	**† Burr-Brown (2542, 2544)**	10
		8	—	x						x	x					AD390K	AD	
			375			x	x			x			x			MN3348	MicroNet	
						x	x			x			x			MN3348H	† MicroNet	
		1/2	20	x	x	x	x			x	x			x		MP7541T	† MicroPwr	
		10	375			x	x			x			x			MN3349	MicroNet	15
						x	x			x			x			MN3349H	† MicroNet	
			760			x	x			x			x		x	DAC88	† MicroNet	
						x	x		x				x		x	MN3660	◊† MicroNet	
			875	x	x					x	x			x	x	MP1480S	Analogic	
			1200			x	x			x			x			DAC71	MicroNet	20
		15		x						x	x			x		AD39KT	AD	
					x					x	x			x		AD394	AD	
					x					x	x			x		AD394K	AD	
					x					x	x			x		AD394T	AD	
				x						x	x			x		AD395	AD	25
				x						x	x			x		AD395K	AD	
			165	x				x		x	x			x		DAC348B-12	† HybridSys	
				x				x		x	x			x		DAC348C-12	HybridSys	
			300	x	x					x	x		x			DAC349B-12	† HybridSys	
				x	x					x	x		x			DAC349C-12	HybridSys	30
				x	x					x	x		x			DAC9349-12	HybridSys	
		20	150			x	x			x	x		x			DAC347LPB-12U	† HybridSys	
						x	x			x	x		x			DAC347LPC-12B	HybridSys	
						x	x			x	x		x			DAC347LPC-12U	HybridSys	
						x	x			x	x		x			HAC347LPB-12B	† HybridSys	35
			355			x				x				x		MN3412	◊ MicroNet	
		25	—				x			x	x		x		x	DAC02701	ILC-DDC	
			175 *			x				x	x		x			DAC9356	HybridSys	
			595			x	x						x	x	x	**ADC80H-AH-12**	**Burr-Brown (2541)**	
		30	—	x		x				x				x		M/DA2000	HyComp	40
		35 *	—	x	x					x	x		x			DDC1250-12-1	ILC-DDC	
				x	x					x	x		x			DDC1250-12-3	ILC-DDC	
		35	90			x				x			x			MN371	MicroNet	
						x				x			x			MN371H	† MicroNet	
			150			x				x	x		x			AD371J	AD	45
		50	265				x			x	x		x			DAC356B-12	◊† HybridSys	
							x			x	x		x			DAC356C-12	◊ HybridSys	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB μS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
12	1/2	50	908				x			x	x		x			DAC356LPB-12 ◊†	HybridSys	
							x			x	x		x			DAC356LPC-12 ◊	HybridSys	
			1653			x	x					x	x			HDS1240E	AD	
						x	x					x	x			HDS1240EM †	AD	
		70	90				x			x	x		x			MN370	MicroNet	5
							x			x	x		x			MN370H †	MicroNet	
	3/4	0.08	1600							x			x			**DAC812B**	**Burr-Brown (2542)**	
		6	450			x	x			x	x		x		x	HSDAC87ASB †	HybridSys	
		8	—	x						x	x					AD390J	AD	
				x						x	x					AD390S †	AD	10
				x						x	x					AD390T †	AD	
				x						x	x					**DAC390 †**	**Intech (2799)**	
	1/2	1	450	x		x	x			x	x			x		**PM7543F**	**PMI (2974, 2976)**	
	1	—	35		x			x	x	x					x	AD7545B	AD	
					x			x	x	x					x	AD7545K †	AD	15
					x			x	x	x					x	AD7545T	AD	
		0.035	300	X						X	X		X			**AD568 †**	**AD (2403)**	
		0.06/1	675			x	x			x			x			DAC8528-11 †	ILC-DDC	
		0.25	375	x		x				x	x	x		x		**DAC312E**	**PMI (2974)**	
		0.5												x		**HDAC50500BC ◊**	**HoneywellSPT (2997)**	20
														x		**HDAC50500BI ◊**	**HoneywellSPT (2997)**	
														x		**HDAC50500BM ◊†**	**HoneywellSPT (2997)**	
										x	x			x		**HDAC7541ZBC**	**HoneywellSPT (2997, 2999)**	
										x	x			x		**HDAC7541ZBI**	**HoneywellSPT (2997, 2999)**	
										x	x			x		**HDAC7541ZBM †**	**HoneywellSPT (2997, 2999)**	25
														x		**HDAC7542ABC**	**HoneywellSPT (2997, 2999)**	
														x		**HDAC7542ABI**	**HoneywellSPT (2997, 2999)**	
														x		**HDAC7542ABM †**	**HoneywellSPT (2997, 2999)**	
														x		**HDAC7543ABC**	**HoneywellSPT (2997, 2999)**	
														x		**HDAC7543ABI**	**HoneywellSPT (2997, 2999)**	30
														x		**HDAC7543ABM †**	**HoneywellSPT (2997, 2999)**	
														x		**HDAC7545ABC**	**HoneywellSPT (2997, 2999)**	
														x		**HDAC7545ABI**	**HoneywellSPT (2997, 2999)**	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
12	1	0.5												x		**HDAC7545ABM †**	**HoneywellSPT (2997, 2999)**	
		0.6	450	x	x	x	x	x		x	x					**DAC7541AA**	**Burr-Brown (2541)**	
				x	x	x	x	x		x	x					**DAC7541AJ**	**Burr-Brown (2541)**	
				x	x	x	x	x		x	x					**DAC7541AS †**	**Burr-Brown (2541)**	
		0.6 *	470	x			x			x	x			x		Si7541AJ	Siliconix	5
				x			x			x	x			x		Si7541J	Siliconix	
			900	x			x			x	x			x		Si7541AS †	Siliconix	
				x			x			x	x			x		Si7541S †	Siliconix	
		1	20 *	x	x	x	x			x	x			x		AD7541A	AD	
				x	x	x	x			x	x			x		AD7541J	AD	10
				x	x	x	x			x	x			x		**AD7541A**	**GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7541J**	**GE/Intersil (2668)**	
			20	x	x	x	x			x	x			x		AD7541A	Maxim	
				x	x	x	x			x	x			x		AD7541AA	Maxim	
				x	x	x	x			x	x			x		AD7541AJ	Maxim	15
				x	x	x	x			x	x			x		AD7541AS †	Maxim	
				x	x	x	x			x	x			x		AD7541J	Maxim	
				x	x	x	x			x	x			x		AD7541S †	Maxim	
				x	x	x	x			x	x			x		MP7541A	MicroPwr	
				x	x	x	x			x	x			x		MP7541J	MicroPwr	20
				x	x	x	x			x	x			x		MP7541S †	MicroPwr	
		1 *	20 *	x	x						x			x		MP7542A	MicroPwr	
				x	x						x			x		MP7542J	MicroPwr	
				x	x						x			x	x	MP7543A	MicroPwr	
				x	x						x			x	x	MP7543J	MicroPwr	25
				x	x						x			x	x	MP7543S †	MicroPwr	
		1	20 *	x	x	x	x			x	x			x		MP7621A	MicroPwr	
				x	x	x	x			x	x			x		MP7621J	MicroPwr	
				x	x	x	x			x	x			x		MP7621S †	MicroPwr	
				x	x	x	x			x	x			x		MP7623A	MicroPwr	30
				x	x	x	x			x	x			x		MP7623J	MicroPwr	
				x	x	x	x			x	x			x		MP7623S †	MicroPwr	
			30	x	x					x	x			x		HS7541B-1 †	HybridSys	
				x	x					x	x			x		HS7541C-1	HybridSys	
				x						x	x			x		DAC1209	National	35
				x						x	x			x		DAC1219	National	
				x						x	x			x		DAC1231	National	
				x	x					x	x			x	x	**DAC8012B †**	**PMI (2974)**	
				x	x					x	x			x	x	**DAC8012F**	**PMI (2974)**	
				x	x					x	x			x	x	**DAC8012H**	**PMI (2974)**	40
				x	x					x	x			x	x	**DAC8212B †**	**PMI (2964, 2974, 2976)**	
				x	x					x	x			x	x	**DAC8212F**	**PMI (2964, 2974, 2976)**	
				x	x					x	x			x	x	**DAC8212H**	**PMI (2964, 2974, 2976)**	
				x	x					x	x			x		**PM7541B †**	**PMI (2974, 2976)**	
				x	x					x	x			x		**PM7541F**	**PMI (2974, 2976)**	45

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB μS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
12	1	1	30	x	x					x	x			x		**PM7541H**	**PMI (2974, 2976)**	
			40 *	x	x	x	x			x	x			x	x	MP7622A	MicroPwr	
				x	x	x	x			x	x			x	x	MP7622J	MicroPwr	
				x	x	x	x			x	x			x	x	MP7622S	† MicroPwr	
			50 *	x	x	x	x			x	x			x		AD7541S	† AD	5
				x	x	x	x			x	x			x		**AD7541L**	**GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7541S**	**† GE/Intersil (2668)**	
			450	x	x					x	x					TP7541A	TeledyneP	
				x	x					x	x			x		TP7541J	TeledyneP	
				x	x					x	x			x		TP7541S	† TeledyneP	10
			470	x		x	x	x	x		x			x	x	Si7545K	Siliconix	
				x		x	x	x	x	x				x	x	Si8045K	Siliconix	
		1 *	500	x	x						x					MP1209A	MicroPwr	
				x	x						x					MP1209J	MicroPwr	
				x	x						x					MP1209S	† MicroPwr	15
				x	x						x				x	MP1231A	MicroPwr	
				x	x						x				x	MP1231J	MicroPwr	
				x	x						x				x	MP1231S	† MicroPwr	
				x	x						x				x	MP1232H	MicroPwr	
				x	x						x				x	MP1232R	† MicroPwr	20
				x	x						x				x	MP1232Z	MicroPwr	
		1	700					x		x					x	IR3K12	Sharp	
			900	x		x	x	x	x		x			x	x	Si7545T	† Siliconix	
				x		x	x	x	x	x				x	x	Si8045T	† Siliconix	
		1.5								x	x					AD7537	AD	25
										x	x			x		AD7547J	AD	
										x	x			x		AD7547K	AD	
										x	x			x		AD7547S	AD	
										x	x					AD7549J	AD	
										x	x			x		AD757J	AD	30
		2	20							x	x			x	x	HS7542J	HybridSys	
										x	x			x	x	HS7542S	† HybridSys	
										x	x			x	x	HS7543J	HybridSys	
										x	x			x	x	HS7543S	† HybridSys	
										x	x			x	x	HS7545J	HybridSys	35
										x	x			x	x	HS7545S	† HybridSys	
			30	x	x					x	x			x	x	AD7545B	Maxim	
				x	x					x	x			x	x	AD7545K	Maxim	
				x	x					x	x			x	x	AD7545T	† Maxim	
			40	x	x					x	x			x		AD7542A	AD	40
				x	x					x	x			x		AD7542J	AD	
				x	x					x	x			x		AD7542S	† AD	
				x	x					x				x		AD7543A	AD	
				x	x					x				x		AD7543J	AD	
				x	x					x	x			x		AD7542A	Maxim	45
				x	x					x	x			x		AD7542J	Maxim	
				x	x					x	x			x		AD7542S	† Maxim	
				x	x					x				x		AD7543A	Maxim	
				x	x					x				x		AD7543J	Maxim	
				x	x					x				x		AD7543S	† Maxim	50
				x	x	x	x			x	x			x	x	SI8021A	† Siliconix	
				x	x	x	x			x	x			x	x	SI8021C	Siliconix	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
12	1	2	450	x	x						x			x		MP7542S	† Harris	
		2.5	—	x	x					x	x		x			DAC338B-12-1	HybridSys	
		4	300	X	X					X	X		X	X	X	**AD767**	**† AD (2405)**	
			800	x	x								x		x	**DAC811J**	**Burr-Brown (2541)**	
		5	450 *	x	x					x	x		x			HS9338-1	HybridSys	5
		10	65	X	X				X	X	X		X	X	X	AD6245	† AD	
				X	X				X	X	X		X	X	X	**AD7248**	**† AD (2407)**	
		20 *	500	x	x					x	x		x		x	DAC9377-16-5	HybridSys	
		30	—	x		x				x				x		M/DA2005	HyComp	
		35	150			x				x	x		x			AD371K	AD	10
						x				x	x		x			AD371S	† AD	
		550 *	30	x	x					x	x					AD7240K	AD	
				x	x					x	x					AD7240T	† AD	
	1 1/4	0.1	10000		x			x			x		x	x		ADC60OK	Burr-Brown	
	1.0	6 *	360 *	x		x	x			x	x					HSDAC87AS	† HybridSys	15
	1/2	0.5	330	x						x	x			x		**HI5660-2**	**† Harris (2738, 2749)**	
				x						x	x			x		**HI5660-5**	**Harris (2738, 2749)**	
				x						x	x			x		**HI5660A-S**	**Harris (2738, 2749)**	
				x						x	x			x		**HI5660A-2**	**† Harris (2738, 2749)**	
		1 *	20 *	x	x						x					MP1208B	MicroPwr	20
				x	x						x					MP1208K	MicroPwr	
				x	x						x					MP1208T	† MicroPwr	
				x	x						x				x	MP1230B	MicroPwr	
				x	x						x				x	MP1230K	MicroPwr	
				x	x						x				x	MP1230T	† MicroPwr	25
				x	x						x			x		MP7542B	MicroPwr	
				x	x						x			x		MP7542K	MicroPwr	
				x	x						x			x		MP7542T	† MicroPwr	
				x	x						x			x	x	MP7543B	MicroPwr	
				x	x						x			x	x	MP7543K	MicroPwr	30
				x	x						x			x	x	MP7543T	† MicroPwr	
	1/4	1 *	500	x	x						x					MP1210H	MicroPwr	
				x	x						x					MP1210R	† MicroPwr	
				x	x						x					MP1210Z	MicroPwr	
	1 1/2	550 *	30	x	x					x	x					AD7240J	AD	35
				x	x					x	x					AD7240S	† AD	
	2	—	35		x			x	x	x					x	**AD7545A**	**AD (2409)**	
					x			x	x	x					x	AD7545J	AD	
					x			x	x	x					x	AD7545S	† AD	
		0.04	—	x	x							x	x			DA4000	HyComp	40
		0.05	—			x	x			x		x	x			ADH030II-10	◊ ILC-DDC	
		0.25		x	X	x	x			x	x		x	x		DAC6012AC	Raytheon	
				x	X	x	x			x	x		x	x		DAC6012AM	Raytheon	
				x	X	x	x			x	x		x	x		DAC6012C	Raytheon	
				x	X	x	x			x	x		x	x		DAC6012M	Raytheon	45
			375	x		x				x	x	x		x		**DAC312B**	**† PMI (2974)**	
				x		x				x	x	x		x		**DAC312F**	**PMI (2974)**	
		0.25 *	473	x	x	x		x		x	x			x		HA17012B	Hitachi	
		0.5	10 *	x						x	x			x		DAC1220	† National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
12	2	0.5	10 *	x						x	x			x		DAC1220C	National	
		0.5 *	20 *	x	x	x	x			x	x			x		AD7521L	AD	
				x	x	x	x			x	x			x		AD7521U	† AD	
				x	x	x	x			x	x			x		**AD7521L**	**GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7521U**	**† GE/Intersil (2668)**	5
				x	x	x	x			x	x			x		**AD7531L**	**GE/Intersil (2668)**	
		0.5	20	x	x	x	x			x	x			x		AD7521L	Maxim	
				x	x	x	x			x	x			x		AD7521U	† Maxim	
				x	x	x	x			x	x			x		AD7531L	Maxim	
		0.5 *	20 *	x	x	x	x			x	x			x		MP7521L	MicroPwr	10
				x	x	x	x			x	x			x		MP7521U	† MicroPwr	
				x	x	x	x			x	x			x		MP7531L	MicroPwr	
			40 *	x	x	x	x			x	x			x	x	MP7622H	MicroPwr	
				x	x	x	x			x	x			x	x	MP7622R	† MicroPwr	
				x	x	x	x			x	x			x	x	MP7622Z	MicroPwr	15
		0.5	397	x	x	x		x		x	x	x		x		AM6012	Signetics	
		1 *	20 *	x	x	x	x			x	x			x		MP7621Z	MicroPwr	
		1	30	x						x	x			x		DAC1210	National	
				x						x	x			x		DAC1232	National	
			470	x		x	x	x	x		x			x	x	Si7545J	Siliconix	20
			900	x		x	x	x	x		x			x	x	Si7545S	† Siliconix	
		2	30	x	x					x	x			x	x	AD7545A	Maxim	
				x	x					x	x			x	x	AD7545J	Maxim	
				x	x					x	x			x	x	AD7545S	† Maxim	
			40	x	x	x	x			x	x			x	x	SI8020A	† Siliconix	25
				x	x	x	x			x	x			x	x	SI8020C	Siliconix	
			375 *	x	x	x				x	x			x		DAC3120B-0	† HybridSys	
				x	x	x				x	x			x		DAC3120C-0	HybridSys	
		2.5	—	x	x					x	x		x			DAC338B-12-0	HybridSys	
		5	450 *	x	x					x	x		x			HS9338-0	HybridSys	30
		20 *	500	x	x					x	x		x		x	DAC9377-16-4	HybridSys	
		35 *	—	x	x					x	x		x			DDC1250-10-1	ILC-DDC	
				x	x					x	x		x			DDC1250-10-3	ILC-DDC	
		500 *	24	x						x	x			x		AD7521L	National	
				x						x	x			x		AD7521U	† National	35
	2/3	6 *	360 *	x		x	x			x	x					HSDAC87AT	† HybridSys	
	3/4	7	800 *			x	x	x		x			x			DAC1200K-V	Burr-Brown	
			975	x	x					x	x		x			DAC1201K-V	Burr-Brown	
	4	0.25 *	473	x	x	x		x		x	x			x		HA17012C	Hitachi	
		0.5 *	20 *	x	x	x	x			x	x			x		AD7521K	AD	40
				x	x	x	x			x	x			x		AD7521T	† AD	
				x	x	x	x			x	x			x		AD7531K	AD	
				x	x	x	x			x	x			x		**AD7521K**	**GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7521T**	**† GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7531K**	**GE/Intersil (2668)**	45
		0.5	20	x	x	x	x			x	x			x		AD7521K	Maxim	
				x	x	x	x			x	x			x		AD7521T	† Maxim	
				x	x	x	x			x	x			x		AD7531K	Maxim	
		0.5 *	20 *	x	x	x	x			x	x			x		MP7521K	MicroPwr	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Irt. Ref.	Mult.	Latches	Device	Source	Line
12	4	0.5 *	20 *	x	x	x	x			x	x			x		MP7521T	† MicroPwr	
				x	x	x	x			x	x			x		MP7531K	MicroPwr	
		500 *	24	x						x	x			x		AD7521K	National	
				x						x	x			x		AD7521T	† National	
				x						x	x			x		DAC1221	† National	5
				x						x	x			x		DAC1221C	National	
	8	0.5 *	20 *	x	x	x	x			x	x			x		AD7521J	AD	
				x	x	x	x			x	x			x		AD7521S	† AD	
				x	x	x	x			x	x			x		AD7531J	AD	
				x	x	x	x			x	x			x		**AD7521J**	**GE/Intersil (2668)**	10
				x	x	x	x			x	x			x		**AD7521S**	**† GE/Intersil (2668)**	
				x	x	x	x			x	x			x		**AD7531J**	**GE/Intersil (2668)**	
		0.5	20	x	x	x	x			x	x			x		AD7521J	Maxim	
				x	x	x	x			x	x			x		AD7521S	† Maxim	
				x	x	x	x			x	x			x		AD7531J	Maxim	15
		0.5 *	20 *	x	x	x	x			x	x			x		MP7521J	MicroPwr	
				x	x	x	x			x	x			x		MP7521S	† MicroPwr	
				x	x	x	x			x	x			x		MP7531J	MicroPwr	
		500 *	24	x						x	x			x		AD7521J	National	
				x						x	x			x		AD7521S	† National	20
				x						x	x			x		DAC1222	† National	
				x						x	x			x		DAC1222C	National	
12 (dual)																		
	1/2	1	450	x		x	x			x	x			x		**DAC8222A**	**† PMI (2974)**	
				x		x	x			x	x			x		**DAC8222E**	**PMI (2974)**	
				x		x	x			x	x			x		**DAC8222G**	**PMI (2974)**	25
				x			x	x		x						**DAC8248A**	**† PMI (2974, 2976)**	
				x			x	x		x						**DAC8248E**	**PMI (2974, 2976)**	
				x			x	x		x						**DAC8248G**	**PMI (2974, 2976)**	
		1.5	450	x	x					x	x					AD7537B	AD	
				x	x					x	x					AD7537C	AD	30
				x	x					x	x					AD7537K	AD	
				x	x					x	x					AD7537L	AD	
				x	x					x	x					AD7537T	† AD	
				x	x					x	x					AD7537U	† AD	
				x	x					x	x					AD754L	AD	35
				x	x					x	x					AD7547B	AD	
				x	x					x	x					AD7547C	AD	
				x	x					x	x					AD7547T	† AD	
				x	x					x	x					AD7547U	† AD	
	1	1	450	x		x	x			x	x			x		**DAC8222B**	**† PMI (2974)**	40
				x		x	x			x	x			x		**DAC8222F**	**PMI (2974)**	
				x		x	x			x	x			x		**DAC8222H**	**PMI (2974)**	
				x			x	x		x						**DAC8248F**	**PMI (2974, 2976)**	
				x			x	x		x						**DAC8248H**	**PMI (2974, 2976)**	
		1.5	450	x	x					x	x					AD7537A	AD	45
				x	x					x	x					AD7537J	AD	
				x	x					x	x					AD7537S	† AD	
				x	x					x	x					AD7547A	AD	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
12 Plus Sign Dynamic Range (7-Bit plus sign format)																		
	—	0.5	192							x						AM6072C	AMD	
										x						AM6072M †	AMD	
	1/2 step	0.5	207							x	x	x		x		DAC86E	PMI	
	1 step	0.5	192							x						AM6070C	AMD	
										x						AM6070M †	AMD	5
			207							x	x	x		x		DAC86C	PMI	
12 (Quad)																		
	1/2	8		x									x			MN390 †	MicroNet	
12–3 Digit BCD																		
	1/10	1.5 *	465							x	x			x		AD562K/BCD	AD	
										x	x			x		AD562S/BCD †	AD	
			475							x	x		x			AD563J/BCD	AD	10
										x	x		x			AD563K/BCD	AD	
										x	x		x			AD563S/BCD †	AD	
										x	x		x			AD563T/BCD †	AD	
	1/4	0.3/3 *	925							x	x		x			ADDAC80/CCD	AD	
						x				x	x		x			ADDAC85/CCD †	AD	15
						x				x	x		x			ADDAC85C/CCD	AD	
		3	900										x		x	**DACHK12DGC**	**Datel (2576)**	
													x		x	**DACHK12DMM †**	**Datel (2576)**	
		3 *	1050							x			x			**DACHZ12DGC**	**Datel (2576)**	
										x			x			**DACHZ12DMC**	**Datel (2576)**	20
										x			x			**DACHZ12DMM †**	**Datel (2576)**	
	1/2	0.3	1200								x		x			**DAC80-CCD-I**	**Burr-Brown (2542)**	
											x		x			**DAC80Z-CCD-I**	**Burr-Brown (2542)**	
		0.3/3 *	850 *							x			x			DAC85-CCD †	MicroNet	
		0.5 *	0.05							x	x		x			**DACHA12DC**	**Datel (2576)**	25
										x	x		x			**DACHA12DM †**	**Datel (2576)**	
		0.5	30							x	x		x			**DACHA12DC-1**	**Datel (2576)**	
										x	x		x			**DACHA12DM-1 †**	**Datel (2576)**	
		15	300	x	x					x	x		x			DAC349B-3D †	HybridSys	
				x	x					x	x		x			DAC349C-3D	HybridSys	30
				x						x	x		x			DAC9349-3D	HybridSys	
12–4 Digit BCD																		
	1/2	20 *	500	x	x					x	x		x		x	DAC9377-4D	HybridSys	
13	1/2	3	500	x				x		x	x					**DAC7134BK**	**Datel (2576)**	
				x				x		x	x					**DAC7134UK**	**Datel (2576)**	
	1	0.1	980				x			x			x			2615-12	ILC-DDC	35
		1.6	1100				x			x			x			SDAC12 ◊	ILC-DDC	
	2	0.1	980				x			x			x			2615-11	ILC-DDC	
		1.6	1100				x			x			x			SDAC11 ◊	ILC-DDC	
	4	0.1	980				x			x			x			2615-10	ILC-DDC	
		1.6	1100				x			x			x			SDAC10 ◊	ILC-DDC	40
14	1/2			x	x					x	x			x		DAC9331-14	HybridSys	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
14	1/2	0.5		x								x				**HDAC50600**	**HoneywellSPT (2997)**	
				x								x				**HDAC50800**	**HoneywellSPT (2997)**	
			350										x		x	TDA1540	Signetics	
		2	30 *	x	x					x	x			x		HS3140B-4 †	HybridSys	
				x	x					x	x			x		HS3140C-4	HybridSys	5
		3		x				x		x	x			x	x	**ICL7134**	**GE/Intersil (2668)**	
			30	x	x					x	x			x		DAC331B-14 †	HybridSys	
				x	x					x	x			x		DAC331C-14	HybridSys	
			500	x				x		x	x					**DAC7134BL**	**Datel (2576)**	
				x				x		x	x					**DAC7134UL**	**Datel (2576)**	10
		30		x	x			x		x						A867-14	Intech	
		100		x	x			x		x						**414BIN**	**Intech (2799)**	
		200 kHz	600							x						HDD1409	AD	
	1	0.5	0.05	x	x					x	x			x		DACHA14BC	Datel	
				x	x					x	x			x		DACHA14BM †	Datel	15
			30	x	x					x	x			x		DACHA14BC-1	Datel	
				x	x					x	x			x		DACHA14BM-1	Datel	
		1.5		x										x	x	AD7534B	AD	
				x										x	x	AD7534K	AD	
				x										x	x	AD7534T †	AD	20
				x										x	x	AD7535B	AD	
				x										x	x	AD7535K	AD	
				x										x	x	AD7535T †	AD	
										x	x					AD7536K	AD	
										x	x					AD7536T †	AD	25
			50	X						X	X			X	X	**AD7538**	**† AD (2408)**	
		1.8	1775	x	x					x						DAC02310-103	† ILC-DDC	
				x	x					x						DAC02310-303	ILC-DDC	
		2	30 *	x	x					x	x			x	x	MP3140B-4 ◊†	MicroPwr	
				x	x					x	x			x	x	MP3140C-4 ◊	MicroPwr	30
			375 *	x	x	x				x	x			x		HS3140B-3	HybridSys	
				x	x	x				x	x			x		HS3140C-3	HybridSys	
		3	500	x	x					x	x		x			**DAC7134**	**Datel (2576)**	
	2	1.5		x										x	x	AD7534A	AD	
				x										x	x	AD7534J	AD	
				x										x	x	AD7534S †	AD	35
				x										x	x	AD7535A	AD	
				x										x	x	AD7535J	AD	
				x										x	x	AD7535S †	AD	
										x	x					AD7536J	AD	40
										x	x					AD7536S †	AD	
		1.8	1775	x	x					x						DAC02310-102	† ILC-DDC	
				x	x					x						DAC02310-302	ILC-DDC	
		2	40 *	x	x					x	x			x	x	MP3140B-3 ◊†	MicroPwr	
				x	x					x	x			x	x	MP3140C-3 ◊	MicroPwr	45
				x	x					x	x			x	x	MP7614K	MicroPwr	
				x	x					x	x			x	x	MP7614T †	MicroPwr	
		15	780		x					x	x					AD396K	AD	
					x					x	x					AD396S †	AD	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB μS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
14	2	15	780		x					x	x					AD396T	AD	
		100		x	x			x		x						**416BIN**	**Intech (2799)**	
	4	2	40 *	x	x					x	x			x	x	MP7614J	MicroPwr	
				x	x					x	x			x	x	MP7614S	† MicroPwr	
16		3	200							x	x			x		AD569S	† AD	5
	1/8	25	1425	x				x		x			x		x	MP8116	Analogic	
	1/4	2		x		x	x			x	x			x		HS7616KN	HybridSys	
				x		x	x			x	x			x		HS7616TD	† HybridSys	
		3.5	750		x			x	x	x	x		x			MP1936	Analogic	
		5	500		x			x	x	x	x		x			MP1926A	Analogic	10
		50	500		x			x	x	x	x		x			MP1926S	Analogic	
	1/2	0.1		x								x				**HDAC52160**	**HoneywellSPT (2997)**	
		1	1575	x						x			x		x	TDA1541	Signetics	
		2		x		x	x			x	x			x		HS7616JN	HybridSys	
				x		x	x			x	x			x		HS7616SD	HybridSys	15
		2 *	60	x	x					x	x			x		DAC370B-16	◊† HybridSys	
				x	x					x	x			x		DAC370C-16	◊ HybridSys	
				x	x					x	x			x		DAC9331-16-6	HybridSys	
				x	x					x	x			x		MP9331-6	MicroPwr	
		5 *	50 *	x	x					x	x			x	x	AD7546B	AD	20
				x	x					x	x			x	x	AD7546K	AD	
		15	540	x	x		x			x	x		x			DAC02900	† ILC-DDC	
		20 *	500	x	x					x	x		x		x	DAC9377-16-6	HybridSys	
		50	1700			x	x			x	x		x			DAC736K	Burr-Brown	
	1	1				x	x			x						**DAC700C**	**Burr-Brown (2541)**	25
						x	x			x						**DAC700L**	**Burr-Brown (2541)**	
						x	x			x						**DAC702C**	**† Burr-Brown (2541)**	
						x	x			x						**DAC702L**	**Burr-Brown (2541)**	
	1 *	1 *	310 *		x	x	x	x	x			x	x	x		IR3K16B	Sharp	
					x	x	x	x	x			x	x	x		IR3K16BM	Sharp	30
	1	1	465	x	x			x		x	x					**HIDAC16B-5**	**Harris (2738, 2749)**	
		2 *	60	x	x					x	x			x		DAC9331-16-5	HybridSys	
				x	x					x	x			x		MP9331-5	MicroPwr	
		5	45							x	x			x	x	HS9371K	HybridSys	
										x	x			x	x	HS9371T	† HybridSys	35
		5 *	50 *	x	x					x	x			x	x	AD7546A	AD	
				x	x					x	x			x	x	AD7546J	AD	
		8				x	x			x						**DAC701C**	**Burr-Brown (2541)**	
						x	x			x						**DAC701L**	**Burr-Brown (2541)**	
		11	2100		x					x						AC50116	Analogic	40
		20	450	x	x						x			x	x	MP9377-16-5	MicroPwr	
		20 *	500	x	x						x		x	x	x	AD1147	AD	
				x	x						x		x	x	x	AD1148	AD	
		30		x	x			x		x						A867-16	Intech	
	1/2	20	450	x	x						x			x	x	MP9377-16-6	MicroPwr	45
	2	0.3														**DAC706**	**Burr-Brown (2541)**	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																	(Cont'd)	
16	2	0.3	790			x	x			x	x		x			PCM53K-I	◊ Burr-Brown	
			940			x				x	x		x			**DAC700B**	**Burr-Brown (2541)**	
						x				x	x		x			**DAC700K**	**Burr-Brown (2541)**	
							x	x		x	x		x			**DAC702B**	**Burr-Brown (2541)**	
							x	x		x	x		x			**DAC702K**	**Burr-Brown (2541)**	5
	2 *	0.35 *	230			x	x			x	x		x			PCM55H	Burr-Brown	
						x	x			x	x		x			PCM55J	Burr-Brown	
			540			x	x			x	x		x			PCM54H	Burr-Brown	
						x	x			x	x		x			PCM54J	Burr-Brown	
						x	x			x	x		x			PCM54K	Burr-Brown	10
	2	0.35*	800					x		x	x		x		x	**DAC706B**	**Burr-Brown (2541)**	
								x		x	x		x		x	**DAC706K**	**Burr-Brown (2541)**	
								x		x	x		x		x	**DAC706S**	**† Burr-Brown (2541)**	
				x				x		x	x		x		x	**DAC708B**	**Burr-Brown (2541)**	
				x				x		x	x		x		x	**DAC708K**	**Burr-Brown (2541)**	15
				x				x		x	x		x		x	**DAC708S**	**† Burr-Brown (2541)**	
		1				x	x			x						**DAC700S**	**† Burr-Brown (2541)**	
						x	x			x						**DAC702S**	**† Burr-Brown (2541)**	
			465	x	x			x		x	x					**HIDAC16C-5**	**Harris (2738, 2749)**	
			700					x		x					x	IR3K16A	Sharp	20
			850				x			x			x			**DAC71-COB-I**	**Burr-Brown (2541)**	
						x				x			x			**DAC71-CSB-I**	**Burr-Brown (2541)**	
			950				x			x			x			**DAC72BH-COB-I**	**Burr-Brown (2541)**	
						x				x			x			**DAC72BH-CSB-I**	**Burr-Brown (2541)**	
			1225				x			x			x			ADDAC71-COB-I	AD	
						x				x			x			ADDAC71-CSB-I	AD	25
							x			x			x			ADDAC72-COB-I	AD	
						x				x			x			ADDAC72-CSB-I	AD	
		2	20	x	x					x	x			x	x	MP7616T	† MicroPwr	
			30	x	x					x	x			x		HS3160B-4	† HybridSys	30
				x	x					x	x			x		HS3160C-4	HybridSys	
		2 *	60	x	x					x	x			x		DAC9331-16-4	HybridSys	
				x	x					x	x			x		MP9331-4	MicroPwr	
		4	790			x				x	x		x			**DAC701B**	**Burr-Brown (2541)**	
						x				x	x		x			**DAC701K**	**Burr-Brown (2541)**	35

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ± LSB	Settling Time ± ½LSB μS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int. Ref.	Mult.	Latches	Device	Source	Line
																(Cont'd)		
16	2	4	790				x	x		x	x		x			**DAC703B**	**Burr-Brown (2541, 2544)**	
							x	x		x	x		x			**DAC703K**	**Burr-Brown (2541, 2544)**	
			940			x	x			x	x		x			PCM53K-V	◊ Burr-Brown	
		5	45							x	x			x	x	HS9371J	HybridSys	
										x	x			x	x	HS9371S	† HybridSys	5
			1225				x			x			x			ADDAC71-COB-V	AD	
						x				x			x			ADDAC71-CSB-V	AD	
							x			x			x			ADDAC72-COB-V	AD	
						x				x			x			ADDAC72-CSB-V	AD	
		8				x	x			x						**DAC701S**	**† Burr-Brown (2541)**	10
						x	x			x						**DAC703S**	**† Burr-Brown (2541, 2544)**	
																DAC705	**Burr-Brown (2541)**	
																DAC707	**Burr-Brown (2541)**	
			940				x			x			x			**DAC703C**	**Burr-Brown (2541, 2544)**	
							x			x			x			**DAC703L**	**Burr-Brown (2541, 2544)**	15
			950					x		x	x		x		x	**DAC705B**	**Burr-Brown (2541)**	
								x		x	x		x		x	**DAC705K**	**Burr-Brown (2541)**	
								x		x	x		x		x	**DAC705S**	**† Burr-Brown (2541)**	
								x		x	x		x		x	**DAC707B**	**Burr-Brown (2541)**	
								x		x	x		x		x	**DAC707K**	**Burr-Brown (2541)**	20
								x		x	x		x		x	**DAC707S**	**† Burr-Brown (2541)**	
				x				x		x	x		x		x	**DAC709B**	**Burr-Brown (2541)**	
				x				x		x	x		x		x	**DAC709K**	**Burr-Brown (2541)**	
				x				x		x	x		x		x	**DAC709S**	**† Burr-Brown (2541)**	
			1175					x		x			x		x	DAC725K	Burr-Brown	25
		10		x									x		x	MN3290	† MicroNet	
			940			x	x			x	x		x			DAC1600K-V	Burr-Brown	
			950				x			x			x			**DAC72BH-COB-V**	**Burr-Brown (2541)**	
						x				x			x			**DAC72BH-CSB-V**	**Burr-Brown (2541)**	
			1175			x				x			x			**DAC71-CSB-V**	**Burr-Brown (2541)**	30
		15	850				x			x			x			DAC70BH-COB-I	Burr-Brown	
						x				x			x			DAC70BH-CSB-I	Burr-Brown	
		16	550							x	x		x		x	HS9378C	HybridSys	
										x	x		x		x	HS9378T	† HybridSys	

(Continued)

Bin.—Binary
Off.—Offset
Compl.—Complementary
Magn.—Magnitude
Int Ref.—Internal Reference
CTC—Compl. 2's Compl.
Mult.—Multiplying

© IC MASTER 1988

INTERFACE—Digital to Analog Converters (Cont'd)

Bits Res.	Linearity Error ±LSB	Settling Time ±½LSB µS	Power Dis. mW (max.)	Bin. Input	Off. Bin. Input	Compl. Bin. Input	Compl. Off. Bin. Input	CTC or 2's Compl. Input	Sign. Magn. Input	TTL Logic	CMOS Logic	ECL Logic	Int Ref.	Mult.	Latches	Device	Source	Line
16	2																(Cont'd)	
		20	450	x	x						x			x	x	MP9377-16-4	MicroPwr	
		35	1170			x	x			x			x			**DACHP16BMC**	**Datel (2576)**	
						x	x			x			x			**DACHP16BMC-1**	**Datel (2576)**	
						x	x			x			x			**DACHP16BMM †**	**Datel (2574, 2576)**	
						x	x			x			x			**DACHP16BMM-1 † **	**Datel (2576)**	5
	3	10	940			x	x			x	x		x			DAC1600J-V	Burr-Brown	
	4	0.3	790			x	x			x	x		x			PCM53J-I ◊	Burr-Brown	
		1				x	x			x						**DAC702J**	**Burr-Brown (2541)**	
			465	x	x			x		x	x			x		4088	TeledyneP	
		2	40 *	x	x					x	x			x	x	MP7616J	MicroPwr	10
				x	x					x	x			x		MP7616L	MicroPwr	
				x	x					x	x			x	x	MP7616S †	MicroPwr	
	4 *	2 *	280 *	x		x	x	x	x			x	x	x		IR3K17	Sharp	
	4	4	940			x	x			x	x		x			PCM53J-V ◊	Burr-Brown	
		6	150							x	x				x	AD569J	AD	15
										x	x				x	AD569K	AD	
		8				x	x			x						**DAC703J**	**Burr-Brown (2541, 2544)**	
			1175					x		x			x		x	DAC725J	Burr-Brown	
		16	550							x	x		x		x	HS9378S †	HybridSys	
	8	2	—	x	x					x	x			x		MP7616K	MicroPwr	20
			30	x	x					x	x			x		HS3160B-3 †	HybridSys	
				x	x					x	x			x		HS3160C-3	HybridSys	
16–4 Digit BCD																		
	1/2	15	1170							x			x			**DACHP16DGC**	**Datel (2576)**	
										x			x			**DACHP16DMC**	**Datel (2576)**	
										x			x			**DACHP16DMM †**	**Datel (2576)**	25
	2	10	1175							x			x			**DAC71-CCD-V**	**Burr-Brown (2541)**	
							x			x			x			**DAC71-COB-V**	**Burr-Brown (2541)**	
18	1	20	60	x	x					x	x		x		x	DAC370B-18 ◊†	HybridSys	
				x	x					x	x		x		x	DAC370C-18 ◊	HybridSys	
				x	x					x	x		x		x	MP370B-18 †	MicroPwr	
				x	x					x	x		x		x	MP370C-18	MicroPwr	30
			500	x	x					x	x		x			DAC377-18 ◊	HybridSys	
				x	x					x	x		x		x	DAC377B-18 ◊†	HybridSys	
				x	x					x	x		x		x	DAC377C-18 ◊	HybridSys	
				x	x					x	x		x		x	MP377B-18 †	MicroPwr	
				x	x					x	x		x		x	MP377C-18	MicroPwr	35
	2	25	1700			x	x			x			x			**DAC729K**	**Burr-Brown (2541)**	
	4	25	1700			x	x			x			x			**DAC729J**	**Burr-Brown (2541)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Display Drivers

Function	Device	Source	Line
AC Plasma Axis Driver			
	SN65500E	TI	
	SN75500E	TI	
AC Plasma Display Driver			
	UCN5857A	**Sprague (3203)**	
	UCN5858A	**Sprague (3203)**	
	UCN5859A	**Sprague (3203)**	5
	UC5860A	Sprague	
Bargraph LCD Driver 18-Element			
	HEF9754V	Signetics	
Bargraph LED	LM3914	National	
	LM3915	National	
	LB1405	Sanyo	10
	LB1409	Sanyo	
	LB1415	Sanyo	
	LB1416	Sanyo	
	LB1419	Sanyo	
	LB1426	Sanyo	15
	LB1436	Sanyo	
	UAA170	Siemens	
	UAA180	Siemens	
	TSC9403	TeledyneS	
	TSC9404	TeledyneS	20
	U237B	Telefunken	
	U244	Telefunken	
	U247B	Telefunken	
	U254	Telefunken	
	U257B	Telefunken	25
	U267B	Telefunken	
Bargraph Vacuum Fluorescent			
	HA12010	Hitachi	
	LM3916	National	
	LB1470	Sanyo	
BiMOS Segment Latch Driver			
	CA3208	**GE/RCA (2654)**	30
BiMOS Sequencer Driver			
	CA3207	**GE/RCA (2654)**	
Clock Driver, Dual			
	DS3671	National	
DC Plasma and Gas Discharge Data Line Driver			
	SN751508	TI	
	SN751518	TI	
DC Plasma and Gas Discharge Scan Line Driver			
	SN751506	TI	35
	SN751516	TI	
Decoder Driver, 4-Bit Input, 16-Line Output			
	IR2C12	Sharp	
Display Driver, Static LED (with blinking capability)			
	SDA2131	Siemens	
Display Driver, 35 High-Voltage LCD			
	HI8011	**Holt (2769)**	
	HI8012	**Holt (2769)**	40
Driver, 32-Bit Thin-Film EL Display Driver, 225V			
	UCN5851	**Sprague (3203)**	
	UCN5852	**Sprague (3203)**	
Electroluminescent Column Driver			
	SN65554	TI	
	SN65555	TI	
	SN65556	TI	
	SN65567	TI	45
	SN65568	TI	
Electroluminescent Column Driver, 32 Outputs			
	SN75555	◊ TI	
	SN75556	◊ TI	
Electroluminescent Even Column Driver, 32 Outputs			
	Si9554	Siliconix	50
Electroluminescent Even Column Driver, 32 Outputs			
	SI9554	Siliconix	
	SN55554	† TI	
	SN75554	◊ TI	
Electroluminescent Even Row Driver, 32 Outputs			
	SI9552	Siliconix	
	SN55552	† TI	55
	SN65552	TI	
	SN75552	◊ TI	
Electroluminescent Even Row Driver, 34 Outputs			
	SN65564	TI	
Electroluminescent Odd Column Driver, 32 Outputs			
	Si9553	Siliconix	
Electroluminescent Odd Column Driver, 32 Outputs			
	SI9553	Siliconix	60
	SN55553	† TI	
	SN75553	◊ TI	
Electroluminescent Odd Row Driver, 32 Outputs			
	SI9551	Siliconix	
	SN55551	† TI	
	SN65551	TI	65
	SN75551	◊ TI	
Electroluminescent Odd Row Driver, 34 Outputs			
	SN65563	TI	
Electroluminescent Row Driver, 32 Outputs			
	SN75557	◊ TI	
	SN75558	◊ TI	
Electroluminescent Row Driver, 34 Outputs			
	Si9560	Siliconix	70
	SN75563	TI	
	SN75564	TI	
Electroluminescent, 16-Channel Display Column Driver			
	HV01	Supertex	
Electroluminescent, 16-Channel Display Row Driver			
	HV02	Supertex	
Electroluminescent, 64-Channel Column Driver			
	HV04	Supertex	75
	HV06	Supertex	
Electroluminescent, 64-Channel Row Driver			
	HV03	Supertex	
	HV05	Supertex	
Flasher, Pulse Generator			
	U175	Telefunken	
	U176	Telefunken	80
Fluorescent Display Driver			
	HA16617	Hitachi	
	HA16619	Hitachi	
Grid Driver	LH1001	Sharp	
Lamp Driver	CSR301	TeledyneC	
LCD Alphanumeric Controller/Driver, Intelligent			
	µPD7225	◊ NEC	85
LCD Clock Driver, 3– 1/2 Digit.			
	MIC8027	Micrel	
LCD Controller	M6265	◊ OKI	
LCD Controller, Large Panel			
	SED1330F	S-MOS	
LCD Controller (up to 20 digits, 7 segments)			
	PSB7510	Siemens	
	PSB7520	Siemens	90
LCD Controller with Built-In Character Generator			
	HD43160AH	Hitachi	
LCD Controller, 16-Dot Row, 40-Dot Column			
	M6222	OKI	
LCD/CRTC Controller (640x400 Dot Matrix)			
	TC7779	Toshiba	
LCD Display Timing Controller			
	HD63645F	Hitachi	
LCD Dot Matrix Controller			
	M6240	OKI	95
	M6255	◊ OKI	
	LH3691A	Sharp	
	LR3692	Sharp	
LCD Dot Matrix Controller/Driver, Intelligent			
	µPD7227	◊ NEC	
	µPD7228	◊ NEC	100
LCD Dot Matrix Display Controller			
	HD61830	Hitachi	
LCD Dot Matrix Display Controller and Driver			
	HD44780	◊ Hitachi	
LCD Dot Matrix Driver			
	ICM7281	GE/Intersil	
	HD44102CH	Hitachi	
	HD44103CH	Hitachi	105
	HD44105CH	Hitachi	
	HD61102	◊ Hitachi	
	HD61103A	Hitachi	
	HLCD0488	Hughes	
	HLCD0515	Hughes	110
	HLCD0538A	◊ Hughes	
	HLCD0539A	◊ Hughes	
	HLCD0540	◊ Hughes	
	HLCD0548	◊ Hughes	
	HLCD0550	◊ Hughes	115
	HLCD0551	◊ Hughes	
	HLCD0607	Hughes	
	MM58538	National	
	MM58539	National	
	MM58540	National	120
	MM58548	National	
	SED1200	S-MOS	
	LH5030	Sharp	
	LH5031	Sharp	
	LH5035A	Sharp	125
	LH5036A	Sharp	
	LH5821	Sharp	
	LH5823	Sharp	
	LH5826	Sharp	
LCD Dot Matrix Driver, 40-Segment			
	LH5006A	Sharp	130
LCD Dot Matrix Driver, 80-Segment			
	LH5021A	Sharp	
	LH5022	Sharp	
LCD Driver, Active Matrix			
	M5280	OKI	
	M5282	OKI	
LCD Driver, Bit Serial (hex, BCD)			
	MAX7232	Maxim	135
LCD Driver, Bit Serial (upper case ASCII)			
	MAX7234	Maxim	
LCD Driver, Dichroic			
	S4520	Gould	
LCD Driver, Large Panel			
	SED1180F	S-MOS	
	SED1181F	S-MOS	
	SED1190F	S-MOS	140
	SED1191F	S-MOS	
	SED1600F	S-MOS	
	SED1610F	S-MOS	
LCD Driver, Multiplexed			
	PCF8576	◊ **Signetics (3127)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Display Drivers (Cont'd)

Function	Device	Source	Line
LCD Driver, Four Digit, Seven Segment			
	CD7211	**GE/RCA (2635, 2653)**	
LCD Driver, 5-Digit, 8-Segment			
	M58292	OKI	
LCD Driver, 32/64 Segment			
	HD61602	Hitachi	
	HD61603	Hitachi	
	PCF8577	◊ Signetics	5
LCD Driver, 32-Dot Row			
	M5238	◊ OKI	
LCD Driver, 33-Segment w/Serial Interface			
	MC145453	◊ Motorola	
LCD Driver, 35V max., 38 Outputs, BCD Hexadecimal to 7-Segment Decoder/Driver, Bus Compatible			
	HI8030	Holt	
LCD Driver, 35V max, 38 Outputs			
	HI8010	**Holt (2769, 4253)**	
LCD Driver, 40-Dot Column			
	M5259	OKI	10
	M5839B	OKI	
LCD Driver, 48-Dot			
	M5219B	OKI	
LCD Driver, 56-Dot			
	M5221	OKI	
LCD Driver, 64-Dot Row			
	M5278	OKI	
LCD Driver, 68-Dot Row			
	M5298	OKI	15
LCD Driver, 80/160-Dot			
	M5265	OKI	
LCD Driver, 80-Dot Column			
	M5279	OKI	
	M5299	OKI	
LCD Driver, 80-Dot Row/Column			
	M5260	OKI	
LCD Driver, 40-Channel Output			
	HD44100H	Hitachi	20
LCD Driver, 6-bit Parallel			
	MAX7231	Maxim	
LCD Driver, 80-Channel Output			
	HD61100A	Hitachi	
LCD Graphics Driver			
	SED1500	S-MOS	
LCD Row Driver			
	ICM7280	GE/Intersil	
	ICM7283	GE/Intersil	25
LCD 5x7 Dot Driver			
	LH5003	Sharp	
	LH50031	Sharp	
	LH5004	Sharp	
	LH50041	Sharp	
LE Driver, 12-Dot			
	IR2431	◊ Sharp	30
LED Bar Display Driver, 10 LEDs			
	TA7612A	Toshiba	
LED Digit Driver			
	MSL966	OKI	
LED Display Driver, 5 LEDs			
	TA7654	Toshiba	
	TA7655	Toshiba	
LED Display Driver, 33 Outputs, 15 mA Sink Capability			
	MM5486	National	35
	M5486	SGS	

Function	Device	Source	Line
LED Display Driver, 34 Outputs, 15 mA Sink Capability			
	M5450	SGS	
LED Display Driver, 35 Outputs, 15 mA Sink Capability			
	M5451	SGS	
LED Display/Interface (drives 7, 14, 16-segments for linear displays, bar graphs)			
	SAA1061	Signetics	
LED Driver System, 8 Decade, 8x8 Memory, Decoder (versions either hardwire or processor controlled; with 7 segment and digit drivers for either common anode or cathode LEDs; 2–6 V supply)			
	ICM7218A	**GE/Intersil (2671)**	40
	ICM7218B	**GE/Intersil (2671)**	
	ICM7218C	**GE/Intersil (2671)**	
	ICM7218D	**GE/Intersil (2671)**	
	ICM7218E	**GE/Intersil (2671)**	
	ICM7218A	Maxim	45
	ICM7218B	Maxim	
	ICM7218C	Maxim	
	ICM7218D	Maxim	
LED Driver, 5-Dot			
	IR2E01	Sharp	
	IR2E13	Sharp	50
	IR2E21	Sharp	
	IR2E24	Sharp	
	IR2E25	Sharp	
	IR2E31	Sharp	
	IR2E31A	Sharp	55
	IR2E32N	Sharp	
LED Driver, 7-Dot			
	IR2E02	Sharp	
	IR2E19	Sharp	
	IR2E22	Sharp	
	IR2E29	Sharp	60
	IR2E37	Sharp	
LED Driver, 7-Segment			
	IR2C07	Sharp	
LED Driver, 8/16-Segment, serial input			
	CD22401	GE/RCA	
LED Driver, 12-Dot			
	IR2E05	Sharp	
	IR2E07	Sharp	65
	IR2E10	Sharp	
	IR2E16	Sharp	
	IR2E17	Sharp	
	IR2E30	Sharp	
	IR2E33	Sharp	70
	IR2E36	Sharp	
	IR2E38	Sharp	
	IR2E40	Sharp	
	IR2E41	Sharp	
	IR2406	Sharp	75
	IR2432	◊ Sharp	
	IR2433	◊ Sharp	
LED Driver, 16-Dot			
	IR2E03	Sharp	
	IR2E04	Sharp	
	IR2E15	Sharp	80
LED Driver, 4-Digit w/ I²C Bus Interface			
	SAA1064	Signetics	
LED Flasher (See also Flasher this section)			
	LM3909	National	
LED, Static	U3082	◊ Telefunken	

Function	Device	Source	Line
LED, Static, Microprocessor Control			
	U180M	Telefunken	
Level Meter, 8-Dot			
	MSM9353	OKI	85
Level Meter, 32-Dot			
	MSM9356	◊ OKI	
Multiplexed LCD Driver, Master and Slave			
	MM58201	National	
Multiplexed LCD Driver, Master and Slave with Serial Interface			
	MC145000	◊ Motorola	
	MC145001	◊ Motorola	
Plasma Column Driver, 32 Outputs			
	Si9559	Siliconix	90
Plasma Driver, AC			
	SN55501E	◊ TI	
Printer, Timer/Driver			
	CD22401	GE/RCA	
Segment Driver for Gas Discharge Displays			
	DI232	Dionics	
	DI242	Dionics	
TV On-Screen Display Driver			
	LR67151	Sharp	95
Vacuum Flourescent Driver			
	SN65513B	TI	
Vacuum Fluorescent Driver			
	LI2048	Sharp	
Vacuum Fluorescent, Level Shifted (50 V operation)			
	DI512BR	Dionics	
Vacuum Fluorescent, Level Shifted (80 V operation)			
	DI513BR	Dionics	
Vacuum Fluorescent, Level Shifted (110 V operation)			
	DI514BR	Dionics	100
Vacuum Fluorescent, 8-Line			
	UCN5815A	**Sprague (3203)**	
Vacuum Fluorescent, 10-Line			
	UCN5810A	**Sprague (3203, 3205)**	
Vacuum Fluorescent, 20 Outputs			
	TL5812I	TI	
Vacuum Fluorescent, 32 Outputs			
	SN65518	◊ TI	
Video or RGB to LCD Interface Controller			
	SED1341F	S-MOS	105
BCD (hexadecimal) to 7-Segment Decoder/Driver with Latch Active Low, Open Collector			
	9370C	Fairchild	
BCD (hexadecimal) to 7-Segment Latch/Decoder/Driver (CMOS with bipolar output)			
	UCN4805A	Sprague	
BCD (hexadecimal) to 7-Segment LED Decoder/Driver, Constant Current, with Latch			
	9368C	Fairchild	
BCD Plus 1 to 7-Segment			
	LM1017	National	
	U143	Telefunken	110
BCD to 7-Segment Decoder/Driver			
	MC14547BA	† Motorola	
	MC14547BC	Motorola	
	MC14558	◊ Motorola	
BCD to 7-Segment Decoder/Driver, Active High, Resistive Pull-Up			
	54LS248	† Fairchild	
	54LS249	† Fairchild	115
	54LS48	† Fairchild	
	54LS49	† Fairchild	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Display Drivers (Cont'd)

Function	Device	Source	Line
BCD to 7-Segment Decoder/Driver, Active High, Resistive Pull-Up (Cont'd)			
	74LS248	◊ Fairchild	
	74LS249	◊ Fairchild	
	74LS48	◊ Fairchild	
	GD8307	**GoldStar (2694)**	
	HD74LS248	Hitachi	5
	HD74LS249	Hitachi	
	HD74LS48	Hitachi	
	HD74LS49	Hitachi	
	M74LS248	Mitsubishi	
	SN74LS248	◊ Motorola	10
	SN74LS249	◊† Motorola	
	SN74LS48	Motorola	
	SN74LS49	Motorola	
	DM54LS248	† National	
	DM54LS249	† National	15
	DM54LS48	† National	
	DM54LS49	† National	
	DM5448	◊† National	
	DM74LS248	National	
	DM74LS249	National	20
	DM74LS48	National	
	DM74LS49	National	
	DM7448	National	
	DS8856	National	
	S8T05	† Signetics	25
	SN54LS248	◊† TI	
	SN54LS249	◊† TI	
	SN54LS48	◊† TI	
	SN54LS49	◊† TI	
	SN5448	† TI	30
	M74LS48	Mitsubishi	
BCD to 7-Segment Decoder/Driver, Active Low, Open Collector, 15 V Output			
	54LS247	† Fairchild	
	54LS347	† Fairchild	
	54LS447	† Fairchild	
	54LS47	† Fairchild	35
	74LS247	◊ Fairchild	
	74LS347	◊ Fairchild	
	74LS447	◊ Fairchild	
	74LS47	◊ Fairchild	
	7447	Fairchild	40
	HD74LS247	Hitachi	
	HD74LS47	Hitachi	
	M74LS247	Mitsubishi	
	MC4039	Motorola	
	SN74LS247	◊ Motorola	45
	SN74LS47	Motorola	
	DM54LS247	† National	
	DM54LS47	† National	
	DM5446A	◊† National	
	DM5447A	◊† National	50
	DM74LS247	National	
	DM74LS47	National	
	DM7446A	National	
	DM7447A	National	
	S8T04	† Signetics	55
	383A/C	TeledyneS	
	383B/M	† TeledyneS	
	SN54LS247	◊† TI	
	SN54LS347	† TI	
	SN54LS47	◊† TI	60
	SN54246	† TI	
	SN54247	† TI	
	SN5446A	† TI	
	SN5447A	† TI	
	SN74LS247	TI	65

(Continued)

Function	Device	Source	Line
BCD to 7-Segment Decoder/Driver, Active Low, Open Collector, 15 V Output (Cont'd)			
	SN74LS47	TI	
	SN7446A	TI	
	SN7447A	TI	
	M74LS47	Mitsubishi	
BCD to 7-Segment Decoder/Driver, for Liquid Crystal Displays	**CD4055B**	**† GE/RCA (2635)**	70
	CD4055BE	**GE/RCA (2635)**	
	TC4055B	**Toshiba (3308)**	
BCD to 7-Segment Decoder/Driver, 2-Digit, Direct Driver for Common Anode LED Displays	DS8669	◊ National	
BCD to 7-Segment Latch/Decoder/Driver (CMOS with bipolar output)	F4511BC	Fairchild	
	F4511BM	† Fairchild	75
	CD4511B	**† GE/RCA (2635)**	
	CD4511BE	**GE/RCA (2635)**	
	MC14511BA	† Motorola	
	MC14511BC	Motorola	
	MC14513BA	† Motorola	80
	MC14513BC	Motorola	
	CD4511BC	National	
	CD4511BM	† National	
	MN4511B	◊ Panasonic	
	HCC4511B	SGS	85
	HCF4511B	◊ SGS	
	HEF4511B	◊ Signetics	
	HEF4511BD	◊ Signetics	
	883C4511B	◊† Sprague	
	TC4511B	**Toshiba (3308)**	90
BCD to 7-Segment Latch/Decoder/Driver, for Liquid Crystal Displays	**CD4543BD**	**† GE/RCA (2635)**	
	CD4543BE	**GE/RCA (2635)**	
	NE589	◊ Signetics	
BCD to 7-Segment Latch/Decoder/Driver (strobed latch), for Liquid Crystal Displays	**CD4056B**	**† GE/RCA (2635)**	
	CD4056BE	**GE/RCA (2635)**	95
	LS7100	**LSIComp (2867)**	
	MC14543BA	† Motorola	
	MC14543BC	Motorola	
	MC54HC4543	† Motorola	
	MC74HC4543	Motorola	100
	883C4534B	† Sprague	
	TC4056B	**Toshiba (3308)**	
BCD to 7-Segment Latch/LCD/Decoder/Driver (ripple blanking)	MC14544BA	† Motorola	
	MC14544BC	Motorola	
BCD to 7-Segment LED Decoder/Driver	**CA3168**	**GE/RCA (2653)**	105
BCD to 7-Segment LED Decoder/Driver, Constant Current	DS8857	National	
	NE587	◊ Signetics	
BCD to 7-Segment LED Decoder/Driver with Latch, Output 0–9,—,E,H,L,P	9374C	Fairchild	
BCD to 7-Segment LED Driver Adjustable Current	DS8858	National	
BCD to 7-Segment LED Latch/Decoder/Driver, with Ripple Blanking	F4734BC	Fairchild	110
	F4734BM	† Fairchild	
BCD-to-Decimal Decoder/Driver (for lamps)	380A/C	TeledyneS	
	380B/M	† TeledyneS	

(Continued)

Function	Device	Source	Line
BCD-to-Decimal Decoder/Driver (for lamps) (Cont'd)			
	381A/C	TeledyneS	
	381B/M	† TeledyneS	115
BCD-to-Decimal Decoder/Driver (nixie driver)	DM5441A	◊† National	
	DM7441A	National	
	382A/C	TeledyneS	
	382B/M	† TeledyneS	
BCD-to-Decimal Decoder/Driver with Blanking (for cold cathode indicator tubes)	MC54141	◊† Motorola	120
	DM54141	† National	
	DM74141	National	
BCD-to-Seven Segment Decoder/Driver with Active Pull-up	SN54LS247	Motorola	
	SN54LS248	Motorola	
	SN54LS249	Motorola	125
	SN54LS47	Motorola	
	SN54LS48	Motorola	
	SN54LS49	Motorola	
Quad AC Plasma Display Axis Driver	SN55426B	† TI	
	SN55427B	† TI	130
Hex TTL to LED Bulb Driver, with Latch	DS8859	National	
	DS8869	National	
Hexadecimal to 7-Segment Latch/Decoder/Driver (CMOS with bipolar output)	MC14495	◊ Motorola	
Seven Segment LED (serial interface)	MC14489	Motorola	
2-Digit LED Driver	M5481	SGS	135
	M5482	SGS	
3/5 Digit LED Driver	IR2434	◊ Sharp	
3/5-Digit LED Driver	IR2E11	Sharp	
	IR2424	◊ Sharp	
3 1/2 Digit LCD Driver with 7-Segment Decoders, Clock, and a Reference	TLC7136C	TI	140
3– 1/2-Digit LED Driver	M5480	SGS	
4/5-Digit Vacuum Fluorescent (serial data input)	MM5450	◊ National	
	MM5451	◊ National	
4-Bit Multiplexed LCD Driver (4x7)	HLCD7211-1	Hughes	
	HLCD7211-2	Hughes	145
4-Channel Incandescent Lamp Driver	CLD4	TeledyneC	
4-Channel Plasma	XR2284	Exar	
4-Character, 18-segment triplexed LCD Decoder/Driver.	MIC7233	Micrel	
4-Character, 18-Segment Triplexed LCD Decoder/Driver	**ICM7233**	**GE/Intersil (2671)**	
	ICM7233	Maxim	150
	MAX7233A	Maxim	
	MAX7233B	Maxim	
	MIC7233A	Maxim	
4-Digit Driver (Quad Power Strobe)	HD6600	National	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

INTERFACE—Display Drivers (Cont'd)

Function	Device	Source	Line
4-Digit LCD Driver			
	ICM7211AM	**GE/Intersil (2671)**	
	ICM7211M	**GE/Intersil (2671)**	
	ICM7211AM	Maxim	
	ICM7211M	Maxim	
	TSC7211AM	TeledyneS	5
4-Digit LED Driver, Multiplexed BCD or Binary to 7-Segment Decoder/Driver			
	ICM7212	**GE/Intersil (2671)**	
	ICM7212A	**GE/Intersil (2671)**	
	ICM7212	◊ Maxim	
	ICM7212A	Maxim	
4-Digit LED Driver, BCD or Binary to 7-Segment Decoder/Driver, Data and Digit Select Code Latches for µP Interface	**ICM7212AM**	**GE/Intersil (2671)**	10
	ICM7212M	**GE/Intersil (2671)**	
	ICM7212AM	Maxim	
	ICM7212M	Maxim	
	MC3941	Motorola	
	TSC701AM	TeledyneS	15
	TSC7212A	◊ TeledyneS	
	TSC7212AM	TeledyneS	
4-Digit Liquid Crystal, Multiplexed BCD to LCD Decoder/Driver, AC Drive			
	ICM7211	**GE/Intersil (2671)**	
	ICM7211A	**GE/Intersil (2671)**	
	ICM7211	◊ Maxim	20
	ICM7211A	Maxim	
	DF412	Siliconix	
4-Digit Select Microprocessor Interface (4x7)			
	HLCD7211-3	Hughes	
	HLCD7211-4	Hughes	
4-Digit (stores segment and address data, drives 7–8 segment digits)			
	MM74C911	National	25
4-Digit Vacuum Fluorescent; 'M' Versions have µP Interface, Basic Device has Multiplexed BCD Input; Hexadecimal or CODE B Decoder Version			
	ICM7235	GE/Intersil	
	ICM7235A	GE/Intersil	
	ICM7235AM	GE/Intersil	
	ICM7235M	GE/Intersil	
4-Digit/8-Segment Vacuum Fluorescent			
	COP470	National	30
4-Digit, 17-Segment Alpha-Numeric with Memory, Decoder and LED Drivers			
	DL2416	National	
	MM74C956	National	
	NSM4307	National	
	NSM4507	◊ National	
4-Digit, 7-Segment LCD Decoder/Driver			
	TSC7211A	◊ TeledyneS	35
4-Digit, 7-Segment LED Decoder/Driver			
	TSC700A	TeledyneS	
4-Digit, 7-Segment LED Display Driver			
	HI8031	**Holt (2769)**	
4-Segment Liquid Crystal			
	CD4054B	**GE/RCA (2635)**	
	TC4054B	**Toshiba (3308)**	

Function	Device	Source	Line
4-Segment MOS to LED Anode Driver			
	DS55493	† National	40
	DS75491	National	
	DS75493	National	
	SN75491A	TI	
5-Character, 18-Segment Triplexed LCD Decoder/Driver			
	ICM7234	GE/Intersil	
	ICM7234	Maxim	45
	MAX7234A	Maxim	
	MAX7234B	Maxim	
5-Line Plasma Display Axis Driver			
	DI5140	Dionics	
	DI5180	Dionics	
	DI5240	Dionics	50
	DI5280	Dionics	
5-Step, Linear, LED Driver			
	KA2286	Samsung	
	KA2287	Samsung	
5-Step, Logarithmic, LED Driver			
	KA2284	Samsung	
	KA2285	Samsung	55
5-Step, Logarithmic, LED Driver, Dual			
	KA2281	Samsung	
	KA2283	Samsung	
5-Step Logarithmic Dual LED Driver			
	TA7666	Toshiba	
	TA7667	Toshiba	
5x2 LED Driver			
	IR2E27	Sharp	60
5x7 Dot Matrix LCD/Console Controller			
	CY300	Cybernetic	
6-Digit Gas Discharge Display Anode Driver			
	DS8891	National	
	8891	Signetics	
6-Digit LED Driver, Start/Stop/Reset, Split, Time Out			
	ICM7215	**GE/Intersil (2669)**	
6-Digit MOS to LED Cathode Driver			
	DS75492	National	65
	DS75494	National	
	DS8870	National	
	DS8877	National	
	PS55494	† National	
	SN75492	TI	70
6-Digit/Segment Vacuum Fluorescent			
	UDN6116A	**Sprague (3203)**	
6-Digit BCD (stores segment and address data, drives 7–8 segment digits)			
	MM74C912	National	
6-Digit Hex (stores segment and address data, drives 7 segments)	MM74C917	National	
6-Digit, 7-Segment LCD Driver with Decimal Points, or Three 16-Segment Characters. 48-Stage Shift Register, 48-Bit Data Latch and 48-Segment Driver			
	MSM5219	◊ OKI	
7-Digit MOS to Gas Discharge			
	XR2272	◊ Exar	75
7-Digit/Segment MOS to Vacuum Fluorescent			
	XR2271	◊ Exar	
7-Line Dot Matrix or Segmented			
	SN75581	TI	
7-Segment Decoder/Driver with Serial Interface			
	MC14499	◊ Motorola	
7-Segment Gas Discharge Display Cathode Driver, with BCD Decoder	DS7880	◊† National	
	DS8880	National	80

(Continued)

Function	Device	Source	Line
7-Segment Gas Discharge Display Cathode Driver, with BCD Decoder		(Cont'd)	
	DS8884A	National	
	DS8880	◊ Signetics	
7-Segment, LCD Driver			
	IR2E14	Sharp	
	IR2E34	Sharp	
7-Segment to BCD Converter/Driver			
	MM54C915	† National	85
	MM74C915	National	
7x2 LED Driver			
	IR2E09	Sharp	
	IR2E28	Sharp	
7x2-Segment LED Driver			
	IR2E35	Sharp	
8-Bit Parallel In/Parallel Out Fluorescent (for µP systems)	UCS4815H	◊† Sprague	90
8-Channel Plasma			
	XR2288	Exar	
8-Character, 14/16 Segment LED Display Driver			
	ICM7243	**GE/Intersil (2671)**	
8-Digit Gas Discharge Display Anode Driver			
	DS8897	National	
8-Digit MOS to LED Cathode Driver			
	DS8863	National	
	DS8871	National	95
	DS8963	National	
8-Digit/Segment Vacuum Fluorescent			
	XR6118	◊ Exar	
	XR6128	Exar	
	NE594	◊ Signetics	
	SA594	◊ Signetics	100
	UDN6118A	**Sprague (3203)**	
	UDN6128A	**Sprague (3203)**	
	UDN6138	Sprague	
8-Digit, 7-Segment Triplexed LCD Decoder/Driver			
	ICM7231	**GE/Intersil (2671)**	
	ICM7231	Maxim	105
	MAX7231A	Maxim	
	MAX7231B	Maxim	
	MAX7231C	Maxim	
8-Line Vacuum Fluorescent Driver			
	MSL912R	OKI	
	MSL915R	OKI	110
	MSL916R	OKI	
	MSL917R	OKI	
8-Output Digit-Scan Counter/Decoder for Cold-Cathode Counter Tubes			
	MSL9510R	OKI	
	MSL9511R	OKI	
8-Segment Gas Discharge Display Cathode Driver			
	DI230A	Dionics	115
	DI300	◊ Dionics	
	DI302	◊ Dionics	
	DS7889	◊† National	
	DS8889	National	
	UDN7180A	Sprague	120
8-Segment MOS to LED Anode Driver			
	MC676	Motorola	
	DS8867	National	
9-Digit MOS to LED Cathode Driver			
	DS8872	National	
	DS8973	National	
	DS8975	National	125

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Display Drivers (Cont'd)

Function	Device	Source	Line
9-Digit MOS to LED Cathode Driver, with Low Battery Indicator	DS8864	National	
9-Digit MOS to LED Cathode Driver with Shift Register Decoding	DS8874	National	
9-Line to 30 LED	U1096B	Telefunken	
10-Bit Driver, Serial Input, Parallel Output	IR2C02	Sharp	
10-Bit High-Voltage, High-Current	S4534	◊ Gould	5
10-Bit Serial In/Parallel Out Fluorescent (for μP systems)	TL4810B	TI	
	UCN4810A	◊ TI	
10-Digit, 7-Segment Triplexed LCD Decoder/Driver	**ICM7232**	**GE/Intersil (2671)**	
	ICM7232	Maxim	
	MAX7232A	Maxim	10
	MAX7232B	Maxim	
	MAX7232C	Maxim	
10-Line Vacuum Fluorescent Display Driver	UCN4810A	◊ TI	
11-Segment LED Display Drivers	MM5485	National	
12-Line Vacuum Flourescent	**UCN5811A**	**Sprague (3203, 3205)**	15
12-Line Vacuum Fluorescent	SN75514	TI	
12-Line Vacuum Fluorescent Display Driver	SN65512B	TI	
	SN75512B	TI	
12-Segment, LCD Driver	IR2429	◊ Sharp	
12x2 LED Driver	IR2E12	Sharp	20
	IR2E20	Sharp	
13-Bit Driver, Serial Input, Parallel Output	IR2412A	Sharp	
16-Line Vacuum Fluorescent	DS8881	National	
	8881	Signetics	
16-Segment LED Display Drivers	MM5484	National	25
20-Digit Alphanumeric or Dot Matrix VF Driver	MM58242	◊ National	
20-Line Vacuum Fluorescent Display Driver	TL5812	TI	
20-Segment Vacuum Fluorescent Display Driver	SED2020F	S-MOS	
30-Bit LCD Driver/Register	MD4330B	Mitel	
32-Bit LCD	MM58438	National	30
32-Bit LCD Driver	S4521	◊ Gould	
	S4535	◊ Gould	
32-Channel, Serial Input Thin-Film Electroluminescent Display Column Drivers	**UCN5853A**	**Sprague (3203)**	
	UCN5853EP	**◊ Sprague (3203)**	
	UCN5854A	**Sprague (3203)**	35
	UCN5854EP	**Sprague (3203)**	
32-Digit Alphanumeric or Dot Matrix VF Driver	MM58241	◊ National	
	MM58248	◊ National	

(Continued)

Function	Device	Source	Line
32-Digit Alphanumeric or Dot Matrix VF Driver (Cont'd)			
	MM58341	National	
	MM58348	National	40
32-Line AC Plasma Display Axis Driver	SN55500D	◊† TI	
	SN65501E	TI	
	SN75501E	TI	
32-Line AC Plasma Display Driver	SN75508	TI	
	SN75509	TI	45
32-Line Electroluminescent Display Column Drivers	SN75567	TI	
	SN75568	TI	
32-Line Vacuum Fluorescent	SN75518	TI	
32-Row LCD Dot-Matrix Driver	MSM5238	◊ OKI	
32-Segment LCD	MM5452	◊ National	50
	MM5453	◊ National	
32-Segment LCD Controller/Driver	μPD7255	NEC	
32-Segment LCD Driver	AY0438I	GIM	
	MM5483	National	
	PCF2112	Signetics	55
32-Segment Vacuum Fluorescent Display Driver	SED2032F	S-MOS	
40-Segment LCD Duplex	PCF2100	Signetics	
64-Segment LCD Duplex	PCF2111	Signetics	
32-Channel Electroluminescent Column Driver (serial input)	Si9555	Siliconix	
	Si9556	Siliconix	60
8-Bit Parallel-In/Parallel-Out Flourescent (For μP Systems)	UCS5815H	Sprague	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Error Checking Circuits

Function	Max. Serial Data Rate, MHz	Supply Voltage, V	Device	Source	Line
Bus Buffer Correction (4-bit for use with EDAC unit)		5	MC74F2961A ◊	Motorola	
			MC74F2962A ◊	Motorola	
Clock Recovery Circuit	50	5	**T7032**	**AT&T (2473)**	
			T7033	**AT&T (2473)**	
Codec, Convolutional Coder/Viterbi Decoder (for forward error correction)					
	0.01	5	**STI5268**	**STI (3211)**	5
Convolutional Encoder	1	5	**STEL2012**	**STI (3210)**	
CRC Generator/Checker	2 *	5	COM8004	SMC	
	3	5	MC8500	Motorola	
	10	5	9401C	Fairchild	
			9401M †	Fairchild	10
			8X01A	Signetics	
	12	5	74F401 ◊	Fairchild	
			N9401	Signetics	
			S9401 †	Signetics	
CRC Generator/Checker (expandable)	30	5	74F402 ◊	Fairchild	15
Deskew-Queue Register	3 *	5	MC8520	Motorola	
Digital Encryption Processor	0.235	5	**T7000A** ◊	**AT&T (2471)**	
Error Detection and Support Logic, for Winchester Disk System					
	5	5	WD1014	Western	
Error Detection/Correction Circuit	—	5	8206	Intel	
			WD8206 ◊	Western	20
Error Detection/Correction Circuit (CMOS)	—	5	**IDT39C60** ◊	**IDT (2801)**	
			IDT39C60A	**IDT (2801)**	
			IDT49C460 ◊	**IDT (2801, 2817)**	
			IDT49C460A	**IDT (2801, 2817)**	
Error Detection/Correction Circuit (ECL)	—	−5.2	MC10163	Motorola	25
			MC10563 ◊†	Motorola	
			MC10593 ◊	Motorola	
Error Detection/Correction Circuit (TTL)	—	5	AM2960 ◊	AMD	
			MB1412A	Fujitsu	
			MB1426	Fujitsu	30
			DP8402A	National	
			DP8403	National	
			DP8404	National	
			DP8405	National	
			MM54ALS632		
			†	National	35
			MM54ALS633		
			†	National	
			MM54ALS634		
			†	National	
			MM54ALS635		
			†	National	
			MM74ALS632	National	
			MM74ALS633	National	40
			MM74ALS634	National	
			MM74ALS635	National	
			2960	**Signetics (3085)**	
			54F630 †	Signetics	
			54F631 †	Signetics	45
			74F630	Signetics	
			74F631	Signetics	
			SN54LS630 ◊†	TI	
			SN74ALS616	**TI (3227)**	
			SN74ALS634A	**TI (3227)**	50
			SN74ALS635	TI	
			SN74LS630	TI	
	−15		AM2960-1 ◊	AMD	
Error Pattern Register	3	5	MC8501	Motorola	
Expandable Error Checker and Corrector	—	5	DP8400	National	55
Forward Error-Correction Encoder/Decoder	20	5	SRT241203-I	SpaceResearch	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Error Checking Circuits (Cont'd)

Function	Max. Serial Data Rate, MHz	Supply Voltage, V	Device	Source		Line
LRCC Data Register	3	5	MC8502	Motorola		
Polynominal Generator	4 *	5	MC8506	Motorola		
Polynominal Generator/Checker	3.5 *	5	MC68653	Motorola		
			MC8503	Motorola		
			SCN68653	◊ Signetics		5
	4	5	SCN2653	◊ Signetics		
Random Number Generator		5	**T7001**	◊ **AT&T**	**(2472)**	
Universal Polynominal 4-Bit Generator	17 *	5	MC8504	Motorola		
Viterbi Decoder (for forward error correction)	256 kb/s	5	**STI2010**	**STI**	**(3210)**	
	1024 Kb/s	5	**STEL2016**	**STI**	**(3206)**	10
	2048 Kb/s	5	**STEL2015**	**STI**	**(3206)**	
Winchester Disk CRC Checker/Generator			HDC1100-04	SMC		
Single Error Hamming Code Detector and Generator	—	5	MC4041	Motorola		

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Keyboard Encoder-Decoders

No. of Keys	No. of Output Bits	Code	Max. Clock Rate, KHz	Supply Voltage, V	Comments	Device	Source	Line
Keyboard Programmable Keyless Locks						**LS7222**	**LSIComp (2867)**	
						LS7223	**LSIComp (2867)**	
Public Key Encription Processor						**CA34C168**	**Calmos (2553)**	
16	4	Binary	—	3–15	2 key rollover, 3 state output	MM54C922 †	National	
						MM74C922	National	5
		External ROM Programmable						
			—	5	Antibounce, mute, interlock	M190	SGS	
		1 of 16	—	5	Strobe output, key rollover output, 2 of 8 keyboard to binary encoder, one of four row inputs and column inputs (telephone key pads) give binary output, strobe.	MC14419	Motorola	
20	5	Binary	—	3–15	2 key rollover, 3 state output	MM54C923 †	National	
						MM74C923	National	
40				5	TV Keyboard	U340 ◊	Telefunken	10
64				5	TV Keyboard	U3040	Telefunken	
85	8	ASCII/HEX	1000	4–6.5	Scans and generates code for 53 key ASCII plus 32 non-ASCII keys	CDP1871AC	GE/RCA	
				4–10.5	Scans and generates code for 53 key ASCII plus 32 non-ASCII keys	**CDP1871A**	**GE/RCA (2642)**	
90	9	ASCII		4.5–7	N Key rollover, any key down output signal, ASCII or binary (PRO) versions.	KB3600	GIM	
	10	External ROM Programmable						
			100	5	9x10 matrix, N key rollover, parallel output	KR9600	SMC	15
					9x10 matrix, N key rollover, parallel output, caps lock, auto repeat	KR9601	SMC	
		Mask Programmable	100	5	9x10 matrix, N key rollover, serial output, caps lock, auto repeat	KR9602	SMC	
104	8	ASCII		5	8x13 matrix, parallel or serial, baud rate select, N key rollover/lockout, autorepeat, caps lock (LED indicators).	KB3661	GIM	
112	8	ASCII		5	8x14 matrix, serial output, baud rate select, N key rollover/lockout, autorepeat, caps lock.	KB3660S	GIM	
	10	Mask Programmable	66	5	112 bits for internal programming of function keys	AY34592	GIM	20
128	8	Mask Programmable	400	5	8 x 16 matrix, 8-Bit bus interface, 4 rollover modes, UART on chip	MC2671	Motorola	
	9	Mask Programmable	100	5	16 x 8 matrix, three-state I/O, 2 or 3 key alarm	MSM3914A ◊	OKI	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Line Drivers—Single Ended

No. Per Device	Output	Party Line	Supply Voltage, V	Comments	Device	Source	Line
2		No	5	Video Line Driver, High Speed Op-Amp	**CA3450**	**GE/RCA (2645, 2654)**	
	−0.5 to 5.5 V	No	5	RS422A, RS423A	μA9639C	TI	
	±4 to 6 V	No	±9 to ±15	RS232, RS423, CCITT V.26, V.28	μA9636AC	Fairchild	
					μA9636AM †	Fairchild	
					μA9636AC	TI	5
	±6 V	No	±12	4 Input	**N8T15**	**Signetics (3022)**	
	±8 V	No	±12	RS232C	DS75150	National	
					SN55150 †	TI	
					SN75150	TI	
	±15 V	No	±15	RS423A, RS423C	μ9636A	TI	10
	±8 V	No	±12	RS232C	M75150	Mitsubishi	
	High Current	Yes	5	Coax/Twisted Pair	DS75123	National	
					N8T23	**Signetics (3022)**	
					SN75123	TI	
				Emitter Follower for Coax/Twisted Pair	DS55121 ◊†	National	15
					DS75121	National	
					N8T13	**Signetics (3022)**	
					S8T13	Signetics	
					SN55121 †	TI	
					SN75121	TI	20
	TTL	No	5	Three-State, Inverting	LD6005	Intech	
	0.8 to 2.0		±12	RS-423/RS-232C	**MC3488A**	**Motorola (2953)**	
	2.4		5	General Purpose Interface Bus	SN75ALS121	TI	
3	±6 V	No	±12	RS232B/C, CCITT, MIL188	μA9616HC	Fairchild	
					μA9616HEC	Fairchild	25
					μA9616HM †	Fairchild	
	High Current	No	5	IBM360	HD2904	Hitachi	
4	±3 to ±9 V	No	±4.5 to ±12	RS232C, CCITT V. 24	DS14C88	National	
	±4 to ±12 V	No	±5 to ±15	RS232/432	LT1032	LinearTech	
	±4 to 6 V	No	±5	RS423, RS422 with mode control	AM26LS30C	AMD	30
					DS3691	National	
			±5.5	RS423, RS422 with mode control	AM26LS30M †	AMD	
					DS1691 †	National	
		Yes	±5	RS423, Three-State	AM26LS29C	AMD	
					GD26LS29	**GoldStar (2694)**	35
			±5.5	RS423, Three-State	AM26LS29M †	AMD	
	±6 to 9 V	No	±9 to ±15	RS232C, CCITT V.24	XR1488 ◊	Exar	
					μA1488C	Fairchild	
					MC1488 ◊	**Motorola (2952, 2958)**	
					DS1488	National	40
					MC1488	Samsung	
					MC1488 ◊	SGS	
					MC1488	Signetics	
					SN55188 ◊†	TI	
					SN75188	TI	45
	±30	No	±5 to ±15	RS-232/423, Three-State	LT1030C	LinearTech	
					LT1030M †	LinearTech	
	±4 to 6 V	Yes	±5 V	RS423, Three-State	M5A26LS29	Mitsubishi	
	TTL	No	5	Meets IBM 360/370 I/O Interface Specifications	SN75ALS130	TI	
		Yes	4.5 to 5.5	Gating Control to Allow Either Single-Ended or Differential Operation	DS7831 †	TI	50
					DS7832 †	TI	
			5	DS7831 w/o Vcc Clamp	DS7832 †	National	
					DS8832	National	
				Three-State	**N8T09**	**Signetics (3022)**	
					S8T09 †	Signetics	55
				2-Input NAND, 80 Ma	96101C	Fairchild	
					96101M †	Fairchild	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Line Circuits (Cont'd)

Line Drivers—Single Ended (Cont'd)

No. Per Device	Output	Party Line	Supply Voltage, V	Comments	Device	Source	Line
						(Cont'd)	
4	TTL	Yes	5	4-Input AND, NAND	DS7831	† National	
					DS8831	National	
	0.15 to 4 V	No	5	IBM360/370	**MC3481**	**Motorola (2952)**	
					MC3485	**Motorola (2952)**	
	0.8 to 2 V	No	5	IBM 360/370	SN75ALS126	TI	5
	0.8 to 2.4	±9	5	RS-232 with Shutdown	MAX234C	Maxim	
					MAX234E	Maxim	
					MAX234M	† Maxim	
5	0.8 to 2.4	±9	5	RS-232 with Shutdown	MAX235C	Maxim	
					MAX235E	Maxim	10
					MAX235M	† Maxim	
		No	5	RS-232	MAX230	Maxim	
6	NTDS	No	5,–5	NTDS Hex Driver	MOF1305B	† Interdesign	
			5,–15	NTDS	MOA268B	† Interdesign	
8	—	Yes	—	RS-2326/RS-423A CCITT V.10/X.26	NE5170	Signetics	15
	CMOS	Yes	5	Three-State, Inverting	**74AC11240**	**TI (3252)**	
	TTL		5		**UC5170**	**Unitrode (3327)**	
		Yes	5	Three-State (also see index for 74S244, 74LS244, 67S304, 67LS304)	54LS241	† Fairchild	
					74LS241	◊ Fairchild	
					74LS244	◊ Fairchild	20
					HD74LS241	Hitachi	
					HD74LS244	Hitachi	
					MM54C941	‡ Micrel	
					SN54LS241	◊† MMI	
					SN54LS244	◊† MMI	25
					SN54LS245	◊† MMI	
					SN54LS341	† MMI	
					SN54LS344	† MMI	
					SN54S244	† MMI	
					SN54LS241	† Motorola	30
					SN54LS244	† Motorola	
					SN74LS241	◊ Motorola	
					SN74LS244	◊ Motorola	
					SN74LS541	Motorola	
					DM54S241	† National	35
					DM74LS241	National	
					DM74LS244	National	
					DM74S241	National	
					MM54C941	† National	
					MM74C941	National	40
					74F541	**Signetics (3024)**	
					74LS241	**Signetics (3003)**	
					74LS244	**Signetics (3003)**	
					74LS541	**Signetics (3003)**	
					SN54ALS244A	† TI	45
					SN54ALS541	† TI	
					SN54AS241	◊† TI	
					SN54AS244	◊† TI	
					SN54LS241	◊† TI	
					SN54LS244	◊† TI	50
					SN54S241	† TI	
					SN54S244	† TI	
					SN74ALS241A	TI	
					SN74ALS244A	TI	
					SN74ALS541	TI	55
					SN74ALS541-1	TI	
					SN74AS241	TI	
					SN74AS244	TI	
					SN74LS241	TI	
					SN74LS244	TI	60
					SN74LS541	TI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

No. Per Device	Output	Party Line	Supply Voltage, V	Comments	Device	Source	Line
Line Drivers—Single Ended							**(Cont'd)**
8	TTL	Yes	5	Three-State (also see index for 74S244, 74LS244, 67S304, 67LS304)			(Cont'd)
					SN74S241	TI	
					SN74S244	TI	
				Three-State, Inverting	54F240 ◊†	Fairchild	
					54LS240 †	Fairchild	
					74F240 ◊	Fairchild	5
					74LS240 ◊	Fairchild	
					74LS540 ◊	Fairchild	
					SN54LS240 ◊†	MMI	
					SN54LS340 †	MMI	
					SN54LS240 †	Motorola	10
					SN74LS240 ◊	Motorola	
					SN74LS540	Motorola	
					DM54S240 †	National	
					DM74S240	National	
					54LS540 †	Signetics	15
					74F540	**Signetics (3024)**	
					74LS240	**Signetics (3003)**	
					74LS540	**Signetics (3003)**	
					SN54AS240 ◊†	TI	
					SN54LS240 ◊†	TI	20
					SN54LS540 †	TI	
					SN54S240 †	TI	
					SN74ALS240A	TI	
					SN74ALS540	TI	
					SN74ALS540-1	TI	25
					SN74AS240	TI	
					SN74LS240	TI	
					SN74LS540	TI	
					SN74S240	TI	
16	TTL	Yes	5	Three-State	T74LS365A	SGS	30
					T74LS367A	SGS	
					SN54LS365A ◊†	TI	
					SN54LS367A ◊†	TI	
					SN74LS365A	TI	
					SN74LS367A	TI	35
				Three-State, Inverting	T74LS366A	SGS	
					T74LS368A	SGS	
					SN54LS366A †	TI	
					SN54LS368A ◊†	TI	
					SN74LS366A	TI	40
					SN74LS368A	TI	
Line Drivers—Differential							
2	±3 V	Yes	±5	RS422 at Low Data Rates, RS423	AM26LS30C	AMD	
			±5.5	RS422 at Low Data Rates, RS423	AM26LS30M †	AMD	
	±5V	No	±15, ±5	ARINC 429, 100K bits data rate	**HS3182 †**	**Harris (2720)**	
	High Current CMOS						
		No	3–15	CMOS 50 mA, 4-Input AND, NAND	MM78C30 ‡	Micrel	45
					MM78C30 †	National	
					MM88C30	National	
	High Current TTL						
		No	5	40 mA, Open Collector/Active Pull-up	DS55114 ◊†	National	
					DS75114	National	
					SN55114 ◊†	TI	50
					SN75114	TI	
				40 mA, RS422	SN75158	TI	
				40 mA, 4-Input AND, NAND	DM74S140	National	
					DS7830 †	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Line Circuits (Cont'd)

No. Per Device	Output	Party Line	Supply Voltage, V	Comments	Device	Source	Line
Line Drivers—Differential							**(Cont'd)**
2	High Current TTL						
		No	5	40 mA, 4-Input AND, NAND			(Cont'd)
					DS8830	National	
					54S140	† Signetics	
					74S140	**Signetics (3003)**	
					SN54S140	† TI	
					SN55183	◊† TI	5
					SN74S140	TI	
					SN75183	TI	
		Yes	5	Three-State	DS7831	† National	
					DS8831	National	
				DS7831 w/o Vcc Clamp	DS7832	† National	10
				40 mA, Open Collector/Active Pull-Up, Three-State	DS55113	◊† National	
					DS75113	National	
					SN55113	◊† TI	
					SN75113	TI	
				40 mA, RS422, Three-State	DS8832	National	15
					SN75159	TI	
	TTL	No	5	RS–422	DS8921	◊ National	
					DS8922	◊ National	
					DS8923	◊ National	
				RS–422/423	51998	† Micropac	20
	2.5 to 3.5	No	5	High Speed	μA9638C	TI	
	3.5 mA	Yes	±5	Twisted Pair	SN55109A	† TI	
					SN75109A	TI	
					SN75111	TI	
	6.5 mA	Yes	±5	Twisted Pair, Level Shifting	**MC75S110**	**Motorola (2952)**	25
					SN55110A	◊† TI	
					SN75110A	TI	
	18 mA	Yes	±5	Higher Current 75110	SN75112	TI	
	50 mA	No	5	High Speed, EIA-RS422	μA9638C	Fairchild	
					μA9638M	† Fairchild	30
4					SN55111	TI	
	High Current CMOS						
		No	3–15	CMOS, 25 mA	MM78C29	‡ Micrel	
					MM78C29	† National	
					MM88C29	National	
	High Current TTL						
		No	5	50 Ohm Lines	**74128**	**Signetics (3003)**	35
					SN74128	TI	
				75 Ohm Lines	54128	† Signetics	
					SN54128	† TI	
		Yes	5	RS–422, RS–423, Three-State	μA3487	Fairchild	
					MC3487	**Motorola (2952, 2959)**	40
					DS3487	National	
				RS–422, Three-State	SN55ALS194	TI	
				RS–422A, Three-State	SN75ALS194	◊ TI	
				Three-State	DS1688	† National	
	TTL TS	No	5	RS422A	MC3487	TI	45
	11 mA	Yes	±5	Quad 75110	**MC3453A**	**Motorola (2952)**	
				Quad 75110	MC3453	TI	
	20 mA	Yes	5	MIL188–114, Three-State	DS1692	† National	
					DS3692	National	
				RS–422, Three-State	AM26LS31C	AMD	50
					AM26LS31M	† AMD	
					AM26LS31C	**AT&T (2499)**	
					LB1023AC	AT&T	
					μA26LS31	Fairchild	
					GD26LS31	**GoldStar (2694)**	55

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Line Drivers—Differential (Cont'd)

No. Per Device	Output	Party Line	Supply Voltage, V	Comments	Device	Source	Line
4	20 mA	Yes	5	RS–422, Three-State			(Cont'd)
					M5A26LS31	Mitsubishi	
					AM26LS31 ◊	**Motorola (2952)**	
					AM26LS31C ◊	**Motorola (2952)**	
					AM26LS31M ◊†	**Motorola (2952)**	
					DS26LS31C †	National	5
					DS26LS31M ◊	National	
					AM26LS31	Signetics	
					AM26LS31C	TI	
					SN55ALS192	TI	
					SN75ALS192 ◊	TI	10
					SN75LS192	TI	
	40 mA	No	5	Translates input TTL logic levels to ECL-like ouput levels	**41LG**	**AT&T (2492)**	
		Yes	5	RS–422, Fed. 1020, Three-State	SN75151	TI	
					SN75153	TI	
	60 mA	Yes	5	RS–422A, Three-State	**SN75172**	**Motorola (2952)**	15
					SN75174	**Motorola (2952)**	
					SN75172	TI	
					SN75174	TI	
				RS–485	μA96172 ◊	Fairchild	
					μA96174 ◊	Fairchild	20

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Line Circuits (Cont'd)

No. Per Device	Receiver Input Threshold	Common Mode Voltage, V	Supply Voltage, V	Comments	Device	Source	Line
Line Receivers—Single Ended							
2			5	IBM360/370	SN75ALS123	TI	
	±0.1 V (ref)		5	Ext. Reference Adjustable from 1.5 to 3.5 V	SN75140A	TI	
					SN75141	TI	
	±2.0		5	Hysteresis, EIA/MIL	**N8T16**	**Signetics (3022)**	
					S8T16	Signetics	5
				RS232B	DS7822	† National	
					DS8822	National	
3	0.7 to 1.7		5	Hysteresis, IBM360/370	DS75124	National	
					N8T24	**Signetics (3022)**	
					SN75124	TI	10
	0.8 to 2.0 V		5	Hysteresis, High-Speed	DS55122	◊† National	
					DS75122	National	
					SN55122	† TI	
					SN75122	TI	
	0.86 to 2.40		5	High-Speed	HD2915	Hitachi	15
	1.15 to 1.55		5	IBM360	HD2905	Hitachi	
4			5	RS422A, RS423A	MC3486	TI	
	±0.2	±7	±5	Three-State, RS–422/423A	M5A26LS32A	Mitsubishi	
	±3 to ±9 V	No	±4.5 to ±12	RS232C, CCITT V. 24	DS14C89A	National	
	±3/0.8 to 3		5 or 12	RS232C, Hysteresis, Fail Safe Option	55154	† Fairchild	20
					DS75154	National	
					SN75154	TI	
	±3/0.8 to 3		5 or 12	RS232C, Hysteresis, Fail Safe Option	M75154	Mitsubishi	
	0.75 to 1.5 V		5	RS232C, Programmable Threshold, Hysteresis	μA1489C	Fairchild	
					M75189	Mitsubishi	25
					MC1489	◊ **Motorola (2952, 2958)**	
					DS1489	National	
					MC1489	Samsung	
					MC1489	SGS	
					MC1489	Signetics	30
					SN55189	† TI	
					SN75189	TI	
	0.75 to 2.25		5	RS232C, Programmable Threshold, Wider Hysteresis than 1489	XR1489A	Exar	
					μA1489AC	Fairchild	
					MC1489A	**Motorola (2952, 2958)**	35
					DS1489A	National	
					MC1489A	Samsung	
					MC1489A	Signetics	
					SG1489A	SiliconG	
					SN55189A	† TI	40
	0.75 to 2.25 V		5	RS232C, Programmable Threshold, Wider Hysteresis than 1489	M75189A	Mitsubishi	
	0.97 to 2.65		5	Hysteresis, 120 Ohm System	DS7836	† National	
	1.05 to 2.5		5	Hysteresis, 120 Ohm System	DS8836	National	
	1.2 to 1.8		5	120 Ohm System, No Hysteresis, NOR Input	DS7640	◊† National	
	1.3 to 1.7		5	120 Ohm System, No Hysteresis, NOR Input	DS8640	National	45
	1.75 to 2.25 V		5	RS232C, Programmable Threshold, Hysteresis	SN75189A	TI	
	5 to 7.5		15	Hysteresis, Interface to CMOS	367A	TeledyneS	
					367M	† TeledyneS	
				Hysteresis, Open Collector, Interface to CMOS	368A	TeledyneS	
	5.5 to 8		12	Hysteresis, Open Collector, Inferface to CMOS	368C	TeledyneS	50
				Hystersis, Interface to CMOS	367B	TeledyneS	
					367C	† TeledyneS	
6	–1 to 4.5/–1.5 to 13		5	NTDS	MOB272	† Interdesign	
	0.97 to 2.65		5	Hysteresis, 120 Ohm System	DS7837	† National	
	1.05 to 2.50		5	Hysteresis, 120 Ohm System	**MC3437**	**Motorola (2952)**	55
					DS8837	National	
					N8T37	**Signetics (3022)**	
7			5	IBM360/370	SN75ALS125	TI	
					SN75ALS127	TI	
	0.7 to 1.7		5	IBM360/370	**MC75125**	**Motorola (2952)**	60
					MC75127	**Motorola (2952)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value "Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

No. Per Device	Receiver Input Threshold	Common Mode Voltage, V	Supply Voltage, V	Comments	Device	Source	Line
Line Receivers—Single Ended							**(Cont'd)**
7	0.7 to 1.7		5	IBM360/370			(Cont'd)
					DS75125	National	
					DS75127	National	
					SN75125	TI	
					SN75127	TI	
8	—		5	RS-232C/RS-422A/RS-423A CCITT V.10, V.11, V.28, X.26, X.27	NE5180	Signetics	5
					NE5181	Signetics	
	0.7 to 1.7		5	IBM360/370	**MC75128**	**Motorola (2952)**	
					MC75129	**Motorola (2952)**	
					DS75128	National	
					DS75129	National	10
					SN75128	TI	
					SN75129	TI	
Line Receivers—Differential							
2	±0.010	±3	±5	10 mV, MOS Sense, Active Pull-up	DS75207	National	
					DS75208	National	
					SN75207	TI	15
				10 mV, MOS Sense, Open Collector	SN75208	TI	
				10 mV, MOS Sense, Three-State	DS3604	National	
				75207 with Diode Protected Input Stage	SN75207B	TI	
				75208 with Diode Protected Input Stage	SN75208B	TI	
	±0.025	±3	±5	25 mV, Active Pull-up	**MC75107**	**Motorola (2952)**	20
				25 mV, Active Pull-Up	DS55107	† National	
					DS75107	National	
				25 mV, Active Pull-up	SN55107A	† TI	
					SN75107A	TI	
				25 mV, Open Collector	**MC75108**	**Motorola (2952)**	25
					DS55108	† National	
					DS75108	National	
					SN55108A	† TI	
					SN75108A	TI	
				25 mV, Three-State 55107	DS1603	† National	30
					DS3603	National	
				55107A with Diode Protected Input Stage	DS55107	† National	
					DS75107	National	
					SN55107B	† TI	
					SN75107B	TI	35
				55108A with Diode Protected Input Stage	DS55108	† National	
					DS75108	National	
					SN55108B	† TI	
					SN75108B	TI	
	±0.2	±7	5	RS-422, RS-423	μA9639A	Fairchild	40
	±0.2/0.3	±10/15	5	Twisted Pair, ±15 V CMV. Response Control	DS78LS120	† National	
					DS88LS120	National	
		±15	5	CMOS Compatible, Response Control	DS78C120	† National	
					DS88C120	National	
	±0.2/0.5	±7/15	5	RS232, RS422/3	μA9637AC	Fairchild	45
					μA9637AM	† Fairchild	
					μA9637AC	TI	
					SN55157	† TI	
					SN75157	TI	
	±0.3/0.3	±0/15	5	±15 V CMV, Response Control	DS78L20	◊† National	50
	±0.4	±7	5	RS-422, RS-423/C and CCITT compatible	μA9639AC	Fairchild	
	±0.5/1	±0/15	5	±15 V CMV, Response Control	DS55115	◊† National	
					DS75115	National	
					SN55115	◊† TI	
					SN75115	TI	55
		±3/15	5	Twisted Pair, ±3/15 V CMV, Response Control	DS7820A	‡ National	
					DS8820A	National	
					SN55182	◊† TI	
					SN75182	TI	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Line Circuits (Cont'd)

Line Receivers—Differential (Cont'd)

No. Per Device	Receiver Input Threshold	Common Mode Voltage, V	Supply Voltage, V	Comments	Device	Source	Line
2	± 0.5/1					(Cont'd)	
		± 10/15	5	Twisted Pair, ± 15 V CMV, Response Control	DS78C20	† National	
					DS7820	† National	
					DS88C20	National	
					DS8820	National	
					L7820	† SGS	5
	± 0.5/3	± 25	± 12	Adjusts RS232C/MIL-188, ± 25 V CMV, Hysteresis	SN75152	TI	
	0.5 to 2.5		5	RS-422A, RS-423A, RS-232, V.28.	SN75146	TI	
4					MC3550	TI	
					MC3552	TI	
					MC3553	TI	10
					SN55154	TI	
			± 15/12-24	Quad Comparator, 3mV Hysteresis	ESM1600	Thomson	
					ESM1602	Thomson	
			5	RS422A, RS423A	MC3486	TI	
	± 0.025	± 3	± 5	Four 75107, Active Pull-up	**MC3450**	**Motorola (2952, 2959)**	15
					DS1650	† National	
					DS3650	National	
				Four 75108, Open Collector	**MC3452**	**Motorola (2952, 2959)**	
					DS1652	† National	
					DS3652	National	20
	± 0.2	-7,12	5	Three State, RS-422/423, CCITT V.10 and V.11	AM26LS32BC	AMD	
					AM26LS32BM	† AMD	
					AM26LS34C	AMD	
					AM26LS34M	† AMD	
		± 3	± 5	Three-State, RS422/423	**MC3486**	**Motorola (2952, 2959)**	25
					DS3486	National	
		± 7	± 5	Three-State, RS-422/423	AM26LS32C	AMD	
					AM26LS32M	† AMD	
					AM26LS32C	**AT&T (2500)**	
				Three-State RS-422/423	LB1022AC	AT&T	30
				Three-State, RS-422/423	μA26LS32C	Fairchild	
					μA26LS32M	† Fairchild	
					GD26LS32	**GoldStar (2694)**	
					AM26LS32	◊ **Motorola (2952)**	
					DS26LS32AM	◊‡ National	35
					DS26LS32C	National	
					DS26LS32M	◊† National	
					AM26LS32AC	TI	
					AM26LS32AM	† TI	
			5	Three State, RS-422/423	μA3486	Fairchild	40
		± 12	5	RS-422/485	μA96173	◊ Fairchild	
					μA96175	◊ Fairchild	
				Three-State, RS-422A/RS-423A	**SN75173**	**Motorola (2952)**	
					SN75175	**Motorola (2952)**	
					SN55173	† TI	45
					SN75173	TI	
					SN75175	TI	
				Three-State, RS-422A/423A/485, CCITT V.10, V.11, V.26 V.27	SN55ALS195	TI	
					SN75ALS195	TI	
					SN75ALS195	TI	50
		± 15	± 5	50 mV Hysteresis	DS1689	† National	
					DS1690	† National	

(Continued)

† Military Temperature Range (-55° to 125°C) ‡ High Radiation Resistance *Typical Value 'Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Line Receivers—Differential (Cont'd)

No. Per Device	Receiver Input Threshold	Common Mode Voltage, V	Supply Voltage, V	Comments	Device	Source		Line
4	±0.2	±15	±5	50 mV Hysteresis			(Cont'd)	
					DS3689	National		
					DS3690	National		
	±0.5	±15	±5	Three-State	AM26LS33C	AMD		
					AM26LS33M †	AMD		
					AM26LS33C	**AT&T**	**(2500)**	5
					LB1022BK	AT&T		
					GD26LS33	**GoldStar**	**(2694)**	
					DS26LS33C	National		
					DS26LS33M †	National		
					AM26LS33AC	TI		10
					AM26LS33AM †	TI		
	±0.8	−12, ±7.5	±5,−5	NTDS	MOF1623B †	Interdesign		
	0.20	±4	5	Quad differential input to TTL output	**41LF**	**AT&T**	**(2490)**	
	0.5 to 2.4	7,−7	5	Has Open Collector Outputs	MC3452	TI		
				Has Three-State Outputs	MC3450	TI		15
	0.8 to 2.0	7,−7	5	Three-State, RS−422A, RS−423A, RS−485, CCITT V.10, V.11, X.26, and X.27	SN75ALS193	TI		
				Three-State, RS−422A, RS−485, CCITT V.10, V.11, X.26, and X.27	SN55ALS193	TI		
8		±25	5		**UC5180**	**Unitrode**	**(3327)**	
					UC5181	**Unitrode**	**(3327)**	
	−0.2 to 0.2	±15	5	RS232C and RS423A; CCITT V.10, V.28 and V.11	ULN8510EP	Sprague		20

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Line Circuits (Cont'd)

No. Per Device	Receiver Input Threshold, V	Output	Supply Voltage, V	Comments	Device	Source	Line
Line Transceivers—Single Ended							
1	0.8 to 2	TTL	5	RS–232-C Driver and Receiver	SN75155	TI	
2	0.8 to 1.4	TTL/CMOS	5	Three-State, Dual RS–232 Driver/Receiver	LT1080C	LinearTech	
					LT1080M †	LinearTech	
					LT1081C	LinearTech	
					LT1081M †	LinearTech	5
3	0.8 to 2.0	TTL/CMOS	5	Three-State, Triple Driver/Receiver	LT1039C	LinearTech	
					LT1039M †	LinearTech	
4		TTL	5	IEEE 896.1	SN75ALS057	TI	
	0.05 to 2.50	TTL	5	Open Collector, 1 V Hysteresis	DS8838	National	
					N8T38	**Signetics (3022)**	10
	0.3 to 1.1	TTL	5	Bus Transceiver, Three-State, 75 mA Output to 40 ohm bus, Hystere	LB1025AC	AT&T	
	0.4 to 2.05	TTL	5	Open Collector, Hysteresis	AM26S12AC	AMD	
					AM26S12AM †	AMD	
	0.5 to 2.0	TTL	5	Bus Transceiver, Tridirectional, Three-State	SN54LS442 †	TI	
	0.6 to 2.0	TTL	5	Bus Transceiver, Tridirectional, Three-State	SN74LS442	TI	15
				General Purpose Interface Bus, Open Collector, for MOS Input	**MC3446A**	**Motorola (2952)**	
	0.7 to 2.0	TTL	5	Three-State, Bus Transceiver	AM2915AM †	AMD	
				Three-State, Bus Transceiver, Parity Generator/Checker	AM2916AM †	AMD	
					AM2917AM †	AMD	
	0.8 to 1.8	TTL/MOS	5	General Purpose Interface Bus, Bidirectional Bus Transceiver, Three-State	AM3448A	AMD	20
					MC3448A	**Motorola (2952, 2959)**	
	0.8 to 2.0	TTL	5	Bus Transceiver Three-State, Inverting	SN54LS242 †	Motorola	
					SN54LS243 †	Motorola	
					SN54ALS242B †	TI	
					SN54ALS243A †	TI	25
					SN54LS242 ◊†	TI	
					SN54LS243 ◊†	TI	
				General Purpose Interface Bus, Open Collector, 100 mA Output	**MC3440A**	**Motorola (2952)**	
					MC3441A	**Motorola (2952)**	
					DS3662	National	30
					DS7641 ◊†	National	
					DS8641	National	
				Line Transceiver with Driver Enable.	**MC34051**	**Motorola (2953)**	
				Line Transceiver with Separate Enable for Driver and Receiver.	**MC34050**	**Motorola (2953)**	
				Three-State, Bus Transceiver	AM2915AC	AMD	35
					SFC2915A	Thomson	
				Three-State, Bus Transceiver, Parity Generator/Checker	AM2916AC	AMD	
					AM2917AC	AMD	
					SFC2917	Thomson	
				Three-State, Hysteresis	HD74LS242	Hitachi	40
					SN74LS242 ◊	Motorola	
					SN74LS243 ◊	Motorola	
					DM74LS242	National	
					DM74LS243	National	
					74LS242	**Signetics (3003)**	45
					74LS243	**Signetics (3003)**	
					SN74ALS242B	TI	
					SN74ALS243A	TI	
					SN74LS242	TI	
					SN74LS243	TI	50
				Three-State (Inverting)	AM2912C	AMD	
					AM2912M †	AMD	
					MC6880	**Motorola (2951)**	
					MC8T26A	**Motorola (2951)**	
					DS8T26A	National	55
					DS8T26AM †	National	
					N8T126	**Signetics (3022)**	
					N8T127	**Signetics (3022)**	
					N8T26A	**Signetics (3022)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value ' Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Line Transceivers—Single Ended (Cont'd)

No. Per Device	Receiver Input Threshold, V	Output	Supply Voltage, V	Comments	Device	Source	Line
4	0.8 to 2.0	TTL	5	Three-State (Inverting)			(Cont'd)
					S8T126	◊† Signetics	
					S8T127	◊† Signetics	
				Three-State, Inverting	SN54AS242	◊† TI	
					SN74AS242	TI	
					SN74AS243	TI	5
				Three-State (Inverting) Three-State (Non-Inverting)	SN75136	TI	
					MC6889	**Motorola (2951)**	
					MC8T28	**Motorola (2951)**	
					DS8T28	National	
					DS8T28M	† National	10
					N8T128	Signetics	
					N8T129	**Signetics (3022)**	
					N8T28	**Signetics (3022)**	
					S8T128	◊† Signetics	
					S8T129	◊† Signetics	15
	0.8 to 2.4	TTL	5	Two Independent RS–232 Drivers and 2 Receivers	MAX232C	Maxim	
					MAX232E	Maxim	
					MAX232M	† Maxim	
					MAX233C	Maxim	
					MAX233E	Maxim	20
			5, 12	Independent RS–232 Drivers and Receivers	MAX231C	Maxim	
					MAX231E	Maxim	
					MAX231M	† Maxim	
	0.8 to2	TTL/CMOS	7	Bus Transceiver, Three-State	MC3446	◊ TI	
	0.97 to 2.65	TTL	5	Open Collector, 1 V Hysteresis	AM7838	◊† AMD	25
					DS7838	† National	
	1.05 to 2.50	TTL	5	Inverting 7833/8833	DS7835	† National	
					DS8835	National	
				Inverting 7839/8839	DS7834	† National	
					DS8834	National	30
					N8T34	**Signetics (3022)**	
				Three-State, NOR Gate, Transmit Disable, Hysteresis	DS7839	† National	
					DS8839	National	
				Three-State, T/R Disables, Hysteresis	DS7833	† National	
					DS8833	National	35
	1.5 to 2.4	TTL	5	Open Collector, 100 mA Output, Parity Generator/Checker	AM2907M	† AMD	
				Q-bus Compatible 2907	AM2908M	† AMD	
				2-Input, Open Collector 100 mA Drivers	AM2905M	† AMD	
				2-Input, Open Collector 100 mA Drivers, Parity Generator/Checker	AM2906M	† AMD	
	1.5 to 3.2	TTL	5	Open Collector, 100 mA Output	SN55138	◊† TI	40
	1.6 to 1.8	TTL	5	Open Collector, Hysteresis	AM26S12C	AMD	
					AM26S12M	† AMD	
	1.6 to 2.3	TTL	5	Open Collector, 100 MA Output, Parity Generator/Checker	AM2907C	AMD	
				Q-bus Compatible 2907	AM2908C	AMD	
				2-Input, Open Collector 100 mA Drivers	AM2905C	AMD	45
				2-Input, Open Collector 100 mA Drivers, Parity	AM2906C	AMD	
	1.6 to 2.4	TTL	5	Open Collector, 100 mA Output	AM26S10M	† AMD	
					AM26S11M	† AMD	
					μA9640M	† Fairchild	
					DS26S10M	† National	50
					DS26S11M	† National	
	1.75 to 2.25	TTL	5	Open Collector, 100 mA Output	AM26S10C	AMD	
					AM26S11C	AMD	
					μA9640C	Fairchild	
					MC26S10	**Motorola (2952)**	55
					DS26S10C	National	
					DS26S11C	National	
					AM26S10C	TI	
					AM26S11C	TI	
	1.8 to 2.9	TTL	5	Open Collector, 100 mA Output	SN75138	TI	60

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

INTERFACE—Line Circuits (Cont'd)

No. Per Device	Receiver Input Threshold, V	Output	Supply Voltage, V	Comments	Device	Source	Line
Line Transceivers—Single Ended (Cont'd)							
6	0.8 to 1.4	TTL/CMOS	5	Universal Level Translator/RS–232 Line Receiver	LTC1045C	LinearTech	
					LTC1045M	† LinearTech	
7	0.8 to 2.4	TTL	5	Four Independent RS–232 Drivers and 3 Three-State Receivers with Shutdown	MAX237C	Maxim	
					MAX237E	Maxim	
					MAX237M	† Maxim	5
8		TTL	5	IEEE 896.1	SN75ALS056	TI	
	—	TTL/CMOS	5	General Purpose Interface Bus	DS3666	National	
					DS75160A	◊ National	
					DS75161A	◊ National	
					DS75162A	◊ National	10
	TTL	TTL	5	Bidirectional Bus Transceiver, Three-State	DP7304B	† AMD	
					DP8304B	AMD	
					DP8304	National	
	0.5 to 2.0	TTL	5	Bidirectional Bus Transceiver, Open Collector	54LS641	† Signetics	
					54LS642	† Signetics	15
					74LS641	◊ **Signetics (3003)**	
					74LS641-1	◊ **Signetics (3003)**	
					74LS642	◊ **Signetics (3003)**	
					74LS642-1	◊ **Signetics (3003)**	
					SN54LS641	◊† TI	20
					SN54LS642	◊† TI	
					SN54LS644	◊† TI	
				Bidirectional Bus Transceiver, Three-State	DP7303	† AMD	
					DP7307	◊† AMD	
					DP7308	◊† AMD	25
					DP8303	AMD	
					DP8307	AMD	
					DP8308	AMD	
					SN54LS645	† MMI	
					SN54LS645-1	† MMI	30
					DP7303	◊† National	
					DP7304B	◊† National	
					DP7307	◊† National	
					DP7308	◊† National	
					DP8303	National	35
					DP8304B	National	
					DP8307	National	
					DP8308	National	
					SN54ALS245A	† TI	
					SN54ALS645A	† TI	40
					SN54LS640	◊† TI	
					SN54LS645	◊† TI	
	0.6 to 2.0	TTL	5	Bidirectional Bus Transceiver, Open Collector	SN74LS641	TI	
					SN74LS641-1	TI	
					SN74LS642	TI	45
					SN74LS642-1	TI	
					SN74LS644	TI	
					SN74LS644-1	TI	
				Bidirectional Bus Transceiver, Three-State	**74LS640**	**Signetics (3003)**	
					74LS640-1	**Signetics (3003)**	50
					74LS645	◊ **Signetics (3003)**	
					SN74LS245	TI	
					SN74LS623	TI	
					SN74LS640	TI	
					SN74LS640-1	TI	55
					SN74LS645	TI	
					SN74LS645-1	TI	
	0.7 to 2.0	TTL	5	Bidirectional Bus Transceiver, Open Collector	SN54LS641	† Motorola	
					SN54LS642	† Motorola	
				Bidirectional Bus Transceiver, Three-State	54LS245	† Fairchild	60
					SN54LS245	† Motorola	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value ᶜMacrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

No. Per Device	Receiver Input Threshold, V	Output	Supply Voltage, V	Comments	Device	Source	Line
Line Transceivers—Single Ended (Cont'd)							
8	0.7 to 2.0	TTL	5	Bidirectional Bus Transceiver, Three-State			(Cont'd)
					SN54LS640	† Motorola	
					SN54LS645	† Motorola	
	0.8 to 2.0	TTL	5	Bidirectional Bus Transceiver, Open Collector	HD74LS641	Hitachi	
					HD74LS642	Hitachi	
					SN74LS641	Motorola	5
					SN74LS642	Motorola	
				Bidirectional Bus Transceiver, Three-State	74LS245	◊ Fairchild	
					HD74LS243	Hitachi	
					HD74LS645	Hitachi	
					HS74LS640	Hitachi	10
					MC54F245	† Motorola	
					MC74F245	Motorola	
					SN74LS245	◊ Motorola	
					SN74LS640	Motorola	
					SN74LS645	Motorola	15
					DM74LS245	National	
					DS3667	† National	
					N8T125	**Signetics (3022)**	
					S8T125	◊† Signetics	
					74LS245	**Signetics (3003)**	20
					SN74ALS245A	TI	
					SN74ALS645A	TI	
					SN74AS245	TI	
					SN74LS646	TI	
					SN74LS648	TI	25
				General Purpose Interface Bus	**MC3447**	**Motorola (2952)**	
					SN75ALS163	TI	
					SN75160B	TI	
					SN75161B	TI	
					SN75162B	TI	30
					SN75163B	TI	
					SN75164B	TI	
			7	General Purpose Interface Bus.	SN75ALS160	TI	
					SN75ALS161	TI	
					SN75ALS162	TI	35
					SN75ALS164	TI	
					SN75ALS165	TI	
	0.8 to 2.4	TTL	5	Four Independent Drivers and 4 Receivers	MAX238C	Maxim	
					MAX238E	Maxim	
				3 RS–232 drivers, 5 RS–232 receivers	MAX239	Maxim	40
10	0.8 to 2.4	TTL	5	Five Independent RS–232 Drivers and 5 Three-State Receivers with Shutdown	MAX236C	Maxim	
					MAX236E	Maxim	
					MAX236M	† Maxim	
Line Transceivers—Differential							
1		TTL	5	Designed to meet proposed EIA Standard RS485	DS3695	National	
					DS3696	National	45
					DS3697	National	
					DS3698	National	
				EIA Standard RS422-A, RS–485	SN65176B	TI	
				IEEE 802.3, 1 Base 5	SN75061	TI	
				IEEE 802.3, 1 Base 5	SN75062	TI	50
	±0.2	TTL	5	Independent Driver and Receiver, RS–422A/485, CCITT V.11, X.27	SN75179B	TI	
	±0.5/±1 V	TTL	5	Independent Three-State 55113 Driver and 55115 Receiver	SN55116	† TI	
					SN75116	TI	
				Same as 55116 with Three-State Receiver	SN55118	† TI	
					SN75118	TI	55
				Same as 55117 with Three-State Receiver	SN55119	† TI	
					SN75119	TI	
				Three-State 8 Pin, 40 mA	SN55117	† TI	
					SN75117	TI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Line Circuits (Cont'd)

No. Per Device	Receiver Input Threshold, V	Output	Supply Voltage, V	Comments	Device	Source		Line
Line Transceivers—Differential							**(Cont'd)**	
1							(Cont'd)	
	0.8 to 2	TTL	5	Bidirectional Bus Repeater, Three-State, RS-485/422A	μA96177	◊ Fairchild		
					μA96178	◊ Fairchild		
				Bidirectional Bus Transceiver, Three State	μA96176	◊ Fairchild		
					SN75176	**Motorola**	**(2953)**	
					SN75177	**Motorola**	**(2953)**	5
					SN75178	**Motorola**	**(2953)**	
					SN75176B	TI		
				Bus Repeater	SN75177B	TI		
					SN75178B	TI		
2	0.20	TTL/ECL	5	Contains two differential ECL-to-TTL converters and two TTL-to-differential ECL converters				
					41LK	**AT&T**	**(2494)**	10
					41LL	**AT&T**	**(2494)**	
					41LM	**AT&T**	**(2494)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value ' Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Memory Drivers

Function	Device	Source	Line
Bank Switch	DS1222	Dallas	
Bubble Memory Coil Driver	DS3616	National	
Bubble Memory Function Driver	DS3615	National	
	DS3618	National	
Bubble Memory Predriver	SI7250	Siliconix	5
Bubble Memory Sense Amplifier	DS3617	National	
Bubble Memory Quad VMOS Drive Transistors	HA13007	◊ Hitachi	
Data Separator, Hard Disk	**SSI32D532**	**SiliconSys (3198)**	
	SSI32D534	**SiliconSys (3198)**	
	SSI32D535	**SiliconSys (3198)**	10
Data Synchronizer, Hard Disk	SSI32D533	SiliconSys	
Disk Drive, Disk Data Controller	DP8466	National	
Disk Drive, Disk Data Separator	AM9581	AMD	
	SSI32D531	**SiliconSys (3198)**	
	SSI34D441	**SiliconSys (3198)**	15
Disk Drive, Disk Pulse Detector	DP8464	National	
Disk Drive, Encoder/Decoder, 2, 7	DP8462	National	
	DP8463	National	
Disk Drive, Flexible Disk Support Circuit (port expansion for 8048 microprocessor)	**SSI34B580**	**◊ SiliconSys (3198)**	
Disk Drive, Flexible Disk, 2-Channel	**SSI34P570**	**◊ SiliconSys (3198)**	20
Disk Drive, Flexible Disk, 4-Channel	**SSI34R575**	**SiliconSys (3198)**	
Disk Drive, Hard Disk Controller	AM9580	AMD	
Disk Drive, MFM Data Separator	DP8460	National	
Disk Drive Read Channel (enhanced)	**VM443**	**VTC (3375)**	
Disk Drive Read/Write Preamplifier (thin-film heads)	**VM321**	**VTC (3375)**	25
Disk Drive Read/Write Preamplifier (vertical heads)	**VM322**	**VTC (3375)**	
Disk Drive Servo Preamplifier (ferrite head)	**VM201**	**VTC (3375)**	
Disk Drive, Winchester Servo Preamp	CS101A	Cherry	
Disk Drive, Winchester Thin Film Head Servo Preamp	CS116	Cherry	
Disk Memory Read/Write	μPC751	◊ NEC	30
Driver, 11-Bit DRAM	AM2976C	AMD	
	AM2976M	† AMD	

Function	Device	Source	Line
Dynamic RAM Controller	TMS34061	◊ TI	
Dynamic RAM Controller/Driver	SN54S408	† MMI	
	SN54S408-2	† MMI	35
	SN74S408	MMI	
	SN74S408-2	MMI	
	673102	MMI	
	673102A	MMI	
	673103	MMI	40
	673103A	MMI	
	673104	MMI	
	673104A	MMI	
Dynamic RAM Controller/Driver, Multimode	SN54S409	† MMI	
	SN54S409-2	† MMI	45
	SN54S409-3	† MMI	
	SN74S409	MMI	
	SN74S409-2	MMI	
Dynamic RAM Controller, 256K	**THCT4502B**	**TI (3227, 3236)**	
Floppy Disk Write Controller/Head Driver	**MC3469**	**Motorola (2949)**	50
	MC3471	**◊ Motorola (2949)**	
Memory Driver	SG55325	◊† SiliconG	
Memory Driver, FIFO RAM Controller	N8X60	Signetics	
	S8X60	† Signetics	
Memory Driver Dual, 400 mA Sink/Source, Decode (for magnetic memories)	DS3629	National	55
Memory Driver, Dual 600 mA Sink/Source	DS55325	† National	
	DS75325	National	
	SG75325	◊ SiliconG	
	SN55325	† TI	
Memory Driver, Quad, 600 mA Sink	SG75326	◊ SiliconG	60
	SG75327	◊ SiliconG	
	SN55326	† TI	
	SN55327	† TI	
Memory Timing Controller (with EDAC)	AM2969	◊ AMD	
Memory Timing Controller (without EDAC)	AM2970	◊ AMD	65
MOS Dynamic Memory Controller	AM2968	◊ AMD	
	2964B	Signetics	
MOS Dynamic Memory Controller, Microprocessor to 64K RAMs	MC3480	Motorola	
MOS Dynamic Memory, 16 K Address Multiplexer and Refresh Counter	MC3242A	Motorola	
MOS Dynamic RAM Controller	MB1422A	Fujitsu	70
	8202A	Intel	
	8203	Intel	
	8205	Intel	
	SN74ALS2967	**TI (3227, 3234)**	
	SN74ALS2968	**TI (3227, 3234)**	75
	TMS4500A	**TI (3227)**	
	TMS4500A-15	TI	
	TMS4500A-20	TI	
	TMS4500A-25	TI	
	VL4500A	VLSI Tech	80

Function	Device	Source	Line
MOS Dynamic RAM Controller/Driver	DP8408	National	
	DP8417	National	
	DP8418	National	
MOS Dynamic RAM Controller/Driver, Multimode	DP8408	National	
	DP8409	National	85
MOS Dynamic RAM Controller/Driver, 16-Bit	DP8428	National	
	NS32828	National	
MOS Dynamic RAM Controller/Driver, 32-Bit	DP8429	National	
	NS32829	National	
MOS Dynamic RAM Controller Interface Circuit	DP84312	National	90
	DP84322	National	
	DP84332	National	
MOS Dynamic RAM Controller, Two Port	54LS764	Signetics	
	74F764	**Signetics (3024, 3186)**	
	74LS764	**Signetics (3003)**	95
MOS Dynamic RAM Programmable Refresh Timer	DP84300	National	
Paged Memory Management Unit	**MC68851**	**Motorola (2897)**	
RISC Memory Controller/Driver	**VL86C110**	**VLSI Tech (3344)**	
Dual AND TTL to MOS Driver (NMOS memory interface)	μA9643C	Fairchild	
Dual Memory Driver, 400 mA Sink (for magnetic memories)	MC4043	Motorola	100
Dual MOS Clock Driver	0026	Fairchild	
	DS0025	† National	
	DS0025C	National	
	DS0026	† National	
	DS0026C	National	105
	DS0056	† National	
	DS0056C	National	
Dual MOS Clock Driver, Bootstrapped for Single Supply Systems	DS1671	National	
Dual TTL to MOS Driver (MOS memory interface)	DS75361	National	
	DS75362	National	110
Dual-Port Memory Controller (8/16/32-bit microprocessor interface)	S61C35	Gould	
Quad MOS Clock Driver	DS3245	National	
Quad, MOS Memory Decoder/Clock Driver	DS36143	National	
Quad MOS Memory I/O Register	DS16177	† National	
	DS1677	† National	115
	DS3647	National	
Quad Multiplexer/Driver, for MOS Systems	DS1648	† National	
	DS1678	† National	
	DS3648	National	
	DS3678	National	120
Quad NAND TTL to MOS Driver (MOS memory interface-clock driver)	HD2912	Hitachi	
	HD2916	Hitachi	
	DS75365	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Memory Drivers (Cont'd)

Function	Device	Source	Line
Quad NAND TTL to MOS Driver (MOS memory interface-clock driver) (Cont'd)			
	3207A	Signetics	
	3207A-1	Signetics	
	SN55365	† TI	
Quad NMOS Memory Driver			
	DS1674	† National	
	DS36144	National	5
	DS3674	National	
Quad Power Strobe (Strobe power on memories)			
	HD6600	National	
Quad Predriver, Open Collector, 50 mA Sink (for magnetic memories)			
	MC4042	Motorola	
Quad TTL to NMOS Memory Driver (for 2105, 2107, etc.)	μA9645C	Fairchild	
Hex Inverter/MOS Driver, Disable Causes Logic 1 State			
	DS16149	† National	10
	DS16179	† National	
	DS36149	National	
	DS36179	National	
Hex Inverter/MOS Driver, Three-State			
	DS1649	† National	
	DS1679	† National	15
	DS3649	National	
	DS3679	National	
Hex Latch/Driver, for MOS Memories			
	DS1675	† National	
	DS3645	National	
	DS3675	National	20
Octal Dynamic Memory Driver, Three-State			
	AM2965C	◊ AMD	
	AM2965M	◊† AMD	
	AM2966C	◊ AMD	
	AM2966M	◊† AMD	
Octal Dynamic RAM Driver, Three-State			
	SN54S700	† MMI	25
	SN54S730	† MMI	
	SN54S731	† MMI	
	SN54S734	† MMI	
	SN74S700	MMI	
	SN74S730	MMI	30
	SN74S731	MMI	
	SN74S734	MMI	
Octal MOS Driver, Three-State			
	DP84240	◊ National	
	DP84244	◊ National	
	DS1628	† National	35
	DS3628	National	
Two Phase Oscillator/Clock Driver (for MOS systems)			
	DS7803	† National	
	DS7807	† National	
	DS8803	National	
	DS8807	National	40

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Addressable Peripheral Driver (latched, 8-output driver)			
	NE590	◊ Signetics	
	NE591	◊ Signetics	
Bidirectional Interface Circuit, High Voltage			
	TEA1512	Thomson	
BiMOS Latched Driver			
	UCN5800A	**Sprague (3203)**	
	UCN5801A	**Sprague (3203)**	5
	UCN5810A	**Sprague (3203, 3205)**	
	UCN5812A	**Sprague (3203, 3205)**	
	UCN5818A	**Sprague (3203, 3205)**	
	UCS4401H	† Sprague	
	UCS4801H	† Sprague	10
	UCS4810H	† Sprague	
Clock Generator/Oscillator, to 10 MHz, 8 and 1 Divider, for Microprocessors			
	ICM7209	**† GE/Intersil (2670)**	
Clock Generator to 175 MHz (For use with Brooktree RAMDACs), Divide by 2,3 4,5, or 8.			
	BT438	Brooktree	
Clock Generator, 150 MHz, for RAMDACsdivide by 3,4,5, or 8 (for use with RAMDACs)			
	BT439	Brooktree	
CMOS Dynamic RAM Controller			
	VL4502	VLSI Tech	15
Converter, Serial to Parallel, 13-bit, to 80 mA			
	TEA1017	**Signetics (3128)**	
Data Acquisition Controller (intelligent) for A/D Converter	CY600	Cybernetic	
Disk Buffer Management Unit			
	HDC9225	SMC	
Driver, BiMOS Latched, with Read Back			
	UCN5882EP	**Sprague (3203)**	
Driver, Control Circuit for Fast Switching Transistors			
	UAA4002	Thomson	20
Driver, High Side Driver Switch (drives loads from positive side of power supply)			
	MC3399T	**Motorola (2933)**	
Driver, High Speed, 1.5 A			
	UC1705	**† Unitrode (3324, 3326)**	
	UC3705	**Unitrode (3324, 3326)**	
Driver, High-Speed Dual Pin Driver (1.5 GHz)			
	16G061	**GigaBit (2689)**	
Driver, Injector	L9335	SGS	25
	L9336	SGS	
Driver, Laser Diode			
	IR3C01	Sharp	
	IR3C02	Sharp	
	IR3C02A/N	Sharp	
	IR3C05	Sharp	30
Driver, Low-Noise Switchmode (for three-phase brushless dc motors)			
	UC3623	Unitrode	
Driver, MOSFET (opto-isolated, 1.0μA short-circuit current)	DIG12-08-010	Dionics	
Driver, MOSFET (opto-isolated, 10.0μA short-circuit current)	DIG12-06-100	Dionics	
Driver, MOSFET (opto-isolated, 15μA short-circuit current)	DIG11-06-150	Dionics	
Driver, MOSFET (opto-isolated, 2.5μA short-circuit current)	DIG12-06-025	Dionics	35
Driver, MOSFET (opto-isolated, 25.0μA short-circuit current(	DIG12-06-250	Dionics	
Driver, MOSFET (opto-isolated, 3μA short-circuit current)	DIG11-06-030	Dionics	
Driver, MOSFET (opto-isolated, 4.5μA short-circuit current)	DIG12-08-045	Dionics	
Driver, MOSFET (opto-isolated, 5μA short-circuit current)	DIG11-08-050	Dionics	
Driver, Open Collector/Emitter, for 150 mA (load connected to negative supply)			
	PBD3520	RIFA	40
Driver, Power Bridge			
	MD930	AnalogSys	
Driver, Push-Pull 4-Channel			
	IP293L	**IPS (2854)**	
Driver/Receiver for Disk Head Amplifier			
	MB4316	Fujitsu	
Driver, SCR (opto-isolated)			
	DIG11-04-200F	Dionics	
Driver, Solenoid and Motor, to 40 V, 4 A			
	SG3640	◊ SiliconG	45
	SG3641	◊ SiliconG	
Driver, Solenoid (2.4 A)			
	MC3484S2	**Motorola (2933)**	
Driver, Solenoid (4 A)			
	MC3484S4	**Motorola (2933)**	
Driver, Switching Transistor			
	LAS8100	Lambda	
	LAS8101	Lambda	50
	IR4N05	Sharp	
	UC2950	**Unitrode (3326)**	
Driver, Universal High-Current Sink Driver			
	PBD3545	RIFA	
Driver, Universal High-Current Source Driver			
	PBD3548	RIFA	
Driver, Universal Source, 2 A			
	PBD3544	RIFA	55
Driver, Single, 125 mA, for Relays, Motors, Lamps			
	PBD3510	RIFA	
	PBD3511	RIFA	
Driver, Dual MOSFET, to 24 V			
	SN75372	TI	
Driver, Dual, to 80 V, 0.2 A			
	DI446	Dionics	
Driver, Dual, 2-Input, Sink or Source 500 mA			
	SG1627	◊† SiliconG	60
	SG3627	◊ SiliconG	
Driver, Dual 8-Bit, BiMOS Latched			
	UCN5881EP	**◊ Sprague (3203)**	
Driver, Triple Tri-State Power (25W)			
	UC3657	**Unitrode (3326)**	
Driver, Quad MOSFET, to 24 V			
	SN75374	TI	
Driver, 1 Channel (lamp relay driver)			
	TDE3207	Thomson	65
Driver, 2 Channel (hammer), to 35 V, 1 A			
	SG3700	SiliconG	
Driver, 2 Channel (solenoid and motor driver, 4 A)			
	SG3638	◊ SiliconG	
	SG3638A	◊ SiliconG	
	SG3639	◊ SiliconG	
	SG3639A	◊ SiliconG	70
		(Continued)	
Driver, 2 Channel (solenoid and motor driver, 4 A)		(Cont'd)	
	SG3643	◊ SiliconG	
	SG3643A	◊ SiliconG	
Driver, 4 Channel Latched, 50V Sink			
	UCS5800H	† Sprague	
Driver, 4 Channel, 2.5A			
	UDN2545B	**Sprague (3203)**	
Driver, 4 Channel, 30 V, 1.5A			
	UDN2941B	**Sprague (3203)**	75
Driver, 4 Channel, 40 V, 2 A			
	SG3637	◊ SiliconG	
Driver, 4 Channel, 60 V, –6 A			
	UDN2948W	**Sprague (3203)**	
Driver, 5 Channel, CMOS/TTL Input (lamp, relay driver, load to negative supply)			
	UDN2957A	Sprague	
Driver, 5 Channel Darlington, to 400 mA			
	XR2200	◊ Exar	
	XR2200M	† Exar	80
	LB1287	Sanyo	
	LB1288	Sanyo	
Driver, 7 Channel, CMOS/PMOS Input (hammer, lamp, relay driver)	XR2204	◊ Exar	
	XR2204M	† Exar	
	μA9668C	Fairchild	85
	μA9668M	† Fairchild	
	MC1416	**Motorola (2954)**	
	PBD3523-12	RIFA	
	PBD352304	RIFA	
	ULN2004A	SGS	90
	ULN2004	Signetics	
	SG2004	SiliconG	
	SG2014	SiliconG	
	SG2024	SiliconG	
	ULN2004	**Sprague (3203)**	95
	ULN2014A	**Sprague (3203)**	
	ULN2024	**Sprague (3203)**	
	ULN7004A	**Sprague (3203)**	
	ULS2004	◊† Sprague	
	ULS2014	◊† Sprague	100
	ULS2024	◊† Sprague	
	ULN2004A	◊ TI	
Driver, 7 Channel, CMOS/TTL Input (hammer, lamp, relay driver)	XR2003M	† Exar	
	XR2203	◊ Exar	
	μA9667C	Fairchild	105
	μA9667M	† Fairchild	
	MC1413	**Motorola (2954, 2958)**	
	PBD3523-13	RIFA	
	ULN2003A	SGS	
	ULN2003	Signetics	110
	SG2003	◊ SiliconG	
	SG2005	SiliconG	
	SG2013	SiliconG	
	SG2015	SiliconG	
	SG2023	SiliconG	115
	SG2025	SiliconG	
	SG3853	◊ SiliconG	
	ULN2003	**Sprague (3203)**	
	ULN2005	**Sprague (3203)**	
	ULN2013A	**Sprague (3203)**	120
	ULN2015A	**Sprague (3203)**	
	ULN2023	**Sprague (3203)**	
	ULN2025	**Sprague (3203)**	
	ULN7003A	**Sprague (3203)**	
	ULN7005A	**Sprague (3203)**	125
		(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Peripheral Drivers (Cont'd)

Function	Device	Source	Line
Driver, 7 Channel, CMOS/TTL Input (hammer, lamp, relay driver) (Cont'd)			
	ULS2003	◊† Sprague	
	ULS2005	◊† Sprague	
	ULS2013	◊† Sprague	
	ULS2015	◊† Sprague	
	ULS2023	◊† Sprague	5
	ULS2025	† Sprague	
	ULN2003A	◊ TI	
Driver, 7 Channel, MOS/TTL Input (hammer, lamp, relay driver)	XR2201	◊ Exar	
	XR2201M	† Exar	
	μA9665C	Fairchild	10
	ULS2011	† IPS	
	MC1411	**Motorola (2954)**	
	PBD3523-11	RIFA	
	ULN2001A	SGS	
	SG2001	◊ SiliconG	15
	SG2011	SiliconG	
	SG2021	SiliconG	
	SG3851	◊ SiliconG	
	ULN2001	**Sprague (3203)**	
	ULN2011A	**Sprague (3203)**	20
	ULN2021	**Sprague (3203)**	
	ULN7001A	**Sprague (3203)**	
	ULS2001	† Sprague	
	ULS2011	◊† Sprague	
	ULS2012H	◊† Sprague	25
	ULS2021	◊† Sprague	
	SN75466	TI	
	ULN2001A	◊ TI	
Driver, 7 Channel, PMOS Input (hammer, lamp, relay driver)	XR2202	◊ Exar	
	XR2202M	† Exar	30
	μA9666C	Fairchild	
	μA9666M	† Fairchild	
	MC1412	**Motorola (2954)**	
	PBD3523-14	RIFA	
	SG2002	◊ SiliconG	35
	SG2012	SiliconG	
	SG2022	SiliconG	
	SG3852	◊ SiliconG	
	ULN2002	**Sprague (3203)**	
	ULN2012A	**Sprague (3203)**	40
	ULN2022	**Sprague (3203)**	
	ULN7002A	**Sprague (3203)**	
	ULS2002	◊† Sprague	
	ULS2012	◊† Sprague	
	ULS2022	◊† Sprague	45
	ULN2002A	◊ TI	
Driver, 8 Channel, CMOS/PMOS Input (hammer, lamp, relay driver)	ULS2804	† IPS	
	ULS2814	† IPS	
	ULS2824	† IPS	
	ULN2804	**Motorola (2954)**	50
	PBD3538-11	RIFA	
	PBD3538-12	RIFA	
	ULN2804A	SGS	
	ULN2804	**Sprague (3203)**	
	ULN2814A	**Sprague (3203)**	55
	ULN2824	**Sprague (3203)**	
	ULS2804	† Sprague	
	ULS2814	† Sprague	
	ULS2824	† Sprague	
Driver, 8 Channel, CMOS/PMOS Input (lamp, relay driver)	**UDN2982A**	**Sprague (3203)**	60
	UDN2984A	**Sprague (3203)**	
	UDS2982	† Sprague	
	UDS2984	† Sprague	

Function	Device	Source	Line
Driver, 8 Channel, CMOS/TTL Input (hammer, lamp, relay driver)	ULS2803	† IPS	
	ULS2805	† IPS	65
	ULS2813	† IPS	
	ULS2815	† IPS	
	ULS2823	† IPS	
	ULS2825	† IPS	
	ULN2803	**Motorola (2954)**	70
	PBD3538-13	RIFA	
	PBD3538-14	RIFA	
	ULN2803A	SGS	
	ULN2805A	SGS	
	NE5090	Signetics	75
	ULN2803	**Sprague (3203)**	
	ULN2805	**Sprague (3203)**	
	ULN2813A	**Sprague (3203)**	
	ULN2815A	**Sprague (3203)**	
	ULN2823	**Sprague (3203)**	80
	ULN2825	**Sprague (3203)**	
	ULS2803	† Sprague	
	ULS2805	† Sprague	
	ULS2813	† Sprague	
	ULS2815	† Sprague	85
	ULS2823	† Sprague	
	ULS2825	† Sprague	
Driver, 8 Channel, CMOS/TTL Input (lamps, relay driver)	**UDN2596A**	**Sprague (3203)**	
	UDN2597A	**Sprague (3203)**	
	UDN2981A	**Sprague (3203)**	90
	UDN2983A	**Sprague (3203)**	
	UDN2985A	**Sprague (3203)**	
	UDS2981	† Sprague	
	UDS2983	† Sprague	
Driver, 8 Channel Latched, 50V Sink	UCS5801H	† Sprague	95
Driver, 8 Channel, MOS/TTL Input (hammer, lamp, relay driver)	ULS2801	† IPS	
	ULS2811	† IPS	
	ULS2821	† IPS	
	ULN2801	**Motorola (2954)**	
	ULN2801A	SGS	100
	ULN2801	**Sprague (3203)**	
	ULN2811A	**Sprague (3203)**	
	ULN2821	**Sprague (3203)**	
	ULS2801	† Sprague	
	ULS2811	† Sprague	105
	ULS2821	† Sprague	
Driver, 8 Channel, PMOS Input (hammer, lamp, relay driver)	ULS2802	† IPS	
	ULS2812	† IPS	
	ULS2822	† IPS	
	ULN2802	**Motorola (2954)**	110
	ULN2802A	SGS	
	ULN2802	**Sprague (3203)**	
	ULN2812A	**Sprague (3203)**	
	ULN2822	**Sprague (3203)**	
	ULS2802	† Sprague	115
	ULS2812	† Sprague	
	ULS2822	† Sprague	
Driver, 8 Channel, PMOS Input (lamps, relay driver)	**UDN2598A**	**Sprague (3203)**	
	UDN2599A	**Sprague (3203)**	
	UDN2986A	**Sprague (3203)**	120
Driver, 8-Bit, BiMOS Addressable Latched	UCN4807A	Sprague	
	UCN4808A	Sprague	
Driver, 8-bit Serial Input BiMOS Latched (80 V sink)	UCS5822A	Sprague	

Function	Device	Source	Line
Driver, 8-Bit Serial Input, Latched 100 V Sink	**UCN5823A**	**Sprague (3203)**	
	UCS4823H	◊† Sprague	125
Driver, 8-Bit Serial Input, Latched 50 V Sink	**UCN5821A**	**Sprague (3203)**	
	UCS4821H	◊† Sprague	
Driver, 8-Bit Serial Input, Latched 80 V Sink	**UCN5822A**	**Sprague (3203)**	
	UCS4822H	◊† Sprague	
Driver, 8-Channel Current-Sink Driver	**UDN2595A**	**Sprague (3203)**	130
Driver, 9 Channel for Printer	HA13408	Hitachi	
Driver, 10-Bit, High-Voltage, High-Current	S4534	◊ Gould	
Driver, 10-Bit Serial-Input Latched Source	**UCN5810F**	**Sprague (3203, 3205)**	
	UCS4810H	† Sprague	
	UCS5810H	† Sprague	135
Driver, 16-Bit, BiMOS Addressable Latched	**UCN5816A**	**Sprague (3203)**	
Driver, 20-Bit Serial-Input Latched Source	**UCN5812F**	**Sprague (3203, 3205)**	
Driver, 32-Bit for Displays, Relays, Solenoids, Print Heads and Motors	S4521	◊ Gould	
	S4535	◊ Gould	
Driver, 32-Bit Serial-Input Latched Source	**UCN5818F**	**Sprague (3203, 3205)**	140
Driver, 7-Channel, CMOS/TTL Input (hammer, lamp, relay driver)	ULN2003AM	◊ TI	
Drivers, Four Half-Bridge (hybrid)	PH26450	† MicroNet	
Flux-Regulating Actuator, Dual (for printheads, solenoids, relays)	SN75608	TI	
Hall Effect Device (senses magnetic field)	UGN3503U	Sprague	
Hall Effect Device (senses msgnetic field)	UGS3503U	Sprague	145
Hall Effect Digital Latches (for brushless dc motor control)	UGN3077	Sprague	
	UGS3077	Sprague	
Hall Effect Digital Latches (logic to electromechanical interface)	UGN3075	Sprague	
	UGN3076	Sprague	
	UGS3075	† Sprague	150
	UGS3076	† Sprague	
Hall Effect Switch (senses magnetic field)	UGN3035U	Sprague	
	UGN3040T	Sprague	
	UGN3040U	Sprague	
	UGN3131T	Sprague	155
	UGN3131U	Sprague	
	UGS3040T	Sprague	
	UGS3040U	Sprague	
	UGS3131T	Sprague	
	UGS3131U	Sprague	160
High Current Switch Driver (to drive high power, high speed NPN switching transistors)	SG1629	◊† SiliconG	
	SG3629	◊ SiliconG	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Peripheral Drivers (Cont'd)

Function	Device	Source	Line
High-Voltage Analog Switch Array, 2 Channels with 8 circuits each	TC9162	Toshiba	
	TC9163	Toshiba	
	TC9164	Toshiba	
High-Voltage, High-Current Source Driver	UDQ2957R	◊ Sprague	
High-Voltage Source Drivers	**UDN6510A**	**Sprague (3203)**	5
	UDN6514A	**Sprague (3203)**	
Injector Solenoid Driver	CS266	Cherry	
Intelligent Slave Physical Interface Controller (ISPIC)	S61393	Gould	
Lamp Dimmer, Momentary or Prolonged Touch	**LS7331**	**LSIComp (2867)**	
Lamp Dimmer, Ten Level Power Control	**LS7310**	**LSIComp (2867)**	10
	LS7315	**LSIComp (2867)**	
Level Translator	HT01OP	AT&T	
MOS Dynamic RAM Controller/Driver	DP8419	National	
MOS Dynamic RAM Controller Interface Circuit	DP84412	National	
Motor, AC Motor Control Circuit	HEF4752V	Signetics	15
Motor, AC Motor Speed Control	**TDA1285**	**Motorola (2936)**	
Motor and Actuator Driver	ICH8510I	GE/Intersil	
	ICH8510M	† GE/Intersil	
	ICH8520I	GE/Intersil	
	ICH8520M	† GE/Intersil	20
	ICH8530I	GE/Intersil	
	ICH8530M	† GE/Intersil	
Motor and Solenoid Driver	**CA3169**	**GE/RCA (2650, 2654)**	
Motor, Bidirectional Motor Driver	**GL7445**	**GoldStar (2700)**	
Motor, Brushless DC Motor Commutator, 3 Phase	**LS7261**	**LSIComp (2867)**	25
	LM621	National	
Motor, Brushless DC Motor Speed Controller	**LS7260**	**LSIComp (2867)**	
Motor, Closed-Loop Brushless Speed Control Adapter	**MC33039**	**Motorola (2935)**	
Motor Controller, Brushless, DC	NE5570	Signetics	
	SA5570	Signetics	30
	SE5570	◊ Signetics	
Motor Controller, DC Brushless (Electrical Sensor Phasing of 120/240 Degrees)	MC33034P120	Motorola	
	MC33034P60	**Motorola (2934)**	
Motor Controller/Driver, DC Servo	**MC33030**	**Motorola (2934)**	
Motor Controller (intelligent) for 4-Phase Stepper Motors	CY500	Cybernetic	35
	CY512	Cybernetic	
	CY525	Cybernetic	
Motor, DC Motor Switch Mode Control	UAA4004	Thomson	
Motor Drive, DC Motors	TLE4201	Siemens	

Function	Device	Source	Line
Motor Driver	IR2C08	Sharp	40
	IR2C09	Sharp	
	IR2C25	Sharp	
Motor Driver, Bidirectional	IR2C10	Sharp	
	IR2C11	Sharp	
Motor Driver, Brushless, DC	TDA5040	◊ Signetics	45
Motor Driver, for 3-Phase brushless dc motors	HA13406W	Hitachi	
Motor Driver, Full Bridge	**UDN2953B**	**Sprague (3203)**	
	UDN2954W	**Sprague (3203)**	
Motor Driver, Full Bridge, Dual	**UDN2993B**	**Sprague (3203)**	
	UDN2998W	**Sprague (3203)**	50
Motor Driver, Half Bridge	LAS8500	Lambda	
	LAS8501	Lambda	
	SG1635	SiliconG	
	SG3635	◊ SiliconG	
	UDN2931B	**Sprague (3203)**	55
	UDN2935Z	**Sprague (3203)**	
	UDN2943Z	**Sprague (3203)**	
	UDN2949Z	Sprague	
	UDN2950Z	**Sprague (3203)**	
	UDN2951	**Sprague (3203)**	60
	UDN2955	**Sprague (3203)**	
	UDS2933H	† Sprague	
	UDS2934H	† Sprague	
Motor Driver, Half H	SN75603	TI	
	SN75604	TI	65
	SN75605	TI	
Motor Driver, Micro Motor	IR3C03N	Sharp	
Motor Driver, Stepper Motor Drive Circuit	TEA3718	Thomson	
Motor Driver with Built-In Braking Function	**GL7401**	**GoldStar (2700)**	
Motor Driver, Dual Bridge	HA13421A	Hitachi	70
Motor Driver, Dual Bridge Driver	HA134021A	Hitachi	
Motor Driver, Dual Bridge, 0.2 A, 36 V	**IP1M10**	**IPS (2854)**	
	IP1M20	**IPS (2854)**	
	IP3M10	**IPS (2855)**	
	IP3M20	**IPS (2855)**	75
	2M10	IPS	
	2M20	IPS	
Motor Driver, Dual Full Bridge with Diodes	**IP293D**	**IPS (2854)**	
Motor Driver, Dual Full Bridge without Diodes	**IP293**	**IPS (2854)**	
Motor Driver, Dual (full-H)	L298	TI	80
Motor Driver, Quad Gated, Inverted	**CA3219A**	**GE/RCA (2650)**	
Motor Driver, Quad (half-H)	L293	TI	
	L293D	TI	
	SN754410	TI	
	SN754411	TI	85
Motor Driver, Three-Phase Brushless, 13 A, 400 V	CHHY008	Solitron	

Function	Device	Source	Line
Motor Driver, Three-Phase Brushless, 13 A, 500 V	CHHY004	Solitron	
Motor Driver, Three-Phase Brushless, 15 A, 400 V	CHHY007	Solitron	
Motor Driver, Three-Phase Brushless, 15 A, 500 V	CHHY003	Solitron	
Motor Driver, Three-Phase Brushless, 30 A, 200 V	CHHY006	Solitron	90
Motor Driver, Three-Phase Brushless, 30 A, 500 V	CHHY002	Solitron	
Motor Driver, Three-Phase Brushless, 40 A, 100 V	CHHY005	Solitron	
Motor Driver, Three-Phase Brushless, 40 A, 500 V	CHHY001	Solitron	
Motor Driver, Four-Channel Push Pull	**L293**	**◊ Unitrode (3326)**	
Motor Driver, 3-Phase Brushless DC Motor Controller Drivers	**UDN2936W**	**Sprague (3203)**	95
	UDN2937W	**Sprague (3203)**	
Motor Driver, 3-Phase Brushless dc Motors	**UC3622**	**Unitrode (3326)**	
Motor Driver, 3-Phase, Half-Bridge	UDS2933H	† Sprague	
	UDS2934H	Sprague	
Motor Driver, 3-Phase Half-Bridge for Brushless DC Motors	**UDN2933B**	**Sprague (3203)**	100
Motor Driver, 3-Phase Unipolar Brushless DC Motors	**UDN2938W**	**Sprague (3203)**	
	UDN2939B	**Sprague (3203)**	
Motor Driver, 3-Phase, 30 Vdc brushless, 3A	**UC3620**	**Unitrode (3326)**	
Motor Driver, 3-Phase Half-Bridge for Brushless DC Motors	**UDN2934B**	**Sprague (3203)**	
Motor, Micro Stepper Controller	PBL3960	RIFA	105
Motor, Micro Stepper Driver	PBL3771	RIFA	
Motor, Microstepping Control of Two-Phase Stepper Motors	IXMS150	IXYS	
Motor, PWM Dual Driver (load control and status monitoring)	**UC3728**	**Unitrode (3327)**	70
Motor, Servo Controller	**SSI32H568**	**SiliconSys (3198)**	
Motor, Servo Demodulator	**SSI32H567**	**SiliconSys (3198)**	110
Motor, Servo Motor Controller	**EL2007**	**Elantec (2591)**	
Motor, Servo Motor Driver	**SSI32H569**	**SiliconSys (3198)**	
Motor, Smart Power Switch (for current, power, or thermal overload)	**UC195**	**Unitrode (3327)**	
	UC295	**Unitrode (3327)**	
	UC395	**Unitrode (3327)**	115
Motor Speed Controller	ZN411	Ferranti	
Motor Speed Controller, Universal	ZN410D	Ferranti	
	ZN410E	Ferranti	
	TDA1285A	**Motorola (2936)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

INTERFACE—Peripheral Drivers (Cont'd)

Function	Device	Source	Line
Motor Speed Regulator			
	LM1014	Fairchild	
	LM1014A	Fairchild	
	CA3228	GE/RCA	
	TDA1085A	**Motorola (2936)**	
	MSM5819	OKI	5
	TDA1085A	Plessey	
	TDA2085A	Plessey	
	TDA1151	SGS	
Motor Speed Regulator (for small dc motors). See also Linear—Consumer Circuits.			
	CS140	Cherry	
	CS175	Cherry	10
	μA7392C	Fairchild	
	LS7263	**LSIComp (2867)**	
	LM1014-2	National	
	SL440	Plessey	
	TCA955	Siemens	15
	NE5520	Signetics	
	SG1731	† SiliconG	
	SG2731	SiliconG	
	SG3731	SiliconG	
	EF4443	Thomson	20
	TDA1041	Thomson	
	TDA1154	Thomson	
	UC1637	**† Unitrode (3326)**	
	UC2637	**† Unitrode (3326)**	
	UC3637	**† Unitrode (3326)**	25
Motor Speed Regulator, PLL			
	TM4503	Toshiba	
Motor, Stepper Motor Controller			
	SSI183	SiliconSys	
Motor, Stepper Motor Driver			
	CS3717A	Cherry	
	MC3479	**Motorola (2935)**	
	UC1517	† Unitrode	30
	UC1717	**Unitrode (3326)**	
	UC3517	**Unitrode (3326)**	
	UC3717A	**Unitrode (3326)**	
Motor, Stepper Motor Driver, (to 90 V)			
	UDN7078W	**Sprague (3203)**	
Motor, Stepper Motor Driver (2 A)			
	TCA1560	Siemens	35
	TCA1561	Siemens	
Motor, Stepper Motor Driver, 10 to 45 V			
	UC3717	**Unitrode (3326)**	
Motor, Stepper Motor Predriver			
	SSI184	SiliconSys	
Motor, Stepper Motor Translator/Driver			
	UCN4202A	◊ Sprague	
	UCN4203A	◊ Sprague	40
	UCN4204B	**◊ Sprague (3203)**	
	UCN4205B-2	◊ Sprague	
	UCN5804B	**Sprague (3203)**	
Motor, Stepper Motor with current control			
	UDN2965W-2	**Sprague (3203)**	
Motor, Stepping Motor Controller/Driver, 24 V			
	SAA1042A	**Motorola (2935)**	45
Motor, Stepping Motor Controller/Driver, 6–12 V			
	SAA1042	**Motorola (2935)**	
Motor, Stepping Motor Driver			
	IP1717	IPS	
	IP1717A	IPS	
	IP1770	IPS	
	IP3717	IPS	50
	IP3717A	IPS	
	IP3770A	**IPS (2854)**	

(Continued)

Function	Device	Source	Line
Motor, Stepping Motor Driver (Cont'd)			
	LM18293	National	
	TDA3717	Plessey	
	PBA3219	RIFA	55
	PBD3517	RIFA	
	PBL3717	RIFA	
	PBL3770	RIFA	
	TM4503	SGS	
	PBL3717A	TI	60
	TL376C	TI	
	TEA3717	Thomson	
Motor, Stepping Motor Driver and Floppy Disk Logic Circuit	CS279	Cherry	
Motor, Stepping Motor Driver (4 A)			
	IP2D03	**IPS (2855)**	
	IP2003	IPS	65
	IP3D03	**IPS (2854)**	
Motor, Stepping Motor Driver (4 amps)			
	IP1D10	IPS	
Motor, Stepping Motor Translator/Driver			
	UCN5871	**Sprague (3203)**	
Motor, Dual Bidirectional Motor Driver			
	GL7438	**GoldStar (2700)**	
Motor, Triple Half-Bridge (for three-phase brushless motors)	**UC1657**	**Unitrode (3326)**	70
Motor, Three-Phase DC Brushless Controller/Driver			
	IP3M05	**IPS (2854)**	
	IP3M11	**IPS (2855)**	
	IP3M21	**IPS (2855)**	
Motor, Five Channel Programmable Current Switch			
	UC3722	**Unitrode (3327)**	
NTDS Driver/Receiver			
	VS610S	**VTC (3373)**	75
Pin Driver with Inhibit Mode, 100 MHz (for digital test systems)	AD345	◊ AD	
Power Peripheral Driver, CMOS/TTL Input (to 150 V, versions: 0.01 to 16 A)			
	VF01	Supertex	
	VF02	Supertex	
	VF03	Supertex	
	VF12	Supertex	80
	VF13	Supertex	
Printer Controller, for 5x7 Dot Matrix Printers			
	CY480	Cybernetic	
Printer Driver, Thermal Print Heads			
	RP2X04	◊ Datel	
Printer Driver, 5 Channel			
	HD2919	Hitachi	
Printer Solenoid Driver			
	DS3654	National	85
Printing Calculator Circuits			
	DS8654	◊ National	
	DS8692	National	
	DS8693	National	
	DS8694	National	
Push-Pull 4-Channel Driver			
	IP293DA	**IPS (2854)**	90
	IP293E	**IPS (2854)**	
Push-Pull 10-Channel Driver			
	IP3M02	**IPS (2854)**	
Read/Write circuit, 4-Channel for Center-Tapped Ferrite Heads	**SSI32R188**	**SiliconSys (3198)**	
Relay and Lamp Driver, to 30 V, 0.15 A			
	TDE1647	Thomson	

Function	Device	Source	Line
Relay and Lamp Driver, to 30 V, 0.3 A			
	TDE1607	Thomson	95
Relay and Lamp Driver, to 45 V, 0.3 A			
	TDE1647A	Thomson	
	TDE1737	Thomson	
Relay and Lamp Driver, to 50 V, 0.3 A			
	TDE1787	Thomson	
Relay and Lamp Driver, to 50 V, 0.5 A			
	TDE1767	Thomson	
Relay and Lamp Driver, to 60 V, 0.3 A			
	TDE1787A	Thomson	100
Relay and Lamp Driver, to 60 V, 0.5 A			
	TDE1767A	Thomson	
Relay and Lamp Driver, Dual, to 32 V, 2/4 A			
	TDE1777	Thomson	
Relay Driver, for 48 V Telephone Relays			
	UDN2580A	**Sprague (3203)**	
	UDN2585A	**Sprague (3203)**	
	UDN2588A	**Sprague (3203)**	105
	UDN2957A	Sprague	
Relay Driver, to 65 V, Sinks 300 mA, OR Input for 48 V Telephone Relays			
	DS1687	† National	
	DS3686	National	
	DS3687	National	
Relay Driver, to 70 V, 500 mA			
	CSR301	TeledyneC	110
Relay Driver, to 57 Volts, 500 mA			
	LM1921	National	
Relay Driver, 5 Channel, to 65 V, 70 mA			
	ITT7163	ITT	
	ITT7164	ITT	
Relay Driver, 7 Channel, to 100 V, 500 mA			
	SN75468	TI	
	SN75469	TI	115
Relay Driver, 7 Channel, to 50 V, 500 mA			
	SN75465	TI	
	SN75466	TI	
	SN75467	TI	
Solenoid Driver			
	MC3484V2	Motorola	
	MC3484V4	Motorola	120
Tape Drive, Read Data Path			
	SSI35P550	**SiliconSys (3198)**	
Video Shift Register, 250 MHz, Quad 10-bit or Penta 8-bit	BT424	Brooktree	
Winchester Disk Memory Read/Write Circuit			
	SSI32R104BLN	**SiliconSys (3198)**	
Dual AND Driver, HNIL, 250 mA, Open Collector			
	391A/C	TeledyneS	
Dual CMOS or TTL Driver/Translator, up to 30 V			
	IH6201C	**GE/Intersil (2679)**	125
	IH6201M	**† GE/Intersil (2679)**	
Dual Darlington Switch, to 80 V, 1.5 A			
	ULN2061	**Sprague (3203)**	
	ULN2062	**Sprague (3203)**	
Dual Half Bridge Driver, 1.5 A			
	SG3636	◊ SiliconG	
Dual NAND Driver, HNIL, 250 mA, Open Collector			
	392A/C	TeledyneS	130
Dual NOR Driver, HNIL, 250 mA, Open Collector			
	394A/C	TeledyneS	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Peripheral Drivers (Cont'd)

Function	Device	Source	Line
Dual OR Driver, HNIL, 250 mA, Open Collector			
	393A/C	TeledyneS	
Dual Peripheral AND Driver			
	DS55450	† National	
	DS55451	† National	
	DS55461	† National	
	DS75450	National	5
	DS75451	National	
	DS75461	National	
	PBD3513	RIFA	
	SG55450	† SiliconG	
	SG55450B	◇† SiliconG	10
	SG55451	† SiliconG	
	SG55460	◇† SiliconG	
	SG55460B	† SiliconG	
	SG55461	◇† SiliconG	
	SG75450	SiliconG	15
	SG75450B	◇ SiliconG	
	SG75451	SiliconG	
	SG75460	◇ SiliconG	
	SG75460B	SiliconG	
	SG75461	◇ SiliconG	20
	SN55450B	† TI	
	SN55451B	† TI	
	SN55461	† TI	
	SN55471	† TI	
	SN75450B	TI	25
	SN75451B	TI	
	SN75461	TI	
	SN75471	TI	
	SN75476	TI	
Dual Peripheral AND Driver, for CMOS			
	DS1631	† National	30
	DS3631	National	
Dual Peripheral AND Driver, to 70 V, 600 mA			
	UDN5721M	◇ Sprague	
	UDN5751M	**Sprague (3203)**	
Dual Peripheral AND Driver, to 70 V, 700 mA			
	UDN5741M	**Sprague (3203)**	
Dual Peripheral AND Driver, to 70 V 300 mA			
	SN75446	TI	35
Dual Peripheral AND Driver, to 80 V 600 mA			
	DS1611	† National	
	DS3611	National	
	UDN3611M	**Sprague (3203)**	
	UDN5711M	**◇ Sprague (3203)**	
	UDS3611H	† Sprague	40
	UDS5711H	† Sprague	
Dual Peripheral NAND Driver			
	DS55452	† National	
	DS55462	† National	
	DS75452	National	
	DS75462	National	45
	SG55452	† SiliconG	
	SG55462	◇† SiliconG	
	SG75452	SiliconG	
	SG75462	◇ SiliconG	
	SN55452B	† TI	50
	SN55462	† TI	
	SN55472	† TI	
	SN75407	TI	
	SN75447	TI	
	SN75452B	TI	55
	SN75462	TI	
	SN75472	TI	
Dual Peripheral NAND Driver, for CMOS			
	DS1632	† National	
	DS3632	National	

Function	Device	Source	Line
Dual Peripheral NAND Driver, to 70 V, 600 mA			
	UDN5722M	◇ Sprague	60
	UDN5752M	**Sprague (3203)**	
Dual Peripheral NAND Driver, to 70 V, 300 mA			
	MC1472	**Motorola (2954)**	
	SN75477	TI	
Dual Peripheral NAND Driver, to 80 V, 600 mA			
	DS1612	† National	
	DS3612	National	65
	UDN3612M	**Sprague (3203)**	
	UDN5712M	**◇ Sprague (3203)**	
	UDS3612H	† Sprague	
	UDS5712H	† Sprague	
Dual Peripheral NOR Driver			
	DS55454	† National	70
	DS55464	† National	
	DS75454	National	
	DS75464	National	
	SG55454	† SiliconG	
	SG55464	◇† SiliconG	75
	SG75454	SiliconG	
	SG75464	◇ SiliconG	
	SN55454B	† TI	
	SN55464	† TI	
	SN55474	† TI	80
	SN75407	TI	
	SN75449	TI	
	SN75454B	TI	
	SN75479	TI	
Dual Peripheral NOR Driver, for CMOS			
	DS1634	† National	85
	DS3634	National	
Dual Peripheral NOR Driver, to 70 V, 600 mA			
	UDN5724M	Sprague	
	UDN5754M	**Sprague (3203)**	
Dual Peripheral NOR Driver, to 70 V, 700 mA			
	UDN5744M	**Sprague (3203)**	
Dual Peripheral NOR Driver, to 30 V, 300 mA			
	SN75479	TI	90
Dual Peripheral NOR Driver, to 80 V, 600 mA			
	DS1614	† National	
	DS1614	† National	
	DS3614	National	
	UDN3614M	**Sprague (3203)**	
	UDN5714M	**◇ Sprague (3203)**	95
	UDS3614H	† Sprague	
	UDS5714H	† Sprague	
Dual Peripheral OR Driver			
	DS55453	† National	
	DS55463	† National	
	DS75453	National	100
	DS75463	National	
	SG55453	SiliconG	
	SG55463	◇ SiliconG	
	SG75453	SiliconG	
	SG75463	◇ SiliconG	105
	SN55453B	† TI	
	SN55463	† TI	
	SN55473	† TI	
	SN75408	TI	
	SN75448	TI	110
	SN75453B	TI	
	SN75463	TI	
	SN75473	TI	
	SN75478	TI	
Dual Peripheral OR Driver, for CMOS			
	DS1633	† National	115
	DS3633	National	

Function	Device	Source	Line
Dual Peripheral OR Driver, to 70 V, 600 mA			
	UDN5723M	◇ Sprague	
	UDN5753M	**Sprague (3203)**	
Dual Peripheral OR Driver, to 70 V, 700 mA			
	UDN5743M	**Sprague (3203)**	
Dual Peripheral OR Driver, to 30 V, 300 mA			
	SN75478	TI	120
Dual Peripheral OR Driver, to 80 V, 600 mA			
	DS1613	† National	
	DS3613	National	
	UDN3613M	**Sprague (3203)**	
	UDN5713M	**◇ Sprague (3203)**	
	UDS3613H	† Sprague	125
	UDS5713H	† Sprague	
Dual Peripheral Positive AND Driver			
	SG55471	† SiliconG	
	SG75471	SiliconG	
Dual Peripheral Positive NAND Driver			
	SG55452B	◇† SiliconG	
	SG55472	† SiliconG	130
	SG75452B	◇ SiliconG	
	SG75472	SiliconG	
Dual Peripheral Positive NOR Driver			
	SG55454B	◇† SiliconG	
	SG55474	† SiliconG	
	SG75454B	◇ SiliconG	135
	SG75474	SiliconG	
Dual Peripheral Positive OR Driver			
	SG55453B	◇† SiliconG	
	SG55473	† SiliconG	
	SG75453B	◇ SiliconG	
	SG75473	SiliconG	140
Dual Peripheral Positive-AND Drivers			
	SG55451B	◇† SiliconG	
Dual Peripheral/Power Driver			
	UDN5725M	**Sprague (3203)**	
Dual Power MOS Driver			
	D169A	Siliconix	
	TSC426	TeledyneS	
	TSC427	TeledyneS	145
	TSC428	TeledyneS	
Dual Power MOSFET Driver			
	ICL7667C	**GE/Intersil (2675)**	
	ICL7667M	**† GE/Intersil (2675)**	
	TSC450C	TeledyneS	
	TSC450M	† TeledyneS	150
Dual Schottky Diode Bridge (for bipolar stepper motor drivers)	CS299D	Cherry	
Dual Solenoid/Motor Driver, ±4 A			
	UDN2962	**Sprague (3203)**	
Dual Switchmode Solenoid Driver			
	L295	SGS	
	L295	**Unitrode (3326)**	
Dual 4 A Solenoid Driver			
	UDN2976W	Sprague	155
Dual 4-Input AND Driver, HNIL 250 mA Open Collector			
	390A/C	TeledyneS	
Dual 4-Input NAND Driver, HNIL, 250 mA Open Collector	395A/C	TeledyneS	
Quad AND Driver			
	CA3252	**GE/RCA (2650, 2654)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Peripheral Drivers (Cont'd)

Function	Device	Source	Line
Quad AND Driver, Inverting	**CA3262**	**GE/RCA (2650, 2654)**	
Quad AND Driver, Non-Inverting	**CA3219A**	**GE/RCA (2650, 2654)**	
Quad Bipolar Driver	L293E	SGS	
	SG293D	SiliconG	
	L293D	◊ **Unitrode (3326)**	5
	L293E	◊ **Unitrode (3326)**	
Quad Darlington Driver, to 100 V, 1.5 A	FT5753	Fujitsu	
Quad Darlington Driver, to 100 V, 3 A	FT5754	Fujitsu	
Quad Darlington Driver, to 100 V, 5 A	FT5755	Fujitsu	
Quad Darlington Switch	TEB1013	Thomson	10
Quad Darlington Switch, High Current	SN75465	TI	
Quad Darlington Switch, to –50 V, 1.75 A	SG2841	◊ SiliconG	
Quad Darlington Switch, to 50 V, 1.5 A	SN75064	TI	
	SN75066	TI	
	SN75068	TI	15
Quad Darlington Switch, to 50 V, 4 A	**UDN2878W**	◊ **Sprague (3203)**	
Quad Darlington Switch, to 80 V, 1.25 A	ULS2064	◊ IPS	
	ULS2065	◊ IPS	
	ULS2066	◊ IPS	
	ULS2067	◊ IPS	20
	ULS2068	◊ IPS	
	ULS2069	◊ IPS	
	ULS2070	◊ IPS	
	ULS2071	◊ IPS	
	ULS2074	◊ IPS	25
	ULS2075	◊ IPS	
	ULS2076	◊ IPS	
	ULS2077	◊ IPS	
Quad Darlington Switch, to 80 V, 1.5 A	ULN2047B	SGS	
	ULN2064B	SGS	30
	ULN2065B	SGS	
	ULN2066B	SGS	
	ULN2067B	SGS	
	ULN2068B	SGS	
	ULN2069B	SGS	35
	ULN2070B	SGS	
	ULN2071B	SGS	
	ULN2075B	SGS	
	ULN2076B	SGS	
	ULN2077B	SGS	40
	SG2064	SiliconG	
	SG2065	SiliconG	
	SG2066	SiliconG	
	SG2067	SiliconG	
	SG2068	SiliconG	45
	SG2069	SiliconG	
	SG2070	SiliconG	
	SG2071	SiliconG	
	SG2072	SiliconG	
	SG2073	SiliconG	50
	SG2074	SiliconG	
	SG2075	SiliconG	

(Continued)

Function	Device	Source	Line
Quad Darlington Switch, to 80 V, 1.5 A (Cont'd)	SG2076	SiliconG	
	SG2077	SiliconG	
	ULN2064	**Sprague (3203)**	55
	ULN2065	**Sprague (3203)**	
	ULN2068	**Sprague (3203)**	
	ULN2069	**Sprague (3203)**	
	ULN2074	**Sprague (3203)**	
	ULN2075	**Sprague (3203)**	60
	ULS2064H	† Sprague	
	ULS2065H	† Sprague	
	ULS2066H	† Sprague	
	ULS2067H	† Sprague	
	ULS2068H	† Sprague	65
	ULS2069H	† Sprague	
	ULS2070H	† Sprague	
	ULS2071H	† Sprague	
	ULS2074H	† Sprague	
	ULS2075H	† Sprague	70
	ULS2076H	† Sprague	
	ULS2077H	† Sprague	
	SN75065	TI	
	SN75067	TI	
	SN75069	TI	75
	ULN2064	TI	
	ULN2065	TI	
	ULN2066	TI	
	ULN2067	TI	
	ULN2068	TI	80
	ULN2069	TI	
	ULN2074	TI	
	ULN2075	TI	
Quad Darlington Switch, to 80 V, 4 A	**UDN2879W**	◊ **Sprague (3203)**	
Quad Darlington Switch, to 80V, 1.5A	L7150	SGS	85
Quad Driver for Automotive Applications	DS3656	National	
Quad Driver, to 60 V, –4 A	**UDN2944W**	**Sprague (3203)**	
Quad Driver, Universal	**IP2D08**	**IPS (2854)**	
	IP2D09	**IPS (2854)**	
	IP3D08	◊ **IPS (2855)**	90
	IP3D08A	◊ **IPS (2855)**	
	IP3D09	◊ **IPS (2855)**	
Quad ECL to MOS Clock Driver	HD2923	Hitachi	
Quad Fault Protected Peripheral Driver	DS3668	National	
Quad High Current Peripheral Driver	DS3658	National	95
	DS3669	National	
	SN75436	TI	
	SN75437A	TI	
	SN75438	TI	
	SN75440	TI	100
Quad High-Current, High-Voltage Source Driver (to 60 V, 4 A)	**UDN2944W**	**Sprague (3203)**	
Quad Latch/Driver	**UCN5900A**	**Sprague (3203)**	
	UCS4401H	† Sprague	
Quad Latch/Driver, serial input	**UCN5825B**	**Sprague (3203)**	
	UCN5826B	**Sprague (3203)**	105

Function	Device	Source	Line
Quad Latched High-Current Driver	**UCN5813B**	**Sprague (3203)**	
	UCN5814B	**Sprague (3203)**	
Quad NAND Power Driver (to 60V, sinks 1A)	**UDN2543B**	**Sprague (3203, 3205)**	
Quad Negative Voltage Relay Driver	DS3680	National	
	DS3680	TI	110
Quad Peripheral Driver, Open Collector, to 35 V, Sinks 600 mA	SN75435	TI	
Quad PIN Diode Driver (also see: linear-other devices)	UDS5791H	† Sprague	
Quad Power NAND Driver, 600 mA Sink	**CA3219**	**GE/RCA (2650)**	
Quad Power Peripheral Driver	HA13007	◊ Hitachi	
	VQ1000	Siliconix	115
	VQ1001	Siliconix	
	VQ1004	Siliconix	
	VQ1006	Siliconix	
	VQ2001	Siliconix	
	VQ2004	Siliconix	120
	VQ2006	Siliconix	
	VQ3001	Siliconix	
	VQ7254	Siliconix	
	VC01	Supertex	
	VC02	Supertex	125
	VC13	Supertex	
	VQ1000	Supertex	
	VQ3001	Supertex	
	VQ7254	Supertex	
Quad Relay and Lamp Driver, to 50 V, 1.5 A	UDN2841	TI	130
	UDN2845	TI	
Quad Solenoid Driver	HA13415	Hitachi	
Quad Transistor Switch (Inverting) to 50 V, 1.5 A	L9222	SGS	
Quad Transistor Switch, to 46 V, 1.8 A	L6222	SGS	
Quad 2-Input AND Driver (to 70 V, sinks 600 mA)	**UDN5706A**	◊ **Sprague (3203)**	135
	UDS5706H	† Sprague	
Quad 2-Input AND Power Driver, Open Collector (to 100 V, sinks 500 mA)	UHC/D-400	† Sprague	
	UHC/D-406	† Sprague	
	UHC/D-500	† Sprague	
	UHC/D-506	† Sprague	140
	UHP400	**Sprague (3203)**	
	UHP406	**Sprague (3203)**	
Quad 2-Input NAND Driver (for 70 V, sinks 600 mA)	**UDN5707A**	◊ **Sprague (3203)**	
	UDS5707H	† Sprague	
Quad 2-Input NAND Power Driver, Open Collector, to 100 V, Sinks 500 mA	UHC/D-407	† Sprague	145
	UHC/D-408	† Sprague	
	UHC/D-507	† Sprague	
	UHC/D-508	† Sprague	
	UHP407	**Sprague (3203)**	
	UHP408	**Sprague (3203)**	150
Quad 2-Input NAND Power Driver, to 50V, Sinks 600 mA	**CA3262**	**GE/RCA (2650, 2654)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Quad 2-Input NOR Driver, to 70 V, Sinks 600 mA			
	UDN5733A	**Sprague (3203)**	
	UDS5733H	† Sprague	
Quad 2-Input NOR Power Driver, Open Collector, to 100 V, Sinks 500 mA			
	UHC/D-432	† Sprague	
	UHC/D-433	† Sprague	
	UHC/D-532	† Sprague	5
	UHC/D-533	† Sprague	
Quad 2-Input OR Driver, to 70 V, Sinks 600 mA			
	UDN5703A	**◊ Sprague (3203)**	
	UDS5703H	† Sprague	
Quad 2-Input OR Power Driver, Open Collector, to 100 V, Sinks 500 mA			
	UHC/D-402	† Sprague	
	UHC/D-403	† Sprague	10
	UHC/D-502	Sprague	
	UHC/D-503	Sprague	
	UHP402	**Sprague (3203)**	
	UHP403	**Sprague (3203)**	
Quad-Gated Inverting Power Driver			
	CA3242	**GE/RCA (2650, 2654)**	15
Octal Latched Peripheral Driver			
	DP7310	◊ National	
	DP7311	◊ National	
	DP8310	National	
	DP8311	National	
Eight Latch/Drivers			
	UCN5815A	**Sprague (3203)**	20
	UCN5901A	**Sprague (3203)**	
4-Input AND Current Driver (45 V, to 1.5 A peak)			
	EDH0006	**† Elantec (2593)**	
	MC0006	† Micra	
4-Input AND High Voltage-High Current Driver (4.5 V, to 3 A peak)	**EDH0008**	**† Elantec (2593)**	
	MC0008	† Micra	25
8-Bit Latch, Source Driver, Serial Input			
	UCN5890A	**Sprague (3203)**	
	UCN5891A	**Sprague (3203)**	
	UCN5895A	**Sprague (3203)**	
8-Bit Latch/100 V Driver, Serial Input			
	UCN5843A	**Sprague (3203)**	
8-Bit Latch/50 V Driver, Serial Input			
	UCN5841A	**Sprague (3203)**	30
8-Bit Latch/80 V Driver, Serial Input			
	UCN5842A	**Sprague (3203)**	
8-Channel High-Voltage DMOS Driver			
	UDN6540B	**Sprague (3203)**	
8-Channel Source Driver with Overcurrent Protection			
	UDN2987A	**Sprague (3203)**	
10-Bit Latch/150 V Driver, Serial Input			
	UCN5910A	**Sprague (3203)**	
32-Bit Latch/Driver, Serial Input			
	UCN5832	**Sprague (3203)**	35
	UCN5833A	**Sprague (3203)**	
32-Channel Power Driver for Thermal Head			
	HC16701	Hitachi	
32-Line AC Plasma Display Driver			
	SN75509	TI	
32-Channel Power Driver for Thermal Head			
	HC16701	Hitachi	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Sense Amplifiers

Function	Device	Source	Line
MOS Memory Sense Amplifier			
	SN75107A	TI	
	SN75107B	TI	
	SN75108A	TI	
	SN75108B	TI	
MOS to TTL Level Converter, High Speed, Three-State			
	MC4300	† Motorola	5
Sense Amplifier, Magnetic Tape			
	MC3467L	**Motorola (2950)**	
Dual Core Memory Sense Amplifier, Complementary Output, Latch Capability			
	55S20	Fairchild	
Dual Core Memory Sense Amplifier, Separate Inverted Outputs			
	55S234	Fairchild	
	SN55234	† TI	
Dual Core Memory Sense Amplifier, Separate Outputs			
	55S24	Fairchild	10
	SG5524	◊ SiliconG	
Dual MOS to TTL Level Converter, Latch, Three-State (Sense Amp)	MC74468	Motorola	
Dual Sense Amplifier			
	SG55234	† SiliconG	
	SG55234A	† SiliconG	
Dual Sense Amplifier (for MOS memory or line receiver)			
	DS75207	National	15
	DS75208	National	
	SN75207	TI	
	SN75208	TI	
	DS3604	National	
	DS1603	† National	20
	DS3603	National	
Triple Current Sense Latch			
	SG3551	SiliconG	
Quad Sense Amplifer, Three-State			
	MC3430	**Motorola (2925)**	
	MC3431	**Motorola (2925)**	
	MC3432	**Motorola (2925)**	25
	MC3433	**Motorola (2925)**	
	DS1651	† National	
	DS1653	† National	
	DS3651	National	
	DS3653	National	30
Hex MOS Sense Amplifier (MOS to TTL Converter) Three-State	DS3605	National	
	DS3606	National	
	DS3607	National	
	DS3608	National	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Transmitters-Receivers

Function	Max Serial Data Rate in kHZ	Supply Voltage, V	Device	Source	Line
	240	5	μPD71051	◊ NEC	
(ACIA) Asynchronous Communications Interface Adapter (Links 8-Bit bidirectional data bus to serial asynchronous data communications, including to 6860)	50	5	F6850	Fairchild	
			S6551	◊ Gould	
			S6551A	Gould	
			MC6850	**Motorola (2902)**	5
			EF6850	Thomson	
ARINC–429 Receiver/Transmitter	100	5	**HS3182**	**† Harris (2720)**	
			HS3282	**† Harris (2720)**	
ASTRO (asynchronous/synchronous receiver/transmitter) to Interface Serial Communications Channel with a Parallel Digital System (i.e. microprocessors)	1000	12, ± 5	COM1671	◊ SMC	
			UC1671	Western	10
Asynchronous Addressable Receiver/Transmitter	—	4.75–11.5			
			MM54240	National	
	4.8	3–18	MC14469	◊ Motorola	
Asynchronous Communications Element	—	5	**82C50-Cell** °	**Harris (2731, 2768, 4249)**	
			82C50A	**◊ Harris (2731, 2768, 4249)**	
			WD82C50	**Western (3381)**	15
	-	5	**MD82C50**	**† Harris (2702)**	
	56	5	**WD8250**	**◊ Western (3381)**	
Asynchronous Communications Interface	1000	5	SCN2641	◊ Signetics	
Asynchronous Receiver/Transmitter Interface	16	5	**T7112**	**AT&T (2470, 2478)**	
Asynchronous Serial Manchester Adapter	1000	5	**HD6408-Cell** °	**Harris (2735, 4249)**	20
Backplane Transceiver, Quad			SN55ALS057	TI	
Baud Rate Generator (programmable divider)	19.2	12, ± 5	F4702BC	Fairchild	
			F4702BM	† Fairchild	
			IM4702	**GE/Intersil (2678)**	
			IM4712	**GE/Intersil (2678)**	25
			HD4702-Cell °	**Harris (2703, 2735, 2768, 4249)**	
			HD4702-2	**† Harris (2703, 2735, 2768, 4249)**	
			MC14411	Motorola	
			MM5307	National	
	1000	5	COM8046	SMC	30
			COM8046T	SMC	
			COM8126	SMC	
			COM8126T	SMC	
			COM8146	SMC	
			COM8146T	SMC	35
		12,5	COM5026	◊ SMC	
			COM5026T	◊ SMC	
			COM5046	SMC	
			COM5046T	SMC	

Function	Max Serial Data Rate in kHZ	Supply Voltage, V	Device	Source	Line
Baud Rate Generator (programmable divider), Dual	307/19.2	5	WD1943-00	Western	40
			WD1943-05	Western	
	614/19.2	5	WD1943-06	Western	
	1000	5	AY5-8116	GIM	
			AY5-8116T	GIM	
			AY5-8136	GIM	45
			AY5-8136T	GIM	
			COM8116	SMC	
			COM8116T	SMC	
			COM8136	SMC	
			COM8136T	SMC	50
			COM8156	SMC	
			COM8156T	SMC	
			WD1945	Western	
		12,5	COM5016	◊ SMC	
			COM5016T	◊ SMC	55
			COM5036	SMC	
			COM5036T	SMC	
Bus Interface Circuit (MIL-STD1553B)	5000	5	**HS3273**	**† Harris (2720)**	
Command/Response Manchester II Converter (MIL-STD–1553B)	1000	5	BUS8937	† ILC-DDC	
Command/Response Multiplex Data Bus Transmitter	1000	5, ± 12/ ± 15			
			BUS62300	† ILC-DDC	60
DUART (Dual Universal Asynchronous Receiver and Transmitter). Two Channel UART, baud-rate generator, 16-Bit counter/timer, I/O ports.	1 MB/s	5	**XR68C681**	**Exar (2612)**	
			XR88C681	**Exar (2612)**	
	1000	5	**MC2681**	**Motorola (2898)**	
			MC68681	**Motorola (2898)**	
			SCN2681	**◊ Signetics (3052)**	65
			SCN68681	**◊ Signetics (3054)**	
			26810	◊ Signetics	
			26814	◊ Signetics	
			26818	◊ Signetics	
			UM2681-1	UMC	70
			UM2681-2	UMC	
DUART (Dual Universal Asynchronous Receiver-Transmitter) (complete serial to parallel and parallel to serial interface)	56	5	**VL16C452**	**VLSI Tech (3331)**	
EPCI (Enchanced Programmable Communications Interface) Serial/Parallel receiver/transmitter-Synchronous and asynchronous with baud rate generator.	1 Kb/s	5	**MC68661A**	**Motorola (2898)**	
	1Mb/s	5	SCN2661A	Signetics	
			SCN2661B	Signetics	75
			SCN2661C	Signetics	
			COM2661	SMC	
			COM2661-1	SMC	
			COM2661-2	SMC	
			COM2661-3	SMC	80
			UM2661-1	UMC	
			UM2661-2	UMC	
			UM2661-3	UMC	
	15.6 Kb/s	5	**MC68661C**	**Motorola (2898)**	
	62.5 Kb/s	5	**MC68661B**	**Motorola (2898)**	85
			SCN68661	◊ Signetics	
Facsimile/X.25 Link Controller	1000	5	**WD2511F**	**Western (3385)**	
			WD2511G	**Western (3385)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Transmitters-Receivers (Cont'd)

Function	Max Serial Data Rate in kHZ	Supply Voltage, V	Device	Source	Line
IBM 3274/3276 Compatible COAX Receiver/Transmitter	2358	5	COM9004	SMC	
			COM9064	SMC	
Manchester Encoder-Decoder					
	1000	5	**HD6408 ◊°**	**Harris (2735, 4249)**	
			HD6409-Cell °	**Harris (2735, 2768, 4249)**	
			HD6409-2 †	**Harris (2735, 2768, 4249)**	5
			HS15530RH ◊‡	**Harris (2719)**	
	1250	5	**HD15530-Cell °**	**Harris (2703, 2736, 2768, 4249)**	
			HD15530-2 †	**Harris (2703, 2736, 2768, 4249)**	
			HD15530-9	**Harris (2703, 2736, 2768, 4249)**	
			HD15531-Cell °	**Harris (2703, 2736, 4249)**	10
			HD15531-2 †	**Harris (2703, 2736, 4249)**	
			HD15531-9	**Harris (2703, 2736, 4249)**	
			CT15530 ◊	Marconi	
	2500	5	**HD15531B**	**Harris (2703, 2736, 4249)**	
Master Digital-Loop Transceiver					
	80	5	MC145418 ◊	Motorola	15
			MC145422	Motorola	
	160	5	MC145421	Motorola	
MIL-STD-1553 BC/RTU/MT/Multibus Interface Unit			BUS65508	ILC-DDC	
MIL-STD-1553 BC/RTU/MT/Unibus Interface Unit			BUS65505	ILC-DDC	
MIL-STD-1553 Bus Controller (hybrid)			BUS66106	ILC-DDC	20
			BUS66111	ILC-DDC	
MIL-STD-1553 Bus Controller/RTU/Bus Monitor			BUS65600	ILC-DDC	
MIL-STD-1553 Command/Response Manchester II Converter	1 Mb/s	5	BUS64103 †	ILC-DDC	
MIL-STD-1553 Dumb Remote Terminal Unit (hybrid)			BUS65101 †	ILC-DDC	
MIL-STD-1553 Dumb Remote Terminla Unit (Hybrid)	1 Mb/s	5, ± 15	BUS65102 †	ILC-DDC	25
MIL-STD-1553 Manchester Encoder	2 Mb/s	5	BUS1556	ILC-DDC	
MIL-STD-1553 Manchester II Decoder	16 Mb/s	5	BUS1555	ILC-DDC	
MIL-STD-1553 Remote Terminal Interface			**UT1760A**	**UTMC (4331)**	
			UT63M1	**UTMC (4331)**	
MIL-STD-1553 Remote Terminal Unit	1 Mb/s	5, ± 15	BUS65132 †	ILC-DDC	30
MIL-STD-1553 Remote Terminal Unit Memory Interface (Hybrid)			BUS66105 †	ILC-DDC	
MIL-STD-1553 Remote Terminal Unit Protocol Generator (Hybrid)			BUS66108 †	ILC-DDC	
	1 Mb/s	5	BUS66101 †	ILC-DDC	
			BUS66102 †	ILC-DDC	
MIL-STD-1553 Remote Terminal Unit (RTU)	1000	5, ± 15	BUS1553 †	ILC-DDC	35

Function	Max Serial Data Rate in kHZ	Supply Voltage, V	Device	Source	Line
MIL-STD-1553 Remote Terminla Unit (Hybrid)	1 Mb/s	5, ± 15	BUS65125 †	ILC-DDC	
MIL-STD-1553 Terminal Bit Processor			BUS64100	ILC-DDC	
MIL-STD-1553 to Microprocessor Interface Unit			BUS66305 †	ILC-DDC	
MIL-STD-1553 to MIL-STD-1750 Interface (hybrid)			BUS66300	ILC-DDC	
MIL-STD-1553 Transceiver	1 Mb/s	5, ± 15	BUS63104 †	ILC-DDC	40
MIL-STD-1553 Dual Redundant Data Bus Transceiver	1 Mb/s	± 12/ ± 15	BUS63125 †	ILC-DDC	
MIL-STD-1553 Dual Redundant Remote Terminal Unit			BUS65112	ILC-DDC	
MIL-STD-1553B Bus Circuit			**CT1775**	**CTI (2554)**	
MIL-STD-1553B Bus Controller/Remote Terminal/Monitor Transceiver Circuit			**MA3690 ‡**	**Marconi (2881)**	
			MA3691 ‡	**Marconi (2881)**	45
MIL-STD-1553B Bus Interface Circuit			**CT1800**	**CTI (2554)**	
			CT1801	**CTI (2554)**	
			CT1820	**CTI (2554)**	
MIL-STD-1553B Remote Terminal	1250	5	**MA805 ◊**	**Marconi (2882)**	
MIL-STD-1553B Subsystem Interface Support Circuit			**MA8055**	**Marconi (2882)**	50
MIL-STD-1553B Dual Redundant Bus Controller and Remote Terminal Unit			**UT1553-BCRT**	**UTMC (4331)**	
MPCC (multi-protocol communications controller) Bit and Byte Oriented	1 Mb/s	5	SCN2652A	Signetics	
	1 25 Mb/s	5	μPD7201A	NEC	
	2 Mb/s	5	**MC68652-2**	**Motorola (2898)**	
			SCN2652A	Signetics	55
			SCN68652 ◊	Signetics	
Multi-Channel, Multi-Protocol 4-Wire Full-Duplex Transceiver	144	5	29C53 ◊	Matra-Harris	
OCTART, Octal Asynchronous Receiver/Transmitter	19.2	5	78808	SMC	
Parallel to Serial Interface	—	5 V	CY232	Cybernetic	
	38.4	5	CY233	Cybernetic	60
Party Line Bus for Industrial and Data Communications			**MC26S10**	**Motorola (2952)**	
PCI (Programmable Communications Interface) Serial/parallel receiver/transmitter—synchronous and asynchronous with baud rate generator.	1000 b/s	5	SCN2651C	Signetics	
			COM2651	SMC	
PCM Line Interface Circuit, with both transmit and receive circuitry.	8.448 MB/s	5	**XRT5683**	**Exar (2608)**	
PCM Remote Control Transmitter	0.5	5	MC14497 ◊	Motorola	65
PSART (Programmable Synchronous-Asynchronous Receiver-Transmitter) Serial to parallel and parallel to serial converter that can operate in Full Duplex Mode.	50	5	8251	Intel	
	64	5	μPD8251A	NEC	
			μPD8251AF	NEC	
			MSM82C51A	OKI	
			COM8251A	SMC	70
Receiver/Decoder (Bi-Phase)	3500	5	DP8343 ◊	National	
Receiver/Decoder (Bi-Phase, IBM 3270)	—	5	DP8341 ◊	National	
Remote Control Decoder, decodes first 5 bits as address and last 4 as data	5.0	5	MC145027	Motorola	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTERFACE—Transmitters-Receivers (Cont'd)

Function	Max Serial Data Rate in kHZ	Supply Voltage, V	Device	Source	Line
Remote Control Decoder, 9-bit address	5.0	5	MC145028	◊ Motorola	
Remote Control Encoder, encodes 9 bits of information and transmits serially	5.0	5	MC145026	◊ Motorola	
Remote Terminal Interface Unit (MIL-STD-1553B compliance)			**UT1553B**	**UTMC (4331)**	
S/T Interface for ISDN	-	5	**T7250A**	◊ **AT&T (2470, 2480)**	
Signalling System No. 7 Link Controller (Q.703)	64	5	WD2507	Western	5
Slave Digital-Loop Transceiver	80	5	MC145419	◊ Motorola	
			MC145426	Motorola	
	160	5	MC145425	Motorola	
SPCC (Sync-Protocol Communications Controller) Bit and Byte Oriented	1000	5	F3846	Fairchild	
			F6856	Fairchild	10
Synchronous Data Link Controller, HDLC/SDLC	4	5	**WD1935A**	**Western (3382)**	
Synchronous Packet Data Formatter	2	5	**T7110**	**AT&T (2476)**	
	4	5	**T7111**	**AT&T (2477)**	
Synchronous Receiver/Transmitter (Bi-Sync/SDLC)	800	±5,12	μPD379	NEC	
Synchronous Serial Data Adaptor	2 Mb/s	5	**MC6852**	**Motorola (2902)**	
Transceiver, MIL-STD-1553			**CT1487**	**† CTI (2554)**	15
			CT1589	**† CTI (2554)**	
			CT2077	**† CTI (2554)**	
			CT3077	**† CTI (2554)**	
			CT3078	**† CTI (2554)**	
			CT3231	**† CTI (2554)**	20
			CT3232	**† CTI (2554)**	
Transceiver, MIL-STD-1553A/B	1000	±15/±12			
			BUS63105	† ILC-DDC	
		±15,5	BUS8553	† ILC-DDC	
			BUS8555/56	† ILC-DDC	
			BUS8559	† ILC-DDC	25
Transceiver, Serial T1	-	5	DS2180	Dallas	
Transmitter/Decoder (Bi-Phase, IBM 3270)	—	5	DP8340	◊ National	
Transmitter/Encoder (Bi-Phase)	3500	5	DP8342	◊ National	
UART, MIL-STD-1553A	1000	5	COM1553A	† SMC	
			COM1553B	◊ SMC	30
UART (Universal Asynchronous Receiver-Transmitter)			TC8570P	Toshiba	
			TC8570F	◊ **Toshiba (3306)**	
			TC8570P	◊ **Toshiba (3306)**	
UART (Universal Asynchronous Receiver-Transmitter), (complete serial to parallel and parallel to serial interface	625	5	NS82C50	National	
UART (Universal Asynchronous Receiver-Transmitter) (complete serial to parallel and parallel to serial interface)	30	5	AY3-1015D	GIM	35
	38.5	5	**SCC2691**	◊ **Signetics (3056)**	
	40	5	COM1863	SMC	
			COM8017	SMC	
			COM8018	SMC	
			COM8502	SMC	40

(Continued)

Function	Max Serial Data Rate in kHZ	Supply Voltage, V	Device	Source	Line
UART (Universal Asynchronous Receiver-Transmitter) (complete serial to parallel and parallel to serial interface)					
				(Cont'd)	
	56	5	INS8250	National	
			VL16C450	**VLSI Tech (3329)**	
			VL82C50	**VLSI Tech (3329)**	
			VL82C50A	**VLSI Tech (3329)**	
			WD16C450	**Western (3381)**	45
			WD2123	◊ Western	
	60	5	TR1863-00	Western	
			TR1865-00	Western	
	100	5	CDP1854AC	◊† GE/RCA	
			HD6406	◊† **Harris (2735, 2768, 4249)**	50
			HD6406-Cell °	**Harris (2735, 2768, 4249)**	
			HS82C52RH ‡	**Harris (2711)**	
			MD82C52	† **Harris (2702)**	
			82C52	◊† **Harris (2731, 2768, 4249)**	
			82C52-Cell °	**Harris (2731, 2768, 4249)**	55
	150	5	TR1863-02	Western	
			TR1865-02	Western	
	200	5	**IM6402**	◊ **GE/Intersil (2678)**	
			IM6402M	◊† **GE/Intersil (2678)**	
			IM6403	◊ **GE/Intersil (2678)**	60
			IM6403M	◊† **GE/Intersil (2678)**	
			CDP6402D	† **GE/RCA (2642)**	
			CDP6402E	**GE/RCA (2642)**	
			HD6402-Cell °	**Harris (2703, 2735, 4249)**	
			HD6402-2	† **Harris (2703, 2735, 4249)**	65
			TR1863-04	Western	
	800	5	MB8868A	Fujitsu	
			S1602	◊ Gould	
	1000	5	**CDP65C51-1** †	**GE/RCA (2642)**	
	2000	5	**CDP65C51-2** †	**GE/RCA (2642)**	70
UART, Eight Channel Universal	50/19.2K		COM78808	◊ SMC	
UNITS (User Network Interface Termination for Switches)	0.192	5	**T7252**	◊ **AT&T (2470, 2481)**	
Universal Data Bus Dumb Remote Terminal Unit (hybrid)			BUS65201	◊† ILC-DDC	
Universal Data Bus Transceiver (hybrid)			BUS63102	† ILC-DDC	
USRT (universal synchronous receiver-transmitter) Complete serial to parallel and parallel to serial interface.	500	5	S2350	◊ Gould	75
USYNRT (universal synchronous receiver/transmitter) Multi-Protocol, Bit and Byte Oriented	1500	5,12	COM5025	◊ SMC	
X.25 Packet Network Interface (LAPB)	1100	5, 12	**WD2511A**	**Western (3385)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

INTERFACE—Transmitters-Receivers (Cont'd)

Function	Max Serial Data Rate in kHZ	Supply Voltage, V	Device	Source	Line
Dual Asynchronous Receiver/Transmitter	1000	5	MC2682	Motorola	
Dual RS–232 Transmitter/Receiver		5	DS1228	Dallas	
			DS232	Dallas	
Triple RS–232 Transmitter/Receiver		5	DS1229	Dallas	
Octal Asynchronous Receiver/Transmitter	19.2	7	TCM78808	◊ TI	5
Octal UART	38.4	5	**SCC2698**	◊ **Signetics (3058)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

INTRODUCTION TO LINEAR

The Linear Section includes parameters on over 1100 operational amplifiers. Since there are so many devices, separate lists are provided for those having special characteristics such as High Speed, High Voltage or Wide Bandwidth. If you have located an op amp in a specialized category, you can review its characteristics by finding it in the Part Number or Product Indexes and looking it up in the Operational Amplifier Characteristics Section.

After the special lists, the "Operational Amplifier Characteristics" listings categorize amplifiers by input parameters. They are arranged in order of increasing offset voltage, bias current, offset current and then voltage drift. The column labeled "Comp" indicates the number of external components normally used for compensation; for example "0" means no compensation is required.

Consumer circuits such as audio amplifiers, AM, FM, and TV circuits as well as some digital devices (watches, calculators, etc.) are covered by model number in the Consumer Circuit Section. Linear devices that do not fit in conventional categories are listed under the heading "Other Linear Devices"

Category	
Amplifiers, Special Purpose	1102
Arrays	
Transistor	1106
Special	1108
Comparators	1109
Consumer Circuits	1116
Followers	1128
Operational Amplifiers	
Selected Characteristics	
General Purpose	1130
High Output Current	1130
High Speed	1131
High Voltage	1131
Low Bias Current	1132
Low Drift	1132
Low Power	1133
Programmable	1133
Single Supply	1134
Wideband	1135
Complete Characteristics	1137
Phase Locked Loop Circuits	1190
Telecommunications	1192
Timers	1201
Voltage Regulators	
Fixed	1202
Adjustable	1213
Switching	1215
Other Linear Devices	1219

©IC MASTER 1988

LINEAR—Amplifiers, Special Purpose

Function	Device	Source	Line
AC Amplifier, Quad, Single Supply			
	CA3048	**† GE/RCA (2649)**	
	CA3052	**GE/RCA (2649)**	
AGC Amplifier, Low Distortion (adjustable attack, release time and threshold voltage)			
	LC403	**Gennum (2687)**	
	LD403	◊† Gennum	
AGC Generator, for SSB Receivers			
	SL621C	Plessey	5
AGC Generator (voice operated gain adjusting device)			
	SL620C	Plessey	
	SL6270	◊ Plessey	
Amplifier for IR Remote Control (1300 dB gain, 8 kHz bandwidth)	U250	Telefunken	
	U3043M	Telefunken	
	U3083M	◊ Telefunken	10
Amplifier, Half-Bridge (3 A output)			
	UC3176	**Unitrode (3326)**	
Amplifier, Loudspeaker			
	TEA7031	Thomson	
Amplifier, Low Voltage (1–1.6 V)			
	VA7505J	**VTC (3373)**	
	VA7505K	**VTC (3373)**	
	VA7505L	**VTC (3373)**	15
Amplifier, Microphone			
	SL792	Plessey	
	SL793	Plessey	
Amplifier Microphone (for telephone circuits)			
	ZN470AE	Ferranti	
	ZN472E	Ferranti	
	ZN475E	Ferranti	20
	ZN476E	Ferranti	
	ZN477E	Ferranti	
	ZN478E	Ferranti	
Amplifier, Sample and Hold			
	VA730J	**VTC (3373)**	
	VA730S	**VTC (3373)**	25
Amplifier with Photodiode			
	TFA1001W	Siemens	
Audio Amplifier with Three NPN Transistors			
	LM389	National	
Buffer Amplifier, Industrial Process Control (1500V Isolation)	**ISO102**	**Burr-Brown (2538)**	
Buffer Amplifier, Industrial Process Control (3500V Isolation)	**ISO106**	**Burr-Brown (2538)**	
Buffer Amplifier, Unity Gain, Wideband			
	LH4001	National	30
Buffer Amplifier, Wide Bandwidth			
	HOS200A	AD	
	HOS200S	† AD	
Buffer Amplifier, Wideband			
	LH4002	† National	
	LH4002C	National	
Buffer Amplifier, Wideband, High Slew Rate			
	HA5002-2	**† Harris (2706, 2738, 2748)**	
	HA5002-5	**Harris (2706, 2738, 2748)**	35
Compression Amplifier			
	LD512	Gennum	
CRT Driver, High Voltage (class A)			
	TKDD10P	Tektronix	

Function	Device	Source	Line
Current Amplifier (unity gain, 100 mA output)			
	3329	† Burr-Brown	
	ELH0002	**◊† Elantec (2592)**	40
	ELH0002C	**Elantec (2592)**	
	HA5033	**† Harris (2706, 2738, 2748)**	
	MC0002	◊† Micra	
	MC0002C	◊† Micra	
	LH0002	◊‡ National	45
	LH0002C	National	
	CLH0002	† TeledyneC	
Current Amplifier (unity gain, 150 mA output)			
	LT1010C	LinearTech	
	LT1010M	† LinearTech	
Current Amplifier (unity gain, 200 mA output)			
	3553	**† Burr-Brown (2534, 2536)**	50
	BB3553	† Maxim	
	9963	OEI	
Current Amplifier (unity gain, 400 mA output)			
	HA5002-2	**† Harris (2706, 2738, 2748)**	
	HA5002-5	**Harris (2706, 2738, 2748)**	
Current Amplifier (unity gain, 500 mA output)			
	9910	◊ OEI	55
	9911	◊ OEI	
Current Amplifier (wideband, 100 mA output)			
	HOS100AH	AD	
	HOS199SH	† AD	
Current Booster, 100 mA Output (for op amp)			
	2035	† TeledyneP	
DAS (programmable gain, track and hold) Data Acquisition Amplifier (prog. gain, track and hold)	AD365	◊ AD	60
Data Acquisition System, (programmable gain, track and hold)	AD367	◊ AD	
Differential Amplifier (Gain is Fixed, A ± 10)			
	INA106B	**Burr-Brown (2537)**	
	INA106K	**Burr-Brown (2537)**	
Differential Amplifier (Instrumentation Amp. Building Block)	**INA105A**	**Burr-Brown (2537)**	
	INA105B	**Burr-Brown (2537)**	65
	INA105K	**Burr-Brown (2537)**	
Differential Amplifier, Unity Gain			
	INA117	**Burr-Brown (2537)**	
Differential Amplifier (Instrumentation Amp. Building Block)	**INA105U**	**Burr-Brown (2537)**	
Differential/Cascode Amplifier (dc to rf)			
	CA3028A	**† GE/RCA (2647)**	
	CA3028B	**† GE/RCA (2647)**	70
	CA3053	**◊† GE/RCA (2647)**	
Differential Input/Differential Output Amplifier (bandwidth less than 2 MHz)	**CA3000**	**† GE/RCA (2647)**	
	MC1590	† Motorola	
Differential/Video Amplifier			
	CLC103AM	† Comlinear	
	LM592	National	75

Function	Device	Source	Line
Differential Video Amplifier, 120 MHz Bandwidth, Adjustable Gain			
	μA592C	Fairchild	
	μA592M	† Fairchild	
Fiber Optic Receiver Amplifier			
	LH0082	† National	
	LH0082C	National	
Floppy Disc Read Amplifier System			
	XR3470A	◊ Exar	80
	XR3470B	◊ Exar	
	MC3470	**◊ Motorola (2950)**	
	MC3470A	**Motorola (2950)**	
	MC3470	TI	
Floppy Disc Write Amplifier			
	XR2247	Exar	85
Floppy Disk Read-Chain Data			
	TL712	TI	
Floppy Disk Read-Chain Data Comparator with MECL III and MECL 1000			
	TL721	TI	
Front End Amplifier (for ultrasonic or infrared remote control systems)			
	TDA4180	Telefunken	
Instrumentation Amplifier			
	INA102	**Burr-Brown (2537)**	
Instrumentation Amplifier Front End (CMOS switch building block)			
	LTC1043	LinearTech	90
Instrumentation Amplifier, Medical			
	HINA524	**HoneywellSPT (2998)**	
	HINA624	**HoneywellSPT (2998)**	
Instrumentation Amplifier (programmable gain)			
	AM551MM	**Datel (2574)**	
Instrumentation (commutating auto zero)			
	ICL7605C	**GE/Intersil (2672)**	
	ICL7605M	**† GE/Intersil (2672)**	95
	ICL7606C	**GE/Intersil (2672)**	
	ICL7606M	**† GE/Intersil (2672)**	
Instrumentation, (different input, independent gain adjustment)	**AMP01**	**‡ PMI (2975)**	
Instrumentation, (differential input, independent gain adjustment)	AD521J	AD	
	AD521K	AD	100
	AD521L	AD	
	AD521S	† AD	
	AD522A	AD	
	AD522B	AD	
	AD522S	† AD	105
	AD625	AD	
	INA101	**Burr-Brown (2537, 2545)**	
	INA104	**Burr-Brown (2537)**	
	INA105	**Burr-Brown (2537)**	
	3626A	Burr-Brown	110
	3626B	Burr-Brown	
	3626C	Burr-Brown	
	3629	† Burr-Brown	
	3630A	Burr-Brown	
	3630B	Burr-Brown	115

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Amplifiers, Special Purpose (Cont'd)

Function	Device	Source	Line
Instrumentation, (differential input, independent gain adjustment) (Cont'd)			
	3630C	Burr-Brown	
	3630S	Burr-Brown	
	HC3020	HyComp	
	MN2200	MicroNet	
	MN2200H	† MicroNet	5
	LH0036	† National	
	LH0036C	National	
	LH0038	† National	
	LH0038C	National	
	LM163A	† National	10
	LM363	National	
	LM363A	† National	
	AMP05	**† PMI (2975)**	
Instrumentation, Digitally Programmable Gain			
	PGA100AG	**Burr-Brown (2537)**	
	PGA100BG	**Burr-Brown (2537)**	15
	PGA102	**Burr-Brown (2537)**	
	PGA200	**Burr-Brown (2537)**	
	PGA201	Burr-Brown	
	AM542MC	**◊ Datel (2577)**	
	AM543MC	**◊ Datel (2577)**	20
	LH0084	† National	
	LH0084C	National	
	LH0086	† National	
	LH0086C	National	
Instrumentation, Fast-Settling FET-Input			
	INA110B	**Burr-Brown (2537)**	25
	INA110A	**Burr-Brown (2537)**	
	INA110K	**Burr-Brown (2537)**	
	INA110S	**† Burr-Brown (2537)**	
Instrumentation, Pin Programmable Gain			
	AD624A	◊ AD	
	AD624B	◊ AD	30
	AD624C	◊ AD	
	AD624S	◊† AD	
Instrumentation (unity gain)			
	3627	**Burr-Brown (2537)**	
IR Remote Control Amplifier for TV Receivers			
	CA3237	GE/RCA	
Isolation Amplifier			
	MP227	Analogic	35
Isolation Amplifier, Optically Coupled			
	ISO100AP	**Burr-Brown (2538)**	
	3650HG	**Burr-Brown (2538)**	
	3652HG	**Burr-Brown (2538)**	
Isolation Amplifier, Precision			
	3450	**Burr-Brown (2538)**	
	3451	**Burr-Brown (2538)**	40
	3452	**Burr-Brown (2538)**	
	3455	**Burr-Brown (2538)**	

Function	Device	Source	Line
Isolation Amplifier, Transformer Coupled			
	AD295	AD	
	3456	**Burr-Brown (2538)**	
	3656AG	Burr-Brown	45
Isolation Amplifier, Three-Port (Nonlinearity to 0.025% maximum)	AD210A	AD	
	AD210B	AD	
Isolation Amplifier (750V isolation)			
	52046	† Micropac	
Linear-Antilog Amplifier, Dual (differential input, separate control inputs)			
	SSM2022	SSM	
Log Amplifier	MSA104	OKI	50
	MSA105	OKI	
Log Amplifier, Bipolar (module)			
	2531A	OEI	
Log amplifier, wideband.			
	2930	OEI	
Log/Antilog Amplifier, (antilog)			
	ICL8049C	**GE/Intersil (2672)**	
	2910	† OEI	55
	2920	OEI	
	SSM2100	SSM	
Log/Antilog Amplifier, (log)			
	4127	**Burr-Brown (2540)**	
	ICL8048C	**GE/Intersil (2672)**	
	2910	† OEI	60
	2920	OEI	
	TL441AM	† TI	
Log/Log Ratio Amplifier			
	LOG100	**◊ Burr-Brown (2540)**	
Logarithmic Amplifier (25 MHz sideband)			
	AD9521	**AD (2442)**	
Low Noise, Low Level, Chopper Stabilized Amplifier			
	MP221	Analogic	65
Low Voltage, Class A, <1.6V, peak clipping			
	LR505	Gennum	
	LS505	Gennum	
	LT505	Gennum	
Low Voltage, Class A, <3V			
	LC505	Gennum	
	LC506	Gennum	70
	LC507	Gennum	
	LD505	Gennum	
	LE507	Gennum	
	LV506	Gennum	
Low Voltage, Class A, <3V, compression			
	LD501	Gennum	75
	LD502	Gennum	
	LD511	Gennum	
Low Voltage, Class A, 1 to 10V			
	LC508	Gennum	
	LP508	Gennum	
Low Voltage, Class B, <3V			
	LC547	Gennum	80
	LC549	Gennum	
	LC550	Gennum	
	LD547	Gennum	
	LD548	Gennum	
	LD549	Gennum	85
	LU547	Gennum	
	LV549	Gennum	

(Continued)

Function	Device	Source	Line
Low Voltage, Class B, <3V (Cont'd)			
	WC535	Gennum	
	WE530	Gennum	
	WS531	Gennum	90
	WV530	Gennum	
	WV535	Gennum	
Low Voltage, Class B, (3V			
	LC551	Gennum	
	LC552	Gennum	
Microphone Amplifier, Buffer Amplifier for Electret Microphones	ZN482Z	Ferranti	95
Microphone Amplifier, Electret			
	PBL3721	RIFA	
Microphone Amplifier (for microphones in telephones)			
	TCA980	Signetics	
	TDD0246	Telefunken	
	U246	Telefunken	
	U446	Telefunken	100
	U646	Telefunken	
	U647	Telefunken	
Microphone Amplifier, Telecom Electret			
	PBL3747	RIFA	
Microphone/Headphone Amplifier			
	SL6310	◊ Plessey	
Microphone Preamplifier			
	SSM2011	SSM	105
	SSM2015	SSM	
	SSM2016	SSM	
Microphone Preamplifier, Telephone Electret			
	LB1027AA	AT&T	
Microwave, 7 dB, 1–8 GHz			
	TQ9111	◊ TriQuint	
Mixer (to 200 MHz)			
	S042	Siemens	110
Op Amp, Wideband (with AGC)			
	VA702J	**VTC (3373)**	
	VA712S	**VTC (3373)**	
Operational Amplifier/Voltage Comparator, Dual			
	LM192	◊† National	
	LM292	National	
	LM2924	National	115
	LM392	National	
Operational Amplifier, Dual with Dual Voltage Comparator	**MC3405**	**Motorola (2925)**	
	MC3505	**† Motorola (2925)**	
Power Amplifier, Bridge (20 W)			
	ULN3793W	Sprague	
	ULN3794W	Sprague	120
Power Amplifier, Motor and Actuator Driver, to 12 V, 1.5 A	ICH8515I	GE/Intersil	
	ICH8515M	† GE/Intersil	
Power Amplifier, Motor and Actuator Driver, to 24 V, 3 A			
	ICH8510I	GE/Intersil	
	ICH8510M	† GE/Intersil	
	ICH8520I	GE/Intersil	125
	ICH8520M	† GE/Intersil	
	ICH8530I	GE/Intersil	
	ICH8530M	† GE/Intersil	
Preamplifier, for IR Remote Control			
	μPC1473	NEC	
	μPC1474	NEC	130
	μPC1475	NEC	
	TDA2320	SGS	
Preamplifier, for Ultrasonic Remote Control			
	TDA3047	Signetics	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Amplifiers, Special Purpose (Cont'd)

Function	Device	Source	Line
Preamplifier, Infrared (74 dB gain, 100 kHz bandwidth)	TDA4050B	Siemens	
Preamplifier, Low Noise (35 dB gain, 100 MHz bandwidth)	AH0013CA	OEI	
	AH0013CB	OEI	
	AH0013MA	† OEI	
Preamplifier, Precision (to precede operational amplifiers)	LM121	† National	5
	LM121A	† National	
	LM221	National	
	LM221A	National	
	LM321	National	
	LM321A	National	10
Preamplifier, Protected FET	SI1000	Siliconix	
	SI1010	Siliconix	
	SI1020	Siliconix	
Preamplifier, Temperature Controlled	μA727M	† Fairchild	
Programmable Channel Op Amp (one of 4 input stages can be connected to single output)	**HA2400**	**◇† Harris (2737, 2747, 2768)**	15
	HA2404	Harris	
	HA2405	Harris	
	HA2406-5	Harris	
Programmable Curve Fitting Amplifier (six programmable gain slopes)	51934	† Micropac	
Programmable Gain Amplifier (digitally controlled gain)	**3606**	**Burr-Brown (2537)**	20
	HS2020	HybridSys	
	MN2020	MicroNet	
Read Amplifier/Preamplifier (for magnetic tape memory systems)	MC3467	Motorola	
RF Amplifier, Gated	MC1445	Motorola	
	MC1545	† Motorola	25
RF Amplifier, Low Voltage, Wideband	LA910	Gennum	
RF Amplifier, Wideband (10 to 500 MHz)	**LB950**	**Gennum (2688)**	
RF Amplifiers (hybrid), 1 GHz	MWA310	Motorola	
	MWA320	Motorola	
	MWA330	Motorola	30
RF Amplifiers (hybrid), 3 GHz	MWA0204	Motorola	
	MWA0211	Motorola	
RF Amplifiers (hybrid), 400 MHz	MWA110	Motorola	
	MWA120	Motorola	
	MWA130	◇ Motorola	35
RF Amplifiers (hybrid), 600 MHz	MWA210	Motorola	
	MWA220	Motorola	
	MWA230	Motorola	
RF Amplifiers (hybrid), 900 MHz	MWA5121	Motorola	
	MWA5157	◇ Motorola	40
RF Amplifiers, Hybrids	MHW590	Motorola	
	MHW591	Motorola	
	MHW592	Motorola	
	MHW593	Motorola	
	MHW709	Motorola	45

(Continued)

Function	Device	Source	Line
RF Amplifiers, Hybrids (Cont'd)	MHW710	Motorola	
	MHW720	Motorola	
RF Amplifiers, Hybrids for Cellular Radio	MHW802	Motorola	
	MHW806	Motorola	
	MHW806A	Motorola	50
	MHW808A	Motorola	
	MHW820	Motorola	
	NHW720A	Motorola	
Signal Sources Switch, (buffer amplifiers with input switches)	TDA1029	Signetics	
Telephone audio	**MC34119**	**Motorola (2945, 2960)**	55
Thermocouple Amplifier with Cold Junction Compensation	AD594A	AD	
	AD594C	AD	
	AD595A	AD	
	AD595C	AD	
Unity Gain Buffer Amplifier	**VA003J**	**VTC (3373)**	60
	VA003S	**VTC (3373)**	
Video Buffer Amplifier	**HA5033-2**	**† Harris (2706, 2738, 2748)**	
	HA5033-5	**Harris (2706, 2738, 2748)**	
Video, Differential with AGC	MC1445	TI	
	TL026C	◇ TI	65
	TL027C	◇ TI	
	TL027M	◇† TI	
Video, IF and RF Amplifiers	CLC100	Comlinear	
	CLC102	Comlinear	
	CLC104AI	Comlinear	70
	CLC104AM	† Comlinear	
	CLC200AM	† Comlinear	
	CLC220AM	† Comlinear	
	μA733C	Fairchild	
	μA733M	† Fairchild	75
	μA733	† GE/Intersil	
	μA733C	GE/Intersil	
	NE592	◇ GE/Intersil	
	SE592	† GE/Intersil	
	CA3001	**† GE/RCA (2647)**	80
	CA3011	† GE/RCA	
	CA3020A	**GE/RCA (2649)**	
	CA3040	**† GE/RCA (2647)**	
	HA17733	Hitachi	
	MC1733	**† Motorola (2920)**	85
	MC1733C	**Motorola (2920)**	
	NE592	**Motorola (2960)**	
	LM733	‡ National	
	μPC1651	NEC	
	μPC1652	NEC	90
	μPC1655	NEC	
	μPC1656	NEC	
	μPC1658	NEC	
	μPC1659	NEC	
	SL1550	Plessey	95
	SL541	Plessey	
	SL550	Plessey	
	SL560	Plessey	
	SL610C	Plessey	
	SL611C	Plessey	100

(Continued)

Function	Device	Source	Line
Video, IF and RF Amplifiers (Cont'd)	SL612C	Plessey	
	μA733	† Signetics	
	μA733C	Signetics	
	NE5205	**◇ Signetics (3086)**	
	NE5592	**Signetics (3088)**	105
	NE592	◇ Signetics	
	SE592	† Signetics	
	TDA4501	Signetics	
	TDA4502	Signetics	
	SG1401	◇† SiliconG	110
	SG2401	◇ SiliconG	
	SG3401	◇ SiliconG	
	μA733C	◇ TI	
	μA733M	◇† TI	
	NE592	TI	115
	NE592A	TI	
	TL592	◇ TI	
	TL592A	TI	
	TL592B	TI	
Video Line Driver	**EL2003**	**◇‡ Elantec (2591, 2595)**	120
	EL2003H	**† Elantec (2591, 2595)**	
	EL2003H-8	**† Elantec (2591, 2595)**	
Video, 2-Channel Multiplexed	TL040C	TI	
Voltage Controlled Amplifier	SSM2013	SSM	
	SSM2014	SSM	125
Wideband Amplifier, DC to 2.5 GHz	ADA25001	Anadigics	
Wideband Amplifier, Hybrid	MC5108B	NEC	
	MC5120	NEC	
	MC5121	NEC	
	MC5156	NEC	130
	MC5157	NEC	
	MC5192	NEC	
	MC5229	NEC	
	MC5384	NEC	
	MC5385	NEC	135
	MC5386	NEC	
	MC5800	NEC	
	MC5801	NEC	
	MC5802	NEC	
	MC5805	NEC	140
	MC5814	NEC	
	MC5815	NEC	
Wideband Amplifier, Logarithmic	SL1613	Plessey	
Wideband Amplifier, Logarithmic Limiting (4 to 500 MHz)	SL1531	Plessey	
	SL1532	Plessey	145
	SL531C	◇ Plessey	
	SL532C	◇ Plessey	
Wideband Amplifier (up to 1 GHz)	SL565C	Plessey	
Wideband Amplifier with Low Level Video Detection (7 to 200 MHz for log IF amplifiers)	SL1521	† Plessey	
	SL1522	Plessey	150
	SL1523	Plessey	
	SL1524	Plessey	
	SL1525	Plessey	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Wideband Amplifier with Low Level Video Detection (7 to 200 MHz for log IF amplifiers) (Cont'd)			
	SL521	Plessey	
	SL523	Plessey	
Winchester Disk Read/Write Preamplifier			
	μA2482	◊ Fairchild	
	μA2483	◊ Fairchild	
	μA2484	◊ Fairchild	5
	μA2485	◊ Fairchild	
	μA2486	◊ Fairchild	
	μA2487	◊ Fairchild	
	μA2488	◊ Fairchild	
Winchester Disk Servo Preamplifier			
	μA2480	◊ Fairchild	10
Zero Voltage and Zero Crossing Triggers (triac and SCR control)	HA16631	Hitachi	
Quad Current Controlled Amplifier			
	SSM2024	SSM	
Two Wire Transmitter (Sends current signal over same two lines from which it is powered.)			
	XTR100AM	**† Burr-Brown (2538)**	
	XTR100AP	**Burr-Brown (2538)**	
	XTR100BM	**† Burr-Brown (2538)**	15
	XTR100BP	**Burr-Brown (2538)**	
	XTR101	**Burr-Brown (2538)**	
0.5–5 GHz MMIC Amplifier			
	HMR10502	**◊ Harris (2723)**	
1–5 GHz MMIC Amplifier			
	HMR10503	**◊ Harris (2723)**	
6–18 GHz MMIC Amplifier			
	HMM11810	**Harris (2723)**	20

© IC MASTER 1988

LINEAR—Arrays

Transistor Arrays

Function	Device	Source	Line
Darlington Pair and Two Matched NPN Transistors			
	CA3018	**† GE/RCA (2648)**	
	CA3018A	**† GE/RCA (2648)**	
	CA3118	**† GE/RCA (2648)**	
	CA3118A	**† GE/RCA (2648)**	
Darlington Transistors			
	IR2403	Sharp	5
	IR2405	Sharp	
	IR2410	Sharp	
	IR2411	Sharp	
Differential Pair and Three NPN Transistors			
	CA3045	**† GE/RCA (2648)**	
	CA3046	**† GE/RCA (2648)**	10
	CA3086	**† GE/RCA (2648)**	
	CA3146	**GE/RCA (2648)**	
	CA3146A	**GE/RCA (2648)**	
	HA1127	† Hitachi	
	MC3346	**† Motorola (2948, 2959)**	15
	MC3386	† Motorola	
	LM3045	† National	
	LM3046	National	
	LM3086	National	
	LM3146	National	20
	SL3045	† Plessey	
	SL3046	Plessey	
	SL3145	◇† Plessey	
	CA3046	† SGS	
	LM3045	† SGS	25
	LM3046	◇ SGS	
	SG3045	◇ SiliconG	
	SG3046	◇ SiliconG	
	SG3086	◇† SiliconG	
	SG3821	◇ SiliconG	30
	ULN2046A	Sprague	
	ULN2086A	Sprague	
	ULS2045H	† Sprague	
GaAs, Single-gate D-MESFETs, 9 single, 1 dual			
	16G020	**GigaBit (2689)**	
GaAs, Dual-gate D-MESFETs, 8 single			
	16G021	**GigaBit (2689)**	35
NPN Quad, to 350 MHz			
	EN2016	**◇ Elantec (2591, 2597)**	
PNP, Matched Dual			
	MAT03	**PMI (2975)**	
PNP Quad, to 350 MHz			
	EP2015	**◇† Elantec (2591, 2596)**	
Thirty-Two Circuit High-Voltage MOS, Built-In Logic, 250 V			
	LZ1032AM	Sharp	
	LZ1132AM	Sharp	40
	LZ1134R	Sharp	
	LZ1232M	Sharp	
Transistor Array			
	IR2C17	Sharp	
	IR2C19	Sharp	
	IR2C30	Sharp	45
	IR2C32	Sharp	
	IR2C33	Sharp	
	IR2420	◇ Sharp	
	IR2424	◇ Sharp	
	IR2425	◇ Sharp	50
	IR2426	◇ Sharp	
	IR2427	◇ Sharp	
	IR2428	◇ Sharp	
Transistor Array with Stable			
	IR2C22	Sharp	
Transistor Array (8 circuit high voltage)			
	LZ1008AM	Sharp	55
	LZ1108AM	Sharp	
Dual Darlington (NPN-PNP quasi complementary)			
	TDA1410	Telefunken	
Dual Darlington Switch			
	ULN2061	**Sprague (3203)**	
	ULN2062	**Sprague (3203)**	
Dual Differential Amplifiers (NPN), to 120 MHz			
	CA3026	**GE/RCA (2647, 2649)**	60
	CA3054	**◇ GE/RCA (2647, 2649)**	
	CA3054	**Motorola (2948)**	
Dual Differential Amplifiers (NPN), to 500 MHz			
	CA3049	**† GE/RCA (2647, 2649)**	
	CA3102	**† GE/RCA (2647, 2649)**	
Dual Differential Amplifiers (NPN) with Diode Bias String			
	CA3050	**† GE/RCA (2647)**	65
	CA3051	**GE/RCA (2647)**	
Dual Transistors (ft>5 GHz)			
	SL2363C	Plessey	
	SL2364C	◇ Plessey	
Dual Transistors, Monolithic N-Channel JFET, Tightly Matched			
	MP3954	MicroPwr	
	MP3954A	MicroPwr	70
	MP3955	MicroPwr	
	MP3956	MicroPwr	
	MP3958	MicroPwr	
	MP5905	MicroPwr	
	MP5906	MicroPwr	75
	MP5907	MicroPwr	
	MP5908	MicroPwr	
	MP5909	MicroPwr	
	MP5911	MicroPwr	
	MP5912	MicroPwr	80
	MP5912C	MicroPwr	
	MP830	MicroPwr	
	MP831	MicroPwr	
	MP832	MicroPwr	
	MP833	MicroPwr	85
	MP840	MicroPwr	
	MP841	MicroPwr	
	MP842	MicroPwr	
	MP843	MicroPwr	
	MP844	MicroPwr	90
	MP845	MicroPwr	
Dual Transistors, Monolithic NPN, Logarithmic Conformance			
	MP318	MicroPwr	
	MAT01	**‡ PMI (2975)**	
	MAT01A	**‡ PMI (2975)**	
	MAT01G	**† PMI (2975)**	95
Dual Transistors, Monolithic NPN Tightly Matched			
	IT120	GE/Intersil	
	IT120A	GE/Intersil	
	IT121	GE/Intersil	
	IT122	GE/Intersil	
Dual Transistors, Monolithic NPN, Tightly Matched, Low Noise			
	MPT01A	† MicroPwr	100
	MPT01G	MicroPwr	
	MPT02A	† MicroPwr	
	MPT02B	† MicroPwr	
Dual Transistors, Monolithic NPN, Tightly Matched, Low Noise (Cont'd)			
	MPT02E	MicroPwr	
	MPT02F	MicroPwr	105
Dual Transistors, Monolithic NPN Tightly Matched			
	MP301	MicroPwr	
	MP302	MicroPwr	
	MP303	MicroPwr	
	MP310	MicroPwr	
	MP311	MicroPwr	110
	MP312	MicroPwr	
	MP313	MicroPwr	
	MP360	MicroPwr	
	MP361	MicroPwr	
	MP362	MicroPwr	115
	LM194	◇† National	
	LM394	National	
	SL301L	Plessey	
	SL360	Plessey	
	SL362	Plessey	120
Dual Transistors, Monolithic NPN, Tightly Matched, Low Noise			
	MAT02A	**† PMI (2975)**	
	MAT02B	**◇† PMI (2975)**	
	MAT02E	**PMI (2975)**	
	MAT02F	**PMI (2975)**	
Dual Transistors, Monolithic PNP, Logarithmic Conformance			
	MP358	MicroPwr	125
Dual Transistors, Monolithic PNP, Tightly Matched			
	IT130	GE/Intersil	
	IT130A	GE/Intersil	
	IT131	GE/Intersil	
	IT132	GE/Intersil	
	MP350	MicroPwr	130
	MP351	MicroPwr	
	MP352	MicroPwr	
Quad Darlington Switch			
	ULN2068	**◇ Motorola (2954)**	
	ULN2074	**Motorola (2954)**	
	L702	SGS	135
	SG2064	SiliconG	
	SG2065	SiliconG	
	SG2066	SiliconG	
	SG2067	SiliconG	
	SG2068	SiliconG	140
	SG2069	SiliconG	
	SG2070	SiliconG	
	SG2072	SiliconG	
	SG2073	SiliconG	
	SG2074	SiliconG	145
	SG2075	SiliconG	
	SG2076	SiliconG	
	SG2077	SiliconG	
	UDN2841B	Sprague	
	ULN2064	**Sprague (3203)**	150
	ULN2065	**Sprague (3203)**	
	ULN2068	**Sprague (3203)**	
	ULN2069	**Sprague (3203)**	
	ULN2074	**Sprague (3203)**	
	ULN2075	**Sprague (3203)**	155
Quad Darlington Switch with Clamp Diode, 1.5 A			
	M2064	Mitsubishi	
Quad Darlington Switch, 1.5 A			
	M2065	Mitsubishi	
	M2067	Mitsubishi	
Quad Schottky Array			
	UC1611	**Unitrode (3324)**	
	UC2611	**Unitrode (3324)**	160
	UC3611	**Unitrode (3324)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Transistor Arrays (Cont'd)

Function	Device	Source	Line
Quad Transistors, Monolithic NPN, Tightly Matched			
	MAT04	**† PMI (2975)**	
Hex NPN Darlington			
	LB1274	◊ Sanyo	
Two NPN and One PNP Transistor			
	LM195	† Unitrode	
	LM395	◊ Unitrode	
Three Differential Amplifiers (NPN)			
	MC3350	Motorola	5
Three NPN and two PNP Transistors			
	CA3096	**† GE/RCA (2648)**	
	CA3096A	**† GE/RCA (2648)**	
	CA3096C	**† GE/RCA (2648)**	
Four High Current NPN Transistors (core driver)			
	FQ3724	Fairchild	
	FQ3725	Fairchild	10
	CA1724G	† GE/RCA	
	CA1725G	† GE/RCA	
	MHQ4001A	Motorola	
	MHQ4002A	Motorola	
	MHQ4013	Motorola	15
	MHQ4014	Motorola	
	MPQ3303	Motorola	
	MPQ3725	Motorola	
	MPQ3725A	Motorola	
	TPQ3724	Sprague	20
	TPQ3725	Sprague	
	TPQ3725A	Sprague	
Four High Current PNP Transistors (core driver)			
	FQ3467	Fairchild	
	FQ3468	Fairchild	
	MHQ3467	Motorola	25
Four NPN Transistors			
	IR2C34	Sharp	
Five High Current NPN Transistors			
	CA3083	**† GE/RCA (2648)**	
	CA3183	**† GE/RCA (2648)**	
	CA3183A	**GE/RCA (2648)**	
	SG3083	◊† SiliconG	30
	SG3183	◊† SiliconG	
	SG3183A	† SiliconG	
	ULN2083A	Sprague	
	ULS2083H	† Sprague	
Five High Frequency NPN Transistors, (ft>5 GHz)			
	CA3127	**GE/RCA (2648)**	35
	CA3227	**GE/RCA (2648)**	
	CA3246	**GE/RCA (2648)**	
	SL3127	◊ Plessey	
Five High Voltage, High Current NPN Darlington Amplifiers	LB1287	Sanyo	
	LB1288	Sanyo	40
	UDN2956A	Sprague	
	UDN2957A	Sprague	
Five Low-Noise NPN Transistors			
	LS159	SGS	
Six Inverted Darlingtons			
	IR2C05	Sharp	
	IR2C06	Sharp	45
Six NPN Darlingtons			
	LB1272	◊ Sanyo	
	LB1273R	◊ Sanyo	
Six NPN Transistors			
	IR2C04	Sharp	
	IR2C23	Sharp	
	IR2C24	Sharp	50
Sixteen Circuit High-Voltage MOS, Built-In Logic, 250 V			
	LZ1016AM	Sharp	
	LZ1116AM	Sharp	
Seven High Current Darlingtons			
	ULN2032A	Sprague	
	ULN2033A	Sprague	
Seven High Current, High Voltage, NPN Darlington Amplifiers, Open Collector, to 50 V, 500 mA			
	XR2001C	Exar	55
	XR2002C	Exar	
	XR2003C	Exar	
	XR2004C	Exar	
	XR2011C	Exar	
	XR2012C	Exar	60
	XR2013C	Exar	
	XR2014C	Exar	
	XR2201	◊ Exar	
	XR2201M	† Exar	
	XR2202	◊ Exar	65
	XR2202M	† Exar	
	XR2203	◊ Exar	
	XR2203M	† Exar	
	XR2204	◊ Exar	
	XR2204M	† Exar	70
	μA9665C	Fairchild	
	μA9666C	Fairchild	
	μA9666M	† Fairchild	
	μA9667C	Fairchild	
	μA9667M	† Fairchild	75
	μA9668C	Fairchild	
	μA9668M	† Fairchild	
	M2001	Mitsubishi	
	M2002	Mitsubishi	
	M2003	Mitsubishi	80
	M2004	Mitsubishi	
	MC1411	**Motorola (2954)**	
	MC1412	**Motorola (2954)**	
	MC1413	**Motorola (2954, 2958)**	
	MC1416	**Motorola (2954)**	85
	PBD3523-11	RIFA	
	PBD3523-12	RIFA	
	PBD3523-13	RIFA	
	PBD3523-14	RIFA	
	RBD352301	RIFA	90
	RBD352302	RIFA	
	RBD352303	RIFA	
	ULN2003	Signetics	
	ULN2004	Signetics	
	SG2001	◊ SiliconG	95
	SG2002	◊ SiliconG	
	SG2003	◊ SiliconG	
	SG3851	◊ SiliconG	
	SG3852	◊ SiliconG	
	SG3853	◊ SiliconG	100
	ULN2001	**Sprague (3203)**	
	ULN2002	**Sprague (3203)**	
	ULN2003	**Sprague (3203)**	
	ULN2004	**Sprague (3203)**	
	ULN2005	**Sprague (3203)**	105
	ULN2011A	**Sprague (3203)**	
	ULN2012A	**Sprague (3203)**	
	ULN2013A	**Sprague (3203)**	
	ULN2014A	**Sprague (3203)**	
	ULN2015A	**Sprague (3203)**	110
	ULN2021	**Sprague (3203)**	
	ULN2022	**Sprague (3203)**	
	ULN2023	**Sprague (3203)**	
	ULN2024	**Sprague (3203)**	

(Continued)

Function	Device	Source	Line
Seven High Current, High Voltage NPN Darlington Amplifiers, Open Collector, to 95 V, 500 mA			
		(Cont'd)	
	ULN2025	**Sprague (3203)**	115
	ULN7001	**Sprague (3203)**	
	ULN7002A	**Sprague (3203)**	
	ULN7003A	**Sprague (3203)**	
	ULN7004A	**Sprague (3203)**	
	ULN7005A	**Sprague (3203)**	120
	ULS2001	† Sprague	
	ULS2002	◊† Sprague	
	ULS2003	◊† Sprague	
	ULS2004	◊† Sprague	
	ULS2005	◊† Sprague	125
	ULS2011	◊† Sprague	
	ULS2012	◊† Sprague	
	ULS2013	◊† Sprague	
	ULS2014	◊† Sprague	
	ULS2015	◊† Sprague	130
	ULS2021	◊† Sprague	
	ULS2022	◊† Sprague	
	ULS2023	◊† Sprague	
	ULS2024	◊† Sprague	
	ULS2025	† Sprague	135
Seven High Current NPN Transistors, Common Collector			
	CA3082	**† GE/RCA (2648, 2653)**	
	ULN2082A	Sprague	
Seven NPN Darlingtons			
	LB1275	◊ Sanyo	
	IR2C03	Sharp	
	IR2C20	Sharp	140
Seven NPN/PNP Darlingtons			
	M54580	Mitsubishi	
Seven NPN Transistors			
	IR2C35	Sharp	
	IR2C36	Sharp	
Seven NPN Transistors, Common Emitter			
	CA3081	**† GE/RCA (2648, 2653)**	
	ULN2081A	Sprague	145
Seven-Stage Driver Array			
	LB1260	Sanyo	
	LB1261	Sanyo	
	LB1264	◊ Sanyo	
Eight High Current, High Voltage NPN Darlington Amplifiers, Open Collector to 50 V, 500 mA			
	M2803	Mitsubishi	
	M2821	Mitsubishi	150
	M2822	Mitsubishi	
	M2823	Mitsubishi	
	M2824	Mitsubishi	
	M2981	Mitsubishi	
	M2982	Mitsubishi	155
	M2983	Mitsubishi	
	M2984	Mitsubishi	
	PBD3538-11	RIFA	
	PBD3538-12	RIFA	
	PBD3538-13	RIFA	160
	PBD3538-14	RIFA	
	L601	SGS	
	L602	SGS	
	L603	SGS	
	L604	SGS	165
	UDN2981A	**Sprague (3203)**	
	UDN2982A	**Sprague (3203)**	
	UDN2983A	**Sprague (3203)**	
	UDN2984A	**Sprague (3203)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Arrays (Cont'd)

Transistor Arrays (Cont'd)

Function	Device	Source	Line
Eight High Current, High Voltage NPN Darlington Amplifiers, Current Source (Cont'd)			
	UDS2981	† Sprague	
	UDS2982	† Sprague	
	UDS2983	† Sprague	
	UDS2984	† Sprague	
	ULN2801	**Sprague (3203)**	5
	ULN2802	**Sprague (3203)**	
	ULN2803	**Sprague (3203)**	
	ULN2804	**Sprague (3203)**	
	ULN2805	**Sprague (3203)**	
	ULN2811A	**Sprague (3203)**	10
	ULN2812A	**Sprague (3203)**	
	ULN2813A	**Sprague (3203)**	
	ULN2814A	**Sprague (3203)**	
	ULN2815A	**Sprague (3203)**	
	ULN2821	**Sprague (3203)**	15
	ULN2822	**Sprague (3203)**	
	ULN2823	**Sprague (3203)**	
	ULN2824	**Sprague (3203)**	
	ULN2825	**Sprague (3203)**	
	ULS2801	† Sprague	20
	ULS2802	† Sprague	
	ULS2803	† Sprague	
	ULS2804	† Sprague	
	ULS2805	† Sprague	
	ULS2811	† Sprague	25
	ULS2812	† Sprague	
	ULS2813	† Sprague	
	ULS2814	† Sprague	
	ULS2815	† Sprague	
	ULS2821	† Sprague	30
	ULS2822	† Sprague	
	ULS2823	† Sprague	
	ULS2824	† Sprague	
	ULS2825	† Sprague	
Eight High Current, High Voltage NPN Darlington Transistors, 500 mA			
	M2580	Mitsubishi	35
	M2580-1	Mitsubishi	
Eight High Voltage, Medium Current NPN Darlington Amplifiers	SG2801	SiliconG	
	SG2802	SiliconG	
	SG2803	SiliconG	
	SG2804	SiliconG	40
	SG2811	SiliconG	
	SG2812	SiliconG	
	SG2813	SiliconG	
	SG2814	SiliconG	
	SG2821	SiliconG	45
	SG2822	SiliconG	
	SG2823	SiliconG	
	SG2824	SiliconG	
Eight High-Voltage MOSFET's to 300 V			
	LZ1008AD	Sharp	
	LZ1108AD	Sharp	50
Eight NPN Transistors			
	CA3250	**GE/RCA (2648, 2653)**	
	CA3251	**GE/RCA (2648, 2653)**	

Special Arrays

Function	Device	Source	Line
CMOS (three p-channel and three n-channel enhancement MOS transistors tested for linear operation)	**CA3600**	**† GE/RCA (2648)**	
Diode Array, GaAs, 14 single, 1 full-wave rectifier			
	16G010	**GigaBit (2689)**	
	16G011	**GigaBit (2689)**	55
Diode Array (one diode quad and two isolated)			
	CA3019	**† GE/RCA (2649)**	
Diode Array, Thirty-two Circuit Anode Common High Voltage	LZ1030M	Sharp	
Diode Array (6-element)			
	CA3039	**GE/RCA (2649)**	
Diode Array (10 element)			
	CA3141	**GE/RCA (2649)**	
MOS Array (16 circuit high voltage)			
	LZ1016AD	Sharp	60
	LZ1116AD	Sharp	
MOS Array (32 circuit high voltage)			
	LZ1032AD	Sharp	
	LZ1132BD	Sharp	
N-Channel Enhancement Mode D-MOS FETs, 8-Channel Arrays	AN0110N	TopazSemi	
	AN0120N	TopazSemi	65
	AN0130N	TopazSemi	
	AN0140N	TopazSemi	
Printer Driver (12 Circuit) Plus Ribbon-Shift Driver (one circuit)	IR2402	Sharp	
Thyristor/Transistor Array (SCR, programmable unjunction transistor, PNP/NPN transistor pair, NPN transistor and zener diode)			
	CA3097	**† GE/RCA (2648)**	
Dual High-Speed MOSFET Driver			
	SG1626	† SiliconG	70
	SG2626	SiliconG	
	SG3626	SiliconG	
Dual Schottky Diode Bridge			
	L6210	SGS	
Octal High-Voltage N-Channel MOSFET Array			
	AN0103NA	AT&T	
	AN0130	**AT&T (2502)**	75
Octal High-Voltage P-Channel MOSFET Array			
	AP0130NA	**AT&T (2503)**	
Eight P-Channel Enhancement Mode DMOS FETs			
	AP0120N	TopazSemi	
	AP0130N	TopazSemi	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Offset Voltage mV (25°C)	Bias Current (25°C)	Offset Current (25°C)	Response Time ns	Max. Differential Voltage	Gain V/V	Fan Out	Supply Voltage, V	Device	Source	Line
Comparators-Single										
± 100	1 μA		25	5			–7 to 14	TL712	TI	
0.025	100 pA		150				± 8 to ± 20	LMC669	National	
0.25	1.2 μA	80 nA	30	—	20K	—	5,–16	RC4805A	Raytheon	
								RM4805A	† Raytheon	
	1200 nA	80 nA	35 *	—	8000	—	5 to ± 18	**CMP05C**	**† PMI (2975)**	5
0.3	4 μA	.2 μA	2.7	6			7, –7	μA6685	Fairchild	
0.375	500	200	75	5	10K		8/–8	**HS3560RH**	**◇‡ Harris (2716)**	
0.5			4.2		1K		5	**HCPM96900**	**HoneywellSPT (2997)**	
	3.0 nA	1000 nA	80 us				2.8 to 16	LTC1042C	LinearTech	
								LTC1042M	† LinearTech	10
0.5 *	15 μA*	2 μA*	2.5 ns*	6	—	—	7,–7	AM6685C	AMD	
								AM6685M	† AMD	
0.5	25 nA	3 nA	250	36	200K	5	± 18	LT1011AC	◇ TI	
	35 nA	3 nA	250	36	200K	5	5	LT1011AC	LinearTech	
								LT1011AM	† LinearTech	15
0.6	1.8 μA	150 nA	30	—	20K	—	5,–16	RC4805	Raytheon	
								RM4805	† Raytheon	
	1800 nA	150 nA	35 *	—	7000	—	5 to ± 18	**CMP05B**	**† PMI (2975)**	
								CMP05F	**PMI (2975)**	
0.8	50 nA	3 nA	270	11	200K		5 to ± 18	**CMP02**	**‡ PMI (2975)**	20
								CMP02E	**PMI (2975)**	
	600 nA	25 nA	180	11	200K		5 to ± 18	**CMP01**	**‡ PMI (2975)**	
								CMP01E	**PMI (2975)**	
1	100 nA	10 nA	200	30	200K	5	5 to ± 15	LT111A	† LinearTech	
			250	30	200K	5	5 to ± 15	LT311A	LinearTech	25
1.5	50 nA	4 nA	250	36	200K	5	± 18	LT1011C	◇ TI	
							5	LT1011C	LinearTech	
								LT1011M	† LinearTech	
								LT1011AM	◇ TI	
								LT1011M	◇ TI	30
2			2.5	5			–5.2,5	**AD96685**	**AD (2446)**	
	5 μA	500 nA	10	5			± 5	VLC931	ThirdDomain	
	10 μA	1 μA	6.5	6			–5.2,6	AM685L	AMD	
								AM685M	† AMD	
		1.2 μA	12	6		5	–6,5	AM686M	† AMD	35
	10μA	1μA	6.5	6			–5.2, 6	μA685	Fairchild	
	20 μA	3 μA	40	5	40K *	10	–3 to –12,12	LM106	◇‡ National	
								LM206	◇ National	
								LM206	◇ TI	
			40 *	5	1250	1	–6,12	μA710M	† Fairchild	40
								LM710	◇† National	
								μA710M	† TI	
								SFC2710	† Thomson	
2.5	13 μA	1.3 μA	9.5	± 16	800		–6 to 6.5	**CMP08F**	**PMI (2975)**	
	500 nA	50 nA	80 ns	± 5		100 K		**PM119**	**PMI (2975)**	45
2.8	100 nA	15 nA	270	11	100K		5 to ± 18	**CMP02C**	**‡ PMI (2975)**	
	900 nA	80 nA	180	11	200K		5 to ± 18	**CMP01C**	**‡ PMI (2975)**	
3	5 μA	2 μA *	20	5	3K *	2	5,(–6, 5– ± 15)	LM261	National	
	10 μA	1 μA	12	6			–6,5	AM686C	AMD	
	16 μA	1.6 μA	12	± 16	800		–16 to 6.5	**CMP08B**	**† PMI (2975)**	50
	50 nA	0.3 nA	180	30	200 K		± 15	**PM111**	**◇† PMI (2975)**	
	100 nA	10 nA	—	30	40K	5	5 to ± 15	LM111	† LinearTech	
			200 *	30	200K *	5	5, 0 to ± 15	AD111	† AD	
								AD211	AD	
								μA111M	◇† Fairchild	55
								LM111	**† Motorola (2925)**	
								LM211	**Motorola (2925, 2958)**	
								LM111	‡ National	
								LM211	◇ National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Comparators (Cont'd)

Comparators-Single (Cont'd)

Offset Voltage mV (25°C)	Bias Current (25°C)	Offset Current (25°C)	Response Time ns	Max. Differential Voltage	Gain V/V	Fan Out	Supply Voltage, V	Device	Source	Line
									(Cont'd)	
3	100 nA	10 nA	200 *	30	200K *	5	5, 0 to ± 15	LM111	† Raytheon	
								LM111	† Signetics	
								LM211	Signetics	
								SG111	◊† SiliconG	
								SG211	◊ SiliconG	5
								LM111	◊† Thomson	
								LM211	Thomson	
	300 nA	150 nA	30 nS	± 18	15K		± 5 to ± 18	**EL2018**	**† Elantec (2591, 2598)**	
3.0	4 mA	1 mA	1.76	5	4K		5,–5.2	**HCMP96850**	**† HoneywellSPT (2997, 2999)**	
	10 μA	1.3 μA	10*	5	3K*		± 7	LT1016M	† LinearTech	10
3.5	10 μA	1 μA	14	5	3K*		± 7	LT1016C	LinearTech	
	20 μA	5 μA	80	5	10K		–6,12	TL810C	TI	
					33K		–7 to 14	TL510C	TI	
4	2 μA	0.5 μA	26	5	5K *		5,(–6, 5– ± 10)	SE527	† Signetics	
	12 μA	3 μA	22	5	5K *		5,(–6, 5– ± 10)	SE529	† Signetics	15
	25 pA	50 pA	200	—	200K	2	36 *	LF111	† National	
5	5 μA	5 μA	6					**VC7696J**	**VTC (3373)**	
			6.5					**VC7696S**	**VTC (3373)**	
			8					**VC7698J**	**VTC (3373)**	
			8.5					**VC7698S**	**VTC (3373)**	20
	10 μA	2 μA	1.3	3.5	300		–5.2, 5	TKCP10P	Tektronix	
			20	5	3K *	2	(–6, 5 to ± 15)	LM361	National	
		5 μA	1.4 ns	5			5,–5.2	**VC7695C**	**VTC (3373)**	
								VC7695M	**† VTC (3373)**	
			2.0 ns	5			5,–5.2	VC7685C	VTC	25
								VC7685M	† VTC	
			2.2	5	—	—	5,–5.2	AD9685	◊ AD	
			2.7	5	—	—	5,–5.2	AD9687	◊ AD	
	20 μA	3 μA	14 *	5	3K *	4	± 5	LM260	National	
								LM360	National	30
		5 μA	1.4	3.5			± 6	**VC7690J**	**VTC (3373)**	
								VC7690S	**† VTC (3373)**	
	25 μA	5 μA	40	5	40K *	10	–3 to –12,12	LM306	National	
					40K	10	–3 to ± 15	LM306	TI	
			40 *	5	1000	1	–6,12	μA710C	Fairchild	35
								LM710C	◊ National	
	75 μA	10 μA	40 *	5	750		–6,12	TL710M	† TI	
	100 nA	25 nA	300K	36	200		2 to 36	TL331I	TI	
	150 nA	50 nA	1300 *	36	200K *		2 to 36	TL331C	TI	
	300 nA	150 nA	20 nS	± 18	103 dB		± 5 to ± 18	**EL2019**	**† Elantec (2592, 2599)**	40
6	2 μA	0.75 μA	26	5	5K *		5,(–6,5– ± 10)	**NE527**	**Signetics (3124)**	
	20 μA	5 μA	22	5	5K *		5,(–6,5– ± 10)	**NE529**	**Signetics (3125)**	
	60 μA	7.5 μA	25 *	5	5K *	2	± 4.5 to ± 6.5	μA760C	Fairchild	
								μA760M	† Fairchild	
7.5	100 nA	25 nA	1200	30	100K		36	LP211	◊ TI	45
						2	± 18 to ± 36	LP311	TI	
	100 μA	15 μA	40 *	5	700		–6,12	TL710C	TI	
	250 nA	50 nA	—	30	40K	5	5 to ± 15	LM311	LinearTech	
			200*	30	200K*	5	5 to 15	LM311	Samsung	
			200	30	200K	5	5, 0 to ± 15	LM311	TI	50
			200 *	30	200K *	5	5, 0 to ± 15	AD311	AD	
								μA311C	Fairchild	
								CA311	GE/RCA	
								LM311	**Motorola (2925, 2958)**	
								LM311	National	55
								μPC311	NEC	
								LM311	Signetics	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Offset Voltage mV (25°C)	Bias Current (25°C)	Offset Current (25°C)	Response Time ns	Max. Differential Voltage	Gain V/V	Fan Out	Supply Voltage, V	Device	Source	Line
Comparators-Single										**(Cont'd)**
7.5	250 nA	50 nA	200 *	30	200K *	5	5, 0 to ±15			(Cont'd)
								SG311	◊ SiliconG	
								LM311	Thomson	
	250 pA	50 pA	165 *	30	200K *	5	5, 0 to ±15	LM211	◊ TI	
10	75 pA	150 pA	200	—	200K	2	36 *	LF311	National	
30	20 µA	20 µA	15	5	100K	6	5	9915	◊ OEI	5
Comparators-Dual										
0.5	0.3 nA		10000	16			2.8 to 16/±2.8 to ±8	LTC1040C	LinearTech	
								LTC1040M	† LinearTech	
0.5 *	15 µA*	2 µA*	2.5 ns*	6	—	—	7,–7	AM6687C	AMD	
								AM6687M	† AMD	
1	15 nA	2 nA		40	300K	1	±0.75 to ±20	LT1017C	LinearTech	10
								LT1017M	† LinearTech	
	75 nA	8 nA		40	300K	1	±0.75 to ±20	LT1018C	LinearTech	
								LT1018M	† LinearTech	
	500 nA	—	80 *	5	20K	5	5 to ±15	LT319A	LinearTech	
		75 nA	80 *	5	20K	2	5 to ±15	LT119A	† LinearTech	15
2			2.5	5			–5.2,5	**AD96687**	**AD**	**(2446)**
	–250 nA	50 nA	1300	36	200K		2 to 30, 1 to ±18	LM239A	TI	
	0.2 nA	0.2 nA	650	12	50K	45	3 to 12	ALD2301A	† AdvLinear	
	10 µA	1 µA	8	6			–5.2, 5	AM687AM	† AMD	
								µA687A	† Fairchild	20
			10	6			–5.2, 5	AM687M	† AMD	
								µA687	† Fairchild	
	15 µA	3 µA	80	5	12.5K		–6,12	TL514M	† TI	
								TL820M	† TI	
	20 µA	3 µA	30 *	5	1250	1	–6,12	LM1514	† National	25
			40 *	5	1250		–6,12	MC1514	◊† Motorola	
	100 nA	25 nA	1300 *	36	50K		2 to 36	**LM193A**	**† Motorola**	**(2925)**
								LM193A	◊† National	
								LM193A	◊† SGS	
								LM193A	† Signetics	30
	250 nA	50 nA	1300 *	36	50K		2 to 36	**GL393A**	**GoldStar**	**(2700)**
								LM293A	**Motorola**	**(2925, 2958)**
								LM393A	**◊ Motorola**	**(2925, 2958)**
								LM293A	National	
								LM393A	National	35
			1300*	36	50K		2 to 36	LM393A	Samsung	
			1300 *	36	50K		2 to 36	LM293A	SGS	
								LM393A	SGS	
			1300	36	200K		±1 to ±18	LM339A	TI	
							2 to 36	LM295A	TI	40
			1300 *	36	200K		2 to 36	LM393A	◊ TI	
2.5	500	50	80		1000		5	**PM219**	**PMI**	**(2975)**
3	4 mA	1 mA	1.76	5	4K		5,–5.2	**HCMP96870**	**† HoneywellSPT**	**(2997, 2999)**
	10 µA	1 µA	8	6			–5.2, 5	AM687AL	AMD	
			10	6			–5.2, 5	AM687L	AMD	45
	100 nA	10 nA	200 *	30	200K *	5	5, 0 to ±15	LH2111	Raytheon	
			250	30	200K *		5, 0 to ±15	AM1500L	AMD	
								AM1500M	† AMD	
3.5	20 µA	5 µA	80	5	10K		–6, 12	TL514C	TI	
								TL820C	TI	50
	75 µA	10 µA	40 *	5	750	1	–6, 12	µA711M	† Fairchild	
								LM711	◊† National	
								µA711M	† TI	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Comparators (Cont'd)

Offset Voltage mV (25°C)	Bias Current (25°C)	Offset Current (25°C)	Response Time ns	Max. Differential Voltage	Gain V/V	Fan Out	Supply Voltage, V	Device	Source	Line
Comparators-Dual									**(Cont'd)**	
4	0.5 μA	75 nA	80	—	40K	2	±15	LM119	‡ National	
	500 nA	75 nA	80 *	5	10K	2	5 to ±15	LM119	† LinearTech	
							5, 0 to ±15	LM119	◊‡ National	
								LM219	National	
								LM119	† Signetics	5
								LM219	Signetics	
								LM119	◊† Thomson	
5	.025 nA	20 nA	1300	36			2 to 36	LP2901	TI	
	0.005 nA *	0.001 nA *	2500 *	36	50K		−0.3 to 18	TLC3702C	TI	
								TLC3702I	TI	10
								TLC3702M	† TI	
								TLC393C	TI	
								TLC393I	TI	
								TLC393M	† TI	
	0.2 nA	0.2 nA	650	12	50K	45	3 to 12	ALD2301B	† AdvLinear	15
	5 μA *	1 μA	2.7 *	30			−5.2,5	SP9685	Plessey	
								SP9687	Plessey	
	10 μA	2 μA	1.3	3.5	300		−5.2, 5	TKCP15P	Tektronix	
		5 μA	1.8 ns	5			5,−5.2	**VC7697C**	**VTC (3373)**	
								VC7697M	**† VTC (3373)**	20
			2.5 ns	5			5,−5.2	VC7687C	VTC	
								VC7687M	† VTC	
	25 nA	5 nA	8000	36	500K		±18 to 36	LP239	TI	
		20 nA	8000	36	500K		±18 to 36	LP339	TI	
	25 μA	5 μA	30 *	5	1000	1	−6,12	LM1414	National	25
			40 *	5	1000		−6,12	MC1414	Motorola	
	30 μA	5 μA	33 *	5	10K		−6,12	TL811C	TI	
	100 nA	25 nA	1300 *	36	50K		2 to 36	**LM193**	**† Motorola (2925)**	
								LM193	◊‡ National	
								LM193	◊† SGS	30
								LM193	† Signetics	
								LM193	† Thomson	
	100 μA	15 μA	40 *	5	700	1	−6,12	μA711C	Fairchild	
								LM711C	◊ National	
								μA711C	TI	35
								SFC2711	Thomson	
	250 mA	50 nA	1.3 *	36	200 K		36	HA17903	Hitachi	
	250 nA	50 nA	1300 *	36	50K		2 to 36	HA17393	Hitachi	
								LM293	**Motorola (2925, 2958)**	
								LM393	**◊ Motorola (2925, 2958)**	40
								LM293	National	
								LM393	National	
			1300*	36	50K		2 to 36	LM393	Samsung	
			1300 *	36	50K		2 to 36	LM293	◊ SGS	
								LM393	◊ SGS	45
								LM293	Signetics	
								LM293A	Signetics	
								LM393A	Signetics	
								LM393	Thomson	
			1300	36	200K		2 to 36	LM293	TI	50
								LM329	TI	
								LM339	TI	
			1300 *	36	200K		2 to 36 ±1 to ±18	LM393	◊ TI	
					200K *		2 to 36/±1−±18	μPC393	NEC	
		50nA	1300 *	36	50K		2 to 36	TLC193M	† TI	55
5 (2 operational amplifiers, 2 comparators)										
	500 nA	75 nA	1300 *	36	200K *		3–36	**MC3505**	**† Motorola (2925)**	
6	30 pA	15 pA	200 *	36	50K	1	4 to 44	**CA3290B**	**GE/RCA (2647)**	
	40 μA	10 μA	2.4 *	30			−5.2,5	SP9680	Plessey	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Offset Voltage mV (25°C)	Bias Current (25°C)	Offset Current (25°C)	Response Time ns	Max. Differential Voltage	Gain V/V	Fan Out	Supply Voltage, V	Device	Source	Line
Comparators-Dual										**(Cont'd)**
7	250 nA	50 nA	300	36	100K		2 to 36	LM2901	◊ TI	
			1500 *	36	25K		2 to 36	**LM2903**	**Motorola (2925, 2958)**	
								LM2903	◊ National	
								LM2903	SGS	
								LM2903	Signetics	5
								LM2903	◊ TI	
								LM2903	Thomson	
7.5	20 μA	5 μA	18	6	5K *	10	±5	**NE521**	**Signetics (3122)**	
								SE521	† Signetics	
			25	6	5K *	10	±5	**NE522**	**Signetics (3123)**	10
								SE522	† Signetics	
	250 nA	50 nA	200 *	30	200K *	5	5, 0 to ±15	LH2311	GE/Intersil	
			250	30	200K		5, 0 to ±15	AM1500C	AMD	
8	−1 μA	0.2 μA	80 *	5	8K	2	5 to ±15	LM319	LinearTech	
	1 μA	0.2 μA	80 *	5	8K	2	5, 0 to ±15	LM319	National	15
								μPC319	◊ NEC	
								LM319	Signetics	
								LM319	Thomson	
	250 nA	25 nA	600 *	40	—	1	4.5 to 40	SG3524A	SGS	
								UC3524A	SGS	20
9 (2 operational amplifiers, 2 comparators)										
	10	500 nA	1300 *	36			3–36	**MC3405**	**Motorola (2925)**	
10	0.05 nA	0.001 nA	200	18	270K		2 to 18	TLC372C	◊ TI	
								TLC372M	◊† TI	
	0.2 nA	0.2 nA	650	12	50K	45	3 to 12	ALD2301	◊† AdvLinear	
	5 pA	50 nA	200	18			18, 2 to 30	TLC374I	◊ TI	25
	40 pA	25 pA	200 *	36	50K	2	4 to 36	**CA3290A**	**GE/RCA (2647)**	
	100 nA	25 nA	300 *	38	—	1	4.5 to 40	SG3524	◊† SGS	
20	0.2 nA	0.2 nA	650	12	50K	45	3 to 12	ALD2301C	† AdvLinear	
	50 pA	30 pA	200 *	36	25K	2	4 to 36	**CA3290**	**GE/RCA (2647)**	
		100 pA	250	13	20K	1	3 to 15	**HI8575**	**Holt (2769)**	30
	500 nA	100 nA	1300	28	30K		2 to 28	LM3302	TI	
30	50 pA	100 pA	240	13	20K	1	±1.5 to ±7.5	**MC14575**	**◊ Motorola (2925)**	
			250	13	20K	1	±1.5 to ±7.5	**MC14575**	**◊ Motorola (2925)**	
Comparators-Quad										
0.8	100 nA	25 nA	1300	36	50K	2	2–36/±1–±18	**CMP04B**	**† PMI (2975)**	
								CMP04F	**PMI (2975)**	35
1 *	20 nA	1 nA*	5000 *	30	10K		±18	L161B	Siliconix	
								L161C	Siliconix	
					20K		±18	L161A	Siliconix	
1	50 nA	10 nA	3500	36	50K	2	2–36/±1–±18	**CMP404A**	**† PMI (2975)**	
								CMP404E	**PMI (2975)**	40
2 *	20 μA	1 μA *	55	5	1.2K *	10	±5	**MC3430**	**Motorola (2925)**	
								MC3431	**Motorola (2925)**	
			65	5	1.2K *	10	±5	**MC3432**	**Motorola (2925)**	
								MC3433	**Motorola (2925)**	
2	100 nA	25 nA	1300 *	36	50K	2	2–36/±1–±18	**CA139A**	**† GE/RCA (2647)**	45
								LM139A	**◊† Motorola (2925)**	
								LM139A	‡ National	
								PM139A	**◊† PMI (2975)**	
								LM139A	† SGS	
			3500	36	50K	2	2–36/±1–±18	**CMP404B**	**† PMI (2975)**	50
								CMP404F	**PMI (2975)**	
	250 nA	50 nA	1300*	36	50K	2	±1, ±18	LM339A	Samsung	
			1300 *	36	50K	2	2–36/±1–±18	**CA239A**	**GE/RCA (2647)**	
								CA339A	**GE/RCA (2647)**	
								LM239A	**Motorola (2925, 2958)**	55

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Comparators (Cont'd)

Offset Voltage mV (25°C)	Bias Current (25°C)	Offset Current (25°C)	Response Time ns	Max. Differential Voltage	Gain V/V	Fan Out	Supply Voltage, V	Device	Source	Line
Comparators-Quad										**(Cont'd)**
2	250 nA	50 nA	1300 *	36	50K	2	2–36/ ± 1– ± 18			(Cont'd)
								LM339A	**Motorola (2925, 2958)**	
								LM239A	National	
								LM339A	National	
								AN1339	Panasonic	
								LM239A	SGS	5
								LM339A	SGS	
3	75 nA	25 nA	130 *	15	400K *		5 to ± 15	**HA4900-2**	**† Harris (2706)**	
3.0	50nA	20nA	4000*	36	500K*		4–36/or ± 2 to ± 18			
								LP165	† Raytheon	
								LP365A	Raytheon	
5	0.005 nA *	0.001 nA *	2500 *	36	50K		–0.3 to 18	TLC339C	TI	10
								TLC339I	TI	
								TLC339M	† TI	
								TLC3704C	TI	
								TLC3704I	TI	
								TLC3704M	† TI	15
	0.2 μA	0.2 μA	250 ns	12	50K	30	2–12V	ALD4302A		
									◊°† AdvLinear	
	2.5 nA*	0.5 nA*	8000	36	500K	2	2–36/ ± 1.5– ± 18			
								LP339	National	
	100 nA	25 nA	1300 *	36	200K *	2	2–36/ ± 1, ± 18	TLC139M	† TI	
							2–36/ ± 1, ± 18	μA139M	† Fairchild	
								CA139	**† GE/RCA (2647)**	20
								LM139	**◊† Motorola (2925)**	
								LM139	◊† National	
								PM139	**† PMI (2975)**	
								LM139	◊† Raytheon	
								LM139	† SGS	25
								LM139A	† Signetics	
								LM139	† Thomson	
	150 nA	35 nA	200	15	400K *	—	5 to ± 15	**HA4902-2**	**† Harris (2706, 2768)**	
	250 nA	50 nA	1300 *	15	200K *	1	3–15	MM54C909	† National	
								MM74C909	National	30
				36	200K	1	1 to 18	MB4204	Fujitsu	
			1300*	36	200K	2	± 1, ± 18	LM339	Samsung	
			1300 *	36	200K *	2	2–36/ ± 1, ± 18	μA239C	Fairchild	
								μA339C	Fairchild	
								CA239	**GE/RCA (2647)**	35
								CA339	**GE/RCA (2647)**	
								HA17339	Hitachi	
								LM239	**Motorola (2925, 2958)**	
								LM339	**Motorola (2925, 2958)**	
								LM239	National	40
								LM339	National	
								μPC339	◊ NEC	
								AN6912	Panasonic	
								LM339	Raytheon	
								LM239	◊ SGS	45
								LM339	◊ SGS	
								LM239A	◊ Signetics	
								LM339	Signetics	
								LM339	Thomson	
6	75nA	25nA	4000*	36	500K*		4–36/or ± 2 to ± 18	LP365	Raytheon	50
7	100 nA	50 nA	1000				2.5 to 28	M5N339	Mitsubishi	
	250 nA	50 nA	300 *	36	25K	—	36 or ± 18 V	μA2901	Fairchild	
			1300 *	36	50K	2	2–36/ ± 1– ± 18	**LM2901**	**Motorola (2925, 2958)**	
								LM2901	◊ National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Offset Voltage mV (25°C)	Bias Current (25°C)	Offset Current (25°C)	Response Time ns	Max. Differential Voltage	Gain V/V	Fan Out	Supply Voltage, V	Device	Source	Line
Comparators-Quad									**(Cont'd)**	
7	250 nA	50 nA	1300 *	36	50K	2	2–36/ ± 1– ± 18		(Cont'd)	
								LM2901	Raytheon	
								LM2901	◊ SGS	
								LM2901	Signetics	
								LM2901	Thomson	
7.5	150 nA	50 nA	130 *	15	400K *		5 to ± 15	HA4905-5	Harris	5
10	0.05 nA	0.001 nA	200	18	270K			TLC374C	◊ TI	
								TLC374M	◊† TI	
	0.2 μA	0.2 μA	250 ns	12	50K	30	3–12V	ALD4302B	◊°† AdvLinear	
15	0.2 μA	0.2 μA	250 ns	12	50K	30	2–12V	ALD4302	◊°† AdvLinear	
20	50 pA	100 pA	250	13	20K	1	3 to 15	**HI8574**	**Holt (2769)**	10
	500 nA	3 nA *	2000 *	Vcc	2K	1	2 to 28	**MC3302**	◊ **Motorola (2925)**	
								MC3302	◊ SGS	
								MC3302	Signetics	
								TDF3302	Thomson	
		100 nA	300 *	28	2K	—	28 or ± 14 V	μA3302	Fairchild	15
			1300 *	Vcc	2K	2	5 to ± 15	LM3302	National	
30	50 pA	100 pA	250	13	20K	1	± 1.5 to ± 7.5	**MC14574**	◊ **Motorola (2925)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Consumer Circuits

Audio Circuits

Function	Device	Source
Mask Programmable	AY3-1350	GIM
AM/FM IF Tuner	**GL5808**	**GoldStar (2699)**
Amplifier and Preamplifier, Low Power	TCA120	Signetics
Amplifier and Preamplifier with ALC (450 mW)	μPC1350	◊ NEC
Amplifier, Headphone	LA4170	Sanyo
	LA4175	Sanyo
	LA4177	Sanyo
	TA7688	Toshiba
Amplifier, Hearing Aid	LC505	Gennum
	LC506	Gennum
	LC507	Gennum
	LC508	Gennum
	LC547	Gennum
	LC549	Gennum
	LC550	Gennum
	LD501	Gennum
	LD502	Gennum
	LD505	Gennum
	LD511	Gennum
	LD547	Gennum
	LD548	Gennum
	LD549	Gennum
	LE507	Gennum
	LP508	Gennum
	LR505	Gennum
	LS505	Gennum
	LT505	Gennum
	LU547	Gennum
	LV506	Gennum
	LV549	Gennum
	WC535	Gennum
	WE530	Gennum
	WS531	Gennum
	WV530	Gennum
	WV535	Gennum
	TCA1003	ITT
	TCA1004	ITT
	OM200	Signetics
Amplifier, Wideband with AGC	MC1490	Motorola
Amplifier, with AGC, for Recorders	TDA7137	Toshiba
	TDA7137-ST	Toshiba
Attenuator, Digital	AD7115K	AD
Attenuator, Digital (logarithmic D/A converter)	AD7111K	AD
	AD7111L	AD
	AD7111T	† AD
	AD7111U	† AD
	AD7118T	† AD
	AD7118U	† AD
Attenuator, Digital (with loudness compensation switch), 0 to 88.5 dB Attenuation in 1.5 dB Steps	AD7110K	AD
	AD7118K	AD
	AD7118L	AD
Attenuator, Dual	LA2600	Sanyo
	LC7500	Sanyo
Audible Signal Device (generates two tone frequencies)	SAE0700	Siemens
Audio Amplifier (2 W mono)	TDA7233	SGS
Audio Level Detection System, Linear and logarithmic outputs	SSM2110	SSM
CDP Servo Control	**GL3630**	**GoldStar (2699)**
Compander, Low Voltage	NE575	◊ Signetics
Controls (loudness, treble, bass)	TDA4290-2	Siemens
Controls, Stereo, DC Operated	**TCA5550**	**Motorola (2946, 2948)**
	TDA1524	**Motorola (2946)**
	LM1035	National
	TDA1074A	Signetics
	TDA1524A	Signetics
DAC for Volume Control	M50601	Mitsubishi
	M50602	Mitsubishi
Digital Noise Source	MM5437	National
Distortion Suppressor	AH201-1	Analogic
	MP201A	Analogic
Distortion Suppressor, Dual	AH201-2	Analogic
Electronic Graphic Equalizer, Serial Control	TC9170	Toshiba
Electronic Graphic Equalizer, Up/Down	TC9169	Toshiba
Equalizer Amplifier	**GL5529**	**GoldStar (2699)**
Filter, Hearing Aid, High-pass.	LF580	Gennum
FM Front End	TDA7359	SGS
	TDA7361	SGS
Graphic Equalizer, Digitally Controlled	LMC835	National
Level Sensor, dbx (RMS)	μPC1253H2	NEC
Melody Circuit	SVM7910	S-MOS
	SVM7920	S-MOS
	SVM7930	S-MOS
	SVM7940	S-MOS
	SVM7950	S-MOS
	SVM7960	S-MOS
	SVM7970	S-MOS
	SVM7990	S-MOS
Motor Speed Controller for Direct Drive Turntables	TC9142	Toshiba
Music Voicing System	SSM2045	SSM
Music, Voltage Controlled Filter, Four Stage	SSM2040	SSM
	SSM2044	SSM
Music, Voltage Controlled Oscillator	SSM2033	SSM
Music, Voltage Controlled Transient Generator	SSM2056	SSM
Muting Circuit (switching noise suppressor)	TA7324	Toshiba
	TA7362	Toshiba
Noise Reduction, CX	HA12043	Hitachi
	HA12044	Hitachi
Noise reduction, DNR	LM832	National
Noise Reduction, Dolby	HA12045	Hitachi
	HA12046	Hitachi
	HA12047	Hitachi
	HA12048	Hitachi
	HA12058MP	Hitachi
	HA12088NT	Hitachi
	HA12091MP	Hitachi
	LM1121A	◊ National
	LM1121B	◊ National
	LM1121C	◊ National
	LM1131A	National
	LM1131B	National
	LM1131C	National
	LM1894	◊ National
	NE5240	Signetics
	NE645	Signetics
	NE646	Signetics
	NE649	Signetics
	NE650	Signetics
	TK10640	Toko
PLL Stereo Decoder	TEA5581	Signetics
Power Amplifier Driver	ICL8063C	GE/Intersil
	ICL8063M	† GE/Intersil
	MC3320	◊ Motorola
	LM391	National
Power Amplifier Driver, Dual	μPC1225	NEC
	STK3042	Sanyo
	STK3062	Sanyo
	STK3082	Sanyo
Power Amplifier Protector	HA12002	Hitachi
Power Amplifier, Single, >10 Watts	MB3720	Fujitsu
	MB3730	Fujitsu
	MB3731	Fujitsu
	HA13001	◊ Hitachi
	HA1384	Hitachi
	HA1388	Hitachi
	HA1392	Hitachi
	HA1393	Hitachi
	HA1396	Hitachi
	HA1397	Hitachi
	LM1875	◊ National
	LM2005	National
	μPC1188H	NEC
	μPC1230H2	NEC
	LA4460	Sanyo
	LA4461	Sanyo
	STK0030	Sanyo
	STK0040	Sanyo
	STK0050	Sanyo
	STK0055	Sanyo
	STK0059	Sanyo
	STK0060	Sanyo
	STK0070	Sanyo
	STK0080	Sanyo
	STK0150	Sanyo
	STK050	Sanyo
	STK058	Sanyo

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Audio Circuits (Cont'd)

Function	Device	Source
Power Amplifier, Single, >10 Watts (Cont'd)		
	STK070	Sanyo
	STK075	Sanyo
	STK077	Sanyo
	STK078	Sanyo
	STK080	Sanyo
	STK082	Sanyo
	STK083	Sanyo
	STK084	Sanyo
	STK086	Sanyo
	STK4021	Sanyo
	STK4023	Sanyo
	STK4025	Sanyo
	STK4372	Sanyo
	STK4392	Sanyo
	TDA2008	SGS
	TDA2009	SGS
	TDA2030	SGS
	TDA2030A	SGS
	TDA2040	SGS
	TDA1512	**Signetics (3096)**
	TDA2030	◊ Telefunken
	TDA1102	Thomson
	TDA1111	Thomson
	TDA2030	Thomson
	TA7237A	◊ Toshiba
	TA7268	Toshiba
Power Amplifier, Single, <5 Watts		
	CA3020	**† GE/RCA (2649)**
	CA3094	**† GE/RCA (2647)**
	GL386	**† GoldStar (2699)**
	MC13060	**Motorola (2946, 2959)**
	MC1454	Motorola
	MC1554	† Motorola
	LM2895	National
	LM380	National
	LM386	National
	LM388	National
	LM389	National
	LM390	National
	μPC1212	NEC
	μPC1213	NEC
	KA2201	Samsung
	KA2212	Samsung
	KA2213	Samsung
	LA4100	Sanyo
	LA4101	Sanyo
	LA4102	Sanyo
	LA4110	Sanyo
	LA4112	Sanyo
	LA4126	Sanyo
	LA4137	Sanyo
	LA4138	Sanyo
	LA4180	Sanyo
	LA4182	Sanyo
	LA4200	Sanyo
	LA4201	Sanyo
	LA4220	Sanyo
	LA4430	Sanyo
	TBA820	SGS
	TBA820M	SGS
	TDA1904	SGS
	TDA2822M	SGS
	TDA1011	Signetics
	TDA1013A	Signetics
	TDA1015	Signetics

(Continued)

Function	Device	Source
Power Amplifier, Single, <5 Watts (Cont'd)		
	ULN2280B	Sprague
	TCA830	Telefunken
	U410	Telefunken
	U411	Telefunken
	U412	Telefunken
	U413B	Telefunken
	U420	Telefunken
	TBA820	Thomson
	TA7140	Toshiba
	TA7207	Toshiba
	TA7313A	Toshiba
	TA7336	Toshiba
Power Amplifier, Single, 5–10 Watts		
	LM2002	National
	LM383	National
	LM383A	National
	LM384	National
	TDA2002	◊ National
	TDA2002A	◊ National
	TDA2003	◊ National
	μPC1238H/V	NEC
	μPC1241H	NEC
	μPC1242H	NEC
	μPC2002	NEC
	LA4140	Sanyo
	LA4230	Sanyo
	LA4250	Sanyo
	LA4420	Sanyo
	LA4422	Sanyo
	LA4440	Sanyo
	STK4017	Sanyo
	STK4019	Sanyo
	STK4332	Sanyo
	STK4352	Sanyo
	STK4362	Sanyo
	L149	SGS
	TBA810	SGS
	TDA1905	SGS
	TDA1908	SGS
	TDA1908A	SGS
	TDA1910	SGS
	TDA2002	SGS
	TDA2002A	SGS
	TDA2003	SGS
	TDA2006	SGS
	ULN2002A	SGS
	TDA1037	Siemens
	TDA1010A	Signetics
	TDA1020	Signetics
	TDA2611A	Signetics
	ULN3784B	Sprague
	TBA800	Telefunken
	TBA810	Telefunken
	TDA2003	Telefunken
	TDA2006	Telefunken
	TBA800	Thomson
	TBA810	Thomson
	TCA940	Thomson
	TDA2003	Thomson
	TDA2006	Thomson
	TA7205A	Toshiba
	TA7217A	Toshiba
	TA7222A	Toshiba
	TA7238	◊ Toshiba
Power Amplifier, Single, 5–10 Watts		
	LM386	Samsung

Function	Device	Source
Power Amplifier, Dual, >10 Watts		
	μPC2005	NEC
	STK437	Sanyo
	STK439	Sanyo
	STK441	Sanyo
Power Amplifier, Dual, <5 Watts		
	LM1877	◊ National
	LM1895	National
	LM1896	National
	LM2877	National
	LM2896	National
	LM377	National
	LM378	National
	μPC1277	NEC
	LA4120	Sanyo
	LA4125	Sanyo
	LA4125T	Sanyo
	TDA7050	**Signetics (3093)**
	ULN3750B	Sprague
	TEA2025	Thomson
	TA7215	Toshiba
	TA7230	◊ Toshiba
	TA7232	◊ Toshiba
	TA7233	◊ Toshiba
	TA7269	Toshiba
Power Amplifier, Dual, 5–10 Watts		
	HA13108	Hitachi
	HA1377	Hitachi
	HA1394	Hitachi
	LM2878	National
	LM2879	National
	μPC1185HC	NEC
	KA2206	Samsung
	KA2209	Samsung
	KA2210	Samsung
	STK433	Sanyo
	STK435	Sanyo
	STK443	Sanyo
	STK457	◊ Sanyo
	STK459	◊ Sanyo
	STK463	◊ Sanyo
	STK465	◊ Sanyo
	TDA2004	SGS
	TDA2005	SGS
	TDA1510	**Signetics (3094)**
	TEA2021	Thomson
	TEA2024	Thomson
	TA7227	Toshiba
	TA7240A	◊ Toshiba
	TA7241A	◊ Toshiba
	TA7252	Toshiba
	TA7263	Toshiba
	TA7264	Toshiba
	TA7270	Toshiba
	TA7271	Toshiba
Preamplifier	MA106	AnalogSys
	ZN459	† Ferranti
	ZN459C	Ferranti
	ZN459CP	Ferranti
	ZN460	† Ferranti
	ZN460C	Ferranti
	ZN460CP	Ferranti
	CA3080	**GE/RCA (2646)**
	CA3080A	**† GE/RCA (2646)**
	HA12017	Hitachi
	LM1837	National
	LM3080	National
	LM3080A	National
	μPC1023	NEC

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Consumer Circuits (Cont'd)

Audio Circuits (Cont'd)

Function	Device	Source
Preamplifier (Cont'd)		
	μPC1024	NEC
	μPC1032	NEC
	μPC1158H2	NEC
	μPC566	NEC
	SL561B	Plessey
	SL561C	Plessey
	LA3110	Sanyo
	LA3120	Sanyo
	LA3130	Sanyo
	LA3150	Sanyo
	LA3170	Sanyo
	LM1837	SGS
	TDA3410	◊ SGS
	TDA3420	◊ SGS
	TA7063	Toshiba
	TA7120	Toshiba
	TA7122B	Toshiba
	TA7129A	Toshiba
	TA7136A	Toshiba
	TA7322	Toshiba
Preamplifier, Microphone		
	SSM2011	SSM
	SSM2015	SSM
	SSM2016	SSM
Preamplifier, Playback		
	TK10541	◊ Toko
Preamplifier with ALC		
	KA2220	Samsung
Preamplifier, Dual		
	XR4739	Exar
	XR4739M	† Exar
	μA739C	Fairchild
	GL5501	**GoldStar (2699)**
	LM1303	National
	LM1897	National
	LM381	National
	LM382	National
	LM387	National
	KA1222	Samsung
	KA2222	Samsung
	KA2227	Samsung
	LA3115	Sanyo
	LA3122	Sanyo
	LA3133	Sanyo
	LA3155	Sanyo
	LA3160	Sanyo
	LA3161	Sanyo
	L387	SGS
	TDA2320A	SGS
	NE542	Signetics
	TDA1522	Signetics
	TA7325	Toshiba
	TA7359	† Toshiba
	TA7658	Toshiba
	TA7685	Toshiba
	TA7709	Toshiba
Preamplifier, Dual with ALC		
	KA2224	Samsung
	KA2225	Samsung
	KA2226	Samsung
	KA2227	Samsung
Preamplifier, Quad		
	XR4212	Exar
Preamplifier, Two-Channel		
	TK10360	Toko
	TK10411	Toko
Preamplifier, Two-Channel, Auto Reverse		
	TK10570	Toko
Preamplifier, Two-Channel Recording, ALC		
	TK10531	◊ Toko
Preamplifier, Two-Channel Recording and Playback		
	TK10562	Toko
Receiver System		
	TDA2220	SGS
	TDA7220	SGS
Signal Delay	MN3001	Panasonic
	MN3010	Panasonic
	MN3204	Panasonic
	MN3207	Panasonic
Sound Generator		
	AY3-8910A	GIM
	AY3-8912A	GIM
Sound Generator Controller for Microprocessor-Based Systems	NCR8489	NCR
	NCR8496	NCR
	SN76494	TI
Sound Generator, Programmable		
	AY3-8913	GIM
Speech Processor		
	SP0256A	GIM
	SP0264	GIM
Speech Processor, supports Allophone Synthesis		
	SP0256A-AL2	GIM
Speech Synthesis Processor		
	LR3681	Sharp
Stereo Sound Control System		
	HA12412	Hitachi
	MC1355	Motorola
Stereo, Volume, Bass, Treble, Balance	**TCA5550**	**Motorola (2946, 2948)**
	TDA1524	**Motorola (2946)**
Tone Control, Serial		
	TC9156	Toshiba
Tone Control System, Stereo	**TDA1524A**	**Motorola (2946)**
Tone Control, Up and Down		
	TC9155	Toshiba
Tone Controller w/ Source Inputs, Active, I²C		
	TEA6300	◊ Signetics
VDP Time Base Error Correction	**GL3640**	**GoldStar (2699)**
Voice Recognition/Synthesis Circuit		
	SP1000	GIM
Voice Recording/Reproducing (using delta-modulation with external DRAM, for answering machines, message alarm clocks, and talk-back toys)		
	STBC1	GIM
Voice Synthesizer	**UM5000**	**UMC (4329)**
Voltage Controlled Amplifier, dbx		
	μPC1252H2	NEC
Voltage Controlled Oscillator for Electronic Music		
	SSM2038	SSM
Volume Balance Tone Control, Dual	**GL3230**	**GoldStar (2699)**
Volume Control, Serial		
	TC9154	Toshiba
Volume Control System, Automatic		
	HA12039	Hitachi
Volume Control, Up and Down		
	TC9153	Toshiba
Dual DC Operated Tone/Volume/Balance Circuit		
	LM1036	National
	TA7630	Toshiba
Dual DC Operated Tone/Volume/Balance Circuit with Stereo Enhancement		
	LM1040	National

Automotive Circuits

Function	Device	Source
Alternator Voltage Regulator		
	L485	◊ SGS
Automotive Lamp Monitor		
	ULN2435A	Sprague
	ULN2445A	Sprague
	ULN2455A	Sprague
Car Direction Indicator		
	L486	SGS
Clock	μPD6529	◊ NEC
	μPD848	NEC
Clock with Vacuum Fluorescent Display Drivers		
	SCL5233	Sprague
Electronic Ignition Control, Magnetic		
	L482	◊ SGS
	L484	◊ SGS
	L497	◊ SGS
Engine Ignition Control		
	6001Z	NCM
High Energy Ignition Circuit		
	MC3334	Motorola
High Energy Ignition Circuit (Flip-Chip)		
	MCCF3334	Motorola
Ignition Circuit	U2029	Telefunken
	U2128B	Telefunken
Injector Drive Controller		
	LM1949	National
Injector Driver Control		
	L583	SGS
Lamp Flasher	U243	Telefunken
Low Coolant Detector		
	ULN2429A	Sprague
Sealed Lead-Acid Battery Charger	**UC2906**	**Unitrode (3324)**
Solenoid Driver		
	MC3484V2	Motorola
	MC3484V4	Motorola
Speed Control	CA3228	GE/RCA
Speedometer and Mileage Indicator		
	SAY115	ITT
Switch, Engine RPM		
	MC3344	Motorola
Traffic Information Broadcast Decoders		
	UAA1009	ITT
Voltage Regulator		
	TCA700	ITT
	MC3325	Motorola
	μPC2605H	NEC
	μPC2610H	NEC
	TEA7034	Thomson
Quad Driver, See also Interface—Memory and Peripheral Drivers		
	DS3656	National

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source
Automotive Circuits (Cont'd)		
20-Watt Automotive Power Amplifier	LM2005	National
Calculator Circuits		
Calculator	KS6022	Samsung
	KS6024	Samsung
Calculator, Printing	HD38510	Hitachi
	HD38513	Hitachi
	HD38546	Hitachi
	HD38550	Hitachi
	HD38560	Hitachi
	HD38570	Hitachi
	HD38580	Hitachi
	HD38585	Hitachi
Camera Circuits		
Exposure Control	CS102	Cherry
	CS122	Cherry
Strobe Light Controller	U2000	Telefunken
Video Camera Encoder	HA11720	◊ Hitachi
CB Radio Circuits		
Audio Amplifier, 7 W	TBA810CB	SGS
Channel Selector/Display Driver	LC7181	Sanyo
	LC7184	Sanyo
	LC7191	Sanyo
FM IF System	HA12442V	Hitachi
Programmer, for PLL	LC7120	Sanyo
Synthesizer Set, 40 Channel, BCD Channel Setting	LC7131	Sanyo
	LC7135	Sanyo
Clock/Watch Circuits		
Alarm Clock	HD38980	Hitachi
	HD38991C	Hitachi
	HD43115	Hitachi
	HD43890	Hitachi
	MM53108	◊ National
	MM5387	National
	MM5402	National
	MM5405	National
	μPD5388	NEC
	μPD833	NEC
	MSM5550	OKI
	KS5171	Samsung
	KS5204	Samsung
	KS5205	Samsung
	KS5206	Samsung
	KS5207	Samsung
	LM8360	Sanyo
	LM8361	Sanyo
Alarm Clock Radio	MM53113	◊ National
	MM53124	National
	MM5455	◊ National
	MM5456	◊ National
	MM5457	◊ National
	MM5462	◊ National

(Continued)

Function	Device	Source
Alarm Clock Radio (Cont'd)	MM5463	◊ National
	MM5466	National
	LM8363	Sanyo
	LM8364	Sanyo
Analog Clock with Electronic Melody Generator	LR34651	Sharp
Analog Clock (4.19 MHz crystal)	LR3428	Sharp
	LR3429	Sharp
Analog Clock (32 KHz crystal)	LR3464	Sharp
Clock Automotive, with Vacuum Fluorescent Display Drivers	MSM5557	OKI
	SCL5458	◊ Sprague
	SCL5466	◊ Sprague
	SCL5467	◊ Sprague
	SCL5604	Sprague
Clock Circuits (See Also: Digital—CMOS Oscillators/Dividers. Linear—Other Linear Devices—Oscillator)	HD44010	◊ Hitachi
	SAJ300	ITT
	MM53110	◊ National
	μPD1962	NEC
	μPD1963	NEC
	μPD2006	NEC
	MSM5509	OKI
	MSM5528	OKI
	MSM5558	OKI
	SCL5233	Sprague
	SCL5238	Sprague
	SCL5455	◊ Sprague
	SCL5463	◊ Sprague
	SCL5468	◊ Sprague
	SCL5474	Sprague
	SCL5601	Sprague
Clock, RF Counter	MSM5523	OKI
	MSM5525	OKI
Digital Tuner	MM58142	National
LCD Digital Clock	LR3441	Sharp
Melody Alarm Circuit	2009Z	NCM
Melody Circuit, for Clocks	KS5310A	Samsung
	KS5310B	Samsung
	KS5310C	Samsung
	KS5311A	Samsung
	KS5311B	Samsung
	KS5311C	Samsung
	KS5313	Samsung
	KS5314	Samsung
	KS5340	Samsung
	KS5380	Samsung
Watch, Analog (See also Digital—CMOS Oscillators/Dividers)	ICM7047	GE/Intersil
Watch (LCD), Digital	MS680	RTC
	MS681	RTC
	MS682	RTC
	MS683	RTC
	KS5198	Samsung
	KS5199A	Samsung
	LC5621	Sanyo

Function	Device	Source
Watch (LCD), Digital Chronograph	LC5613	Sanyo
Watch (LCD), Digital Chronograph/Alarm	KS5189	Samsung
Watch (LCD), Digital with Alarm	KS5194	Samsung
Music		
Accompaniment Generator for Chords, Arpeggi, Keyboard or Pedalboard Bass	M151	SGS
Digital-to-Audio Converter	PCM53	◊ Burr-Brown
	PCM54	Burr-Brown
	PCM55	Burr-Brown
	PCM56	Burr-Brown
	PCM58	Burr-Brown
Digitally Controlled Analog Music Voice, Nine Octave	SSM2060	SSM
Electronic Attenuator	XR13600	◊ Exar
	MC3340	**Motorola (2946)**
Frequency Divider, 6-Stage	LM3216	Sanyo
Frequency Divider, 7-Stage	M740	SGS
	M741	SGS
	M747	SGS
Melody Generator (automatic)	LR34611	Sharp
Melody Generator (by piezo-electric buzzer)	LR34621	Sharp
Monophonic Synthesizer	M110	SGS
Noise Generator	MM5837	National
Polyphonic Sound Generator	M112	SGS
Rhythm Circuit	LM8372	Sanyo
	LM8471	◊ Sanyo
	LM8972	◊ Sanyo
Sound Generator, stereo, for Music and Sound Effects	SAA1099	Signetics
Tone Generator	M082	SGS
	M082AA	SGS
	M083	SGS
	M083AA	SGS
	M086	SGS
	M086AA	SGS
Top Octave Generator	LM8071	Sanyo
	MK50240	Thomson
Toy Organ	SAA1900	ITT
	KS5390	Samsung
Dual Voltage Controlled Amplifier	SSM2022	SSM
Radio Circuits, AM		
AM IF and Detector, Double Conversion	SL6700A	Plessey
	SL6700C	Plessey
AM Receiver for AM Stereo	TDA4010	Siemens

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Consumer Circuits (Cont'd)

Function	Device	Source
Radio Circuits, AM (Cont'd)		
AM/SW Tuner	5054	Siemens
Amplifier with Demodulator and Volume Control	TDA1048	Siemens
	TDA1048	Thomson
CQUAM AM Stereo Decoder	**MC13020**	◊ **Motorola (2946)**
Frequency Synthesizer	DS8910	◊ National
High-Level Mixer	SL6440C	Plessey
Mixer, IF, AGC	ULN2243A	Sprague
Noise Reduction System	HA12429	Hitachi
Radio System for Electronically Tuned Radios	LM1863	National
Receiver System	ZN415E	Ferranti
	ZN416E	Ferranti
	CA3088	† GE/RCA
	HA1197	Hitachi
	HA1199	Hitachi
	HA12432	Hitachi
	HA12440	Hitachi
	MC13041	**Motorola (2939, 2946, 2959)**
	μPC1215V	NEC
	μPC1216	NEC
	μPC1248	NEC
	TCA440	Siemens
	TDA4001	Siemens
	TDA1072	Signetics
	TEA5550	Signetics
	ULN3839A	Sprague
	TDA1072	Telefunken
	TA7641B	Toshiba
Receiver System (AM radio circuit)	ULN3841A	Sprague
RF, IF Detector	LM3820	National
RF, IF, Detector, AGC	ZN414Z	Ferranti
SSB Detector	SL623C	Plessey
Stereo Decoder	**MC13022**	◊ **Motorola (2946, 2959)**
	ULN3820A	Sprague
Stereo Decoder, C-QUAM (tuning stabilized)	**MC13021**	◊ **Motorola (2946)**
Stereo Demodulator	HS3604	Harris
Tuner for Car Radio	HA12427AV	Hitachi
	HA12428	Hitachi
	TA7402	Toshiba
	TA7616	Toshiba
Tuner System	μPC1243	NEC
	LA1130	Sanyo
	LA1240	Sanyo
	LA1245	◊ Sanyo
Radio Circuits, AM/FM		
AM/FM IF Amplifier with AM Detector	KA1241	Samsung
AM/FM Phase and Signal Locked Loop (PSL²) Tuner	LC7210	◊ Sanyo
AM/FM PLL Synthesizer Tuner	LC7220	◊ Sanyo
	LC7225	◊ Sanyo
AM/FM/SW Frequency Counter	MSM5526	OKI
AM/FM System for Cassette Tape Recorder	HA12430	Hitachi
AM/FM with FM Stereo Decoder	TDA4110	Siemens
AM Tuner/FM IF System with Quadrature Detector	μPC1222	NEC
AM Tuner with AM/FM IF	KA2247	Samsung
	KA2248	Samsung
Broadband Demodulator System (Configurable for AM or FM Based Signals)	LM1211	National
Digital Tuning System	TC9140	Toshiba
	TC9146	Toshiba
	TC9147	Toshiba
Digital Tuning System, 4-bit microcomputer	MB88561	Fujitsu
	MB88562	Fujitsu
Display Driver for Receiving Frequency Digital Display	TD6301A	Toshiba
FM IF System, Low Power	**NE614**	**Signetics (3104)**
FM/SW/MW/LW Frequency Display	LC7253	Sanyo
	LC7257	Sanyo
	LC7258	Sanyo
Frequency Counter; for 3 1/2 Digit VF Displays	MSM5525	OKI
IF Amplifier	LM1868	National
	LA1201	Sanyo
	U2416	Telefunken
	TA7060A	Toshiba
	TA7061B	Toshiba
IF, Narrowband (FM/FSK)	**MC3367**	**Motorola (2939, 2959)**
	MC3371	**Motorola (2939, 2959)**
IF System	HA12413	Hitachi
IF System (low supply voltage)	TA7640A	Toshiba
	TA7757	◊ Toshiba
IF System (3 volt use)	TA7687A	Toshiba
Interprogram Sensor (one program skipping)	TA7341	Toshiba
Mixer (to 200 MHz)	TBB042	Siemens
PLL Tuning Circuit (TV tuning system, prescaler)	**μAA4802**	**Motorola (2948)**
Radio Frequency Display	MM5430	National
Radio Frequency Display Driver and Clock	T1400	Toshiba
Receiver System	**GL5901**	**GoldStar (2699)**
	LM1866	National
Receiver System (Cont'd)	LA1210	Sanyo
	TDA1220A	SGS
	TDA1220B	SGS
	TDA1220L	SGS
	TEA5570	Signetics
	ULN2204A	Sprague
	ULN2241A	Sprague
	ULN3803A	Sprague
	TDA1083	Telefunken
	U416	Telefunken
	U417	Telefunken
	U418	Telefunken
	KB4454	Toko
	TK10311	Toko
	TK4419A	Toko
	TA7613A	Toshiba
Receiving Frequency Display Driver for DTS-6/8 Digital Tuning System	TC9158	Toshiba
	TC9159	Toshiba
Search Tuning	TDA1580	Signetics
Sound (IF detector, dc volume control, preamplifier)	**TBA120C**	**Motorola (2948)**
Stereo/Bridge AF Amplifier (class B)	TDA4935	Siemens
Stereo (volume, bass, treble, and balance control)	**MC3340**	**Motorola (2946)**
Superheterodyne Receiver (Mobile Radio, Radio Pagers)	S422	Siltronics
Tone Control System, Stereo	**TDA1524A**	**Motorola (2946)**
Transmitter, FM/FSK	**MC2831A**	**Motorola (2939, 2959)**
	MC2833	**Motorola (2939)**
Tuner (car radios and home receivers)	TUA1574	Siemens
Tuner Control	LC7200	◊ Sanyo
	LC7201	◊ Sanyo
	LC7203	◊ Sanyo
	LC7207	◊ Sanyo
Tuner, PLL	SDA2120	Siemens
Tuner, Radio Frequency Display and Clock	LC7250	Sanyo
Tuning Synthesizer	SAA1057	Signetics
Radio Circuits, FM		
FM IF and PLL Detector with RF Mixer	SL6691C	Plessey
FM IF and Quadrature Detector with RSSI (received signal strength indicator)	SL6652C	Plessey
	SL6653C	Plessey
FM Noise Canceller with 19kHz Compensator	KB4436	◊ Toko
Front End	HA12438AFP	Hitachi
	KA2249	Samsung
	TDA1574	Signetics
	TA7358	Toshiba
Front End for Headphone Audio	TK10630	Toko

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Radio Circuits, FM (Cont'd)

Function	Device	Source
Front End, Low Voltage		
	TDA7211	SGS
	TDA7212	SGS
	TDA7215	◊ SGS
Front End Timer		
	TDA1094	Telefunken
	TA7335	Toshiba
Front-End, VHF		
	U4062B	Telefunken
IF Amplifier	**CA3002**	**† GE/RCA (2647)**
	CA3005	**† GE/RCA (2647)**
	CA3006	**† GE/RCA (2647)**
	CA3012	† GE/RCA
	CA3028	**† GE/RCA (2647)**
	MC1350	**Motorola (2948)**
	MC3361	Samsung
	LA1111	Sanyo
	LA1222	Sanyo
	TDA1576	Signetics
	TEA5560	Signetics
	TEA6000	Signetics
	ULN2243A	Sprague
	TA7302	Toshiba
IF Amplifier and Detector		
	TDA4210	Telefunken
IF Amplifier/Demodulator, Dual, for dual sound		
	TBA229-2	Siemens
IF Amplifier/Detector		
	CA2111A	† GE/RCA
	CA3013	GE/RCA
	CA3014	† GE/RCA
	CA3065	◊ GE/RCA
	CA3075	◊† GE/RCA
	CA3089	† GE/RCA
	CA3189	GE/RCA
	CA3209	GE/RCA
	CA3215	GE/RCA
	HA11225	Hitachi
	HA12411	Hitachi
	HA12412	Hitachi
	MC1355	Motorola
	MC1357	Motorola
	MC1358	Motorola
	LM1865	National
	LM3011	National
	LM3089	National
	LM3189	National
	LM3361	National
	μPC1028	NEC
	μPC1245	NEC
	TBA750	Plessey
	KA2243	Samsung
	LA1140	Sanyo
	LA1150	Sanyo
	LA1230	Sanyo
	LA1231N	Sanyo
	TCA3089	SGS
	S041	Siemens
	TBA120	Siemens
	TBA129-2	Siemens
	TDA1047	Siemens
	CA3089	◊ Signetics
	CA3089D2	Signetics
	NE604	**Signetics (3103)**
	SA604	† Signetics
	TBA120U	Signetics

(Continued)

Function	Device	Source
IF Amplifier/Detector (Cont'd)		
	ULN2111A	Sprague
	TBA120	Telefunken
	TDA1093	Telefunken
	U414	Telefunken
IF Amplifier/Detector and Multipath Detector		
	TDA4210-3	Siemens
IF Amplifier, Narrow Band		
	MC3359	**◊ Motorola (2939, 2959)**
	MC3361	**Motorola (2939, 2959)**
	IR3N06	Sharp
	ULN3859A	Sprague
	ULN3862A	Sprague
IF Amplifier, PLL, Squelch, Narrow Band		
	SL6640	Plessey
	SL6690	Plessey
	SL6691	Plessey
IF Multiplex System for Headphone Audio		
	TK10600	Toko
	TK10710	Toko
IF System	LA1235	Sanyo
	LA2300	Sanyo
	TCA3189	◊ SGS
	TK10420	Toko
	TK10480	Toko
	TA7303	Toshiba
IF System, FM	LM2065	National
If System, for Manually Tuned Radios		
	LM1965	National
IF System, Low Voltage/Power		
	LM3361A	National
Interference Absorption Circuit		
	TDA1001B	Signetics
LED Tuning Indicator		
	LB1450	Sanyo
	LB1473	Sanyo
Mixer, IF, AGC System		
	LA1160	Sanyo
Mixer, IF Amplifier		
	ULN2243A	Sprague
Modulator Circuit (VCO/modulator, 1.4 to 14 MHz)		
	MC1376	Motorola
Multiplexer, PLL		
	HA12016	Hitachi
	HA12026	Hitachi
	KB4409	Toko
	KB4424A	◊ Toko
	KB4437	◊ Toko
	KB4448	Toko
	TK10610	Toko
Multiplexer, PLL for Headphone Audio		
	TK10280	◊ Toko
	TK10283	◊ Toko
Noise Canceller		
	HA11219	Hitachi
	μPC1176C	NEC
	LA2100	Sanyo
	LA2101	Sanyo
	LA2110	Sanyo
Prescaler (for digital tuning)		
	TD6104	Toshiba
Radio Circuit, FM, Single Chip		
	TDA7021T	Signetics

Function	Device	Source
Radio Receiver, FSK Data Transmission		
	SM450	Siltronics
Receiver for Cellular Radio		
	S412	Siltronics
Receiver Subsystem, Dual Conversion		
	MC3362	**Motorola (2939, 2959)**
	MC3363	**Motorola (2939, 2959)**
Receiver System		
	TBB1469	Siemens
	TBB2469	◊ Siemens
	TBB469	Siemens
	TDA7000	**Signetics (3107)**
	TDA7010T	**Signetics (3108)**
	KB4420B	Toko
	TK10350	Toko
Receiver System, Direct Conversion, (Two-chip set)		
	S408	Siltronics
	S410	Siltronics
Receiver System with Squelch and Scan Control		
	MP5071	MicroPwr
	MC3357	**Motorola (2939, 2959)**
Receiver System (Two-chip set)		
	S404	Siltronics
	S406	Siltronics
RF/IF Amplifier		
	CA3127	**GE/RCA (2648)**
	TBA120U	Signetics
Stereo, AF Signal Processing (for TV sets)		
	TDA6220	Siemens
Stereo Decoder		
	CA3195	GE/RCA
	HA1196	Hitachi
	TCA4500A	**Motorola (2946)**
	LM1310	National
	LM1800	National
	LM1870	National
	LM4500A	National
	μPC1026	NEC
	μPC1197	NEC
	μPC1227	NEC
	KA2261	Samsung
	KA2263	Samsung
	KA2264	Samsung
	LA3301	◊ Sanyo
	LA3350	Sanyo
	LA3361	Sanyo
	LA3365	Sanyo
	LA3370	Sanyo
	LA3375	Sanyo
	LA3380	Sanyo
	LA3381	Sanyo
	LA3390	Sanyo
	TEA1330	◊ SGS
	TCA4500A	Siemens
	μA758	Signetics
	LM1870	Signetics
	TDA1578A	Signetics
	TEA5580	Signetics
	ULN3809A	Sprague
	ULN3823A	Sprague
	SN76115	TI
	TA7157A	Toshiba
	TA7342	Toshiba
	TA7401A	Toshiba

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Consumer Circuits (Cont'd)

Radio Circuits, FM (Cont'd)

Function	Device	Source
Stereo Decoder, PLL, Low Voltage	TDA7040T	Signetics
Tuner	TDA1062S	Telefunken
Tuning Circuit w/ Prescaler, FLL	TDA8400	Signetics
VHF Receiver, Front End	MC13062	Motorola

Remote Control Circuits

Function	Device	Source
Amplifier for IR systems	U2501B	Telefunken
	U3083	◊ Telefunken
Amplifier-Detector	**GL3273**	**GoldStar (2700)**
	GL3274	**GoldStar (2700)**
	MC3373	**Motorola (2948)**
	KA2181	Samsung
	KA2182	Samsung
	KA2183	Samsung
Driver, for IR Transmitter Diodes	U427	Telefunken
	U428	Telefunken
Infrared Remote Control System	SDA2008	Siemens
Preamplifier	TA7344	Toshiba
Preamplifier, for Infrared Control	μPC1473	NEC
	μPC1474	NEC
	μPC1475	NEC
	TDA2320	SGS
Preamplifier, for Ultrasonic Control	TDA3047	Signetics
Radio Control, Programmable 7-Channel RC Decoder	NE5045	Signetics
Radio Control, Programmable 7-Channel RC Encoder	NE5044	Signetics
Receiver, Infrared	μPD1937	NEC
	μPD1987	NEC
	TDA3047	Signetics
	TDA3048	Signetics
Receiver, PPM	UAA4000	Thomson
Remote Control Amplifier, Infrared	CA3237	GE/RCA
Remote Control, Infrared	TDA8160	SGS
	TDA8162	SGS
	SAA3004	Signetics
	SAA3027	Signetics
	SAA3028	Signetics
Remote Control Receiver	LR3715M	Sharp
	LU59001	Sharp
	TA7657	Toshiba
Remote Control Receiver Pre-Amplifier	IR3T20	Sharp
	IR3T21	Sharp
Remote Control Transmitter	TA7333	Toshiba
RF Amplifier/Mixer	**CA3005**	**† GE/RCA (2647)**
	CA3006	**† GE/RCA (2647)**
	CA3049	**† GE/RCA (2647, 2649)**
Transceiver (ultrasonic)	LM1812	National
Transmitter, Infrared	**GM3043**	**GoldStar (2700)**
	GM3044	**GoldStar (2700)**
	MM53226	National
	μPD1913	NEC
	μPD1943	NEC
	μPD1986	NEC
	μPD6102	◊ NEC
	SDA2208-2	Siemens
	SAA3006	Signetics
Transmitter, Infrared PCM	MC14497	◊ Motorola
Transmitter, PPM	UAA4009	Thomson
Transmitter/Receiver (encoder/decoder), 2 device sets	SAA1250	† ITT
	SAA1251	ITT
	SAA1272	ITT
	SAA1350	† ITT
	SAA1351	ITT
	MC145026	◊† Motorola
	MC145027	Motorola
	MC145028	◊ Motorola
	LM1871	National
	LM1872	◊ National
	MM58250	◊† National
	MSL9362	OKI
	MSL9363	OKI
	ML920	Plessey
	ML922	Plessey
	ML923	Plessey
	ML924	Plessey
	ML926	Plessey
	ML927	Plessey
	ML928	Plessey
	ML929	Plessey
	SL490	◊ Plessey
	SAF1032	Signetics
	SAF1039	Signetics
	SCL5284	† Sprague
	SCL5285	† Sprague
	U1334	Telefunken
	U3034	Telefunken
	U3036	Telefunken
	U3037	Telefunken
	U3038	Telefunken
	U3043	Telefunken
	U318	Telefunken
	U321	† Telefunken
	U327	† Telefunken
	U334	Telefunken
	U336	Telefunken
	U337	◊ Telefunken
	U338	◊ Telefunken
	TC9132	† Toshiba
	TC9134	Toshiba
	TC9148	† Toshiba
	TC9149	Toshiba
	TC9150	Toshiba
Transmitter/Receiver, Preamplifier	TEA1009	ITT
6-channel Address-D/A Control Circuit	U3042	Telefunken

Speech Circuits

Function	Device	Source
Dedicated Mask ROM for Voice Synthesis (128K)	**T6684**	**Toshiba (3306)**
Dedicated Mask ROM for Voice Synthesis (64K)	**T6772**	**Toshiba (3306)**
Delta Modulation System, Continuously Variable Slope	HC55536	Harris
	HC55564	◊ **Harris (2768)**
Read-Only Memory	TSP60C20	TI
Recording/Reproduction (SRAM/EPROM)	**TC8830F**	**Toshiba (3306)**
Recording/Reproduction (1 MB DRAM type)	**TC8831F**	**Toshiba (3306)**
Speech Analysis and Synthesis LSI	T6831	Toshiba
Speech Analyzer/Synthesizer, ADPCM	MSM5218	OKI
Speech Encoding A/D Converter	**PCM75**	**Burr-Brown (2541)**
Speech Encoding System	OM8010	Signetics
	OM8011	Signetics
Speech Evaluation Kit	DT1051	National
	DT1054	National
Speech Generator	UAA1003	ITT
	UAA1103	ITT
Speech Interface Control Logic	SPR000	GIM
Speech Processor	TSP50C50	TI
Speech Recognition	MSM6253	OKI
Speech Recognition, 3-device set	μPD7761	NEC
	μPD7762	NEC
	MC4760	NEC
Speech Scrambler/Descrambler	COM9046	SMC
Speech Synthesis (Male/Female)	PCF8200	Signetics
Speech Synthesis Processor	SP0256A	GIM
	SP0264	GIM
	DT1000	National
	MM54104	National
	SC01	Votrax
Speech Synthesis System, Basic Numbers Kit	DT1052	National
	DT1055	National
Speech Synthesis System, Standard Vocabulary Kit	DT1050	National
	DT1053	National
	DT1056	National
	DT1057	National
Speech Synthesis, uses format data	μPD7752	NEC
Speech Synthesizer	SSI SC-01	SiliconSys
Speech Synthesizer, Microprocessor and Memory	TSP50C40A	TI
	TSP50C41	TI

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Speech Circuits (Cont'd)

Function	Device	Source
Speech Synthesizer, Microprocessor and Memory (Cont'd)		
	TSP50C42	TI
	TSP50C43	TI
	TSP50C44	TI
Speech Synthesizer, ADPCM		
	μPD7751	NEC
	MSM5205	◊ OKI
	MSM5248	OKI
	MSM6202	◊ OKI
	MSM6212	◊ OKI
	MSM6243	◊ OKI
	L6212	SGS
Speech Synthesizer, Voice, Music and Sound Effects		
	SSI263A	SiliconSys
	SC02	Votrax
Synthesized Speech Custom Masked ROM		
	TSP6100	TI
Voice Recognition LSI		
	T6658A	**Toshiba (3306)**
Voice Recording/Reproducing LSI		
	T6668	**Toshiba (3306)**
Voice Recording/Reproducing (using delta-modulation with external DRAM, for answering machines, message alarm clocks, and talk-back toys)		
	STBC1	GIM
Voice Synthesis LSI, Single Chip ADM		
	T6667	**Toshiba (3306)**
Voice Synthesis Processor		
	TSP5110A	TI
	TSP5220C	TI
Voice Synthesizing LSI		
	T6721A	◊ **Toshiba (3306)**
	T6803	**Toshiba (3306)**

Tape Recorder Circuits, Audio

Function	Device	Source
Amplifier System (for cassette recorders)		
	TA7738	Toshiba
Amplifier, with AGC, for Recorders		
	TA7137	Toshiba
	TA7137-ST	Toshiba
Audio System	LM1818	National
Auto Reverse and Auto Eject Plunger Driver		
	TD6304A	Toshiba
	TD6308A	Toshiba
	TD6309	Toshiba
Automatic Cuing Circuit		
	LC7510	Sanyo
	LC7512	Sanyo
Automatic Music Selection		
	TC9165	Toshiba
	TC9167	Toshiba
Automatic Music Selection, Index Scan		
	TC9166	Toshiba
Automatic Program Search		
	TC9138A	Toshiba
	TC9139A	Toshiba
Broadband Compander		
	U401	Telefunken
	U407	Telefunken
	U408	Telefunken
Controller (mode change, absence recording)		
	TC9121	Toshiba
Deck Control System		
	TK11020	Toko
IC Switch (cassette)		
	TC9143	Toshiba
	TC9144	Toshiba
Motor Speed Control (automatic stop, dc manual stop, biasing and erasing oscillator)		
	TDA7770	SGS
Motor Speed Control, Stop, Pause, Cassette Ejection		
	TDA7270	◊ SGS
Power Amplifier (cassette)		
	TA7283	Toshiba
Power Amplifier (minicassette)		
	TA7331	Toshiba
Preamplifier, for auto-reversing systems		
	LM1837	National
	LM1837	SGS
Preamplifier, Low-Noise Dual, for Autoreverse Car Stereo	TA7405	Toshiba
Preamplifier with ALC		
	LA3201	Sanyo
	LA3210	Sanyo
	TDA2054	SGS
Preamplifier with ALC (cassette)		
	TDA1054M	SGS
Preamplifier with ALC (minicassette)		
	TA7330	Toshiba
Preamplifier with ALC, Dual		
	TA7668B	Toshiba
Recording and Playback System		
	HA12051	Hitachi
Tape Counter	LM8523	Sanyo
Tape Deck Amplifier System		
	TA7663	Toshiba
Tape Deck Amplifier, Dual Channel		
	TA7639	Toshiba
Tape Play System for Stereo Headphones		
	HA12052CFP	Hitachi
Voice Recording/Reproducing (using delta-modulation with external DRAM, for answering machines, message alarm clocks, and talk-back toys)		
	STBC1	GIM
Single-Key On-Tape Program Selector		
	HA12054	Thomson
Dual Preamplifier for Auto-Reverse Car Stereo		
	TA7705	Toshiba

Tape Recorder Circuits, Video

Function	Device	Source
Amplifier, Recording/Playback		
	U4100	◊ Telefunken
Compandor, DNS		
	U4200	Telefunken
FM Limiter	HA11703	◊ Hitachi
Slow/Still Motion Control		
	GL3667	**GoldStar (2699)**
Switchable Amplifier		
	U252	Telefunken
VCR Audio Play/Record		
	GL3615	**GoldStar (2699)**
16-Channel Precision Timer/Driver		
	CD22401	GE/RCA

Television Circuits

Function	Device	Source
Microprocessor Interface		
	M206	SGS
A-D Converter 8-Bit Real Time		
	7532	OEI
AFT System	LA1364	Sanyo
AGC Amplifier for Direct Broadcast Satellite TURO Receiver	μPC1476	NEC
Auto Focus	RF3L06	Panatech
Bilingual Signal Processor		
	GL3813	◊ **GoldStar (2699)**
Cable TV Channel Processor		
	SDA2110	Siemens
Camera Sync. Generator		
	3262A	Fairchild
	3262B	Fairchild
	ZNA134E	Ferranti
	ZNA134J	† Ferranti
	HD44007A	◊ Hitachi
	S178A	Siemens
CATV Amplifiers (hybrid)		
	BGD102	Amperex
	BGD102E	Amperex
	BGD104	Amperex
	BGD104E	Amperex
	BGD502	◊ Amperex
	BGD504	◊ Amperex
	BGY50	Amperex
	BGY51	Amperex
	BGY52	Amperex
	BGY53	Amperex
	BGY54	Amperex
	BGY54A	Amperex
	BGY55	Amperex
	BGY55A	Amperex
	BGY56	Amperex
	BGY57	Amperex
	BGY58	Amperex
	BGY58A	Amperex
	BGY584	◊ Amperex
	BGY584A	◊ Amperex
	BGY585	◊ Amperex
	BGY585A	◊ Amperex
	BGY586	◊ Amperex
	BGY587	◊ Amperex
	BGY59	Amperex
	BGY60	Amperex
	BGY61	Amperex
	BGY65	Amperex
	BGY67	Amperex
	BGY67A	Amperex
	BGY70	Amperex
	BGY71	Amperex
	BGY74	Amperex
	BGY75	Amperex
	BGY78	Amperex
	BGY84	Amperex
	BGY84A	Amperex
	BGY85	Amperex
	BGY85A	Amperex
	BGY85H	Amperex
	BGY86	Amperex
	BGY87	Amperex
	BGY88	Amperex
CATV Amplifiers (hybrid), 12 dB, 330 MHz		
	MHW1122	Motorola

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Consumer Circuits (Cont'd)

Television Circuits (Cont'd)

Function	Device	Source
CATV Amplifiers (hybrid), 14 dB, 450 MHz		
	MHW5141A	Motorola
	MHW5142A	Motorola
CATV Amplifiers (hybrid), 14 dB, 550 MHz		
	MHW6141	Motorola
	MHW6142	Motorola
CATV Amplifiers (hybrid), 17 dB, 330 MHz		
	MHW3171	Motorola
	MHW3172	Motorola
CATV Amplifiers (hybrid), 17 dB, 450 MHz		
	MHW5171A	Motorola
	MHW5172A	Motorola
CATV Amplifiers (hybrid), 17 dB, 550 MHz		
	MHW6171	Motorola
	MHW6172	Motorola
CATV Amplifiers (hybrid), 18 dB, 330 MHz		
	MHW3181	Motorola
	MHW3182	Motorola
CATV Amplifiers (hybrid), 18 dB, 450 MHz		
	MHW5181A	Motorola
	MHW5182A	Motorola
CATV Amplifiers (hybrid), 18 dB, 550 MHz		
	MHW6181	Motorola
	MHW6182	Motorola
CATV Amplifiers (hybrid), 22 dB, 330 MHz		
	MHW3222	Motorola
CATV Amplifiers (hybrid), 22 dB, 450 MHz		
	MHW5222	Motorola
CATV Amplifiers (hybrid), 22 dB, 550 MHz		
	MHW6222	Motorola
CATV Amplifiers (hybrid), 27 dB, 330 MHz		
	HSW3272A	◊ Motorola
CATV Amplifiers (hybrid), 27 dB, 450 MHz		
	MHW5272A	Motorola
CATV Amplifiers (hybrid), 34 dB, 330 MHz		
	MHW3342	Motorola
	MHW3382A	Motorola
CATV Amplifiers (hybrid), 34 dB, 450 MHz		
	MHW5342A	Motorola
CATV Amplifiers (hybrid), 34 dB, 550 MHz		
	MHW6342	◊ Motorola
CATV Amplifiers (hybrid), 38 dB, 450 MHz		
	MHW5382A	Motorola
CATV Feed Forward Amplifier (hybrid)		
	MHW4524F	Motorola
CATV Power Doubling Amplifier (hybrid)		
	MHW5185	Motorola
	MHW6185	Motorola
CATV Reverse Amplifiers (hybrid), 200 MHz		
	MHW1134	Motorola
	MHW1184	◊ Motorola
	MHW1224	Motorola
	MHW1244	Motorola
Channel Display and Clock		
	MM58146	National
	MM9016	National
Channel Display Driver/Decoder		
	LM1017	National
	U143	Telefunken
Channel Selection		
	μPC1361	◊ NEC
	μPC1362	◊ NEC
	μPC1363	◊ NEC
	LB1500	Sanyo
	LB1515	Sanyo
	LB1550	Sanyo
Character Generator (indicates tuning voltage scale and band info on screen)		
	U191	Telefunken
Chroma Circuits and Horizontal & Vertical Processor		
	KA2153	Samsung
Chroma Circuits (demodulators, IF amplifiers, luminance control, signal processors, and various combinations)		
	CA1398	GE/RCA
	CA3070	◊ GE/RCA
	CA3071	◊ GE/RCA
	CA3072	◊ GE/RCA
	CA3121	GE/RCA
	CA3125	GE/RCA
	CA3126	GE/RCA
	CA3151	GE/RCA
	CA3156	GE/RCA
	CA3170	GE/RCA
	CA3172	GE/RCA
	CA3194	GE/RCA
	CA3217	GE/RCA
	GL3320	**GoldStar (2699)**
	HA11247	Hitachi
	HA11431NT	Hitachi
	HA11436A	Hitachi
	HA11480	Hitachi
	HA11494	Hitachi
	MC1377	**Motorola (2947, 2958)**
	TDA3301	**Motorola (2947)**
	TDA3303	**Motorola (2947)**
	TDA3330	**Motorola (2947)**
	TDA3333	**Motorola (2947)**
	μPC1352	◊ NEC
	μPC1372	NEC
	μPC1377	NEC
	μPC1401	NEC
	KA2151	Samsung
	LA1368	Sanyo
	LA1369	Sanyo
	LA1390	Sanyo
	LB1332	Sanyo
	TDA3505	Signetics
	TDA3563	Signetics
	TDA4555	Signetics
	TBA520	Telefunken
	TBA530	Telefunken
	TBA540	Telefunken
	TBA560	Telefunken
	TBA990	Telefunken
	TDA2140	Telefunken
	TDA2150	Telefunken
	TDA2151	Telefunken
	TDA2160	Telefunken
	TDA2161	Telefunken
	TDA3506	Telefunken
	TDA3560A	◊ Telefunken
	TDA3562A	◊ Telefunken
	TDA3300	Thomson
	TEA1030	Thomson
	TEA5030	Thomson
	TA7141A	Toshiba
	TA7193	Toshiba
	TA7607A	Toshiba
	TA7611A	Toshiba
	TA7621	Toshiba
	TA7622A	Toshiba
	TA7659	Toshiba
	TA7660	Toshiba
	TA7661	Toshiba
	TA7675A	Toshiba
	TA7676	Toshiba
	TA7678A	Toshiba
Chroma, Video Line Drivers (3)		
	MC1379	**Motorola (2947)**
Circle Generator		
	4006Z	NCM
Clock Synchronizer		
	RCS401	ThirdDomain
Color Bar Generator Chip		
	NCM4322Z	NCM
Color Transient Improvement Circuit		
	TDA4565	Signetics
Color TV, Small-Signal Subsystem		
	TDA4505	Signetics
Composite Video Overlay Synchronizer for Color TV		
	MC1378	**Motorola (2947, 2958)**
CRT Controller	RP5C16	Panatech
	RP5C17	Panatech
D/A Converter (converts an input to coarse and fine tune outputs)	SAB3013	Signetics
DC Restorer and Sync Separator		
	6286	OEI
	RSS102	ThirdDomain
Decoder, 1 of 16		
	M054	SGS
	M055	SGS
Demodulator, TV Sound, Dual		
	TDA2555	Signetics
Digital Tuner and Signal Detector		
	LM1019	National
Digital Tuning	SAB3035	Signetics
	SAB3036	Signetics
	SAB3037	Signetics
Digital Tuning Device Set		
	SAA1075	ITT
	SAA1274	ITT
	SAA1276	ITT
Digital Tuning, Divider ÷64		
	SDA2311	Siemens
Digital Tuning, Keyboard Encoder		
	U3040	Telefunken
	U340	◊ Telefunken
Digital Tuning, PLL		
	SDA3112	Siemens
Digital Tuning System Memory Controller		
	TA7619A	Toshiba
Digital Tuning System (PLL)		
	TC9137B	Toshiba
Digital Tuning, 1.3 GHz Divider ÷64		
	SDA4212	◊ Siemens
Digital Tuning 1.3 GHz PLL		
	SDA3202	Siemens
Digital Tuning, 1.3 GHz Prescaler ÷64		
	SDA2211	Siemens
Display Controller, 20 characters x 9 lines		
	MB88303	**Fujitsu (2627)**

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Television Circuits (Cont'd)

Function	Device	Source
East-West Pincushion Correction Circuit	TDA4950	◊ SGS
Electronic Program Memory, 32-Station	M293	SGS
FM Demodulator for Direct Broadcast Satellite Receiver	μPC1477	NEC
FM/IF Amplifier and Demodulator for TV/STEREO	U2829B	◊ Telefunken
Frequency Synthesizer	SAB3035	Signetics
Frequency Synthesizer for TV tuner	U6316	Telefunken
Gray Scale Enhancer, Real Time	2545	OEI
Horizontal & Vertical Processor	CA3202	GE/RCA
	CA3223	GE/RCA
	GL1150	**GoldStar (2699)**
	GL3401	GoldStar
	HA11235	Hitachi
	HA11441	Hitachi
	HA11461NT	◊ Hitachi
	LM1880	◊ National
	KA2921	Samsung
	TDA2577A	Signetics
	TDA2578A	Signetics
	TDA2595	**Signetics (3135)**
	TEA2017	Thomson
Horizontal Deflection Circuit (for monitor)	TDA8100	SGS
Horizontal Processor	CA1391	GE/RCA
	CA1394	GE/RCA
	CA3210	GE/RCA
	TBA940	ITT
	TBA950	ITT
	TDA1950	ITT
	TDA9500	◊ ITT
	TDA9503	◊ ITT
	TDA9513	ITT
	MC1391	**Motorola (2948)**
	MC1394	Motorola
	LM1391	National
	TDA1180	SGS
	TDA2593	Signetics
	TDA2594	Signetics
	TDA1940	Telefunken
	TDA1950	Telefunken
	TDA2591	Telefunken
	TDA2593	Telefunken
	TBA920	Thomson
	TDA2593	Thomson
IF and PLL Detector System	**MC13011**	**Motorola (2948, 2959)**
Image Colorizer, Real time (256 colors)	6730	OEI
In-Set TV Pattern Control Logic	NCM3010Z	NCM
Intercarrier Frequency Modulator	NCM4002Y	NCM
Intercarrier Rrequency Modulator (internal PLL and Comparator)	4002Y-A	NCM
IR Amplifier, Narrow Band	IR3N37/N	Sharp
IR Remote Control Amplifier	CA3237	GE/RCA
Line Selector	4003Z	NCM
MATV Amplifiers (hybrid)	OM322	◊ AMD
	OM320	Amperex
	OM321	Amperex
	OM323	Amperex
	OM323A	Amperex
	OM335	Amperex
	OM336	Amperex
	OM337	Amperex
	OM337A	Amperex
	OM339	Amperex
	OM345	Amperex
	OM350	Amperex
	OM360	Amperex
	OM361	Amperex
	OM370	Amperex
Mixer/Oscillator, VHF, Hyperband, and UHF, w/ IF Amp	TDA5230	Signetics
Modulator Circuit	TDA5560	Siemens
Modulator Circuit for Video Tape Recorders and Disc Players	**MC1374**	**Motorola (2947)**
Modulator for TV, Video and Sound Signals	TDA5665	Siemens
Modulator Oscillator, to 600 MHz	**MC13024**	◊ **Motorola (2946, 2959)**
Monochrome TV, Small-Signal Subsystem	TDA4503	Signetics
Multi-Sound dBX Decoder	**GL3503**	**GoldStar (2699)**
Multisound One Chip	**GL3504A**	**GoldStar (2699)**
Noise Reduction, dbx (stereo)	μPC1481	NEC
NTSC Color Decoder	TDA3567	Signetics
NTSC Color Difference Decoder	TDA4570	Signetics
NTSC TV Synchron Generator	NCM3009Z	NCM
On Screen Channel Display	M191	SGS
	M192	SGS
On Screen Character Display Controller	μPD610	◊ NEC
	μPD6105	NEC
PAL/NTSC Decoder w/ RGB Inputs	TDA2582	Signetics
Pattern Generator	4001Z	NCM
Picture Tube Bias Circuit, Automatic	CA3224	GE/RCA
Power Supply Controller	LA5112	◊ Sanyo
Program Memory (32x16)	U3070	◊ Telefunken
QPSK Demodulator for Direct Broadcast Satellite Receiver	μPC1478	NEC
Radio	M755	SGS
	M756	SGS
Remote Control Receiver, PCM	M104	SGS
Remote Control Transmitter, PCM	M709	SGS
	M710	SGS
RF Modulator	CA1890	GE/RCA
RGB Amplifier	TDA8153	SGS
RGB Pattern Generator	NCM4011Z	NCM
RGB to NTSC Converter	6291	OEI
RGB to NTSC/PAL Encoder	TEA2000	Signetics
RGB Video Amplifier System (for high resolution RGB color monitors)	LM1203	National
RGB/YUV Switch	TDA8443	Signetics
	TDA8443A	Signetics
Signal Processor, Bilingual	CA3142	GE/RCA
	CA3154	GE/RCA
	LA7751	Sanyo
	LA7755	Sanyo
SMPS Controller	TDA4601B	SGS
Sound and Picture Processor	**GL3120**	**GoldStar (2699)**
	HA11485ANT	Hitachi
	μPC1411	NEC
Sound Circuits	CA1190	GE/RCA
	CA1191	GE/RCA
	CA3065	◊ GE/RCA
	CA3075	◊† GE/RCA
	CA3134	GE/RCA
	GL3201	**GoldStar (2699)**
	HA1125	Hitachi
	TDA1235	ITT
	TDA1236	ITT
	MC1358	Motorola
	TBA120	Motorola
	TDA1190	**Motorola (2948)**
	TDA1190P	**Motorola (2948)**
	TDA3190P	**Motorola (2948)**
	μPC1382	NEC
	μPC1406	NEC
	μPC575	NEC
	TBA750	Plessey
	KA2101	Samsung
	KA2102A	Samsung
	LA1320	Sanyo
	LA1363	Sanyo
	LA1365	Sanyo
	TDA1190	SGS
	TDA3190	SGS
	TDA4190	◊ SGS
	TDA8190	SGS
	TBA130-2	Siemens
	TBA120U	Signetics
	TDA2545A	Signetics
	TDA2546A	Signetics
	TDA3810	Signetics
	ULN2111A	Sprague
	TBA120	Telefunken
	TA7130	Toshiba
	TA7176A	Toshiba
	TA7243	◊ Toshiba

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Consumer Circuits (Cont'd)

Television Circuits (Cont'd)

Function	Device	Source
Sound Circuits (Cont'd)		
	TA7314	Toshiba
	TA7632	Toshiba
Sound Circuits, Stereo		
	μPC1391	NEC
	U828	Telefunken
Sound Muting	KA2103	Samsung
Sound Muting & Auto Power OFF		
	KA2104	Samsung
Sound, Parallel IF		
	GL3202	**GoldStar (2699)**
	TDA4445	Telefunken
Stereo Decoder		
	LM1884	◊ National
	μPC1480CA	NEC
Stereo Sound Control		
	TDA6200	Siemens
Switching Regulator Controller		
	μPC1394	NEC
Sychron Generator		
	2001Z	NCM
Sync Generator		
	CA3254	GE/RCA
	CA3255	GE/RCA
	HD440072	Hitachi
Sync Generator with External Genlock		
	6750	OEI
Sync Separator		
	HA11423	Hitachi
	6288	OEI
Synchronization and Deflection Circuit		
	LA7801	Sanyo
	LA7802	Sanyo
	LA7806	Sanyo
	LA7810	Sanyo
Synchronization Circuit		
	TDA2579	**Signetics (3137)**
Teletext, Analog Interface		
	μPC1397	NEC
Test Pattern Generator		
	ZNA234	Ferranti
Tone Control	TDA1524A	Signetics
Traffic Camera Controller		
	4004Z	NCM
Tuner Band Switching		
	LA7900	Sanyo
	TA7315B	Toshiba
Tuner, CATV (to 700 MHz)		
	TUA2005	Siemens
Tuner Controller		
	GL3711	**GoldStar (2699)**
	SL952	Plessey
Tuner Controller (2 device set)		
	SAA1020	ITT
	SAA1121	ITT
	SAA1220	ITT
Tuner, VHF Mixer-Oscillator		
	TDA5030	◊ **Signetics (3105)**
TV Camera Sync Generator		
	CD22402	GE/RCA
TV Chroma and External RGB Switch		
	GL3920	**GoldStar (2699)**
TV Multiplexer/Demodulator (Europe)		
	IR3P02	Sharp
TV RGB Pattern Generator		
	NCM4001Z	NCM
TV Synchron Generator		
	NCM2001Z	NCM
	NCM2011Z	NCM
VCR Data-Back LSI Circuit		
	LR3727	Sharp
Vertical Deflection		
	GL1130	**GoldStar (2699)**
	GL1170	**GoldStar (2699)**
	μPC1031	NEC
	μPC1378	NEC
	LA1385	Sanyo
	LA1463	Sanyo
	LA1464	Sanyo
	LA7800	Sanyo
	TDA1170	SGS
	TDA1170D	SGS
	TDA1170N	SGS
	TDA1670	SGS
	TDA1770	SGS
	TDA2270	SGS
	TDA8170	SGS
	TDA8172	SGS
	TDA2653	**Signetics (3136)**
	TDA2653A	**Signetics (3136)**
	TDA3651	**Signetics (3138)**
	TDA3651A	**Signetics (3138)**
	TDA3652	Signetics
	TDA3653	**Signetics (3138)**
	TDA1170	Telefunken
	TDA1770	◊ Telefunken
	U2170B	Telefunken
	TDA1170	Thomson
	TEA2015	Thomson
	TA7242	◊ Toshiba
Vertical Deflection Output Circuit		
	TDA3654	Signetics
VHF Mixer	U4777B	Telefunken
VHF Mixer/Oscillator, Low Power		
	NE612	**Signetics (3102)**
VHF Tuner	TUA2000-4	Siemens
Video & Sound Circuit		
	KA2913	Samsung
	KA2914	Samsung
Video Chroma (PAL) and RGB Matrix		
	GL3361	**GoldStar (2699)**
Video Circuits (IF amplifiers, detectors, AGC, AFC, and various combinations)		
	CA3068	◊ GE/RCA
	HA11440A	Hitachi
	HA11466	◊ Hitachi
	HA11476	Hitachi
	MC13001	Motorola
	MC13001X	**Motorola (2948)**
	MC13002	Motorola
	MC13002X	**Motorola (2948)**
	MC13010	**Motorola (2948)**
	MC13014	**Motorola (2948)**
	MC1330A1	**Motorola (2948)**
	MC1330A2	**Motorola (2948)**
	MC1349	**Motorola (2948)**
	MC1350	**Motorola (2948)**
	MC1352	**Motorola (2948)**
Video Circuits (IF amplifiers, detectors, AGC, AFC, and various combinations) (Cont'd)		
	MC1372	**Motorola (2903, 2947)**
	MC1373	**Motorola (2947)**
	LM1822	National
	LM1823	National
	LM1886	◊ National
	LM1889	◊ National
	LM2889	National
	TDA2540	National
	TDA440	National
	μPC1356	◊ NEC
	μPC1507	NEC
	SL1430	Plessey
	SL1431	Plessey
	SL1432	Plessey
	TDA440	Plessey
	KA2911	Samsung
	KA2912	Samsung
	KA2916	Samsung
	LA1352	Sanyo
	LA1353	Sanyo
	LA1354	Sanyo
	LA1357N	Sanyo
	TBA1440G	Siemens
	TDA2048	Siemens
	TDA2440-2	Siemens
	TDA2441	Siemens
	TDA4282	Siemens
	TDA5400-2	Siemens
	TDA5510-2	Siemens
	TDA5835	Siemens
	TDA3564	Signetics
	TDA4501	Signetics
	TDA4502	Signetics
	TDA440	Telefunken
	TDA4400	Telefunken
	TDA4410	Telefunken
	TDA4421	Telefunken
	TDA4426	Telefunken
	TDA4427	Telefunken
	TDA4428	Telefunken
	TDA4430	Telefunken
	TDA4431	Telefunken
	TDA4432	Telefunken
	TDA4440	Telefunken
	TDA4442	Telefunken
	TDA4450	Telefunken
	TBA1440G	Thomson
	TBA1441	Thomson
	TDA2540	Thomson
	TDA2541	Thomson
	TDA2542	Thomson
Video Control Combo Circuit w/ Auto Cut-Off Control		
	TDA4580	Signetics
Video, IF and RF Amplifier		
	VA592	**VTC (3373)**
	VA733	**VTC (3373)**
Video IF/Demodulator, Multistandard		
	TDA2549	Signetics
Video IF (VCR connection and quasi-parallel sound)		
	TDA5830-2	Siemens
Video Line Driver		
	VLD212	ThirdDomain
Video Modulator		
	TDA6800	Signetics

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Television Circuits (Cont'd)

Function	Device	Source
Video Op Amp	**HA2544**	**Harris (2737, 2747, 2754)**
	VOA901	ThirdDomain
Video Output Amplifier		
	HA11465	◊ Hitachi
Video Signal Controller		
	VSC920	ThirdDomain
Video Switch	HA11477NT	Hitachi
	TDA5850	Siemens
Video Switch/Multiplexer		
	VSM912	ThirdDomain
Video Switch, 30 MHz Bandwidth (1x1)		
	LR401	**Gennum (2686)**
Video Switch 30 MHz Bandwidth (4x1)		
	LR404	**Gennum (2686)**
Video Sync Separator		
	LM1881	◊ National
Video Sync Stripper (standard video input levels of 1–1.4 V p-p)	RSS100A	ThirdDomain
Video Sync-Stripper		
	RSS100C	ThirdDomain
	RSS100M	† ThirdDomain
Video Sync-Stripper and Decoder		
	RSS102C	ThirdDomain
	RSS102M	† ThirdDomain
VIF and SIR Circuit		
	GL3130	**GoldStar (2699)**
16 Channel Selector		
	IR2P01	Sharp
	IR2P02	Sharp

Video Game Circuits

Function	Device	Source
Color Encoder	HA11478	Hitachi
TV/μP Interface		
	M106	SGS
VDP Video Signal Processor		
	GL3620	**GoldStar (2699)**
Video Camera Auto White Balance		
	HA11777MP	Hitachi
Video Camera Color Separator and Detector		
	HA11774MP	Hitachi
Video Camera 4-Channel Processor		
	HA11767AMP	Hitachi
	HA11776AMP	Hitachi
Video Display Generator		
	MC6847	**Motorola (2903)**
Video Modulator (interfaces audio, color, difference, and luminance signals to TV antenna terminals)		
	HA11466	◊ Hitachi
	MC1372	**Motorola (2903, 2947)**
	LM1889	◊ National
	μPC1507	NEC

Miscellaneous

Function	Device	Source
Appliance Controller, D/A Converter		
	DAC1200	Burr-Brown
	DAC1201	Burr-Brown
	DAC1600	Burr-Brown
Burner Controller		
	HA16605W	◊ Hitachi
Digital Lock	**LS7220**	◊ **LSIComp (2867)**
	LS7225	◊ **LSIComp (2867)**
Digital Lock (Cont'd)		
	LS7226	◊ **LSIComp (2867)**
	LS7228	◊ **LSIComp (2867)**
	LS7229	◊ **LSIComp (2867)**
Facsimile	LM1011	National
Ground Fault Interrupter		
	GL7101	**GoldStar (2701)**
	LM1851	National
	RV4143	Raytheon
	RV4144	Raytheon
	KA2803	Samsung
Infrared Signal Receiver		
	TDA4060	Siemens
	TDA4061	Siemens
Interface Circuit for Radio Pagers		
	S2850	Siltronics
Modulator Oscillator, to 600 MHz		
	MC13024	◊ **Motorola (2946, 2959)**
Motor, Brushless DC Motor Commutator, 3 Phase		
	LS7262	**LSIComp (2867)**
Motor, Brushless DC Motor Speed Controller, 4 Phase		
	LS7264	**LSIComp (2867)**
Motor Controller, D/A Converter		
	DAC710	**Burr-Brown (2541)**
	DAC711	**Burr-Brown (2541)**
Motor Controller, DC		
	HA16628P	Hitachi
	HA16629P	Hitachi
Motor Driver, for 3-Phase brushless dc motors		
	HA13406W	Hitachi
Motor Speed Regulator		
	CS2917	Cherry
Motor Speed Regulator and Driver for 3-Phase brushless dc motors	HA13426	Hitachi
	HA13431	Hitachi
	HA13432	Hitachi
Motor Speed Regulator, PLL, for Record Players, VTR		
	MSM5816	OKI
Music Chimes	SAB0600	Siemens
	SAB0601	Siemens
	SAB0602	Siemens
Optical Transceiver (intrusion alarm)		
	CS258A	Cherry
Peak Power Meter Driver, Dual (for hi-fi stereo)		
	TA7318	Toshiba
	TA7332	Toshiba
Protector Circuit (overcurrent detection for OCL and speaker)	TA7317	Toshiba
Revolution Counter Pulse Shaper		
	SAK215	ITT
Servo Driver	NE544	Signetics
Smoke Detector		
	CS235	Cherry
	MC14467	Motorola
	LM1801	National
	SCL5331-5	Sprague
	SCL5331-6	Sprague
	SCL5332	Sprague
	SCL5334	Sprague
	SCL5341	Sprague
	SD2	Supertex
	SD3A	Supertex
Smoke Detector, Photoelectric with I/O		
	MC145010	Motorola
Switch, Video and Audio		
	TDA8440	Signetics
Switches	SAS560	Hitachi
	SAS570	Hitachi
	SAS6710	Telefunken
Switches, DC-Controlled, Audio		
	LM1037	National
	LM1038	National
	TDA1029	Signetics
Switches, Proximity		
	TCA305	Siemens
	TDA0159	Thomson
	TDA0161	Thomson
	TDA0162	Thomson
Switches, Touch-Sensitive Light Dimmer		
	LS7231	◊ **LSIComp (2867)**
	LS7232	◊ **LSIComp (2867)**
	LS7233	◊ **LSIComp (2867)**
	LS7234	◊ **LSIComp (2867)**
	LS7235	**LSIComp (2867)**
	LS7237	**LSIComp (2867)**
	S576A	Siemens
	S576B	Siemens
	S576C	Siemens
	S576D	Siemens
Tachometer Circuit		
	CS189	Cherry
	CS2917	Cherry
	XR2917	Exar
	LM2907	◊ National
	LM2917	◊ National
Tachometer Converter		
	IR4N03	Sharp
Tone Synthesizer for Doorchimes, Toys		
	AY3-1350	GIM
Toy Radio Control Actuator		
	KA2302	◊ Samsung
	KA2303	◊ Samsung
Traffic Light Control Circuit		
	4004Z	NCM
Tuning Voltage Stabilizer, for use with Variable Capacitance Diodes		
	TCA720	ITT
	μPC574J	NEC
	KA33V	Samsung
Universal Infrared Locking System (EEPROM 1K bit)		
	SDE2506	◊ Siemens
Universal Infrared Locking System (pre-amp with demodulator)	TDE4061	Siemens
Universal Infrared Locking System (receiver)		
	SLE5002	Siemens
Universal Infrared Locking System (transmitter)		
	SLE5001	Siemens
Zero Voltage Switch		
	KA2804	Samsung

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Followers

Bias Current nA 25°C	Offset Voltage mV 25°C	Voltage Drift µV/°C	Unity Gain Bandwidth MHz min	Slew Rate v/us	Output V @ mA	Supply Range, V	Comments	Device	Source	Line
0.1	5	100	100 *	1000	9@100	±5 to ±20	Fast Follower	LH0033A	Maxim	
	10	25 *	100 *	1000	9@100	±5 to ±20	Fast Follower	CLH0033	TeledyneC	
								ADLH0033	† AD	
								ELH0033	**† Elantec (2593)**	
								MC0033	† Micra	5
								MP0033	MicroPwr	
								LH0033	◊† National	
								TP0033-HR	◊† TeledyneP	
		100	100 *	1000	9@100	±5 to ±20	Fast Follower	LH0033	† Maxim	
	50	400	200	3000	10@200	±11 to ±18	Very Fast, FET	9963	OEI	10
0.15	20	25 *	100 *	1000	9@100	±5 to ±20	Fast Follower	ADLH0033C	AD	
								ELH0033C	**Elantec (2593)**	
								MC0033C	Micra	
								LH0033C	National	
								TP0033	◊ TeledyneP	15
0.2 *	50	300 *	300 *	2000	10@200	±5 to ±20	Gain 0.094 (50 Ohm)	**3553**	**† Burr-Brown (2534, 2536)**	
								BB3553	† Maxim	
0.25	15	100	100 *	1000	9@100	±5 to ±20	Fast follower	LH0033AC	Maxim	
0.4	6	90	55 *	220	10@22	±6 to ±18	Very Fast Follower	**BUF03E**	**PMI (2975)**	
		100	55 *	220	10@21	±6 to ±18	Very Fast Follower	**BUF03A**	**◊ PMI (2975)**	20
0.5	20	100	100 *	1000	9@100	±5 to ±20	Fast Follower	LH0033C	Maxim	
0.7	15	150	50 *	180	10@25	±6 to ±18	Very Fast Follower	**BUF03F**	**PMI (2975)**	
			170	50 *	180	±6 to ±18	Very Fast Follower	**BUF03B**	**† PMI (2975)**	
1	0.25	100	100	100	9@100	±5 to ±20	Fast Follower	LH0033/HR	† Maxim	
3	4	6 *	20 *	30 *	10@1	±5 to ±18	Follower, Replaces 102	LM210	◊ National	25
								SFC2210	Thomson	
		12 *	20 *	30 *	10@1	±5 to ±18	Follower, Replaces 102	LM110	‡ National	
5	0.1	100	100	100	9@100	±5 to ±20	Fast Follower	LH0033A/HR	† Maxim	
	0.5	25	140	1000	9@100	±5 to ±20	High Accuracy, Fast Follower	EL2005	◊† Maxim	
								MAX460M	† Maxim	30
	20.0	100	200	1000	10@500	±11 to ±18	Fast, High Current	9911	◊ OEI	
7	7.5	10 *	20 *	30 *	10@1	±5 to ±18	Dual 310 Follower	LH2310	GE/Intersil	
							Follower, Replaces 102	LM310	National	
10	1	25	140	1000	9@100	±5 to ±20	High Accuracy, Fast Follower	EL2005C	◊ Maxim	
								MAX460I	Maxim	35
	5	6 *	10 *	10 *	10@1.25	±12 to ±18	Follower	LM102	† National	
15	10	15 *	10 *	10 *	10@1.25	±12 to ±18	Follower	LM202	◊ National	
20	20	100	39	1500	10@100	±6 to ±18	Video Line Driver	AH001-D	† OEI	
	20.0	100	60	2000	10@100	±6 to ±18	Very Fast Follower	9910	◊ OEI	
25	0.2	200 *	100	2000	10@200	±5 to ±20	Very Fast Follower	MC0063	† Micra	40
	0.5	300 *	200 *	2000	10@200	±5 to ±20	Very Fast Follower	LH0063	† Maxim	
								LH0063	† National	
30	15	20 *	10 *	10 *	10@1.25	±12 to ±18	Follower	LM302	National	
	20	100	25	1000	10@±50	±3 to ±15	6 Identical Sections	MZ320	◊ AnalogSys	
35	15	33 *	250 *	1300	10@100	±5 TO ±20	Video Buffer	**HA5033-2**	**† Harris (2706, 2738, 2748)**	45
								HA5033-5	**Harris (2706, 2738, 2748)**	
50	0.5	300 *	200 *	2000	10@200	±5 to ±20	Very Fast Follower	LH0063C	Maxim	
								LH0063C	National	
5000	5	25	125 *	1400	12@100	—	Fast Follower	HOS100A	AD	
								HOS100S	† AD	50
	10	33	300*	1800	3.5@100	±3 to ±6		**VA033**	**VTC (3373)**	
7000	20	10 *	110 *	1300	10@100	±5 to ±22	Monolithic Buffer	**HA5002-2**	**† Harris (2706, 2738, 2748)**	
			110	1300	10@100	±5 to ±22	Monolithic Buffer	**HA5002-5**	**Harris (2706, 2738, 2748)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Bias Current nA 25°C	Offset Voltage mV 25°C	Voltage Drift µV/°C	Unity Gain Bandwidth MHz min	Slew Rate v/us	Output V @ mA	Supply Range, V	Comments	Device	Source	Line
20000	10	25	100	1000	±4@±100	16	Wideband, high speed amplifier/buffer/current booster.	EH0S200SH	† Elantec	
					±12@±100	16	Wideband, high speed amplifier/buffer/current booster.	EH0S200SH	† Elantec	
						40	Wideband, high speed, amplifier/buffer/current booster.	EH0S100SH	◊† Elantec	
							Wideband, high speed amplifier/buffer/current booster.	EH0S100SH	† Elantec	
	20	100	24 *	1500 *	10 100	±6 to ±18	Follower, Current Booster	AH0010C AH0010F	OEI ◊ OEI	5
25000	5 *		100	1200 *	−12@±105 + ±	±2.5 to ±18	Video line driver/Video buffer.	**EL2003**	**† Elantec**	**(2591, 2595)**
					±12@105	±2.5 to ±18	Video line driver/Video buffer.	**EL2033**	**† Elantec**	**(2592)**
	25	25	100	1000	±4@±100	16	Wideband, high speed amplifier/buffer/current booster.	EH0S200AH	Elantec	
					±12@±100	40	Wideband, high speed amplifier/buffer/current booster.	EH0S100AH EH0S100AH	◊ Elantec Elantec	10
					±12@±100F ±12@±100			EH05100AH	◊ Elantec	
35000	33	33	65	1000	8 100	±12		**OPA633A**	**† Burr-Brown**	**(2534, 2536)**

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

General Purpose

Function	Device	Source	Line
Dual Amplifiers. The 1458 (0°C to 70°C) and the 1558 (–55°C to 125°C) offer approximately the same performance as the 741. Compensation is built in.	XR1458	Exar	
	µA1458	◊ Fairchild	
	CA1458	**GE/RCA (2645)**	
	HA17458	Hitachi	
	MC1458	**Motorola (2921, 2958)**	5
	LM1458	National	
	µPC1458	NEC	
	MC1458	Signetics	
	NE5512	Signetics	
	NE5514	Signetics	10
	SE5512	† Signetics	
	SE5514	† Signetics	
The 101A series consists of the 101A (–55°C to 125°C), the 201A (–25°C to 85°C) and the 301 (0°C to 70°C). These units require an external compensation capacitor which permits the bandwidth to be optimized for particular applications.	AD101A	◊† AD	
	LM101A	† LinearTech	
	LM101A	**† Motorola (2919)**	15
	LM101A	‡ National	
	LM101A	† Raytheon	
	SG101A	† SiliconG	
	TA7506	◊ Toshiba	
The performance of the 741 series is similar to the 101. These units include internal compensation to make the device stable and to eliminate the need for an external capacitor.	AD741	† AD	20
	CA741	**GE/RCA (2645)**	
	MP5502	† MicroPwr	
	MC1741	**† Motorola (2920, 2958)**	
	LM741	† National	
	µPC741	NEC	25
	µA741	† Signetics	
	SG741	◊† SiliconG	
	µA741	Thomson	
	TA7504	◊ Toshiba	
FET Input. The "741" of the FET input devices has yet to be established. Such a device requires very low cost, several sources, and many users. Commercial devices in the 155 series above meet some of these criteria, however, devices from the series below are generally lower in cost.	**CA3140**	**† GE/RCA (2646)**	30
	CA3160	**† GE/RCA (2646)**	
	CA3260	**GE/RCA (2646)**	
	LF351	**Motorola (2920, 2958)**	
	LF13741	◊ National	
	LF351	National	35
FET Input. Bipolar/JFET available in standard (155), wideband (156) and uncompensated (157) versions, premium performance (A and B suffixes), and various temperature ranges (155, 255, 355, etc are available.) Some versions approach the low cost of the units below.	**PM155**	**† PMI (2971)**	

High Output Current

mA V	Device	Source	Line
30000@72	**PA03**	**Apex (2458)**	
15000@44	**PA12A**	**† Apex (2458)**	
15000@43	**OPA512**	**Burr-Brown (2536)**	
10000@39	**PA12**	**Apex (2458)**	40
	PA12M	**† Apex (2458)**	
10000@32	**PA51A**	**† Apex (2458)**	
	PA51M	**† Apex (2458)**	
10000@28	**PA51**	**Apex (2458)**	
10000@26	**OPA501S**	**† Burr-Brown (2536)**	45
10000@20	**OPA501**	**Burr-Brown (2536)**	
	OPA501A	**Burr-Brown (2536)**	
5000@45	**PA07**	**Apex (2458)**	
5000@44	**PA10A**	**† Apex (2458)**	
5000@37	**PA10**	**Apex (2458)**	50
	PA10M	**† Apex (2458)**	
5000@22	**PA73**	**Apex (2458)**	
5000@20	**OPA511**	**Burr-Brown (2536)**	
5000@18	**PA01**	**Apex (2458)**	
3500@24	SG1173	SiliconG	55
3500@18	MCEL165	MCE	
	MCEL2165	MCE	
3000@18	MCETCA2365	MCE	
	MCETCA365	MCE	
2700@24	ICH8530I	GE/Intersil	60
	ICH8530M	† GE/Intersil	
2000@32	**PA09**	**Apex (2458)**	
2000@30	**3572A**	**Burr-Brown (2536)**	
2000@24	ICH8520I	GE/Intersil	
	ICH8520M	† GE/Intersil	65
2000@22	LH0101	Maxim	
	LH0101A	† Maxim	
	LH0101AC	Maxim	
	LH0101C	Maxim	
2000@20	**3573**	**Burr-Brown (2536)**	70
2000@12	MC0021	† Micra	
	LH0021	† National	
2000@11	**ELH0101**	**† Elantec (2593)**	
	ELH0101A	**† Elantec (2593)**	
	ELH0101AC	**Elantec (2593)**	75
	ELH0101C	**Elantec (2593)**	
	LH0101	† National	
	LH0101A	† National	
	LH0101AC	National	
	LH0101C	National	80
1100@11	**ELH0021**	**Elantec (2593)**	
1000@30	**3571A**	**Burr-Brown (2536)**	
1000@24	ICH8510I	GE/Intersil	
	ICH8510M	† GE/Intersil	
1000@10	**ELH0021C**	**Elantec (2593)**	85
	MC0021C	Micra	
	LH0021C	National	
750@34	1461	TeledyneP	
500@10	LH0061	† National	
	LH0061C	National	90
200@10	**3553**	**† Burr-Brown (2534, 2536)**	
	CLC103AM	† Comlinear	
	µA759C	Fairchild	
	µA759M	† Fairchild	
	BB3553	† Maxim	95
150@140	**PA08**	**Apex (2458)**	
140@7	LB1032BC	AT&T	
130@13	**ELH0041**	**† Elantec (2593)**	
	ELH0041C	**Elantec (2593)**	
	MC0041	† Micra	100
	MC0041C	Micra	
	LH0041	◊† National	
	LH0041C	National	
100@15	**CA3094**	**† GE/RCA (2647)**	
100@10	AD3554A	◊ AD	105
	AD3554S	◊† AD	
	HOS060S	† AD	
	3329	Burr-Brown	
	3554A	**Burr-Brown (2535)**	
	3554B	**Burr-Brown (2535)**	110
	3554S	**Burr-Brown (2535)**	
	CLC200AM	† Comlinear	
	HA2542	**Harris (2737, 2747, 2750)**	
	LH0003	† National	
	TP3554	TeledyneP	115
75@145	1480	TeledyneP	
75@140	**PA83**	**◊ Apex (2458)**	
	PA83M	**◊† Apex (2458)**	
75@40	**3583**	**Burr-Brown (2536)**	
60@30	**3580J**	**Burr-Brown (2536)**	120
50@10	AD380S	† AD	
	AD382S	† AD	
	AM500	**Datel (2577)**	
	9914A	◊ OEI	
	9918	OEI	125
	AMP01	**‡ PMI (2975)**	
	1430	TeledyneP	
47@14	LH0020	† National	
	LH0020C	National	
40@143	**PA84**	**◊ Apex (2458)**	130
30@70	**3581J**	**Burr-Brown (2536)**	
25@10	**AM430**	**Datel (2577)**	
25@10 *	**HA2541**	**Harris (2705, 2737, 2747)**	
10@35	**OPA541**	**Burr-Brown (2536)**	
8@4	LB1032AC	AT&T	135

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

High Speed

Unity Gain Slew Rate (V/μs min)	Device	Source	Line
8000	CLC220AM	† Comlinear	
6000	CLC103AM	† Comlinear	
4000	CLC200AM	† Comlinear	
1500	ADLH0033	† AD	
	HOS100S	† AD	5
1400	ADLH0033C	AD	
	HOS100A	AD	
1000	AD3554	◊ AD	
	AD3554S	◊† AD	
	3554	**Burr-Brown (2535)**	10
	AM500GC	**Datel (2577)**	
	AM500MC	**Datel (2577)**	
	AM500MM	**Datel (2574, 2577)**	
	AH9914	OEI	
	9914A	◊ OEI	15
600	**HA2539**	**◊ Harris (2737, 2747, 2753)**	
500	ADLH0032	† AD	
	ADLH0032C	AD	
	1430	TeledyneP	
	1430HR	† TeledyneP	20
400	**AD840**	**◊ AD (2435)**	
	HA2540	**◊ Harris (2737, 2747, 2752)**	
	MC0024	† Micra	
	LH0024	† National	
350 *	**AD842**	**AD (2437)**	25
350	**ELH0032**	**† Elantec (2593)**	
	ELH0032C	**Elantec (2593)**	
350 *	**HA2542**	**Harris (2737, 2747, 2750)**	
350	MC0032	† Micra	
	MC0032C	Micra	
	LH0032C	National	30
300	HOS050	† AD	
	HOS050A	† AD	
	HOS050C	AD	
	HOS060S	† AD	35
	AM1435MC	**Datel (2577)**	
	AM1435MM	**Datel (2574, 2577)**	
	9916	OEI	
250(g = 5)	9906	◊ OEI	
250	**AD841**	**AD (2436)**	40
	3551J	**Burr-Brown (2535)**	
	3551S	**† Burr-Brown (2535)**	
	HA2541	**Harris (2705, 2737, 2747)**	
	MC0024C	Micra	
	LH0024C	National	45
	1435	† TeledyneP	
200	AD380S	† AD	
160	**HA5190**	**◊ Harris (2707, 2737, 2747)**	
	HA5195	◊ Harris	
135	**HA2529**	**Harris (2737, 2747)**	50
120	HA2525	Harris	
100	AD509K	AD	
	AD509S	† AD	
	OPA605	**Burr-Brown (2535)**	
	3550K	**Burr-Brown (2535)**	55
	HA2520	**◊† Harris (2705, 2737, 2747)**	
	HA2544	**Harris (2737, 2747, 2754)**	
	HA5160	**Harris (2706, 2737, 2747)**	
	HA5162	Harris	

High Voltage

Maximum Supply Voltage	Device	Source	Line
± 150	**PA08**	**Apex (2458)**	60
	PA83	**◊ Apex (2458)**	
	PA83M	**◊† Apex (2458)**	
	PA84	**◊ Apex (2458)**	
	3582J	**Burr-Brown (2536)**	
	3583	**Burr-Brown (2536)**	65
	3584	**Burr-Brown (2536)**	
± 85	LB1013AD	AT&T	
± 75	**PA03**	**Apex (2458)**	
	3581J	**Burr-Brown (2536)**	
± 50	**PA07**	**Apex (2458)**	70
	PA10A	**† Apex (2458)**	
	PA12A	**† Apex (2458)**	
± 45	**PA10**	**Apex (2458)**	
	PA12	**Apex (2458)**	
± 40	**PA51A**	**† Apex (2458)**	75
	PA51M	**† Apex (2458)**	
	3571A	**Burr-Brown (2536)**	
	3572A	**Burr-Brown (2536)**	
	HA2640	**◊† Harris (2706, 2738, 2748)**	
	HA2645	Harris	80
	MC1536	**† Motorola (2921)**	
	LH0004	† National	
	LH0004C	National	
	LM143	† National	
	LM144	† National	85
	LM1536	† National	
	SG143	† SiliconG	
	SG1536	◊† SiliconG	
	SG343	SiliconG	
	1332	TeledyneP	90
± 36	**PA51**	**Apex (2458)**	
± 35	**3580J**	**Burr-Brown (2536)**	
± 34	**MC1436**	**Motorola (2920, 2958)**	
	LM344	National	
	SG1436	◊ SiliconG	95
± 30	**PA73**	**Apex (2458)**	
	ICH8510I	GE/Intersil	
	ICH8510M	† GE/Intersil	
	ICH8520I	GE/Intersil	
	ICH8520M	† GE/Intersil	100
	ICH8530I	GE/Intersil	
	ICH8530M	† GE/Intersil	
	MC1436C	**Motorola (2920, 2958)**	
	LM1436	National	
	LM343	National	105
	SG1436C	SiliconG	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers (Cont'd)

Low Bias Current

Current pA 25°C	Device	Source	Line
0.01	**ICH8500A**	**GE/Intersil (2674)**	
0.075	AD515L	AD	
	OPA104CM	Burr-Brown	
	3528C	Burr-Brown	
0.1	**OPA106W**	**† Burr-Brown (2545)**	5
	3523L	Burr-Brown	
	ICH8500	**GE/Intersil (2674)**	
0.15	AD515K	AD	
	OPA104BM	Burr-Brown	
	OPA106V	**† Burr-Brown (2545)**	10
	3528B	Burr-Brown	
0.2	ADOP07	◊† AD	
	HA5180	**Harris (2706, 2737, 2747)**	
0.25	3523K	Burr-Brown	
0.3	AD515J	AD	15
	OPA104AM	Burr-Brown	
	OPA106U	† Burr-Brown	
	3528A	Burr-Brown	
0.5	AD504M	AD	
	AD510L	AD	20
	AD517L	AD	
	3510C	Burr-Brown	
	3523J	Burr-Brown	
	MP5505A	† MicroPwr	
	LH0044A	† National	25
	LH0044AC	National	
1	AD545K	AD	
	AD545L	AD	
	AD545M	AD	
	3522L	Burr-Brown	30
	ICL8007AC	**GE/Intersil (2673)**	
	ICL8007AM	**† GE/Intersil (2673)**	
	LH0052	† National	
1.0	OPA103	Burr-Brown	
	OPA105	† Burr-Brown	35
2	OPA103BM	Burr-Brown	
	3527B	Burr-Brown	
3	OPA103AM	Burr-Brown	
5	**CA3080**	**GE/RCA (2646)**	
	CA3080A	**† GE/RCA (2646)**	40
50	**HA5160**	**† Harris (2706, 2737, 2747)**	
100	**HA5170**	**◊† Harris (2706, 2737, 2747)**	

Low Drift

Function	Device	Source	Line
0.05	**AM7650**	**Datel (2577)**	
0.2	**RC4207**	**Raytheon (2980)**	
	RC4227	**Raytheon (2981)**	45
	RM4207	**◊† Raytheon (2980)**	
	RM4227	**† Raytheon (2981)**	
0.5	AD510L	AD	
	3510C	Burr-Brown	
	LT1002A	† LinearTech	50
	LT1002AC	LinearTech	
	OP05A	† LinearTech	
	LH0044B	National	
	OP05A	**‡ PMI (2970)**	
0.6	**OPA27A**	**† Burr-Brown (2532)**	55
	OPA27E	**Burr-Brown (2532)**	
	OPA37A	**◊† Burr-Brown (2532)**	
	OPA37E	**◊ Burr-Brown (2532)**	
	AM430B	**Datel (2577)**	
	μA714M	† Fairchild	60
	HA5127A	**Harris (2737, 2747, 2768)**	
	HA5130	**Harris (2737, 2747)**	
	HA5137A	**Harris (2737, 2747, 2768)**	
	HA5147A	**Harris (2737, 2747, 2759)**	
	LT1001AC	LinearTech	65
	LT1001AM	† LinearTech	
	LT1007AC	LinearTech	
	LT1007AM	† LinearTech	
	LT1037AC	LinearTech	
	LT1037AM	† LinearTech	70
	OP05E	LinearTech	
	OP07A	† LinearTech	
	OP27A	† LinearTech	
	OP27E	LinearTech	
	OP37A	† LinearTech	75
	OP37E	LinearTech	
	MP5507A	† MicroPwr	
	MP5507E	MicroPwr	
	OP27A	**† Motorola (2920)**	
	OP27E	**Motorola (2920)**	80
	OP05E	**PMI (2970)**	
	OP07A	**‡ PMI (2970)**	
	LT1007AM	◊ TI	
	LT1007M	◊ TI	
	LT1037AM	TI	85
	LT1037M	TI	
1	AD504L	AD	
	AD504S	† AD	
	AD510K	AD	
	AD510S	† AD	90
	AD517K	AD	
	AD517S	† AD	
	AD547L	AD	
	3500E	Burr-Brown	
	3510B	Burr-Brown	95
	3510S	† Burr-Brown	
	3521L	Burr-Brown	
	MP5505A	† MicroPwr	
	LH0044	‡ National	
	LH0044C	National	100

(Continued)

Function	Device	Source	Line
1		(Cont'd)	
	LM11	† National	
	LM11C	National	
	LM725A	◊ National	
	OP05	**‡ PMI (2970)**	
1.0	3291	Burr-Brown	105
	μA725EC	Fairchild	
	OP05	† LinearTech	
1.0 (dual unit)	MP5510A	† MicroPwr	
	MP5510B	MicroPwr	
	MP5510E	MicroPwr	110
1.2	**HA5134A**	**Harris (2737, 2747, 2757)**	
1.3	**HA5135-5**	**Harris (2706)**	
1.8	**HA5127**	**Harris (2737, 2747, 2768)**	
	HA5137	**Harris (2737, 2747, 2768)**	
	HA5147	**Harris (2737, 2747, 2759)**	115
2.0	**HA5134**	**Harris (2737, 2747, 2757)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Low Power Non-Adjustable

Supply Current λA @ ± 15V	Device	Source	Line
9	**OP215B**	**† PMI (2971)**	
	OP215C	**† PMI (2971)**	
	OP215F	**PMI (2971)**	
	OP215G	**PMI (2971)**	
45	**OP20B**	**† PMI (2970)**	5
	OP20C	**† PMI (2970)**	
	OP20F	**PMI (2970)**	
	OP20G	**PMI (2970)**	
	OP20H	**PMI (2970)**	
80	**HA5141**	**Harris (2706, 2737, 2747)**	10
	HA5142	**Harris (2706, 2737, 2747)**	
	HA5144	**Harris (2706, 2737, 2747)**	
200	TL061 Series	TI	
220	**OP420B**	**† PMI (2970, 2972)**	
	OP420C	**◇† PMI (2970, 2972)**	15
	OP420F	**PMI (2970, 2972)**	
	OP420G	**PMI (2970, 2972)**	
250	**HA5151**	**† Harris (2706, 2737, 2747)**	
	HA5152	**† Harris (2706, 2737, 2747)**	
	HA5154	**† Harris (2706, 2737, 2747)**	20
275	OP21G	Burr-Brown	
350	**OP21B**	**† PMI (2970)**	
	OP21F	**PMI (2970)**	
400	LF442A	National	
	OP21G	**PMI (2970)**	25
500	LF442	National	
600	μA108	◇† Fairchild	
	LM108	◇† GE/Intersil	
	LM108	**† Motorola (2919)**	
	LM108	◇† National	30
	LM112	† National	
	LM212	◇ National	
	OP08	**‡ PMI (2970)**	
	OP12	**‡ PMI (2970)**	
	PM108	**‡ PMI (2970)**	35
	LH2108A	Raytheon	
	LM108A	Raytheon	
	LM108	◇† Thomson	

Programmable

The current drain limits of these units are approximately

Supply Current λA @ ± 15V	Device	Source	Line
10–300 μA.	LB1030AC	† AT&T	
	LB1031AC	† AT&T	40
	LB1032AC	† AT&T	
	LB1032BC	† AT&T	
	LB1034AC	† AT&T	
	LB1035AC	† AT&T	
	μA776C	Fairchild	45
	ICL8021C	**GE/Intersil (2673)**	
	ICL8021M	**† GE/Intersil (2673)**	
	CA3078	**† GE/RCA (2646)**	
	CA3078A	**† GE/RCA (2646)**	
	CA3094	**† GE/RCA (2647)**	50
	CA3094A	**† GE/RCA (2647)**	
	CA3094B	**† GE/RCA (2647)**	
	CA6078A	**† GE/RCA (2646)**	
	HA2720	**† Harris (2737, 2747)**	
	HA2725	Harris	55
	MC1776	**◇† Motorola (2921, 2958)**	
	MC1776C	**◇ Motorola (2920, 2958)**	
	MC3476	**Motorola (2920)**	
	LM4250	† National	
	LM4250C	† National	60
	OP32	**PMI (2970)**	
	UC4250	† Solitron	
	UC4250C	Solitron	
10–300 μA	LB1034AC	AT&T	

μA@ ± 8V

Supply Current λA @ ± 15V	Device	Source	Line
20	**ICL7611M**	**† GE/Intersil (2673)**	65
	ICL7631M	**◇† GE/Intersil (2673)**	
	ICL7632M	◇† GE/Intersil	
	ICL7642M	**◇† GE/Intersil (2673)**	
	ICL7611M	† Maxim	
	ICL7631M	† Maxim	70
	ICL7632M	† Maxim	
200	**ICL7611C**	**GE/Intersil (2673)**	
	ICL7612C	**GE/Intersil (2673)**	
	ICL7612M	**† GE/Intersil (2673)**	
	ICL7613C	GE/Intersil	75
	ICL7613M	† GE/Intersil	
	ICL7614C	GE/Intersil	
	ICL7615C	GE/Intersil	
	ICL7616C	GE/Intersil	
	ICL7616M	† GE/Intersil	80
	ICL7621C	**GE/Intersil (2673)**	
	ICL7622C	◇ GE/Intersil	
	ICL7631C	**◇ GE/Intersil (2673)**	
	ICL7642C	**◇ GE/Intersil (2673)**	
	ICL7611C	Maxim	85
	ICL7612C	Maxim	
	ICL7612M	† Maxim	
	ICL7614C	Maxim	
	ICL7616C	Maxim	
	ICL7616M	† Maxim	90
	ICL7621C	Maxim	
	ICL7622C	Maxim	
	ICL7631C	Maxim	
	ICL7642C	Maxim	
	LB1035AC	AT&T	95

Programmable

Single (1 unit per package)

Device	Source	Line
LB1030AC	† AT&T	
LB1031AC	† AT&T	
LB1032AC	† AT&T	
LB1032BC	† AT&T	
LB1034AC	† AT&T	100
LB1035AC	† AT&T	
μA776C	Fairchild	
μA776M	† Fairchild	
ICL7611C	**GE/Intersil (2673)**	
ICL7611M	**† GE/Intersil (2673)**	105
ICL7612C	**GE/Intersil (2673)**	
ICL7612M	**† GE/Intersil (2673)**	
ICL7613C	GE/Intersil	
ICL7613C	GE/Intersil	
ICL7613M	† GE/Intersil	110
ICL7616C	GE/Intersil	
ICL7616M	† GE/Intersil	
ICL8021C	**GE/Intersil (2673)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR–Operational Amplifiers (Cont'd)

Programmable (Cont'd)

Function	Device	Source	Line
Single (1 unit per package)		(Cont'd)	
	ICL8021M	**† GE/Intersil (2673)**	
	CA3078	**† GE/RCA (2646)**	
	CA3078A	**† GE/RCA (2646)**	
	CA3094	**† GE/RCA (2647)**	
	CA3094A	**† GE/RCA (2647)**	5
	CA3094B	**† GE/RCA (2647)**	
	HA2720	**† Harris (2737, 2747)**	
	HA2725	Harris	
	ICL7611C	Maxim	
	ICL7611M	† Maxim	10
	ICL7612C	Maxim	
	ICL7612M	† Maxim	
	ICL7616C	Maxim	
	ICL7616M	† Maxim	
	MC1776	**◊† Motorola (2921, 2958)**	15
	MC1776C	**◊ Motorola (2920, 2958)**	
	MC3476	**Motorola (2920)**	
	LM4250	† National	
	LM4250C	† National	
	µPC4250	† NEC	20
Dual (2 units per package)			
	ICL8022C	GE/Intersil	
	ICL8022M	† GE/Intersil	
Triple (3 units per package)			
	ICL7632C	◊ GE/Intersil	
	ICL7632M	◊† GE/Intersil	
	ICL8023C	**GE/Intersil (2673)**	25
	ICL8023M	**† GE/Intersil (2673)**	
	CA3060	**◊ GE/RCA (2646, 2649)**	
	CA3060A	**◊ GE/RCA (2646, 2649)**	
	CA3060B	**◊ GE/RCA (2646, 2649)**	
	ICL7632C	Maxim	30
	ICL7632M	† Maxim	
	SG1253	◊† SiliconG	
	SG2253	◊ SiliconG	
	SG3253	◊ SiliconG	
	L144A	† Siliconix	35
	L144B	Siliconix	
	L144C	Siliconix	
Quad (4 units per package)			
	XR146	† Exar	
	XR246	Exar	
	XR346	Exar	40
	XR4202	◊ Exar	
	XR4202M	† Exar	
	LM146	† National	
	LM246	National	
	LM346	National	45

Single Supply

Single Units

Supply Voltage, V	Device	Source	Line
to 24	**CA3094**	**† GE/RCA (2647)**	
to 30	**OP32**	**PMI (2970)**	
to 36	µA759C	Fairchild	
	µA759M	† Fairchild	
	CA3094A	**† GE/RCA (2647)**	50
	CA3140	**† GE/RCA (2646)**	
	µA77000	Fairchild	
to 44	**CA3094B**	**† GE/RCA (2647)**	
1 to 16	**ICL7612C**	**GE/Intersil (2673)**	
	ICL7612M	**† GE/Intersil (2673)**	55
	ICL7616C	GE/Intersil	
	ICL7616M	† GE/Intersil	
	ICL7612C	Maxim	
	ICL7612M	† Maxim	
	ICL7616C	Maxim	60
	ICL7616M	† Maxim	
	TLC251C	TI	
2 to 30	**HA5141**	**Harris (2706, 2737, 2747)**	
	HA5151	**† Harris (2706, 2737, 2747)**	
3 to 16	TLC271C	TI	65
4 to 16	TLC271M	† TI	
5 to 16	**CA3130**	**† GE/RCA (2646)**	
	CA3130A	**† GE/RCA (2646)**	
	OP20B	**† PMI (2970)**	
	OP20C	**† PMI (2970)**	70
	OP20F	**PMI (2970)**	
	OP20G	**PMI (2970)**	
	OP20H	**PMI (2970)**	
250	**HA5151**	**† Harris (2706, 2737, 2747)**	

Dual Units

Supply Voltage, V	Device	Source	Line
	TLC2272M	◊† TI	75
to 20	**OP215B**	**† PMI (2971)**	
	OP215C	**† PMI (2971)**	
	OP215F	**PMI (2971)**	
	OP215G	**PMI (2971)**	
1 to 16	TLC252C	TI	80
2 to 30	**HA5142**	**Harris (2706, 2737, 2747)**	
	HA5152	**† Harris (2706, 2737, 2747)**	
3 to 16	TLC272C	TI	
3 to 26	**CA2904**	**GE/RCA (2645)**	
	HA17902	Hitachi	85
	LM2902	**Motorola (2923, 2958)**	
	LM2904	**Motorola (2922, 2958)**	
	LM2902	◊ National	
	LM2904	◊ National	
	LM2904	Thomson	90
3 to 30	**CA158**	**◊† GE/RCA (2645)**	
	CA258	**GE/RCA (2645)**	
	CA358	**GE/RCA (2645)**	
	GL358	**GoldStar (2700)**	
	HA17358	◊ Hitachi	95
	LM158	**† Motorola (2922)**	
	LM258	**Motorola (2922, 2958)**	
	LM358	**Motorola (2921, 2958)**	
	LM158	† National	
	LM158A	† National	100
	LM258	National	
	LM258A	National	
	LM358	National	
	LM358A	National	
	LM158	† Signetics	105
	LM258	◊ Signetics	
	LM358	Signetics	
	NE532	Signetics	
	SE532	† Signetics	
	TL321C	TI	110
4 to 16	TLC272M	† TI	
5 to 30	**OP220**	**PMI (2970, 2972)**	
	OP221	**PMI (2970, 2972)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Single Supply (Cont'd)

Quad Units

Supply Voltage, V	Device	Source	Line
1 to 16	TLC254C	TI	
2 to 30	**HA5144**	**Harris (2706, 2737, 2747)**	
	HA5154	**† Harris (2706, 2737, 2747)**	
3 to 16	TLC274C	TI	
3 to 26	LM2902	Thomson	5
3 to 30	μA124M	† Fairchild	
	μA224	Fairchild	
	μA324C	Fairchild	
	CA124	**† GE/RCA (2645)**	
	CA224	**GE/RCA (2645)**	10
	CA324	**GE/RCA (2645)**	
	GL324	**◇ GoldStar (2700)**	
	HA17324	Hitachi	
	LM124	**† Motorola (2924)**	
	LM224	**Motorola (2923, 2958)**	15
	LM324	**Motorola (2923, 2958)**	
	LM124	‡ National	
	LM224	National	
	LM324	National	
	μPC324	◇ NEC	20
	LM124	◇† Raytheon	
	LM324	Raytheon	
	LM124	† Signetics	
	LM224	Signetics	
	LM324	Signetics	25
	SG124	◇† SiliconG	
	SG224	◇ SiliconG	
	SG324	◇ SiliconG	
3 to 36	XR3403	◇ Exar	
	XR3503	† Exar	30
	μA3303C	Fairchild	
	μA3403C	Fairchild	
	MC3303	**◇ Motorola (2924)**	
	MC3403	**Motorola (2923, 2959)**	
	MC3503	**† Motorola (2924)**	35
	RC3403	Raytheon	
3 to 44	**MC33074**	**◇ Motorola (2924)**	
	MC34074	**Motorola (2923, 2960)**	
	MC35074	**† Motorola (2924)**	
4 to 16	TLC274M	† TI	40
4 to 18	**CA3401**	**† GE/RCA (2645)**	
	HA17301	Hitachi	
	MC3401	**Motorola (2923, 2959)**	
	LM3401	National	
4 to 28	**MC3301**	**◇ Motorola (2924)**	45
	LM3301	National	
4 to 32	**LM2900**	**Motorola (2924)**	
	LM3900	**Motorola (2923, 2958)**	
	LM2900	◇ National	
	LM3900	National	50
	LM2900	Raytheon	
	LM3900	Raytheon	
5 to 30	**OP420B**	**† PMI (2970, 2972)**	
	OP420C	**◇† PMI (2970, 2972)**	
	OP420F	**PMI (2970, 2972)**	55
	OP420G	**PMI (2970, 2972)**	

Wide Band

Unity Gain Bandwidth MHz	Device	Source	Line
10	RC4560	Raytheon	
15	4562	Raytheon	
40 *	AD380J	AD	
	AD380K	AD	60
	AD380L	AD	
	AD380S	† AD	
40	**HA2400**	**◇† Harris (2737, 2747, 2768)**	
40 *	HA2404	Harris	
	HA2405	Harris	65
	HA2406-5	Harris	
40	**HA2541**	**Harris (2705, 2737, 2747)**	
	HA2544	**Harris (2737, 2747, 2754)**	
40 *	**VA2705**	**VTC (3374)**	
	VA2706	**VTC (3374)**	70
	VA2715	**VTC (3374)**	
	VA2716	**VTC (3374)**	
	VA4705	**VTC (3374)**	
	VA4706	**VTC (3374)**	
	VA705	**VTC (3374)**	75
	VA706	**VTC (3374)**	
50 *	**3551J**	**Burr-Brown (2535)**	
	3551S	**† Burr-Brown (2535)**	
	CA3015	**† GE/RCA (2645)**	
	CA3030	**GE/RCA (2645)**	80
	CA3038	**† GE/RCA (2646)**	
60	**HA5112**	**◇ Harris (2706, 2737, 2747)**	
	HA5114	**◇ Harris (2706, 2737, 2747)**	
	HA5137	**Harris (2737, 2747, 2768)**	
60 *	1430	TeledyneP	85
	1430HR	† TeledyneP	
65 *	μA715C	Fairchild	
	μA715M	† Fairchild	
	HA17715	Hitachi	
70 *	ADLH0032	† AD	90
	ADLH0032C	AD	
70	**OPA602**	**Burr-Brown (2533)**	
70 *	**OPA605**	**Burr-Brown (2535)**	
	3554A	**Burr-Brown (2535)**	
	3554B	**Burr-Brown (2535)**	95
	3554S	**Burr-Brown (2535)**	
	ELH0032	**† Elantec (2593)**	
	ELH0032C	**Elantec (2593)**	
70	**HA2542**	**Harris (2737, 2747, 2750)**	
70 *	MC0024	† Micra	100
	MC0024C	Micra	
	MC0032	† Micra	
	MC0032C	Micra	
	LH0024	† National	
	LH0024C	National	105

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers (Cont'd)

Wide Band (Cont'd)

Unity Gain Bandwidth MHz	Device	Source	Line
70 *		(Cont'd)	
	LH0032A	† National	
	LH0032C	National	
90 *	AD3554	◊ AD	
	AD3554S	◊† AD	
100 *	HOS050	† AD	5
	HOS050C	AD	
	HOS060S	† AD	
100	**AM500GC**	**Datel (2577)**	
	AM500MC	**Datel (2577)**	
	AM500MM	**Datel (2574, 2577)**	10
	HA2620	◊† **Harris (2706, 2737, 2747)**	
	HA5160	**Harris (2706, 2737, 2747)**	
	HA5162	Harris	
	9906	◊ OEI	
	NE5539	**Signetics (3087)**	15
	SE5539	† Signetics	
	HA2622	◊† **Harris (2706, 2768)**	
	HA2625	◊ Harris	
100 (–3db)	CLC200AM	† Comlinear	
120	**HA5147**	**Harris (2737, 2747, 2759)**	20
150	**EHA5190**	**Elantec (2594)**	
	EHA5195	**Elantec (2594)**	
	XR4560	**Exar (2607)**	
	HA5190	◊ **Harris (2707, 2737, 2747)**	
	HA5195	◊ Harris	25
150 (–3db)	CLC103AM	† Comlinear	
200	9916	OEI	
	9918	OEI	
200 (–3db)	CLC220AM	† Comlinear	
300	9914A	◊ OEI	30
400	**EHA2540**	**Elantec (2594)**	
	HA2540	◊ **Harris (2737, 2747, 2752)**	
500 *	1435	† TeledyneP	
600	**EHA2539**	**Elantec (2594)**	
	HA2539	◊ **Harris (2737, 2747, 2753)**	35
1000	**OPA600/883B**	**Burr-Brown (2535)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units												
				120					Transimpedance Amplifier	**NE5212**	**◊† Signetics (3092)**	
										SA5212	◊† Signetics	
										SE5212	◊† Signetics	5
				550					Wide-Band High-Frequency Amplifier	NE5204	◊ Signetics	
0.00015	0.00015	0.00004	5	0.5 *	0.3	—	80	—	Ultra Low Bias FET	3528B	Burr-Brown	
0.001	0.001	0.00025	1	2	1	—	100	1	Low Noise, Dielectrically Isolated	**OPA111B**	**Burr-Brown (2532)**	
0.005	0.003	0.06	0.05	0.45 *	0.5 *	10M	120	0	Ultra Low Offset, ± 15V, Chopper Stabilized	MAX421	† Maxim	
										MIC421	◊† Maxim	10
									Ultra Low Offset, ± 15V, Low Power Chopper Amp	MAX422	† Maxim	
										MAX423	† Maxim	
	0.01	0.0005	0.05	2	2.5	10M	120	0	Chopper Stabilized	TSC7650	TeledyneS	
		0.005	0.01	2 *	2.5 *	10M	120	0	Chopper Stabilized	**ICL7650C**	**GE/Intersil (2674)**	
										ICL7650C	Maxim	15
		0.02	0.05	2 *	2.5 *	5M	120	0	Chopper Stabilized	ICL7650	◊† Maxim	
	0.03	0.06	0.05	0.45 *	0.5 *	1M	110	0	Chopper Stabilized	**ICL7652**	**GE/Intersil (2674)**	
										ICL7652	◊ Maxim	
				1	3 *	1M	120	0	Low Noise, Chopper Stabilized	LTC1052C	LinearTech	
										LTC1052M	† LinearTech	20
										LTC7652C	LinearTech	
										LTC7652M	† LinearTech	
		0.060	0.05 *	0.45 *	0.5		130			SI7652B	◊ Siliconix	
										SI7652C	◊ Siliconix	
	0.05	0.0005 *	0.05	0.7 *	0.2 *	1M	110	0	Low Power Chopper; 200µA	TSC900A	TeledyneS	25
	0.06	0.06	0.1	1	2.5	500K	107		Chopper Stabilized	LMC668A	National	
	0.1	0.2	0.05	0.125	0.125	1M	120	0	Ultra Low Offset Chopper with Capacitors.	MAX432C	Maxim	
				0.5	0.5	1M	120	0	Ultra Low Offset Chopper with Capacitors.	MAX430C	Maxim	
	3	—	0.1	0.3	—	30K	88 *	0	Commutating Auto Zero, Compensated	ICL7600C	GE/Intersil	
										ICL7600M	† GE/Intersil	30
								1	Commutating Auto Zero, Uncompensated	ICL7601C	GE/Intersil	
										ICL7601M	† GE/Intersil	
0.01	0.02	0.04	0.1	2 *	2.5 *	5M	120	0	Chopper Stabilized	ICL7650B	† Maxim	
	0.1	0.2	0.05	0.125	0.125	1M	120	0	Ultra Low Offset Chopper with Capacitors.	MAX432E	Maxim	
				0.5	0.5	1M	120	0	Ultra Low Offset Chopper with Capacitors.	MAX430E	Maxim	35
	1.2	0.3	0.1	0.6	0.3	12 M	120	0	Ultra-Low Offset Voltage	**OP77**	**† PMI (2970)**	
	2	2	0.3	0.4	0.1	500K	114	0	Ultra Low Offset, Low Drift.	MAX400M	† Maxim	
0.01 *	10	—	0.2 *	8 *	2.8 *	1.5M *	120	0	Ultra-Low Noise	MP5527	MicroPwr	
				63 *	17 *	1.5M *	120	0	Ultra-Low Noise	MP5537	MicroPwr	
0.015	0.03	0.06	0.1	0.45 *	0.5	5M	110	0	Chopper Stabilized	ICL7652B	Maxim	40
	0.07	0.15		1.5 *	2.5 *	500K	120	0	Chopper Amplifier w/o External Capacitors	TSC911	TeledyneS	
	0.08	0.0005 *	0.2	0.7 *	0.2 *	100K	100	0	Low Power Chopper; 400µA	TSC900B	TeledyneS	
	1.2	0.3	0.1	0.9	0.3	8M	130	0	Ultra-Low Offset Voltage	**AD707**	**AD (2432)**	
	2	2	0.3	0.4	0.1	500K	114	0	Ultra Low Offset, Low Drift.	MAX400C	Maxim	
										MAX400E	Maxim	45
			0.6	0.4	0.1	450K	114	0	Ultra Low Offset, Low Drift	LT1001AM	† LinearTech	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
0.025	0.02	0.1	0.6	0.9*	0.05	200K	108	0	Low power.	**OP97A**	**† PMI (2968, 2970)**	
	0.2	0.1	0.6	0.9*	0.05	200K	108	0	Low power.	**OP97E**	**PMI (2968, 2970)**	
	1	0.25	0.5	0.25 *	0.1 *	1M	110	0	Ultra Low Offset Voltage, Low Drift	AD517L	AD	
		2	0.6	1.2*	0.25*	300K	110	0	Ultra Low Offset Voltage, Low Drift	OP07A	† Solitron	
	2	2	0.6	0.4	0.1	300K	110	0	Ultra Low Offset, Low Drift	OP07A	† Maxim	5
						450K	114	0	Ultra Low Offset, Low Drift	LT1001AC	LinearTech	
				0.5 *	0.1	150K	110	0	Ultra Low Noise	**OP07A**	**† Raytheon (2979)**	
				0.6	0.17		126	0	Low Offset Voltage, Low Drift	HSOP07A	† HybridSys	
				0.6 *	0.17 *	300K	110	0	Ultra Low Offset Voltage, Low Drift	ADOP07A	† AD	
				1.2 *	0.25 *	300K	110	0	Ultra Low Offset Voltage, Low Drift	MPOP07A	† MicroPwr	10
										MP5507A	† MicroPwr	
										OP07A	**‡ PMI (2970)**	
				2.5 *	0.8 *	1M	100	0	Ultra Low Offset Voltage, Low Drift	**HA5135-2**	**Harris (2706)**	
										HA5135-5	**Harris (2706)**	
	10	2.5	2	0.3 *	0.1 *	1M	110	0	Trimmed Offset	AD510L	AD	15
	15	2.5	0.5	0.4 *	0.06 *	1M	120	1	Precision, Low Noise	LH0044A	† National	
										LH0044AC	National	
	20	20	0.75	—	—	5–1000	100	0	Instrumentation (2 amps available as pair)	3629B	† Burr-Brown	
	25	30	0.5	—	—	5–1000	100	0	Instrumentation (2 amps available as pair)	3629C	Burr-Brown	
										3629S	† Burr-Brown	20
	35			5	2.5	7000K		0	Low Noise, High Speed Precision Input	LT1007AC	◊‡ TI	
				60	15	7K			Low Noise, High Speed Bipolar	LT1037AC	TI	
		50	3	—	—	5–1000	100	0	Instrumentation (2 amps available as pair)	3629A	Burr-Brown	
	40			8	2.8	1000K		0	Low Noise, High Speed	OP27E	TI	
				63	17	1K			Low Noise, High Speed Bipolar	OP37E	TI	25
		35	—	63 *	11 *	—	—	0	Low Noise, High Slew Rate	**OP37A**	**† Raytheon (2979)**	
										OP37E	**Raytheon (2979)**	
			0.2	25 *	18 *	1M	—	0	Ultra Low Noise, Low Offset	ADOP37A	† AD	
										ADOP37E	AD	
										OP37A	**‡ PMI (2970)**	30
										OP37E	**PMI (2970)**	
			0.6	5	1.7	1M	114	0	Ultra Low Noise	ADOP27A	† AD	
										ADOP27E	AD	
										AM427-B	**Datel (2577)**	
									Ultra Low Noise.	OP27A	◊† Maxim	35
										OP27E	◊ Maxim	
									Ultra Low Noise	MPOP27A	◊† MicroPwr	
										MPOP27E	◊ MicroPwr	
										OP27A	**‡ PMI (2970)**	
										OP27E	**PMI (2970)**	40
										OP27A	† Solitron	
										OP27E	Solitron	
						600K	114	0	Ultra Low Noise	**OP27A**	**† Raytheon (2979)**	
										OP27E	**Raytheon (2979)**	
				8 *	1.7	1000K	114	0	Ultra Low Noise	**OPA27A**	**† Burr-Brown (2532)**	45
										OPA27E	**Burr-Brown (2532)**	
				8	2.8		126	0	Ultra Low Noise	HSOP27A	† HybridSys	
				8.5 *	10	1M	114	0	Ultra-Low Noise	**HA5127A**	**◊† Harris (2737, 2747, 2768)**	
				25*	18*	1M	114	0	Ultra Low Noise	OP37A	† Solitron	
										OP37E	Solitron	50
				40 *	11	1000K	114	0	Ultra Low Noise	**OPA37A**	**◊† Burr-Brown (2532)**	
										OPA37E	**◊ Burr-Brown (2532)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
											(Cont'd)	
0.025	40	35	0.6	45	11	1M	114	0	Ultra Low Noise.	OP37A	† Maxim	
										OP37E	Maxim	
									Ultra Low Noise, Gain >5	MPOP37A	◊† MicroPwr	
										MPOP37E	◊ MicroPwr	
				63	17		126	0	Ultra Low Noise	HSOP37A	† HybridSys	5
				80 *	20 *	1M	114	1	Ultra-Low Noise	**HA5137A**	**◊† Harris (2737, 2747, 2768)**	
				120	28	1M	114	2	Ultra-Low Noise	**HA5147A**	**◊† Harris (2737, 2747, 2759)**	
		40	10	90	40			0		**VA711L**	**VTC (3374)**	
										VA711S	**† VTC (3374)**	
				500	150			0		**VA721L**	**VTC (3374)**	10
0.03	10000	200	10	1000	250	31.6K	80	1		1467	TeledyneP	
										1467HR	† TeledyneP	
0.035	0.2	0.1	1.5	0.9 *	0.2 *	300K	114			**PM1012A**	**† PMI (2970)**	
	100	0.1	1.5	0.8*	0.1	300K	114	0	Precision Low Drift Bipolar	LT1012C	LinearTech	
0.04	60	100	0.3	8	5	1M	114		Fast Settling	**VA701K**	**VTC (3374)**	15
	90	50	0.8	50	11	30K*	114		Low Noise Frequency Synthesizers	LT1028AC	LinearTech	
										LT1028AM	† LinearTech	
0.05	0.01	0.005	5	12	27	100K	85	0	Wideband-JFET, Dielectrically Isolated	**OPA606L**	**Burr-Brown (2532)**	
	0.05	—	1	1	20	100K	—	1	High Voltage, Chopper Stabilized	3271/25	Burr-Brown	
		0.05	45	7	13 *	128	86	0	High Speed Instrumentation	**AM543MC**	**◊ Datel (2577)**	20
	0.3	0.15	1.5	0.9 *	0.2 *	200K	110			**PM1012G**	**PMI (2970)**	
	2	0.75	1	0.25 *	0.1 *	1M	100	0	Ultra Low Offset Voltage, Low Drift	AD517K	AD	
										AD517S	† AD	
	5	0.5	0.3	0.57	3.5	10K	125	0	Instrumentation Amplifier	**AMP01A**	**‡ PMI (2975)**	
										AMP01E	**PMI (2975)**	25
			0.5	0.2	—	2M	126	0	Precision Instrumentation	LM163A	† National	
										LM363A	† National	
	13	4	1	0.3 *	0.1 *	1M	110	0	Trimmed Offset	AD510K	AD	
										AD510S	† AD	
	15	10	0.5	—	5	1000	90	0	Precision Insrumentation	AD524C	AD	30
	30	—	0.2	0.25	5	1K	115	0	Precision Instrumentation	AD624C	◊ AD	
		5	0.5	0.4 *	0.06 *	500K	114	1	Precision, Low Noise	LH0044B	National	
			1	0.4 *	0.06 *	500K	114	1	Precision, Low Noise	LH0044	‡ National	
		30	2	0.3 *	0.2	1K	80	1	Instrumentation Amplifier	MPINA101A	MicroPwr	
	50	50	1	0.5 *	—	1024	86	0	Low Drift Instrumentation	**AM542MC**	**◊ Datel (2577)**	35
	75	100	0.5	8	5	1M	114		Fast Settling	**VA701S**	**† VTC (3374)**	
	150	0.15	1.5	0.8*	0.1	200K	110	0	Precision Low Drift Bipolar	LT1012M	† LinearTech	
0.06	4	3.8	1	0.4	0.1	400K	110	0	Low Offset Voltage	LT1001C	LinearTech	
										LT1001M	† LinearTech	
	15	10	0.5	0.4 *	0.5 *	1M	110	1	Low Drift	3510C	Burr-Brown	40
	55			5	2.5	5000K		0	Low Noise, High Speed Precision Input	LT1007C	◊ TI	
				60	15	5K			Low Noise, High Speed Bipolar	LT1037C	TI	
		50	1.3	5	1.7	1M	106	0	Ultra Low Noise	ADOP27B	† AD	
										ADOP27F	AD	
										OPA27B	**† Burr-Brown (2532)**	45
										OPA27F	**Burr-Brown (2532)**	
									Ultra Low Noise.	OP27B	◊† Maxim	
										OP27F	◊ Maxim	
									Ultra Low Noise	MPOP27B	◊† MicroPwr	
										MPOP27F	◊ MicroPwr	50
										OP27B	**† Motorola (2920)**	
										OP27F	**Motorola (2920)**	
										OP27B	**◊‡ PMI (2970)**	
										OP27F	**PMI (2970)**	
										OP27B	**† Raytheon (2979)**	55
										OP27F	**Raytheon (2979)**	
											(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units												**(Cont'd)**
0.06	55	50	1.3	5	1.7	1M	106	0	Ultra Low Noise			(Cont'd)
										OP27B	† Solitron	
										OP27F	Solitron	
				8	2.8		123	0	Ultra Low Noise	HSOP27B	† HybridSys	
				45	11	1M	106	0	Ultra Low Noise.	OP37B	† Maxim	
										OP37F	Maxim	5
									Ultra Low Noise	OP37B	† Solitron	
										OP37F	Solitron	
									Ultra Low Noise, Gain >5	ADOP37B	† AD	
										ADOP37F	AD	
										OPA37B	◇† **Burr-Brown (2532)**	10
										OPA37F	◇ **Burr-Brown (2532)**	
										MPOP37B	◇† MicroPwr	
										MPOP37F	◇ MicroPwr	
										OP37B	◇‡ **PMI (2970)**	
										OP37F	**PMI (2970)**	15
					25	100K	106	1	Very Low Noise	**OP47F**	**Raytheon (2979)**	
						500K	106	1	Very Low Noise	**OP47B**	† **Raytheon (2979)**	
				63 *	11	1M	106	0	Ultra Low Noise, Gain >5	**OP37B**	† **Raytheon (2979)**	
										OP37F	**Raytheon (2979)**	
				63	17		123	0	Ultra Low Noise	HSOP37B	† HybridSys	20
0.070	0.1	0.0005 *	0.8	0.7 *	0.2 *	100K	98	0	Low Power Chopper	TSC918	TeledyneS	
0.075	±4	3.8	0.3 *	0.6	0.17	200K	106	0	Ultra-Low Offset Voltage	µA714E	TI	
	0.3	0.15	1.5	0.9*	0.05	150K	108	0	Low power.	**OP97F**	**PMI (2968, 2970)**	
	3	2.8	1.3	0.4	0.1	200K	110	0	Low Offset Voltage, Low Drift	OP07	† LinearTech	
				0.6	0.17		126	0	Low Offset Voltage, Low Drift	HSOP07	† HybridSys	25
				0.6 *	0.17 *	200K	110	0	Low Offset Voltage, Low Drift	ADOP07	◇† AD	
				1.2 *	0.25 *	200K	110	0	Low Offset Voltage, Low Drift	µA714M	† Fairchild	
										OP07	◇† Maxim	
										MPOP07	† MicroPwr	
										MP5507B	† MicroPwr	30
										OP07	◇‡ **PMI (2970)**	
										RC714	† **Raytheon (2979)**	
										RC714C	**Raytheon (2979)**	
										RC714E	**Raytheon (2979)**	
										OP07	† Solitron	35
	4	3.8	0.2	0.4	0.2	150K	106	0	Low Offset Voltage, Low Drift	OP07E	TI	
			1.3	0.4	0.1	200K	110	0	Low Offset Voltage, Low Drift	OP07E	LinearTech	
				0.6 *	0.17 *	200K	123 *	0	Low Offset Voltage, Low Drift	ADOP07E	AD	
									Ultra Low Offset Voltage, Low Drift	MPOP07E	MicroPwr	
				1.2 *	0.25 *	200K	106	0	Low Offset Voltage, Low Drift	µA714EC	Fairchild	40
										OP07E	Maxim	
										MP5507E	MicroPwr	
										OP07E	MicroPwr	
										OP07E	**PMI (2970)**	
										OP07E	Solitron	45
	6	3	20	6.8	450			0	Wideband, Fast-Settling	**AD846**	**AD (2438)**	
	15	3	2	1.2 *	0.25 *	1M	120	0	Precision Instrumentation	**CA3493A**	† **GE/RCA (2645)**	
	75	60		45	17				Audio Op-Amp	MA362C	AnalogSys	
										MA362M	AnalogSys	
0.08	0.05	0.01	1.5	1 *	0.3 *	500K	114	0	Improved LM11	LM11A	† National	50
	15	0.5	1.5	0.1 *	—	1M	105	0	Precision, Low Power	**OP20B**	† **PMI (2970)**	
	180	100	1.0	50	11	30K*	110		Low Noise Frequency Synthesizers	LT1028C	LinearTech	
										LT1028M	† LinearTech	
0.1	3	2.8	0.4 *	1.2 *	0.25 *	500K	—	0	Ultra Low Offset Voltage	**OP207A**	† **PMI (2970, 2972)**	
										OP207B	**PMI (2970, 2972)**	55

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
											(Cont'd)	
0.1	5	1	3	0.2 *	—	2M	120	0	Precision Instrumentation	LM163	† National	
	15	3	1	0.57	3	10K	110	0	Instrumentation Amplifier	**AMP01B**	◇‡ **PMI (2975)**	
										AMP01F	**PMI (2975)**	
	20	15	0.5	—	5	1000	90	0	Precision Insrumentation	AD524B	AD	
	25	0.7	1	0.5 *	49	1000K	95	1	Selectable Input	**OPA201C**	**Burr-Brown (2532)**	5
		1	1	0.3 *	0.2	1M	100	0	Low Power	**OPA21E**	**Burr-Brown (2532)**	
		5	3	3 *	0.1 *	250K	94	0	Trimmed Offset	AD510J	AD	
	35	5	1	0.4 *	0.06 *	500K	114	1	Precision, Low Noise	LH0044C	National	
	40	1	0.8	—	1.7	1800	114	0	Ultra Low Noise	MPOP27	◇ MicroPwr	
		40	10	90	40			0		**VA711K**	**VTC (3374)**	10
				500	150			0		**VA721K**	**VTC (3374)**	
										VA721S	**† VTC (3374)**	
	50	—	0.5	0.25	5	1K	110	0	Precision Instrumentation	AD624B	◇ AD	
			7	0.75	6				Programmable Gain (G = 10)	**PGA102B**	**Burr-Brown (2537)**	
										PGA102S	**† Burr-Brown (2537)**	15
		35	0.5	—	5	1000	90	0	Precision Insrumentation	AD524S	† AD	
	70	1	0.8	—	0.01	100K	120	4	High Gain Instrumentation	**OP06A**	**‡ PMI (2970)**	
	80			8	2.8	700K		0	Low Noise, High Speed	OP27G	TI	
				63	17	700			Low Noise, High Speed Bipolar	OP37G	TI	
		40	0.4 *	8 *	17	1800	114	0		MPOP37	◇ MicroPwr	20
		75	—	63 *	11 *	—	—	0	Low Noise, High Slew Rate	**OP37C**	**† Raytheon (2979)**	
										OP37G	**Raytheon (2979)**	
			0.4 *	8 *	3.2 *	1200K *	120	0	Ultra Low Noise	ADOP27C	† AD	
						1200K	120	0	Ultra Low Noise	ADOP27G	AD	
						1200K *	120	0	Ultra Low Noise	**OP27C**	**Motorola (2920)**	25
						1200K	120	0	Ultra Low Noise	**OP27G**	**Motorola (2920)**	
						1200K *	120	0	Ultra Low Noise	**OP27C**	**‡ PMI (2970)**	
						1200K	120	0	Ultra Low Noise	**OP27G**	**PMI (2970)**	
						1200K*	120	0	Ultra Low Noise	OP27C	† Solitron	
										OP27G	Solitron	30
			0.4 *	25 *	18 *	700K	120	0	Ultra Low Noise	ADOP37C	† AD	
										ADOP37G	AD	
										OP37C	**‡ PMI (2970)**	
										OP37G	**PMI (2970)**	
										OP37C	† Solitron	35
										OP37G	Solitron	
			1.8	5	1.7	700K	100	0	Ultra Low Noise	**AM427-A**	**Datel (2577)**	
										OP27C	† LinearTech	
										OP27G	LinearTech	
									Ultra Low Noise.	OP27C	◇† Maxim	40
										OP27G	◇ Maxim	
									Ultra Low Noise	MPOP27C	◇† MicroPwr	
										MPOP27G	◇ MicroPwr	
										OP27C	**† Raytheon (2979)**	
										OP27G	**Raytheon (2979)**	45
									Ultra Low Noise, Gain >5	**OPA27C**	**† Burr-Brown (2532)**	
										OPA27G	**Burr-Brown (2532)**	
					7	1M	100	0	Ultra-Low Noise	**HA5127**	**◇† Harris (2737, 2747, 2768)**	
				8	2.8		120	0	Ultra Low Noise	HSOP27C	† HybridSys	
				45	11	700K	100	0	Ultra Low Noise	**OPA37C**	**◇† Burr-Brown (2532)**	50
										OPA37G	**◇ Burr-Brown (2532)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
											(Cont'd)	
									Ultra Low Noise.	OP37C	† Maxim	
										OP37G	Maxim	
									Ultra Low Noise, Gain > 5	OP37C	† LinearTech	
										OP37G	LinearTech	
										MPOP37C	◊† MicroPwr	5
										MPOP37G	◊ MicroPwr	
					25	450K	100	1	Very Low Noise	**OP47G**	**Raytheon (2979)**	
				60	14	1M	100	1	Ultra-Low Noise	**HA5137**	**◊† Harris (2737, 2747, 2768)**	
				63	17		120	0	Ultra Low Noise	HSOP37C	† HybridSys	
				120	28	700K	100	2	Precision, High Slew	**HA5147**	**◊† Harris (2737, 2747, 2759)**	10
	100	—	1	0.25	5	1K	100	0	Precision Instrumentation	AD624S	◊† AD	
	150	15	0.5	0.6 *	0.25	2M	110	0	Precision, Low Power	**OP21B**	**† PMI (2970)**	
										OP21F	**PMI (2970)**	
0.12	0.1	0.1	1.5	1*	0.1	200K	114	1	Precision Low Drift Bipolar	LT1008C	LinearTech	
										LT1008M	† LinearTech	15
	0.3	0.15	1.5	0.5 *	0.1	2K *	114	0	Low Power	**PM1008A**	**† PMI (2970)**	
										PM1008G	**PMI (2970)**	
	25	15	1	0.4 *	0.5	1M	110	1	Low Drift	3510B	Burr-Brown	
										3510S	† Burr-Brown	
			2	0.25	0.5	1M	110	1	Precision, Low Drift	**3510V**	**† Burr-Brown (2545)**	20
0.13	12	6	0.2	0.4	0.2	100K	110	0	Low Offset Voltage	OP07D	TI	
0.14 *	0.000075 *	0.000030 *	5	1.0 *	3.0 *		118 *	0	FET Electrometer	**OPA128L**	**◊ Burr-Brown (2533)**	
			10	1.0 *	3.0 *		118 *	0	FET Electrometer	**OPA128K**	**◊ Burr-Brown (2533)**	
										OPA128S	**◊† Burr-Brown (2533)**	
0.14	150	150	1	8	5	700K	100		Fast Settling	**VA701J**	**VTC (3374)**	25
0.15	0.05	0.01	4.0	6.5*	10	150K	86		High Speed Instrumentation Amplifier	LT1055AC	LinearTech	
										LT1055AM	† LinearTech	
		0.010	4.0	6.5*	12	150K	86		High Speed Instrumentation Amplifier	LT1056AC	LinearTech	
										LT1056AM	† LinearTech	
	0.075	0.01	0.7 *	1 *	0.3 *	500K	114	0	Improved LM11	LM11AC	National	30
	2	0.2	2.5	0.8 *	0.12 *	80K	104	0	Improved 108 A, Low Bias, Compensated	**OP12A**	**‡ PMI (2970)**	
										OP12E	**PMI (2970)**	
								1	Improved 108 A, Low Bias	**OP08A**	**‡ PMI (2970)**	
										OP08E	**PMI (2970)**	
							110	1	Improved 108 A, Low Bias	MPOP08A	† MicroPwr	35
									Improved 108 A, Low Dias	MPOP08E	MicroPwr	
		2	0.9	1.2 *	0.25 *	300K	114	0	Instrumentation	MPOP05A	† MicroPwr	
										MP5505A	† MicroPwr	
										OP05A	**‡ PMI (2970)**	
	5	1	3	0.25 *	0.1 *	1M	94	0	Ultra Low Offset Voltage, Low Drift	AD517J	AD	40
	7	6	0.2	0.4	0.2	100K	100	0	Ultra-Low Offset Voltage	OP07C	TI	
			1.6	0.6	0.17		120	0	Low Offset Voltage, Low Drift	HSOP07C	HybridSys	
			1.8	0.4	0.1	120K	100	0	Low Offset Voltage, Low Drift	OP07C	LinearTech	
				0.5 *	0.1	100K	100	0	Ultra Low Noise	**OP07C**	**Raytheon (2979)**	
				0.6 *	0.17 *	120K	100	0	Ultra Low Offset Voltage, Low Drift	ADOP07C	AD	45
				1.2 *	0.25 *	120K	100	0	Low Offset Voltage, Low Drift	OP07C	Maxim	
									Ultra Low Offset Voltage, Low Drift	MPOP07C	MicroPwr	
										OP07C	Solitron	
	10	1.0			0.08	2M	110			**OP90A**	**† PMI (2970)**	
										OP90E	**PMI (2970)**	50
	12	6	2.5	0.5 *	0.1	100K	94	0	Ultra Low Noise	**OP07D**	**Raytheon (2979)**	
				0.6	0.17		110	0	Low Offset Voltage, Low Drift	HSOP07D	HybridSys	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
											(Cont'd)	
0.15	12	6	2.5	0.6 *	0.17 *	120K	94	0	Ultra Low Offset Voltage, Low Drift	ADOP07D	AD	
										MPOP07D	MicroPwr	
				1.2 *	0.25 *	120K	94	0	Low Offset Voltage, Low Drift	OP07D	Maxim	
									Ultra Low Offset, Low Drift	MP5507D	MicroPwr	
										OP07D	**‡ PMI (2970)**	5
										OP07D	Solitron	
	35	20	2	0.4 *	0.5 *	1M	110	1	Low Drift	3510A	Burr-Brown	
	100	4	1	0.6	0.25 *	1M	100	0	High Speed, Low Power	**OP21A**	**PMI (2970)**	
										OP21E	**PMI (2970)**	
0.16	8	7.6			0.1	200K	106	0		LT1001X	† LinearTech	10
										LT1001X/883B	† LinearTech	
	95	85			0.7	2M	104	0		LT1000X	† LinearTech	
										LT1007X/883B	† LinearTech	
0.2	0.003		2.5	2,4	6	400K	115	0	Low Bias Current2	**OP43**	**† PMI (2970)**	
	7	6	0.7 *	1.2 *	0.25 *	400K	—	0	Ultra Low Offset Voltage	**OP207E**	**PMI (2970, 2972)**	15
										OP207F	**PMI (2970, 2972)**	
	20	5	3	1.2 *	0.25	300K	110	0	Precision, Instrumentation	**CA3193A**	**GE/RCA (2645)**	
	25	2.5	5	0.1 *	—	400K	100	0	Precision, Low Power	**OP20C**	**† PMI (2970)**	
										OP20G	**PMI (2970)**	
	26	2.5	0.1	14	30	100K	90		Fast Settling J-FET	LF401A	National	20
	40	2	2	0.5 *	49	1000K	90	1	Selectable Input	**OPA201B**	**Burr-Brown (2532)**	
										OPA201S	**† Burr-Brown (2532)**	
	50		7	0.75	6				Programmable Gain (G = 10)	**PGA102A**	**Burr-Brown (2537)**	
	200	20	0.5	0.6 *	0.25	1.5M	105 *	0	Precision, Low Power	**OP21G**	**PMI (2970)**	
0.20	10	3	3	0.2 *	—	1M	114	0	Precision Instrumentation	LM363	National	25
	15	15	2	0.3 *	0.1 *	1–1000	80	0	Instrumentation	AD522B	AD	
	25	20	6	0.3 *	0.1 *	1–1000	75	0	Instrumentation	AD522S	† AD	
0.25	-	0.15	-	0.35	18	128	85	0	Programmable gain instrumentation amp	**AD526**	**† AD (2443)**	
	± 30	2	1 *	0.6	0.17	100K	100	0	Ultra-Low Offset Voltage	µA714L	TI	
	0.000075		5	1	3 *				FET-Input Electrometer	**AD549C**	**AD (2431)**	30
	0.0001	0.00004	5	1 *	1.2	150K	76	0	Ultra Low Bias Military	**OPA106W**	**† Burr-Brown (2545)**	
	0.00015	0.00008	10	1 *	1.2	150K	76	0	Low Bias Military	**OPA106V**	**† Burr-Brown (2545)**	
	0.0003	0.00008	50	1 *	1.2	150K	76	0	Low Bins Military	OPA106U	† Burr-Brown	
	0.001	0.0002	2	1 *	0.9	100K	76	0	Low Bias, FET Input	**OPA105W**	**† Burr-Brown (2545)**	
						200K	76	0	Low Drift, Low Bias FET	OPA103DM	Burr-Brown	35
			5	1 *	0.9	100K	76	0	Low Bias, FET Input	**OPA105V**	**† Burr-Brown (2545)**	
						200K	76	0	Low Drift, Low Bias FET	OPA103CM	Burr-Brown	
			25	1 *	0.9	100K	76	1	Low Bias, FET Input	**OPA105UM**	**† Burr-Brown (2545)**	
		0.0005	3	0.7 *	0.3	40K	76	0	Precision, Low Drift FET	AD545M	AD	
		0.001	4	5	28		92	0	High-speed precision Di-FET	**OPA602C**	**Burr-Brown (2533)**	40
	0.002	0.0003 *	5	1 *	0.6	100K	76 *	0	Low Drift FET	3527B	Burr-Brown	
	0.005	0.001	8	2.4 *	5	100 K	95		Low Bias Current	**OP43E**	**PMI (2970)**	
	0.01	0.002 *	1	1.5 *	0.6	100K	90 *	0	Ultra Low Drift FET	3521L	Burr-Brown	
		0.004	5 *	10	5	50K	80	0	Low Noise, Wideband JFET	**OPA101BM**	**Burr-Brown (2533)**	
										OPA102BM	**Burr-Brown (2533)**	45

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
											(Cont'd)	
0.25												
	0.010		2	1	1.8 *		86		Precision Low-Power BiFET	**AD548**	**AD (2430)**	
	0.015	0.002 *	2	1.5 *	0.6	100K	90 *	0	Ultra Low Drift FET	3521K	Burr-Brown	
	0.02	0.02 *	5	1.5 *	0.6	50K	90 *	0	Ultra Low Drift FET	3521J	Burr-Brown	
										3521R	† Burr-Brown	
	0.025	0.002	1	1	3	250K	80	2	Ultra Low Drift BIFET	AD547L	AD	5
		0.010	3			200K			High-Speed BiFET	**AD711C**	**AD (2433)**	
	0.03	0.03	3	200	75	250K	90	0	BiFET, 500 ms settling time	**AD744**	**† AD (2434)**	
	0.05	0.01	5	8*	23	150K	86	0	Wideband, Low-Drift JFET	LT1022AC	† LinearTech	
										LT1022AM	† LinearTech	
	1.5	0.005	2	1	1	300K	86		Precision Low Power BiFET	**AD548C**	**AD (2430)**	10
	2	2	0.6	2.5 *	0.5	1M	100	0	Ultra Low Drift	**AM430B**	**Datel (2577)**	
	15	2			0.08	1M	107			**OP90B**	**† PMI (2970)**	
	20	2.5			0.08	1M	104			**OP90F**	**PMI (2970)**	
	30	30	0.75	0.3 *	0.2	1K	80	1	Instrumentation Amplifier	MPINA101S	† MicroPwr	
	50	0.005	5	5 *	30 *	60K	80	—	High Speed, Low Drift FET	AD381L	AD	15
		35	0.5	—	5	1000	90	0	Precision Instrumentation	AD524A	AD	
	100	—	1	0.25	5	1K	100	0	Precision Instrumentation	AD624A	◊ AD	
0.26 *	0.000150 *	0.000065 *	20	1.0 *	3.0 *		118 *	0	FET Electrometer	**OPA128J**	**◊ Burr-Brown (2533)**	
0.3	0.05	0.01	1 *	1 *	0.3	100K	110	0	Improved 108 A, Low Power	**LM11**	**Motorola (2920)**	
										LM11	† National	20
	0.1	0.03	5	4	5	300K	100	0	Precision JFET Input	**HA5170-2**	**† Harris (2706, 2737, 2747)**	
		0.06	5	4	5	300K	100	0	Precision JFET Input	**HA5170-5**	**Harris (2706, 2737, 2747)**	
	2	0.2	3.5	0.8 *	0.12 *	80K	104	0	Improved 108 A, Low Power, Compensated	**OP12B**	**‡ PMI (2970)**	
										OP12F	**PMI (2970)**	
								1	Improved 108 A, Low Bias	MPOP08B	† MicroPwr	25
										MPOP08F	MicroPwr	
	5	1	1.5	—	0.7 *	1M	100	0	Programmable Micropower	**OP32E**	**PMI (2970)**	
				0.25	0.08	400K	82	0	Programmable Micropower	**OP22A**	**PMI (2970)**	
							88	0	Programmable Micropower	**OP22E**	**PMI (2970)**	
			2	—	0.7 *	1M	100	0	Programmable Micropower	**OP32A**	**† PMI (2970)**	30
	15		10	0.02	0.6	2K		0	Digitally Programmable in Binary Steps (From 1 to 2048)	MC4500	HyComp	
	25	2	5	0.1 *	—	500K	90	0	Precision, Low Power	**OP20H**	**PMI (2970)**	
0.3 *	30	0.3 *		0.5 *	0.2 *		70			TA75254	Toshiba	
0.35	3	2	0.2	2.5	0.12 *	300K	104		Low Bias Current	MP5508	MicroPwr	
0.4	0.05	0.02	8.0	5.5*	7.5	120K	83		High Speed Instrumentation Amplifier	LT1055C	LinearTech	35
										LT1055M	† LinearTech	
					9.0	120K	83		High Speed Instrumentation Amplifier	LT1056C	LinearTech	
										LT1056M	† LinearTech	
0.4 *	0.075		25		1.0 *	25K	70	0	FET Electrometer	**AD515L**	**Burr-Brown (2533)**	
	0.15		15		1.0 *	40K	80	0	FET Electrometer	**AD515K**	**Burr-Brown (2533)**	40
	0.3		50		1.0 *	15K	94 *	0	FET Electrometer	**AD515J**	**Burr-Brown (2533)**	
0.40	25	20	6	0.3 *	0.1 *	1–1000	75	0	Instrumentation	AD522A	AD	
0.5		2000	4 *	100				0	Wideband, Fast Settling	**AD9610B**	**AD (2440)**	
										AD9610T	**† AD (2440)**	
	0.000075	0.00002	10	0.5 *	0.3	—	70	—	Ultra Low Bias FET	3528C	Burr-Brown	45
		0.00004	10	1 *	1.6 *	100K	80	0	Ultra Low Bias FET	OPA104CM	Burr-Brown	
	0.0001	0.00005	25	1 *	0.6	100K	80 *	0	Ultra Low Bias FET	3523L	Burr-Brown	
	0.00015	0.00008	15	1 *	1.6 *	100K	66	0	Ultra Low Bias FET	OPA104BM	Burr-Brown	
	0.00025	0.0001	25	1 *	0.6	100K	80 *	0	Ultra Low Bias FET	3523K	Burr-Brown	
	0.0003	0.00008	10	0.5 *	0.3	—	66	—	Ultra Low Bias FET	3528A	Burr-Brown	
	0.001	0.0001	5	1 *	1.5	100K	80	0	Precision FET	LH0052	† National	50
		0.002 *	15	1 *	0.9	200K	76	0	Low Drift, Low Bias FET	OPA103BM	Burr-Brown	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
0.5											(Cont'd)	
	0.002	0.0005	5	2	1	—	90	1	Low Noise, Dielectrically Isolated	**OPA111S**	**† Burr-Brown (2532)**	
		0.001	10	2	1			0		**OPA111M**	**† Burr-Brown (2532, 2545)**	
										OPA111M/883B	**† Burr-Brown (2532, 2545)**	
		0.0015	5	2	1	—	90	1	Low Noise, Dielectrically Isolated	**OPA111A**	**Burr-Brown (2532)**	
		0.002	10	6.5	24		88	0	High-speed precision Di-FET	**OPA602B**	**Burr-Brown (2533)**	5
										OPA602S	**† Burr-Brown (2533)**	
		0.003 *	25	1 *	0.9	200K	76	0	Low Drift, Low Bias FET	OPA103AM	Burr-Brown	
	0.005	0.0003 *	2	1 *	0.6	100K	76 *	0	Ultra Low Drift FET	3527C	Burr-Brown	
			10	1 *	0.6	100K	76 *	0	Low Drift FET	3527A	Burr-Brown	
		0.001	5	0.5 *	1	1M	100	0	JEFT	**OP41A**	**† PMI (2970)**	10
				2.4 *	5	100 K	95		Low Bias Current	**OP43A**	**† PMI (2970)**	
			8	0.5 *	1	1M	100	0	JEFT	**OP41E**	**PMI (2970)**	
		0.001 *	25	1 *	0.6	50K	90 *	0	Low Offset FET	3522K	Burr-Brown	
										3522S	Burr-Brown	
		0.025	10	2 *	8	500K	80	0	Ion Implanted FET	AD611K	◊ AD	15
	0.01	0.008	10	2	2	33K	82	0	Dielectrically Isolated FET, Low Noise	**OPA121K**	**Burr-Brown (2532)**	
		0.01	10	—	20	800K	96	0	to ± 150V supply, 150mA output	**PA08A**	**Apex (2458)**	
				1.3 *	3.5	100K	120 *	0	to ± 50V supply, 5A output	**PA07A**	**Apex (2458)**	
				5	12	30K	74	0	to ± 75 V supply, 30 A output	**PA03A**	**Apex (2458)**	
		0.02	10	20 *	70	63K	90	2	To ± 225 V Supply, 200 mA Output	**PA85A**	**◊† Apex (2458)**	20
	0.015	0.006	10 *	10 *	6.5 *	50K	80	0	Low Noise, Wideband JFET	**OPA101AM**	**Burr-Brown (2533)**	
										OPA102AM	**Burr-Brown (2533)**	
	0.02	0.002 *	10	1.5 *	0.6	50K	90 *	0	Ultra Low Drift FET	3521H	Burr-Brown	
		0.01	10	—	100 *	—	104 *	2	to ± 50V supply, 4A output	**PA09A**	**Apex (2458)**	
				150*	600	150K*	100*	1	± 40 V supply, 4 A output	**PA19A**	**Apex (2458)**	25
	0.025	0.002	2	1	3	250K	80	2	Ultra Low Drift BIFET	AD547K	AD	
			5	1	3	250K	80	2	Ultra Low Drift BIFET	AD547S	AD	
				2	17 *	50K	80	0	High Speed Precision Bipolar JFET	AD544L	AD	
			10	5 *	30 *	40K	80	1	High Speed, Low Drift FET	AD382K	AD	
						60K	80	—	High Speed, Low Drift FET	AD381K	AD	30
		0.01	5	1 *	3	200K	80	0	Precision Bipolar JFET	AD542L	AD	
	0.035	0.002	5	1.5 *	94 *	10K	80	1	Wideband, Fast Settling	**OPA605C**	**Burr-Brown (2535)**	
										OPA605K	**Burr-Brown (2535)**	
			10	1.5 *	94 *	10K	80	1	Wideband, Fast Settling	**OPA605B**	**Burr-Brown (2535)**	
										OPA605J	**Burr-Brown (2535)**	35
	0.05	0.01	5	—	45	100K	86	—	Wideband, Decompensated, Settles to 0.01% in 1.5 µs	**OP17A**	**‡ PMI (2971)**	
										OP17E	**PMI (2971)**	
				14 *	10	35K	85	0	Bias Compensated	OP15E	LinearTech	
									Bipolar-JFET	OP15A	† LinearTech	
						100K	86	0	Bipolar-JFET, Bias Comp.	**OP15A**	**‡ PMI (2971)**	40
										OP15E	**PMI (2971)**	
				19 *	18	35K	85	0	Wideband-JFET, Bias Comp.	OP16A	† LinearTech	
										OP16E	LinearTech	
						100K	86	0	Wideband-JFET, Bias Comp.	**OP16A**	**‡ PMI (2971)**	
										OP16E	**PMI (2971)**	45
		0.025	10	1	1	50K	80	0	Low Power BIFET	LF441A	National	
				3	10	50K	80	0	Wideband JFET	LF411A	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
											(Cont'd)	
0.5	0.05	0.025	10									
				3.4	18	200K	80		Precision High Speed BiFET	**AD711B**	**AD (2433)**	
									Precision High Speed BiFET	**AD711K**	**AD (2433)**	
										AD711T	**† AD (2433)**	
	0.1	—	50	15 *	150 *	100K	90	1	High Speed, High Power	1461HR	† TeledyneP	
	0.10	0.02	5 *	2.5 *	5 *	50K	85	0	Bipolar—JFET	**PM155**	**† PMI (2971)**	5
	0.2	0.1	10 *	3	13	50K	80	0	BiFET, Low Offset	TL087I	TI	
				8 *	30 *	50K	—	0		**MC34081A**	**Motorola (2920, 2960)**	
										MC35081A	**† Motorola (2921)**	
				16 *	55 *	50K	—	—	Decompensated	**MC34080A**	**Motorola (2920, 2960)**	
										MC35080A	**† Motorola (2921)**	10
	0.4	0.05	10 *	3 *	13 *	25K	70	0	Low Offset JFET	TL087C	TI	
	1.5	0.005	5	1	1	300K	82		Precision Low Power BiFET	**AD548B**	**AD (2430)**	
									Precision Low Power BiFET	**AD548K**	**AD (2430)**	
									Precision Low Power BiFET	**AD548T**	**† AD (2430)**	
	2	0.2	5	1 *	0.3 *	80K	96	1	Precision Bipolar, Low Bias	AD208A	AD	15
										µA108AM	◇† Fairchild	
										µA208AM	Fairchild	
										LM108A	† GE/Intersil	
										LM108A	† LinearTech	
										MP108A	† MicroPwr	20
										MP208A	MicroPwr	
										LM108A	**† Motorola (2919)**	
										LM208A	**Motorola (2919, 2958)**	
										LM108A	‡ National	
										LM108AFRH	‡ National	25
										LM208A	◇ National	
										PM108A	**◇‡ PMI (2970)**	
										LM108A	◇† Thomson	
										LM208A	Thomson	
		1	5	220				0	Wideband, Fast-Settling	**AD9611**	**AD (2441)**	30
	3	2.8	2	0.6	0.25 *	200K	110	0	Instrumentation	MPOP05	† MicroPwr	
										MP5505B	† MicroPwr	
										OP05	**‡ PMI (2970)**	
	4	3.8	2	0.6	0.25 *	200K	107	0	Instrumentation	MPOP05E	MicroPwr	
										MP5505E	MicroPwr	35
										OP05E	**PMI (2970)**	
	7	1	5	1 *	0.3 *	80K	96	1	Precision Bipolar	AD308A	AD	
										µA308AC	Fairchild	
										LM308A	GE/Intersil	
										LM308A	LinearTech	40
										MP308A	MicroPwr	
										LM308A	**Motorola (2919, 2958)**	
										LM308A	National	
										LM308A	Thomson	
	7.5	2	2	—	0.7 *	750K	95	0	Programmable Micropower	**OP32B**	**◇† PMI (2970)**	45
										OP32F	**PMI (2970)**	
				0.25	0.08	250K	80	0	Programmable Micropower	**OP22B**	**PMI (2970)**	
							85	0	Programmable Micropower	**OP22F**	**PMI (2970)**	
	26	2.5	0.1	14	30	100K	80		Fast Settling JFET	LF401	National	
	30	2	8	0.8	0.25	100K	85	0	General Purpose	MPOP02A	† MicroPwr	50
										MPOP02E	MicroPwr	
										MP5502A	† MicroPwr	
										MP5502E	MicroPwr	
		5	5	1 *	0.25 *	80K	90	1	High Accuracy 301	AD301AL	AD	
	35	2	8	0.8	0.25	100K	90	0	General Purpose	OP02A	‡ PMI	55
										OP02E	PMI	
	40	10	5	1.2 *	0.25 *	100K	100	0	Precision, Instrumentation	**CA3193**	**GE/RCA (2645)**	
										CA3493	**GE/RCA (2645)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
0.5											(Cont'd)	
	50	4	5	0.3 *	0.2	500K	84	0	Low Power	**OPA21G**	**Burr-Brown (2532)**	
				0.5 *	49	1000K	85	1	Selectable Input	**OPA201A**	**Burr-Brown (2532)**	
		5	5	1 *	0.5 *	50K	90	0	Higher Accuracy 741	AD741L	AD	
		30	1	1.5 *	0.8	100K *	100 *	0	Low Drift	3500E	Burr-Brown	
	75	5	2	1	0.005 *	1000K	110	4	High Accuracy Instrumentation	µA725AM	† Fairchild	5
	80	5	2	—	0.01	1000K	120	4	High Gain Instrumentation	**OP06B**	**‡ PMI (2970)**	
										OP06F	**PMI (2970)**	
		10	0.5	0.3 *	0.12 *	1000K	110	1	Precision Low Noise	AD504M	AD	
			1	0.3 *	0.12 *	1000K	110	1	Precision Low Noise	AD504L	AD	
										AD504S	† AD	10
		100	10	90	40			0		**VA711J**	**VTC (3374)**	
				500	150			0		**VA721J**	**VTC (3374)**	
	500	200	15	0.3	—	—	72	0	Instrumentation	HC3020	HyComp	
0.5 *	5000 *		5 *	95	4000	50K	60 *	0		CLC201AI	Comlinear	
										CLC201AM	Comlinear	15
				160	6000	50K	56 *	0		CLC203AI	Comlinear	
										CLC203AM	Comlinear	
				170	6500	50K	60 *	0		CLC221AI	Comlinear	
										CLC221AM	Comlinear	
0.6	0.05	0.02	9	8*	18	120K	82	0	Wideband, Low-Drift JFET	LT1022C	† LinearTech	20
										LT1022M	† LinearTech	
	0.1	0.01	5	1 *	0.3 *	100K	110	0	Precision, Low Input Current	**LM11C**	**Motorola (2920)**	
										LM11C	National	
0.7	30	2	5	2.5 *	18 *	50K	90	0	High Speed	MPOP01A	† MicroPwr	
										MPOP01H	MicroPwr	25
										MP5501A	MicroPwr	
										MP5501H	† MicroPwr	
										OP01	**‡ PMI (2971)**	
										OP01H	**PMI (2971)**	
				2.5*	18*	50K	90	0	High Speed	OP01	† Solitron	30
										OP01H	Solitron	
0.75	0.010	0.002	7.5	2.4 *	5	500 K	85		Low Bias Current	**OP43F**	**PMI (2970)**	
	0.075	2.8	1.3	0.5 *	0.1	150K	110	0	Ultra Low Noise	**OP07**	**† Raytheon (2979)**	
		3.8	1.3	0.5 *	0.1	150K	106	0	Ultra Low Noise	**OP07E**	**Raytheon (2979)**	
	0.2	0.04	10	1.5	100	500K	86		High-speed, precision.	**OP44E**	**PMI (2966, 2971)**	35
				10 *	50	200K	86	1	Fast Settling	**OP42E**	**PMI (2965, 2971)**	
	4	3.8	1.3	0.6	0.17		123	0	Low Offset Voltage, Low Drift	HSOP07E	HybridSys	
		4	1.3	2.5 *	0.5	1M	100	0	Ultra Low Drift	**AM430A**	**Datel (2577)**	
	80	5	—	0.44 *	0.3	50K	80	0	High Performance	µA741EC	Fairchild	
				1 *	0.3 *	50K	80	0	High Performance	µA741AM	† Fairchild	40
0.9	0.03	0.015	7	0.30	0.01	100K	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD1706A	◊°† AdvLinear	
		0.025	7	0.4	0.33	40K	70	0	CMOS, Rail-to-Rail	ALD1701A	◊°† AdvLinear	
				1	1.4	50K	70	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD1702A	◊°† AdvLinear	
	0.85	0.025	7	2.1	5	50K	70	0		ALD1704A	† AdvLinear	
1	—	—	—	1G *					High Speed	MN542	† MicroNet	45
	0.00006	0.00002		0.1	0.2	100K	60	0	Ultra-low bias current.	**OP80E**	**PMI (2967, 2970)**	
	0.000075	—	25	0.35	0.3	50K	70	0	FET Electrometer	AD515L	AD	
	0.00015	—	15	0.35	0.3	100K	80	0	FET Electrometer	AD515K	AD	
		0.0003		0.1	0.2	100K	60	0	Ultra-low bias current.	**OP80A**	**† PMI (2967, 2970)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
1											(Cont'd)	
	0.0003	0.00008	25	1 *	1.6 *	100K	66	0	Ultra Low Bias FET	OPA104AM	Burr-Brown	
	0.0005	0.0002	50	1 *	0.6	100K	80 *	0	Ultra Low Bias FET	3523J	Burr-Brown	
	0.001	0.0005	15	0.7 *	0.3	40K	70	0	Precision Low Drift FET	AD545K	AD	
	0.002	0.001	25	0.7 *	0.3	20K	66	0	Precision Low Drift FET	AD545J	AD	
	0.004	0.003	20	2	1		90	0	Low Noise	**OPA111V**	**† Burr-Brown (2532)**	5
										OPA111V/883B	**† Burr-Brown (2532)**	
	0.005	—	10	1 *	3	75K	80	0	High Accuracy, FET	AD506L	AD	
		0.0002	10	1 *	1	75K	76	0	Precision FET	LH0052C	National	
	0.01	0.002	7.5 *	0.5 *	1	500K	90	0	JFET	**OP41F**	**PMI (2970)**	
			10	0.5 *	1	500K	90	0	JFET	**OP41B**	**† PMI (2970)**	10
		0.002 *	50	1 *	0.6	50K	90 *	0	Low Offset FET	3522J	Burr-Brown	
		0.005 *	25	10 *	65	25K	70 *	0	Fast Settling, 1 µs to 0.01%	**3550S**	**† Burr-Brown (2535)**	
				20 *	100	25K	70 *	0	Fast Settling, 0.6 µs to 0.01%	**3550K**	**Burr-Brown (2535)**	
		0.01	10	—	125 *	100K	130 *	2	to ± 150V supply, 40mA output	**PA84A**	**◇ Apex (2458)**	
				3	20	1M	130 *	0	to ± 150V supply, 75mA output	**PA83A**	**◇ Apex (2458)**	15
			30	3.5	20		75	0	High-speed precision Di-FET	**OPA602A**	**Burr-Brown (2533)**	
		0.02	10	1	3		90	1	Power Op Amp	**PA88A**	**◇† Apex (2458)**	
	0.010	0.002	10	2.4 *	5	500 K	85		Low Bias Current	**OP43B**	**† PMI (2970)**	
	0.025	0.002	10	2	16	50K	80	0	High Speed Precision Bipolar JFET	AD544K	† AD	
				5 *	30 *	40K	80	1	High Speed, Low Drift FET	AD382S	† AD	20
						60K	80	—	High Speed, Low Drift FET	AD381S	† AD	
			15	2	16	50K	80	0	High Speed Precision Bipolar JFET	AD544S	AD	
		0.01	10	1 *	3	50K	76	0	Precision Bipolar JFET	AD542S	† AD	
						200K	80	0	Precision Bipolar JFET	AD542K	AD	
	0.035	0.002	25	1.5 *	94	10K	70	1	Wideband, Fast Settling	**OPA605A**	**Burr-Brown (2535)**	25
										OPA605H	**Burr-Brown (2535)**	
		0.005	5	1	3	100K	76	2	Ultra Low Drift BIFET	AD547J	AD	
	0.05	0.005	15	5 *	30 *	40K	76	1	High Speed, Low Drift FET	AD382J	AD	
						60K	76	—	High Speed, Low Drift FET	AD381J	AD	
		0.01	15	70	1000	30K	60	1	Wideband, Fast Settling FET	AD3554B	◇ AD	30
			25	70	1000	30K	60	1	Wideband, Fast Settling FET	AD3554S	◇† AD	
		0.025	10	0.75	100 *		70	1	Video Op Amp	**PA18A**	**† Apex (2458)**	
				2	10	33K		0		**OPA445SM**	**† Burr-Brown (2536)**	
		0.1	15	150	1000	1 M	44	1	Wideband, Fast Settling	BB3554B	Maxim	
							60	1	Wideband, Fast Settling	AD3554B	Maxim	35
			25	150	1000	1 M	44	1	Wideband, Fast Settling	BB3554S	† Maxim	
							60	1	Wideband, Fast Settling	AD3554S	† Maxim	
	0.050	0.01	15	70	1000	100K	44	1	150 ns Settling to 0.05%	**3554B**	**Burr-Brown (2535)**	
			25	70	1000	100K	44	1	150 ns Settling to 0.05%	**3554S**	**Burr-Brown (2535)**	
	0.1	0.005*	5	3	190	10K	58	0	Fast Settling FET	AH103L	OEI	40
				4.8	220	10K	58	1	Fast Settling FET	AH104L	OEI	
			10	3	190	10K	58	0	Fast Settling FET	AH103S	† OEI	
				4.8	220	10K	58	1	Fast Settling FET	AH104S	OEI	
		0.01	50	50 *	250 *	100K	70 *	1	Wideband, Fast Settling	**3551J**	**Burr-Brown (2535)**	
										3551S	**† Burr-Brown (2535)**	45
		0.02	10	—	35	75K	86	—	Wideband, Decompensated, Settles to 0.01% in 1.5 µs	**OP17B**	**‡ PMI (2971)**	
										OP17F	**PMI (2971)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
											(Cont'd)	
1	0.1	0.02	10									
				13 *	7.5	30K	85	0	Bias Compensated	OP15B	† LinearTech	
										OP15F	LinearTech	
						75K	86	0	Bipolar-JFET, Bias Comp.	**OP15B**	**‡ PMI (2971)**	
										OP15F	**PMI (2971)**	
				18 *	12	30K	85	0	Wideband-JFET, Bias Comp.	OP16B	† LinearTech	5
										OP16F	LinearTech	
						75K	86	0	Wideband-JFET, Bias Comp.	**OP16B**	**‡ PMI (2971)**	
										OP16F	**PMI (2971)**	
			20	40	330 *	25K	60	1	Wideband, Fast Settling	AD380K	AD	
										AD380L	† AD	10
										AD380S	AD	
	0.2	0.04	10	1.5	100	500K	86		High-speed, precision.	**OP44A**	**† PMI (2966, 2971)**	
				10 *	45	160K	80	1	Fast Settling	**OP42A**	**† PMI (2965, 2971)**	
		0.1	10 *	8 *	30 *	25K	—	0		**MC35081**	**† Motorola (2921)**	
					32 *	25K	—	0		**MC34081**	**Motorola (2920, 2960)**	15
				16 *	55 *	25K	—	—	Decompensated	**MC35080**	**† Motorola (2921)**	
	0.3	0.02	15	40 *	220 *	25K	60	1	Wideband, Fast Settling	1437	TeledyneP	
										1437HR	† TeledyneP	
		0.05	15	13 *	10	150K	86	0	Precision JFET	**OP215E**	**PMI (2971)**	
	2	100	10	30	300 *	100K	70	2	Low Offset, Fast Settling	HOS060	† AD	20
										HOS060/883	† AD	
	5			1.0	1.5	56K	110			SL562	Plessey	
		0.5	10	0.8 *	0.12 *	40K	84	0	Precision, Low Input Current	**OP12C**	**‡ PMI (2970)**	
										OP12G	**PMI (2970)**	
								1	Precision, Low Input Current	MPOP08C	† MicroPwr	25
										MPOP08G	MicroPwr	
										OP08C	**‡ PMI (2970)**	
										OP08G	**PMI (2970)**	
	6	0.5			4		80			TA7540	Toshiba	
	10	3	3	—	0.7 *	500	85	0	Programmable Micropower	**OP32G**	**PMI (2970)**	30
	15	7 *	3	1.5 *	1	45K	100 *	0	Low Bias, Low Noise	3500C	Burr-Brown	
			5	1.5 *	1	45K	100 *	0	Low Bias, Low Noise	3500T	† Burr-Brown	
	40	5	10	1.5	0.53	250K	100	0	Programmable	LB1035AC	† AT&T	
	100	—	2	200	1800	1M	—	1	Bipolar	9808	OEI	
		20	4 *	1 *	0.25 *	30K	70	2	High Voltage	LH0004	† National	35
					0.25	30K	90	2	High Voltage	MC0004	† Micra	
			5	—	—	1000K	110	4	Instrumentation	PM725	† PMI	
				1 *	0.005 *	1000K	110	4	High Accuracy Instrumentation	µA725M	† Fairchild	
										LM725	◊† National	
	250	20		15	50	100K	86		Wideband Amplifier	LT118A	† LinearTech	40
										LT318A	LinearTech	
		70	20	—	—	20K	70	1	General Purpose	TA7502B	◊ Toshiba	
	300	50		15	±5		100		Power Op Amp	MA921	AnalogSys	
	650	15	4.3	40 *	30	10K	60	0		**VA705L**	**VTC (3374)**	
1 *	5000 *		10 *	165	3000	5K	46 *	0		CLC231AI	Comlinear	45
										CLC231AM	Comlinear	
1 to 16	0.001 *	0.001 *	1 *	0.012 *	0.001 *	20K *	77	1	Prog., Low Bias, Supply Volt. = 1 V	TLC251C	TI	
				0.075 *	0.01 *	10K *	77	1	Prog., Low Bias, Supply Volt. = 1 V	TLC251C	TI	
			5 *	2.3 *	4.5 *	10K	70	1	Programmable, High Bias	TLC251C	TI	
1.0	0.2	0.1	10 *	3	13	50K	80	0	BiFET, Low VinfIO	TL088I	TI	50
1.2	0	3	2	0.35	0.08	250K *	80	0	Programmable Micropower	**OP22H**	**PMI (2970)**	
1.3	7	6	4.5	0.4	0.1	120K	100	0	Instrumentation	OP05C	LinearTech	
				1.2 *	0.25 *	120K	100	0	Instrumentation	MPOP05C	MicroPwr	
										MP5505C	MicroPwr	
										OP05C	**‡ PMI (2970)**	55
	110	13	1.4 *	—	0.01	500K	110	4	High Gain Instrumentation	**OP06G**	**PMI (2970)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
1.5	0.01	—	25	1 *	3	50K	80	0	High Accuracy, FET	AD506K	AD	
			50	1 *	3	50K	80	0	High Accuracy, FET	AD506S	† AD	
	0.015	0.01	5*	10	25	56K	80	0	Wideband-JFET, Dielectrically Isolated	**OPA606KM**	**† Burr-Brown (2532)**	
										OPA606S	**† Burr-Brown (2532)**	
	0.02	0.003		120		500	86		Differential Video Amp	µA733	† Signetics	5
	0.025	0.005	7.5	2.4 *	5	300 K	85		Low Bias Current	**OP43G**	**PMI (2970)**	
	0.03	0.005		120		600	86		Differential Video Amp	µA733C	† Signetics	
	0.25	0.05	8	1.2	80	500K	80		High-speed, precision.	**OP44F**	**PMI (2966, 2971)**	
			8 *	10 *	40	200K	80	1	Fast Settling	**OP42F**	**PMI (2965, 2971)**	
	80	5	2	0.5 *	0.005 *	1000K	120	4	Instrumentation	LM725A	◊ National	10
	100	10			0.17 *	130K	100	0		LM118X	† LinearTech	
										LM118X/883B	† LinearTech	
		15	3	0.3 *	0.12 *	500K	100	1	Low Drift, Low Noise	AD504K	AD	
	120	45	4 *	1 *	0.25 *	30K	70	2	High Voltage	LH0004C	National	
1.9	0.2	0.1	10 *	16 *	55 *	25K	—	—	Decompensated	**MC34080**	**Motorola (2920, 2960)**	15
2									24 W BTL Audio Amplifier	**TDA1515A**	**Signetics (3095)**	
	0.0003	0.00004		0.1	0.2	80K	60	0	Ultra-low bias current.	**OP80F**	**PMI (2967, 2970)**	
	0.001 *	0.001 *	0.7 *	0.1 *	0.04 *	30K	70	1	Programmable, Low Bias	TLC251BC	TI	
										TLC271BC	TI	
			1 *	0.012 *	0.001 *	20K *	77	1	Prog., Low Bias, Supply Volt. = 1 V	TLC251BC	TI	20
				0.075 *	0.01 *	10K *	77	1	Prog., Low Bias, Supply Volt. = 1 V	TLC251BC	TI	
			5 *	2.3 *	4.5 *	10K	70	1	Programmable, High Bias	TLC251BC	TI	
										TLC271BC	TI	
	0.0025	0.0025		0.1	0.2	80K	60	0	Ultra-low bias current.	**OP80G**	**PMI (2967, 2970)**	
	0.005	0.001	0.7 *	2.2	5.3	7K	70	0	LinCMOS, Programmable	TLC271BI	TI	25
	0.01	0.0005 *	15	1 *	3	50K	70	0	Low Offset Voltage, FET	**ICL8007**	**† GE/Intersil (2673)**	
	0.02	—	50	100	1000	100K	90	1	Fast-Settling, FET Input	1443HR	† TeledyneP	
	0.025 *	0.01 *	20	1 *	3	50K	76	0	Precision Bipolar JFET	AD542J	AD	
	0.03	0.015	7	0.3	0.01	100K	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD1706B	◊°† AdvLinear	
		0.025	7	1	1.4	50K	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD1702B	◊°† AdvLinear	30
	0.05	0.005	20	2	15	30K	74	0	High Speed Precision Bipolar JFET	AD544J	AD	
		0.01	5	—	40	50K	85	—	Wideband Decompensated	MP157A	† MicroPwr	
										LF157A	† National	
										LF357A	National	
										PM157A	**† PMI (2971)**	35
				2.5 *	3	50K	85	0	Bipolar - JFET	LF155A	† National	
										LF355A	National	
										PM155A	**◊† PMI (2971)**	
										MP155A	† MicroPwr	
				2.5	3	50K	85	1	JFET Input	LF155A	† Thomson	40
				4	10	50K	85	0	Wideband - JFET	LF156A	† National	
										LF356A	National	
										PM156A	**◊† PMI (2971)**	
									Wideband-JFET	MP156A	† MicroPwr	
									Wideband-JFET, Dielectrically Isolated	**OPA156A**	**† Burr-Brown (2532)**	45
										OPA356A	**† Burr-Brown (2532)**	
								1	JFET Input	LF156A	† Thomson	
				15	40	50K	85	1	JFET Input	LF157A	† Thomson	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
2	0.05	0.01									(Cont'd)	
			50	70	1000	100	60	1	Wideband, Fast Settling FET	AD3554A	◊ AD	
		0.025	20	3	16	150K	76		Precision High Speed BiFET	**AD711A**	**AD (2433)**	
									Precision High Speed BiFET	**AD711J**	**AD (2433)**	
						150k	76		Precision High Speed BiFET	**AD711S**	**† AD (2433)**	
		0.03	10 *	0.48 *	0.16 *	20K	76	1	Low Power	ICL7614AC	Maxim	
										ICL7614AM	† Maxim	5
				1	1.6	80K *	70	0	Low Power	**ICL7611AC**	**GE/Intersil (2673)**	
										ICL7611AM	**† GE/Intersil (2673)**	
									Low Power, Extended CMVR	**ICL7612AC**	**GE/Intersil (2673)**	
										ICL7612AM	**† GE/Intersil (2673)**	10
										ICL7616AC	GE/Intersil	
										ICL7616AM	† GE/Intersil	
									Low Power, Input Protected	ICL7613AC	GE/Intersil	
								1	Low Power	ICL7614AC	GE/Intersil	
										ICL7614AM	† GE/Intersil	15
									Low Power, Input Protected	ICL7615	† GE/Intersil	
										ICL7615AC	GE/Intersil	
				1.4 *	1.6 *	10K	76	0	CMOS, Low Power, Programmable Low Bias	ICL7611AC	Maxim	
										ICL7611AM	† Maxim	
									Programmable Bias, Extended CMVR	ICL7612AC	Maxim	20
										ICL7612AM	† Maxim	
										ICL7616AC	Maxim	
										ICL7616AM	† Maxim	
		0.05	30	—	30 *	800K	96	0	to ± 150V supply, 150mA output	**PA08**	**Apex (2458)**	
				1.3 *	5 *	40K	120 *	0	Hi-Rel Screened	**PA07Q**	**† Apex (2458)**	25
									High Voltage, High Output Current	**PA07M**	**† Apex (2458)**	
					5	100K	120 *	0	to ± 50V supply, 5A output	**PA07**	**Apex (2458)**	
				5	20	63K	90	0	± 15 V to ± 150 V supply, 150 mA	**PA08M**	**† Apex (2458)**	
									Hi-Rel Screened	**PA08Q**	**† Apex (2458)**	
					30 *	800K	96	0	To ± 175 V supply, 150 mA output	**PA08V**	**Apex (2458)**	30
		0.1	30	20 *	100 *	63K	90	2	To ± 225 V supply, 200 mA output	**PA85**	**◊ Apex (2458)**	
			50	150	1000	1 M	44	1	Wideband, Fast Settling	BB3554A	Maxim	
							60	1	Wideband, Fast Settling	AD3554A	Maxim	
		2	20	1000	275	31.6K	80	0		TP3554-HR	† TeledyneP	
	0.050	0.01	50	70	1000	100K	44	1	150 ns Settling to 0.05%	**3554A**	**Burr-Brown (2535)**	35
	0.075	0.025	10 *	4 *	13 *	50K	80	0	Precision BIFET	**MC35001A**	**† Motorola (2921)**	
	0.1	0.005*	20	3	190	10K	58	0	Fast Settling FET	AH103J	OEI	
				4.8	220	10K	58	0	Fast Settling FET	AH104J	OEI	
		0.025	50 *	70 *	500 *	20 K	70	2		**EL2006**	**† Elantec (2591)**	
		0.05	10 *	3 *	13 *	50K	80	0	Bipolar JFET	µA771AC	Fairchild	40
										µA771AM	† Fairchild	
				4 *	13 *	50K	80	0	Precision BIFET	**MC34001A**	**Motorola (2920, 2959)**	
			20	150	400	10K	60	3	Fast Settling, Wideband	**OPA600V**	**Burr-Brown (2535, 2545)**	
										OPA600V/MIL	**† Burr-Brown (2535)**	
										OPA600V/883B	**† Burr-Brown (2535, 2545)**	45
	0.10	0.05 *	40	0.5 *	3	50K	80	1	High Current, High Power	**3571A**	**Burr-Brown (2536)**	
										3572A	**Burr-Brown (2536)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
2											(Cont'd)	
	0.2	0.02	50	40 *	225	30K	60	1	Wideband, Fast Settling	1438	TeledyneP	
										1438HR	† TeledyneP	
		0.1	20	2.7	8	25K	70	0	J-FET Input	LF411C	TI	
									Wideband JFET	LF411	National	
				3	10	50K	80	0	JFET Input, High Speed	LF351A	Thomson	5
				17	165	56K	80	0		1463HR	† TeledyneP	
							90	0		1463	† TeledyneP	
	0.3	0.02	15	40	220	25K	60	0	Wideband, settles to 0.1% in 110 ns	HC1437	◊ HyComp	
										HC1437-883	◊† HyComp	
		0.025	7	0.4	0.33	32K	65	0	CMOS, Rail-to-Rail	ALD1701B	◊°† AdvLinear	10
	0.50	—	75	60 *	500	200K	—	0	Inverting, Settles to 0.01% in 200 ns	1430	TeledyneP	
										1430HR	† TeledyneP	
	1.5	0.01	20		1	300K	76		Precision Low Power BiFET	**AD548A**	**AD (2430)**	
				1	1	300K	76		Precision Low Power BiFET	**AD548J**	**AD (2430)**	
									Precision Low Power BiFET	**AD548S**	**† AD (2430)**	15
	2	0.2	3 *	1 *	0.3 *	50K	85	1	High Performance Low Bias Bipolar	LM208	TI	
			15	0.3 *	0.3 *	50K	85	1	Low Noise 108	ICL108LN	† GE/Intersil	
				1 *	0.2 *	50K	85	0	Micropower, Supply Current 600 µa	LM112	† National	
										LM212	◊ National	
					0.3 *	50K	85	1	Precision Bipolar	AD208	AD	20
										µA108M	◊† Fairchild	
										µA208M	Fairchild	
										LM108	◊† GE/Intersil	
										LM108	† LinearTech	
										MP108	† MicroPwr	25
										MP208	MicroPwr	
										LM108	**† Motorola (2919)**	
										LM208	**Motorola (2919, 2958)**	
										LM108	◊† National	
										LM208	◊ National	30
										PM108	**‡ PMI (2970)**	
										LM108	◊† Thomson	
										LM108M	◊† Thomson	
										LM208	Thomson	
	3	2	10	0.5 *	0.1	45K	100 *	0	Low Bias Current	3501C	Burr-Brown	35
	5	0.6	18	50	75		110	0		**VA703**	**† VTC (3372)**	
										VA713	**† VTC (3372)**	
	7	3	10	0.5 *	0.1	45K	100 *	0	Low Bias Current	3501B	Burr-Brown	
										3501S	† Burr-Brown	
	20	0.7	2*	—	—	60K	89	0	Op Amp and Voltage Reference	LM10BL	LinearTech	40
										LM10BL	National	
			2*	—	—	120K	93	0	Op Amp and Voltage Reference	LM10	LinearTech	
										LM10B	LinearTech	
										MCELM10	LinearTech	
										MCELM10	◊ MCE	45
										LM10	† National	
										LM10B	National	
		10 *	5	1.5 *	1	45K	100 *	0	Low Bias, Low Noise	3500B	Burr-Brown	
			10	1.5 *	1	45K	100 *	0	Low Bias, Low Noise	3500S	† Burr-Brown	
	35	7	20 *	40 *	200	10K	70	0	Wideband, Unity Gain Stable	**HA2541-2**	**† Harris (2705, 2737, 2747)**	50
										HA2541-5	**Harris (2705, 2737, 2747)**	
	50	5	8	2.5 *	18 *	50K	80	0	High Speed	MPOP01	† MicroPwr	
										MPOP01E	MicroPwr	
										MPOP01F	† MicroPwr	
										MP5501E	MicroPwr	55
										MP5501F	† MicroPwr	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
											(Cont'd)	
2	50	5										
			10	0.8	0.25	50K	90	0	General Purpose	MP0P02	† MicroPwr	
										MP0P02C	MicroPwr	
										MP5502	† MicroPwr	
										OP02	‡ PMI	
										OP02C	‡ PMI	5
		10	5	2.5 *	5	75K	85	0	Bipolar-JFET	LF155A	† LinearTech	
										LF355A	LinearTech	
				4	10	75K	85	0	Wideband-JFET	LF156A	† LinearTech	
										LF356A	LinearTech	
	60	10	15	—	40	50K	70	1	60 V/µs Comp. for g = 5	SE538	† Signetics	10
				3 *	25	50K	70	0	High Slew Rate	SE530	† Signetics	
	75	10	3 *	1 *	0.5 *	50K	80	1	High Performance Bipolar	LM201A	TI	
			15	—	—	50K	80	1	General purpose	LM101A	SGS	
										LM201A	SGS	
				1 *	0.5 *	25K	80	1	General Purpose, Uncompensated	LM101A	† Thomson	15
						50K	80	0	General Purpose, Compensated	LM107	† LinearTech	
										LM107	‡ National	
										LM207	◊ National	
										SG107	◊† SiliconG	
										SG207	◊ SiliconG	20
										LM207	TI	
										LM107	◊† Thomson	
										LM207	Thomson	
									Higher Accuracy 741	AD741S	† AD	
								1	General Purpose, Improved 101, Uncompensated	AD101A	◊† AD	25
										AD201A	AD	
										µA101AM	◊† Fairchild	
										µA201AM	Fairchild	
										LM101A	† LinearTech	
										LM101A	**† Motorola (2919)**	30
										LM201A	**Motorola (2919, 2958)**	
										LM101A	‡ National	
										LM201A	◊ National	
										LM101A	† Raytheon	
										SG101A	† SiliconG	35
										SG201A	SiliconG	
										LM201A	Thomson	
							90	0	Higher Accuracy 741C	AD741K	AD	
	150	30	3 *	1.3 *	2	50K	80	0	Low Power	**HA5151-2**	**† Harris (2706, 2737, 2747)**	
	200	50	10	5 *	0.3 *	25K	80	3	General Purpose	µA709AM	† Fairchild	40
										LM709A	◊† National	
										SFC2709A	† Thomson	
	500	50	10 *	3.5 *	13 *	50K	80	1	High Performance, Single Supply	**MC33071A**	**◊ Motorola (2920)**	
										MC34071A	**Motorola (2920, 2960)**	
										MC35071A	**† Motorola (2921)**	45
	800	200	—	10 *	13 *	50K	80	1	Wideband, Low Noise	XR5534M	◊† Exar	
										RM5534	**† Raytheon (2979)**	
										SE5534	† Signetics	
										SE5534A	† Signetics	
										SE5534A	† TI	50
	1500	300	—	10 *	6 *	25K	70	1	Low Noise, Comp. for G = 3	SSM2134	SSM	
	20000	6000	20 *	400 *	350	10K	70		Low power enhanced HA-2540; I supply < 16 mA.	**EL2040**	**◊† Elantec (2592)**	
				600 *	550	10K	70		Low power enhanced HA-2539; I supply 16 mA. < 16 mA.	**EL2039**	**◊† Elantec (2592)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
											(Cont'd)	
2	20000	7000	20 *	50 *	150	10K	70		Low power, enhanced HA-2541; I supply < 16 mA.	**EL2041**	**† Elantec (2592)**	
				150 *	160	10K	74		I supply < 16 mA.	**EL2195**	**Elantec (2592)**	
									Low power, enhanced HA-5190; I supply < 16 mA.	**EL2190**	**◇† Elantec (2592)**	
	35000	7000	20 *	40 *	200	10K	70		Wideband, unity gain stable, fast settling.	EHA-2541-2	† Elantec	
										EHA-2541-5	Elantec	5
2.0	0.050	0.01	5	2.5 *	3	50K	85	0	JFET Input	MP355A	MicroPwr	
				4	10	50K	85	0	JFET Input	MP356A	MicroPwr	
				15	40	50K	85	0	JFET Input	MP357A	MicroPwr	
	0.85	0.025	7	2.1	5	50K	70	0		ALD1704B	† AdvLinear	
	50	5	8	2.5*	18*	50K	80	0	High Speed	OP01E	Solitron	10
										OP01F	† Solitron	
2.5	0.2	0.05	7 *	4	15 *	25K	100 *	0	JFET Input	µPC811	NEC	
				8	25 *	25K	100 *	0	High Speed, JFET Input	µPC813	NEC	
	50	5		0.6	0.2	1M	110		Low Power	**LC810**	**Gennum (2687)**	
	125	35	2 *	—	—	250K	96	4	Low Drift	IR9725	Sharp	15
				1 *	0.005 *	250K	94	4	High Accuracy Instrumentation	µA725C	Fairchild	
										LM725C	◇ National	
										PM725C	PMI	
	200	40	5	0.3 *	0.12 *	250K	94	1	Low Drift, Low Noise	AD504J	AD	
	250	50	10 *	1 *	0.25 *	100K	90	2	High Gain Instrumentation, 50 mA	LH0020	† National	20
	5000 *		10 *	165	1800	70 dB	46		Current mode amplifier.	**EL2022**	**† Elantec (2592)**	
3	0.0003	—	50	0.35	0.3	40K	66	0	FET Electrometer	AD515J	AD	
	0.001	0.0002	5 *	0.11	2 *	1M *	90	0	Low Bias Current, Low Power	**HA5180-2**	**Harris (2706, 2737, 2747)**	
										HA5180-5	**Harris (2706, 2737, 2747)**	
			5	2	7	1M	90			1346	TeledyneP	25
										1346-01	† TeledyneP	
	0.01	0.008	6 *	2 *	2 *		82	0	Precision Di-FET	**OPA121U**	**Burr-Brown (2532)**	
	0.020	0.020 *	25	3 *	20 *	100K	110 *	0	High Voltage FET	**3582J**	**Burr-Brown (2536)**	
				5	20 *	50K	110 *	0	High Voltage FET	**3581J**	**Burr-Brown (2536)**	
				5 *	20 *	400K	110 *	0	High Voltage FET	**3583**	**Burr-Brown (2536)**	30
				7 *	—	1000K	110 *	2	High Voltage FET	**3584**	**Burr-Brown (2536)**	
	0.025	0.015	10*	9	22	32K	78	0	Wideband-JFET, Dielectrically Isolated	**OPA606KP**	**Burr-Brown (2532)**	
	0.03	0.005		1	3.5		70			TA75060	◇ Toshiba	
										TA75061	◇ Toshiba	
				3	13		70			TA75070	◇ Toshiba	35
										TA75071	◇ Toshiba	
	0.05	—	75	90	900	56K	80	1	Fast-Settling, FET Input	1443	TeledyneP	
		0.01	10 *	100 *	100	75K	74	1	Wideband, High Slew Rate	**HA5160-2**	**† Harris (2706, 2737, 2747)**	
			10	100	120	150	74			1344-01	† TeledyneP	
			20 *	100 *	100	75K	74	1	Wideband, High Slew Rate	**HA5160-5**	**Harris (2706, 2737, 2747)**	40
			20	100	120	150	74			1344	TeledyneP	
		0.025	10	2	10	33K		0		**OPA445BM**	**Burr-Brown (2536)**	
		0.05	25	—	125 *	100K	130 *	2	to ± 150V supply, 40mA output	**PA84**	**◇ Apex (2458)**	
				5	20	1M	130 *	0	Hi-Rel Screened	**PA83Q**	**◇† Apex (2458)**	
									to ± 150V supply, 75mA output	**PA83**	**◇ Apex (2458)**	45
										PA83M	**◇† Apex (2458)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
											(Cont'd)	
3	0.05	0.05	25	5 *	20 *	100K	110 *	0	± 32/75Vs, ± 30mA.	**PA81J**	◇ **Apex (2458)**	
									± 70/150Vs, ± 15mA.	**PA82J**	◇ **Apex (2458)**	
									Hi-Rel Screened	**PA82Q**	◇ **Apex (2458)**	
				75 *	25 *	100K	130 *	2	Fast Settling, High Voltage	**PA84S**	◇ **Apex (2458)**	
									Hi-Rel Screened	**PA84Q**	◇† **Apex (2458)**	5
									High Voltage	**PA84M**	◇† **Apex (2458)**	
	0.1	0.025	25	40 *	350	20 K	70	2	FET Input	**EL2006A**	† **Elantec (2591)**	
		0.05	25	4.5*	13	86dB	70	0	Wideband, High Output Current	**PA02A**	† **Apex (2458)**	
			30	—	100 *	—	104 *	2	to ± 50V supply, 4A output	**PA09**	**Apex (2458)**	
				10	20	10K	64	2	Hi-Rel Screened	**PA09Q**	† **Apex (2458)**	10
									to ± 40 V supply, 2 A output	**PA09M**	† **Apex (2458)**	
				150*	600	150K*	100*	1	± 40 V supply, 4 A output	**PA19**	**Apex (2458)**	
			100	4	38					**PA04**	**Apex (2458)**	
	0.2	0.04	100	18	100	56K	110	2		1480HR	† TeledyneP	
		0.05	10 *	4 *	13 *	50K	80	0	Low Noise Bipolar-JFET	**TL071BC**	**Motorola (2920, 2960)**	15
										TL071BC	TI	
			15	—	25	50K	82	—	Wideband, Decompensated, Settles to 0.01% in 1.6 µs	**OP17C**	‡ **PMI (2971)**	
										OP17G	**PMI (2971)**	
				0.2 *	5	25K	80	0	Bias Compensated	OP15G	LinearTech	
				12 *	5	25K	80	0	Bias Compensated	OP15C	† LinearTech	20
						50K	82	0	Bipolar-JFET, Bias Comp.	**OP15C**	‡ **PMI (2971)**	
										OP15G	**PMI (2971)**	
				17 *	9	25K	80	0	Wideband-JFET, Bias Comp.	OP16C	† LinearTech	
										OP16G	LinearTech	
						50K	82	0	Wideband-JFET, bias comp.	**OP16C**	‡ **PMI (2971)**	25
										OP16G	**PMI (2971)**	
		0.1	—	3	13 *	50K	70	0	Bipolar JFET	**TL081B**	**Motorola (2920, 2960)**	
										TL081BC	TI	
			10 *	1 *	3.5 *	4K	80	0	Low Power, Bipolar-JFET	TL061BC	TI	
									Programmable Bipolar JFET	TL066BC	TI	30
				1	3.5	4K	80	1	BiFET, Low Power	TL060BC	TI	
				2 *	2	4K	80	0	Low-Power J-FET	**TL061BC**	**Motorola (2920, 2960)**	
				3 *	13 *	50K	80	0	Bipolar-JFET	TL088C	TI	
	0.3	0.075	10 *	0.3	10	200K *	85	0	2 A Power	LH0101A	† National	
										LH0101AC	National	35
				4	7.5	50K	85		2A Power, 5A Peak	LH0101ACK	Maxim	
										LH0101AK	† Maxim	
								0	2 A Power	**ELH0101A**	† **Elantec (2593)**	
										ELH0101AC	**Elantec (2593)**	
			10	5	7.5	50 K	85	0	High Output Current	LH0101A/HR	† Maxim	40
	0.30	0.075	10 *	4.0	10	50K	85	0	2 A Power	LH0101A	† Maxim	
		75	10 *	0.3	10	200K *	85	0	2 A Power	LH0101AC	Maxim	
	0.5	0.05	25	40 *	350	20 K	70	2	FET Input	**EL2006AC**	**Elantec (2591)**	
	2	1	10 *	3	10 *	25K	70	2	Wideband	**MC34181**	**Motorola (2920, 2960)**	
	4	0.5	5	100	1000	1000K	0		Settles to 0.01% in 200 ns	**AM500GC**	**Datel (2577)**	45
										AM500MC	**Datel (2577)**	
	5	3	10 *	—	0.1 *	40K	80	0	Programmable Amplifier	**HA2720**	† **Harris (2737, 2747)**	
	7.5	3	—	0.25 *	0.16 *	100K	70	0	Programmable	LB1031AC	† AT&T	
										LB1032AC	† AT&T	
										LB1032BC	† AT&T	50
										LB1034AC	† AT&T	
										LB1035AC	† AT&T	
										LM4250	† National	
										UC4250	† Solitron	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
3											(Cont'd)	
	10	1000	50	1	500	300	80	2	High Slew Rate	MA207	AnalogSys	
	15	15	15	35 *	25	100K	80	1	Wideband, General Purpose	AD507K	AD	
	20	5	—	0.85 *	0.55	80K	80	0	Low Power, Radiation Resistant	**HS3530RH**	**‡ Harris (2716)**	
		10	40	1 *	1.8 *	63K	74	0	± 45Vs, ± 10A, 97W.	**PA61A**	**Apex (2458)**	
				4 *	2.5	70K	74	0	to ± 50V supply, 15A output	**PA12A**	**† Apex (2458)**	5
				4	2.5	316K	100	0	High Current (15A), High Power	**OPA512SM**	**† Burr-Brown (2536)**	
				6 *	2.5	70K	74	0	to ± 50V supply, 5A output	**PA10A**	**† Apex (2458)**	
	80	30	—	1 *	0.6	50K	80	0	to 500 mA, single supply	µA759M	† Fairchild	
			15	0.4	0.3	50K	80	0	General purpose	LM741E	SGS	
									Higher Performance	LM741A	† National	10
										LM741E	National	
	100	20			0.4 *	25K	80	0		LM101X	† LinearTech	
										LM101X/883B	† LinearTech	
		100	—	10	22	30K	80	1	High Slew Rate, Wideband	HS3516RH	‡ Harris	
	150	30	3 *	1.3 *	2	50K	80	0	Low Power	**HA5151-5**	**Harris (2706, 2737, 2747)**	15
	200	50	20	1 *	0.5 *	50K	80	0	Higher Accuracy 741C	AD741J	AD	
		75	10	6	6	1M	80	0	Low Noise, Wideband	**HA5101**	**◇† Harris (2737, 2747, 2759)**	
				100	40	1M	80	1	Low Noise, High Slew Rate	**HA5111**	**◇† Harris (2737, 2747, 2759)**	
	300	100	3 *	1 *	1.5	100K	70	1	0.2 A Power	**ELH0041**	**† Elantec (2593)**	
					1.5 *	100K	70	1	0.2 A Power	MC0041	† Micra	20
										LH0041	◇† National	
			25	0.015	3 *	100K	70		High Power, High Current	52063	Micropac	
										52106	Micropac	
				1 *	1.5	100K	70	1	1 A Power	**ELH0021**	**Elantec (2593)**	
										MC0021	† Micra	25
										LH0021	† National	
	500	75	3 *	2 *	4.2 *	50K	80	2	General Purpose	**MC1539**	**† Motorola (2919)**	
	600	100	5	1 *	0.5 *	25K	80	3	High Performance MC1709	**MC1709A**	**† Motorola (2919)**	
	1000	200	10	40	20	100K	70	0	Low Noise, Wideband	MA322	AnalogSys	
	2000	200	4	10 *	—	20K	70	0	General Purpose Wide Bandwidth	LH0003	† National	
										LH0003C	National	30
			4 *	30 *	30	15K	90	0	General Purpose, Wide Bandwidth	MC0003	† Micra	
3 *	5000 *		10 *	50	300	70 dB	50		Current mode amplifier.	**EL2020**	**† Elantec (2592, 2600)**	
3	13000	30	-	1460	600	47K	70	1		**AD5539**	**† AD (2439)**	
3 to 16	0.001 *	0.001 *	5 *	2.3 *	4.5 *	10K	70	1	Programmable, High Bias	TLC271C	TI	35
3.5	0.015	—	75	1*	3	20K	70	0	High Accuracy, FET	AD506J	AD	
	4	2	10 *	3	10 *	25K	70	2	Wideband	**MC33181**	**Motorola (2920)**	
	100	20	15	2.5 *	5	50K	85	0	Bipolar-JFET	LF155	† LinearTech	
				5 *	9	50K	85	0	Wideband-JFET	LF156	† LinearTech	
4	0.01	0.002	10	1 *	1.5	100K	80	0	Micropower	LH0022	† National	40
	0.05	0.1	30	1	5 *		90	1	Power Op Amp	**PA88**	**◇† Apex (2458)**	
	3	—	12	20 *	30 *	—	70	0	Unity Gain, Noninverting	SFC2110M	Thomson	
	3.0		12 *	20	30	0.999		0	Unity Gain Voltage Follower	LM210	TI	
	10	10	5 *	12 *	4	100K	80	0	High Impedance	**HA2600**	**† Harris (2706, 2737, 2747)**	
				12	4	100K	80	0	Wideband, High Impedance	**EHA2600**	**‡ Elantec (2594)**	45
	15	2	10 *	1 *	2.5 *	100K	80	0	High Performance	**MC1556**	**Motorola (2921)**	
		15		100 *	25	100K	80	1	Wideband	**EHA2620**	**◇‡ Elantec (2594)**	
			10 *	100	25	100K	80	1	Wide Band, High Impedance, Gain ± 5	**HA2620**	**◇† Harris (2706, 2737, 2747)**	
			20	35 *	20	100K	80	1	Wideband, General Purpose	AD507S	† AD	
	25	12	15 *	4 *	5 *	100K	80	0	High Voltage	**HA2640**	**◇† Harris (2706, 2738, 2748)**	50
	30	2	5	—	—	40K	80	0	Op Amp and Voltage Reference	LM10CL	LinearTech	
										LM10CL	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
											(Cont'd)	
4	30	2	5	—	—							
						80K	90	0	Op Amp and Voltage Reference	LM10C	LinearTech	
										LM10C	National	
	200	50	15	12 *	10	50K	80	0	High Speed, Fast Setting	AD518K	AD	
			20	12 *	10	50K	80	0	High Speed, Fast Settling	AD518S	† AD	
		100	5	0.6	0.25		95		Low Voltage Op Amp	**NE5230**	◇ **Signetics (3089)**	5
										SA5230	◇ Signetics	
	250	50	—	15 *	50	50K	80	0	Precision High Speed	LM118	† LinearTech	
										LM118	◇‡ National	
										LM218	National	
										LM218	TI	10
										LM118	◇† Thomson	
										LM218	Thomson	
		100			0.7 *				General Purpose	AN1741	Panasonic	
										AN6570	Panasonic	
									General Purpose, Dual Power Supply	AN6573	Panasonic	15
	300	100	5 *	1 *	25	50K	70	1	0.5 A Wideband	LH0061	† National	
	500	75	10 *	4.5 *	13 *	25K	70	1	High Performance, Single Supply	**MC33071**	◇ **Motorola (2920)**	
										MC34071	**Motorola (2920, 2960)**	
										MC35071	**† Motorola (2921)**	
	700	100	10	—	—	25K	70	1	40mA Output	MA342	AnalogSys	20
			25	—	9 *	18K	70	1	General Purpose, OC Output	SFC2761M	◇† Thomson	
										SFC2861M	† Thomson	
	1500	300	—	10 *	6 *	25K	70	1	Low noise, Comp. for G = 3	XR5534	◇ Exar	
										XR5534A	◇ Exar	
										XR5534C	◇ Exar	25
										RC5534	◇ Raytheon	
										NE5534	**Signetics (3091)**	
										NE5534A	**Signetics (3091)**	
				10	13	25K	70	1	Low Noise, High Performance	NE5534	TI	
										NE5534A	TI	30
	30000	5000	20 *	70 *	400	4K	60 *	3	High Slew Rate	MC0024	† Micra	
										LH0024	† National	
4 to 16	0.001 *	0.001 *	5 *	2.3 *	4.5 *	10K	70	1	Programmable, High Bias	TLC271M	† TI	
4.5	0.03	0.015	7	0.30	0.01	100k	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD1706	◇°† AdvLinear	
		0.025	7	0.4	0.33	32k	65	0	CMOS, Rail to Rail Single/Dual 5V Supply	ALD1701	◇°† AdvLinear	35
	0.030	0.025	7	1	1.4	50k	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD1702	◇°† AdvLinear	
	0.85	7	2.1	5	50K	70		0	Rail to Rail	ALD1704	† AdvLinear	
	25	13	10 *	3	10 *	25K	70	2	Wideband	**MC35181**	**† Motorola (2921)**	
	100	2		1.8	2.1	50 K	80		Low Power, Single Supply	**MC35171**	**† Motorola (2921)**	
		50	10	1.8	2.1	50K		0	Low Power, Single-Supply	**MC33171**	**Motorola (2920, 2959)**	40
	170	32	6 *	—	0.04 *	25K	80	1	Micropower	**CA3078**	**† GE/RCA (2646)**	
5	—	—	—	1G *					High Speed	MN541	MicroNet	
	0.001	0.0005	5	0.7 *	0.3	40K	76	0	Precision, Low Drift FET	AD545L	AD	
		0.0005 *	25	1 *	0.6	50K	90 *	0	Low Offset FET	3522L	Burr-Brown	
	0.001 *	0.001 *	0.7 *	0.1 *	0.04 *	30K	70	1	Programmable, Low Bias	TLC251AC	TI	45
										TLC271AC	TI	
										TLC271AM	TI	
			1 *	0.012 *	0.001 *	20K *	77	1	Prog., Low Bias, Supply Volt. = 1 V	TLC251AC	TI	
				0.075 *	0.01 *	10K *	77	1	Prog., Low Bias, Supply Volt. = 1 V	TLC251AC	TI	
			5 *	2.3 *	4.5 *	10K	70	1	Programmable, High Bias	TLC251AC	TI	50
										TLC271AC	TI	
										TLC271AM	TI	
	0.003	0.002	4 *	0.5 *	0.5 *	20K	70	0	Low Supply Voltage	**CA3420A**	**† GE/RCA (2645)**	
	0.005	0.0006		2 *	50 *	—	80	0	Micropower, Transconductance Amplifier	**CA3080**	**GE/RCA (2646)**	
										CA3080A	**† GE/RCA (2646)**	55
											(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
											(Cont'd)	
5	0.005											
		0.001	0.7 *	2.2	5.3	7K	70	0	LinCMOS, Programmable	TLC271AI	TI	
	0.02	300 *	25	150 *	250	30K	70	1	Ultra High Speed, Wideband	**AM1435C**	**Datel (2577)**	
										AM1435M	**† Datel (2577)**	
	0.025	0.002	25	15 *	50	50K	80	0	Precision, High Speed FET	LH0062	† National	
	0.03	0.02	6 *	4 *	10 *	50K	80	0	MOS-Bipolar	**CA3160A**	**† GE/RCA (2646)**	5
	0.030	0.02	10 *	4 *	10 *	50K	80	1	MOS, Single Supply, Strobe	**CA3130A**	**† GE/RCA (2646)**	
	0.04	0.02	4 *	0.063 *	0.03 *	10K	70	0	Nanopower BIMOS	**CA3440A**	**GE/RCA (2645)**	
			6 *	4.5 *	9 *	20K	70	0	MOS FET, Single Supply	**CA3140A**	**GE/RCA (2646)**	
	0.05		25 *	140 *	1000			0	Buffer Amplifier	**EL2005**	**† Elantec (2591)**	
		0.03	15 *	0.48 *	0.16 *	10K	70	1	Low Power	ICL7614BC	Maxim	10
										ICL7614BM	† Maxim	
				1	1.6	80K *	70	0	Low Power	**ICL7611BC**	**GE/Intersil (2673)**	
										ICL7611BM	**† GE/Intersil (2673)**	
									Low Power, Extended CMVR	**ICL7612BC**	**GE/Intersil (2673)**	
										ICL7612BM	**† GE/Intersil (2673)**	15
										ICL7616BC	GE/Intersil	
										ICL7616BM	† GE/Intersil	
									Low Power, Input Protected	ICL7613BC	GE/Intersil	
										ICL7613BM	† GE/Intersil	
								1	Low Power	ICL7614BC	GE/Intersil	20
										ICL7614BM	† GE/Intersil	
									Low Power, Input Protected	ICL7615BC	GE/Intersil	
										ICL7615BM	† GE/Intersil	
				1.4 *	1.6 *	6K	70	0	CMOS, Low Power, Programmable Low Bias	ICL7611BC	Maxim	
										ICL7611BM	† Maxim	25
									Programmable Bias, Extended CMVR	ICL7616BC	Maxim	
										ICL7616BM	† Maxim	
						10K	70	0	Programmable Bias, Extended CMVR	ICL7612BC	Maxim	
										ICL7612BM	† Maxim	
			25 *	1.4 *	1.6 *	6K	70	0	Programmable Bias, Extended CMVR	ICL7616DC	Maxim	30
										ICL7616DM	† Maxim	
						10K	70	0	Programmable Bias, Extended CMVR	ICL7612DC	Maxim	
										ICL7612DM	† Maxim	
		200		1.0		50K	94			**CA101**	**GE/RCA (2645)**	
	0.1	0.02	5 *	—	—	50K	85	—	Wideband Decompensated	**LF357B**	**Motorola (2920)**	35
										LF157	† National	
										LF257	◊ National	
										LF357B	National	
										PM157	**† PMI (2971)**	
				2	30	25K	80	1	JFET Input	LF157	† Thomson	40
				2.5	5 *	25K	80	1	JFET Input	LF155	† Thomson	
			5	2.5*	5*	50K	85	0	Bipolar-JFET	MP155	† MicroPwr	
			5 *	2.5 *	5 *	50K	85	0	Bipolar-JFET	**LF355B**	**Motorola (2920)**	
										LF155	† National	
										LF255	◊ National	45
										LF355B	National	
				5	7.5	25K	80	1	JFET Input	LF156	† Thomson	
			5	5*	7.5*	50K	85	0	Wideband-JFET	MP156	† MicroPwr	
			5 *	5 *	7,5 *	50K	85	0	Wideband-JFET	**LF356B**	**Motorola (2920)**	
										LF156	† National	50
										LF156HRH	‡ National	
										LF256	◊ National	
										LF356B	National	
										PM156	**† PMI (2971)**	
			5	15*	30	50K	85	—	Wideband Decompensated	MP157	† MicroPwr	55

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
5	0.1										(Cont'd)	
		0.025	10	1	1	25K	70	0	Low Power-BIFET	LF441	National	
			25 *	70 *	350	1K	50	2	Ultra Fast FET	TP0032	◊† TeledyneP	
			25*	80*	350	1K	50	2	Ultra Fast FET	TP0032-HR	◊† TeledyneP	
			50 *	70 *	500 *	3 K	70	2		**EL2006C**	**Elantec (2591)**	
		0.05	10	2	0.6	25K	70		Low-Power J-FET Input	**LF441C**	**Motorola (2920, 2958)**	5
			10 *	3 *	13 *	50K	80	0	Bipolar-JFET	µA771BC	Fairchild	
										µA771BM	† Fairchild	
				4 *	13 *	50K	80	0	Precision-BIFET	**MC35001B**	**† Motorola (2921)**	
			80	150	400	10K	60	3	Fast Settling, Wideband	**OPA600U**	**Burr-Brown (2535)**	
			100	150	400	10K	60	3	Fast Settling, Wideband	**OPA600U/883B**	**† Burr-Brown (2535, 2545)**	10
	0.10	0.025	25 *	70 *	350	1K	50	2	Ultra Fast-FET	ADLH0032	† AD	
										ELH0032	**† Elantec (2593)**	
										ELH0032C	**Elantec (2593)**	
										MC0032	† Micra	
	0.15	—	50	20 *	210	10K	70	1	Wideband, Fast Settling	AH0605	◊ OEI	15
	0.2	0.025	3 *	1 *	0.3 *	25K	96	0	Precision Bipolar	LM11CL	National	
						50K	110	0	Precision, Low Input Current	**LM11L**	**Motorola (2920)**	
		0.05		5	12 *	25K	100 *	0	JFET Input	µPC356	NEC	
				20	50 *	25K	100 *	0	JFET Input	µPC357	NEC	
		0.1	10 *	4 *	13 *	50K	80	0	Precision-BIFET	**MC34001B**	**Motorola (2920, 2959)**	20
			20				80	0		1464HR	† TeledyneP	
						56K	80	0		1464	† TeledyneP	
			30	4 *	13 *	50K	80	0	JFET Input, High Speed	LF351B	Thomson	
	1	0.15	50	70 *	350	0.3K	50	1	Comp. for G>50	LH0132	† National	
		0.25	25	70	500		60			CLH0032	† TeledyneC	25
	7.5	3	—	1 *	0.1	20K	70	0	Multi-Purpose, Programmable	µA776M	† Thomson	
	10	5	10 *	—	0.1 *	25K	74	0	Programmable Amplifier	HA2725	Harris	
		6	—	0.25 *	0.16 *	50K	70	0	Programmable	LM4250C	† National	
										UC4250C	Solitron	
	10K		25		4500*	10K*	40*	0	150 MHz –3dB bandwidth, up to 4 A output.	**WA01A**	**Apex (2458)**	30
	15	5	20	0.5 *	0.1	45K	100 *	0	Low Bias Current	3501A	Burr-Brown	
										3501R	† Burr-Brown	
	20	3	—	—	2.5 *	100K	80	1	High Voltage	LM144	† National	
				1 *	2 *	100K	80	0	High Voltage	**MC1536**	**† Motorola (2921)**	
										LM1536	† National	35
										SG1536	◊† SiliconG	
			40	1 *	1.5	60K	80	0	Output 26V@10A	**OPA501B**	**Burr-Brown (2536)**	
										OPA501S	**† Burr-Brown (2536)**	
				1*	1.5	98	80	0	Hi-Rel Screened Output 32V@10A	**PA51Q**	**† Apex (2458)**	
										PA51A	**† Apex (2458)**	40
										PA51M	**† Apex (2458)**	
	25	25		12	4	80K	74	0	Wideband, High Impedance	**EHA2602**	**‡ Elantec (2594)**	
										EHA2605	**Elantec (2594)**	
				100 *	20	80K	74	1	Wideband	**EHA2622**	**‡ Elantec (2594)**	
										EHA2625	**Elantec (2594)**	45
			5 *	12 *	4	300K	100	0	Wide Temperature Range	**OPA11HT**	**† Burr-Brown (2532)**	
			10 *	12 *	4	80K	74	0	High Impedance	**AM460-2**	**Datel (2577)**	
										HA2602	**† Harris (2706)**	
										HA2605	Harris	
			15 *	100	20	80K	74	1	Wide Band, High Impedance, Gain ±5	**AM462-1**	**Datel (2577)**	50
										AM462-1M	**† Datel (2577)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
5	25	25	15 *	100	20	80K	74	1	Wide Band, High Impedance, Gain ±5		(Cont'd)	
										HA2622	◊† **Harris (2706, 2768)**	
										HA2625	◊ Harris	
			30 *	1	—	80K	74	1	Wideband	**3508J**	**Burr-Brown (2535)**	
				70	20	80K	100 *	1	Wideband, High Gain	1321-01	† TeledyneP	
								75C07	4170e	1321	TeledyneP	5
	30	15 *	20	1.5 *	0.6	45K	100 *	0	Low Bias, Low Noise	3500A	Burr-Brown	
										3500R	† Burr-Brown	
		30	20	2	0.4	50K	80	0	General Purpose	**3500R/MIL**	† **Burr-Brown (2545)**	
			60	2	0.4	50K	80	0	General Purpose	**3500U/883B**	† **Burr-Brown (2545)**	
	35	7	40	1	1.35	100K	80		High Current, High Power	**OPA501V**	† **Burr-Brown (2536, 2545)**	10
										OPA501V/883B	† **Burr-Brown (2536, 2545)**	
	50	15	—	—	0.8 *	50K	70	0	Programmable	MC1776	◊ SGS	
				0.2	0.35	50K	70	0	Programmable Low Power	**MC1776**	◊† **Motorola (2921, 2958)**	
	100	20	10	2.5 *	18 *	25K	80	0	High Speed	MPOP01C	MicroPwr	
										MPOP01G	† MicroPwr	15
										MP5501C	MicroPwr	
										MP5501G	† MicroPwr	
										OP01C	‡ **PMI (2971)**	
										OP01G	† **PMI (2971)**	
										OP01C	Solitron	20
										OP01G	† Solitron	
			30	1 *	0.5 *	25K	70	1	Precision	µA777C	GE/Intersil	
		25	20	1.3	0.25	25K	70	0	General Purpose	MPOP02B	† MicroPwr	
										MPOP02D	MicroPwr	
										MP5502B	† MicroPwr	25
										MP5502D	MicroPwr	
										OP02B	‡ PMI	
										OP02D	PMI	
		100	—	1 *	0.4 *	50K	70	0	Programmable	XR146	† Exar	
	120	40	6 *	3 *	20	50K	70	0	High Slew Rate	NE530	Signetics	30
	150	30	—	—	—	50K	70	0	Single Supply	TL321I	TI	
		40	6 *	—	60 *	50K	70	1	60 V/µs, Comp. for G = 5	NE538	Signetics	
	200	25	10 *	12	50	15K *	80	0	Unity Gain Stable	HA2519	◊† Harris	
				20	135	15K *	80	1	High-Speed, High Output Current	**HA2529**	◊† **Harris (2737, 2747)**	
			20 *	12	25	20K	80	0	High Slew Rate	**EHA2500**	‡ **Elantec (2593)**	35
				12 *	25	20K	80	0	High Slew Rate	**HA2500**	† **Harris (2705)**	
		50	20 *	8 *	15 *	50K	80	1	Four Addressable Inputs, Single Amplifier	**HA2400**	◊† **Harris (2737, 2747, 2768)**	
										HA2404	Harris	
	500	100	—	—	0.4 *	300K *	95	0	with Voltage Regulator	IR3404	Sharp	
		150	20	—	—	20K	70	1	General Purpose	TA7502	◊ Toshiba	40
										TA7502A	◊ Toshiba	
		200	—	—	—	20K	70	0	General Purpose	IR3741	Sharp	
					0.5 *	20 K	70			M5F741	Mitsubishi	
			—	—	0.5 *	50K	70	0	General purpose	LM741	◊ SGS	
								1	Uncompensated 741	LM748	◊ SGS	45
				1 *	0.5	50K	70	0	High Performance	µA741M	† Thomson	
								1	General Purpose	LM748M	† Thomson	
					30 *	50K	70	1	High Slew Rate	SE531	† Signetics	
				1.0	0.5	50K	94			**LM741**	**GE/RCA (2645)**	
										LM748	**GE/RCA (2645)**	50

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
5	500	200									(Cont'd)	
			3 *	0.5 *	0.3 *	25K	70	3	General Purpose	µA709M	† Fairchild	
										LM709	◊† National	
				1 *	0.5 *	50K	70	0	General Purpose Compensated	AD741	† AD	
										µA741M	† Fairchild	
										MC1741	**† Motorola (2920, 2958)**	5
										LM741	† National	
										PM741	PMI	
										RM741	† Raytheon	
										SG741	◊† SiliconG	
									Low Noise 741	**CA6741**	**† GE/RCA (2645)**	10
								1	General Purpose, Uncompensated	µA101M	◊† Fairchild	
										LM101	◊† National	
									Uncompensated 741	**CA748**	**† GE/RCA (2645)**	
										MC1748	**† Motorola (2919)**	
										LM748	† National	15
										LM748C	National	
					10	50K	70	0	High Slew Rate 741	**MC1741S**	**† Motorola (2920, 2958)**	
				5 *	0.3 *	12K	80	3	General Purpose	SFC2709M	† Thomson	
			4 *	30 *	0.7 *	20K	70	2	Programmable	**CA3094A**	**† GE/RCA (2647)**	
										CA3094B	**† GE/RCA (2647)**	20
			15 *	1 *	0.3 *	25K	70	3	General Purpose	**MC1709**	**† Motorola (2919)**	
	650	50	10	40 *	30	4K	60	0		**VA705K**	**VTC (3374)**	
	750	250	6 *	65 *	15	15K	74	3	High Speed High Gain	µA715M	† Fairchild	
	1000	300	20	30	15	50K	90	0	Precision, Audio; High Linearity	MA332	AnalogSys	
				45	20		90		Audio Op-Amp	MA332C	AnalogSys	25
									Audio Op-Amp	MA332M	† AnalogSys	
		300 *	50	150	60	10K	70	1	High Power	1460	TeledyneP	
	1000 *	5000 *	50	—	8000	50K	60	0	200 MHz –3db bandwidth, G = 1–40	CLC220AI	Comlinear	
									200 MHz –3db bandwidth, G = 1–40; settles to 0.02% in 15 ns.	CLC220AM	† Comlinear	
	2000	400	—	38 *	25 *	0.6K	76	1	Large Signal Wideband	**CA3100**	**† GE/RCA (2646)**	
										L3100	† SGS	30
		500	25 *	5.5 *	8.0 *		70	0	Thermal Protection with Parole Circuit	LM675	National	
	6000 *	3000 *	50	—	4000	50K	60	0	100 MHz –3db bandwidth, G = 1–40	CLC200AI	Comlinear	
									100 MHz –3db bandwidth, G = 1–40; settles to 0.02% in 25 ns.	CLC200AM	† Comlinear	
	10000	300	50	1000	300	10K	70	0		1460HR	† TeledyneP	
		2000	10 *		1.7 *	1.4K	70	3	General Purpose	µA702M	† TI	35
	12000	5000	1.2 *	15 *	3 *	0.7K	70	1	6 Volt, Wideband	**CA3010**	**† GE/RCA (2645)**	
										CA3029	**GE/RCA (2645)**	
										CA3037	**† GE/RCA (2646)**	
	15000	4000	20 *	150	100	15K	74	2	Wideband, Fast Settling	**HA5190**	**◊† Harris (2707, 2737, 2747)**	40
				150 *	160	15K	74		Wideband, fast settling.	EHA-5190-2	◊† Elantec	
	20000	—	10	—	800	250	70	1	Fast, Slews 800 V/µs	**NE5539**	**Signetics (3087)**	
										SE5539	† Signetics	
		300 *	25	500 *	250	10K	80	1	Settles to 0.01% in 70 ns	1435	† TeledyneP	
		300	25	700	250	31.6K	80	1		1435HR	† TeledyneP	45
	24000	5000	3.5 *	50 *	7 *	2K	80	1	12 Volt, Wideband	**CA3015**	**† GE/RCA (2645)**	
										CA3030	**GE/RCA (2645)**	
										CA3038	**† GE/RCA (2646)**	
5.0	0.10	0.025	25 *	70 *	350	1K	50	2	Ultra Fast-FET	LH0032AC	† National	
6	0.025	0.002	15	1 *	1	75K	70	0	High Performance FET	LH0022C	National	50
	0.04	0.02	10 *	5 *	13 *	50K	80	1	MOS/FET Input, Bipolar/MOS Output	**CA081A**	**† GE/RCA (2645)**	
	0.2	0.05	10 *	3 *	13	50K	80	0	Low Noise Bipolar-JFET	TL071M	† TI	
				4 *	13 *	35K	80	0	Low Noise Bipolar-JFET	**TL071M**	**† Motorola (2920, 2960)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
											(Cont'd)	
6	0.2	0.05	10 *	4 *	13 *	50K	80	0	Low Noise Bipolar-JFET	**TL071AC**	**Motorola (2920, 2960)**	
										TL071AC	TI	
		0.1	—	3	13 *	50K	70	0	Bipolar JFET	**TL081A**	**Motorola (2920, 2960)**	
										TL081AC	TI	
			10 *	1	3.5	4K	80	0	BiFET, Adjustable, Low Power	TL066I	TI	5
									BiFET, Low Power	TL061I	TI	
								1	BiFET, Low Power	TL060I	TI	
				1 *	3.5 *	40K	80	0	Low Power Bipolar JFET	TL061AC	TI	
										TL061M	† TI	
									Programmable Bipolar JFET	MCE66	MCE	10
								1	Low Power Bipolar JFET	MCE60	MCE	
										TL060AC	TI	
				2 *	2	4K	80	0	Low-Power J-FET	**TL061AC**	**Motorola (2920, 2960)**	
										TL061M	**† Motorola (2920, 2960)**	
				3	13	50K	80	0	BiFET, General Purpose	TL081I	TI	15
									BiFET, Low Noise	TL071I	TI	
				3 *	13 *	50K	80	0	Bipolar-JFET	MCE80	MCE	
								1	BiFET, General Purpose	TL080AC	TI	
			10	3	13	200K	86		BIFET, General Purpose	TL081M	† TI	
			10 *	4 *	13 *	25K	80	0	JFET Input	**TL081M**	**† Motorola (2920, 2960)**	20
			30	0.075	100 *		70	1	Video Op Amp	**PA18**	**† Apex (2458)**	
	0.3	0.1	10 *	1 *	3.5 *	4K	80	0	Programmable Bipolar JFET	TL066AC	TI	
	10	6	—	1 *	0.1	50K	70	0	Multi-Purpose, Programmable	µA776C	Thomson	
	25	25	15 *	35 *	20	80K	74	1	Wideband, General Purpose	AD507J	AD	
	30	30	15 *	4 *	5 *	100K	74	0	High Voltage	HA2645	Harris	25
										1332	TeledyneP	
			65	1 *	1.8 *	63K	74	0	± 45Vs, ± 10A, 97W.	**PA61**	**Apex (2458)**	
										PA61M	**† Apex (2458)**	
									Hi-Rel Screened	**PA61Q**	**† Apex (2458)**	
				4	2.5	5K	74	0	to ± 41 V supply, 5 A output	**PA12H**	**Apex (2458)**	30
				4 *	2.5	70K	74	0	Hi-Rel Screened	**PA12Q**	**† Apex (2458)**	
									to ± 45V supply, 5A output	**PA12**	**Apex (2458)**	
										PA12M	**† Apex (2458)**	
				4	2.5	316K	100	0	High Current (10A), High Power	**OPA512BM**	**Burr-Brown (2536)**	
				6 *	2.5	70K	74	0	Hi-Rel Screened	**PA10Q**	**† Apex (2458)**	35
									to ± 45V supply, 5A output	**PA10**	**Apex (2458)**	
										PA10M	**† Apex (2458)**	
	50	25	—	—	0.8 *	20K	70	0	Programmable	MC1776C	SGS	
	75	20							General Purpose	AN4250	◊ Panasonic	
					—				General Purpose, Dual Power Supply	AN6593	Panasonic	40
			—	—	—	60K	70	0	Programmable	µPC4250C	NEC	
	100	10	3 *	0.4	1	100K	77	—	Ultra-Low Power	**HA5141**	**Harris (2706, 2737, 2747)**	
		20	20	125	400	200K	60		Fast Settling, Wideband	**OPA600C**	**Burr-Brown (2535)**	
										OPA600T	**† Burr-Brown (2535)**	
	200	0.1	10 *	3	13	50K	80	1	BiFET, Low Noise	TL070I	TI	45
	250	50	—	1 *	0.5	25K	80	0	to 500 mA, Single Supply	µA759C	Fairchild	
	400	0.1	10 *	3	13	25K	80	1	BiFET, Low Power	TL080I	TI	
	500	200	—	—	0.5 *	20K	70	0	General purpose	LM741C	SGS	
								1	Uncompensated 741	LM748C	SGS	
				1 *	0.5	20–50K	70	0	General Purpose Compensated	AD741C	AD	50
										µA741C	Fairchild	
										CA741C	**GE/RCA (2645)**	
											(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
6	500	200	—	1 *	0.5	20–50K	70	0	General Purpose Compensated		(Cont'd)	
										HA17741	Hitachi	
										MC1741C	**Motorola (2920, 2958)**	
										LM741C	National	
										µPC741	NEC	
										PM741C	PMI	5
										SG741C	SiliconG	
										µA741C	◊ TI	
					0.5 *	20–50K	70	1	General Purpose	µA748C	Fairchild	
										µA748C	GE/Intersil	
										CA748C	**GE/RCA (2645)**	10
										MC1748C	**Motorola (2919)**	
										µA748C	TI	
				1	0.5	20K	70	0	General Purpose, Compensated	LM741C	Samsung	
				1 *	0.5	20K	70	0	High Performance	µA741C	Thomson	
								1	General Purpose	LM748C	Thomson	15
					1	100K	70	1	0.2 amp Power	MC0041C	Micra	
										LH0041C	National	
				1.0	0.5	20K	86			**LM741C**	**GE/RCA (2645)**	
										LM748C	**GE/RCA (2645)**	
			3 *	1 *	10	20K	70	0	High Slew Rate 741	**MC1741SC**	**Motorola (2920, 2958)**	20
			5 *	1 *	1	100K	70	1	0.2 A Power	**ELH0041C**	**Elantec (2593)**	
			10 *	1 *	0.25	100K	90	2	High Gain, Instrumentation, 50 mA Output	LH0020C	National	
					0.5 *	20K	—	0	Automotive Temperature Range (–40°C to 85°C)	SA741C	Signetics	
			15 *	0.2 *	0.2 *	20K	70	0	High Power	µA791	Thomson	
			30	1 *	1 *	100K	70	0	1 A Power	**ELH0021C**	**Elantec (2593)**	25
									1 amp Power	MC0021C	Micra	
										LH0021C	National	
		300	10 *	12 *	50	25K	70	0	High Speed, Fast Setting	AD518J	AD	
	650	120		100	100	10	60	2		**VA708K**	**† VTC (3374)**	
				500	135	10	60	10		**VA707K**	**† VTC (3374)**	30
	1000	200	6	1 *	9 *	10K	70	1	General Purpose	SFC2861AM	† Thomson	
		300	6 *	—	9 *	12K	65	1	General Purpose, OC Output	SFC2761C	◊ Thomson	
	1200	500	5 *	4 *	100 *	10K	70	2	Gated	ZN424	Ferranti	
	1500	200	—	1 *	20 *	20K	70	1	High Slew Rate, High Performance	NE531	Signetics	
		500	10	1 *	0.5 *	50K	90	0	General Purpose Compensated	µA741	◊† Signetics	35
	15000	4000	20 *	150 *	160	10K	74		Wideband, fast settling.	EHA-5195	◊ Elantec	
				150	160	15K	74	2	Wideband, Fast Settling	HA5195	◊† Harris	
7	400	75	5 *	—	—	3K	60	0	150mA Output	IR91308	Sharp	
							63	0	250 mA Output, Electronic Shutdown	LM13080	National	
	6000	75	5 *	—	1.6	3K	63	0	400 MHz, Electronic Shutdown	MA324	AnalogSys	40
7.5	0.025	50		1.0	10	25K	88			**LM301A**	**GE/RCA (2645)**	
	0.15	500		1.0		20K	85			**CA201**	**GE/RCA (2645)**	
										LM201	**GE/RCA (2645)**	
	7	—	10 *	20 *	30 *	—	70	0	Unity Gain, Noninverting	SFC2310	Thomson	
				20	30	N/A		0	Unity Gain Voltage Follower	LM310	TI	45
		1	—	0.3 *	0.3 *	25K	80	1	Low Noise 308	LM308LN	GE/Intersil	
			30	1 *	0.3 *	25K	80	0	Micropower, Supply Current 800 µA	LM312	National	
								1	Precision Bipolar	AD308	AD	
										LM308	◊ GE/Intersil	
										LM308	LinearTech	50
										MP308	MicroPwr	
										LM308	**Motorola (2919, 2958)**	
										LM308	National	
										LM308	Thomson	
		1.0	6	1	0.3	25K	80	1	High Performance	LM308	TI	55

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
											(Cont'd)	
7.5												
	250	50		1.0		25K	88			**LM307**	**GE/RCA (2645)**	
			6	1	7.5	15K	70	1	High Performance	LM301A	TI	
			30	—	—	20K	70	1	General Purpose	LM301A	SGS	
				1 *	0.5 *	25K	70	0	General Purpose, Compensated	**CA307**	**GE/RCA (2645)**	
										LM307	LinearTech	5
										LM307	**Motorola (2920)**	
										LM307	National	
										SG307	◊ SiliconG	
										LM307	Thomson	
			30 *	1	0.5	25K	70	0	High Performance	LM307	TI	10
			30	1 *	0.5 *	25K	70	1	General Purpose Uncompensated	AD301A	AD	
										µA301AC	Fairchild	
										CA301A	**GE/RCA (2645)**	
										LM301A	**Motorola (2919, 2958)**	
										LM301A	National	15
										µPC301A	NEC	
										SG301A	◊ SiliconG	
										LM301A	Thomson	
	800	300	10	1 *	0.5	20–50K	70	0	General Purpose Compensated	µA741C	◊† Signetics	
	1000	150	3 *	2 *	4.2 *	15K	80	2	General Purpose	**MC1439**	**Motorola (2919)**	20
	1500	250	6	65 *	10	10K	74	3	High Speed	µA715C	Fairchild	
										HA17715	Hitachi	
		500		1	0.3 *	15K	65	3	Bipolar, General Purpose	µA709C	TI	
			6 *	1 *	0.5 *	20K	65	1	General Purpose	µA201C	Fairchild	
										LM201	◊ National	25
										SG201	◊ SiliconG	
			6–10 *	1 *	0.3 *	15K	65	3	General Purpose	µA709C	Fairchild	
										LM709C	◊ National	
			15 *	1 *	0.3 *	15K	70	3	General Purpose	**MC1709C**	**Motorola (2919)**	
8	40	10	—	1 *	2.5 *	70K	70	1	High Voltage	LM344	National	30
	200	25	20 *	12	50	10K	80	0	High Slew Rate	**EHA2510**	**‡ Elantec (2593)**	
				12 *	50	10K	80	0	High Slew Rate	**HA2510**	**† Harris (2705)**	
				20 *	100	10K	80	1	100 v/µs, Gain = 3	**HA2520**	**◊† Harris (2705, 2737, 2747)**	
				20	100	10K	80	2	High Slew Rate	**EHA2520**	**◊‡ Elantec (2594)**	
			30	20 *	100	10K	80	1	High Speed, Fast Settling	AD509K	AD	35
										AD509S	† AD	
	250	50	—	1	0.5 *	25K	70	0	Power Op Amp	µA77000	Fairchild	
			20 *	12 *	20	15K	74	0	High Slew Rate	**AM450-2**	**Datel (2577)**	
				12	20	15K	74	0	High Slew Rate	**EHA2502**	**‡ Elantec (2593)**	
										EHA2505	**Elantec (2593)**	40
				12 *	20	15K	74	0	High Slew Rate	**HA2502**	**† Harris (2705)**	
										HA2505	Harris	
	40000	15000	25 *	70 *	250	3K	60 *	3	High Slew Rate	MC0024C	Micra	
										LH0024C	National	
9	200	50		4	6	50K	80		Four input programmable amplifier.	EHA-2400	† Elantec	45
	250	50	30 *	8 *	15 *	50K	74	1	Four Addressable Inputs, single Amplifier	HA2405	Harris	
										HA2406-5	Harris	
10	0.001 *	0.001 *	0.7 *	0.1 *	0.04 *	30K	70	1	Programmable, Low Bias	TLC251C	TI	
										TLC271C	TI	
										TLC271M	† TI	50
	0.003	0.002	4 *	0.5 *	0.5 *	10K	70	0	Low Supply Voltage	**CA3420**	**† GE/RCA (2645)**	
	0.005	0.001	0.7 *	2.2	5.3	7K	70	0	LinCMOS, Programmable	TLC271I	TI	
	0.01	0.005 *	25	10 *	65	25K	70 *	0	Fast Settling, 1 µs to 0.01%	**3550J**	**Burr-Brown (2535)**	
	0.03	—	25	300	3000	120K	90	1	FET Input	9740	OEI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
10	0.03										(Cont'd)	
		0.015	7	0.30	0.01	100K	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD1706G	◊°† AdvLinear	
		0.025	7	0.7 *	0.7 *	20K	60	0	CMOS, Rail-to-Rail	ALD1701G	◊°† AdvLinear	
	0.05	0.02	30	5	15	—	86	0	High Voltage	**OPA8780VM**	**† Burr-Brown (2545)**	
						32K	86	1	High Voltage, FET input	**OPA8780V**	**† Burr-Brown (2545)**	
			50	5	15	—	86	0	High Voltage	**OPA8780UM**	**† Burr-Brown (2545)**	5
						32K	86	1	High Voltage, FET input	**OPA8780U**	**† Burr-Brown (2545)**	
		0.020 *	30	3 *	15 *	20K	86 *	0	High Voltage FET	**3580J**	**Burr-Brown (2536)**	
		0.025	4 *	0.063 *	0.03 *	10K	70	0	Nanopower BiMOS	**CA3440**	**GE/RCA (2645)**	
		0.03	7	0.7 *	0.7 *	10K	60	0	CMOS, Rail-to-Rail	ALD2701	◊°† AdvLinear	
		0.05	30	5 *	15 *	20K	86 *	0	± 15/35Vs, ± 60mA	**PA80J**	**Apex (2458)**	10
									Hi-Rel Screened	**PA80Q**	**Apex (2458)**	
	0.050	0.03	7	0.7	1.1	32k	60	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD1703	◊°† AdvLinear	
	0.1	0.03	10	—	10	3K	90	1	FET Input, Low Noise	MA333	AnalogSys	
					35	100K	90	1	JFET Input	MA334	AnalogSys	
										MA400	AnalogSys	15
		0.05	7 *	1	3 *	20K	95 *	0	Low Power, JFET Input	µPC4061	◊ NEC	
	0.10		25 *	140 *	1000			0	Buffer Amplifier	**EL2005C**	**Elantec (2591)**	
	0.2	0.05		3	13 *	25K	95 *	0	Low Noise, JFET Input	µPC4071	◊ NEC	
			5 *	—	—	25K	80	—	Wideband Decompensated	**LF357**	**Motorola (2920)**	
										LF357	National	20
				2.5	5 *	25K	80	0	Bipolar-JFET	**LF355**	**Motorola (2920)**	
										LF355	National	
				5	12 *	25K	80	0	Wideband-JFET	**LF356**	**Motorola (2920)**	
										LF356	National	
			10 *	4 *	13 *	15K	80	0	Low Noise Bipolar-JFET	**TL071**	**Motorola (2920, 2960)**	25
										TL070AC	TI	
										TL070C	TI	
						25K	80	0	Low Noise Bipolar-JFET	TL071C	TI	
										TC071	◊ Toshiba	
		0.1	10 *	3 *	8	25K	70	0	J-FET Input, Wide Bandwidth	LF351	TI	30
				4 *	13	25K	70	0	Bipolar-JFET	**LF351**	**Motorola (2920, 2958)**	
					13 *	25K	70	0	Bipolar-JFET	**MC35001**	**† Motorola (2921)**	
									JFET Input, High Speed	LF351	Thomson	
									Precision BIFET	**MC34001**	**Motorola (2920, 2959)**	
			50	4.5	13	20K	70	0	Hi-Rel Screened	**PA02Q**	**† Apex (2458)**	35
									to ± 19 V supply, 5 A output	**PA02M**	**† Apex (2458)**	
				4.5*	13	86dB	70	0	Wideband, High Output Current	**PA02**	**Apex (2458)**	
		0.10	10*	3*	13*	50K	70	0	Bipolar JFET	µA771C	Fairchild	
		2	10 *	4 *	13 *	15K	80	0	Low Noise Bipolar-JFET	TL075C	TI	
										TC075	Toshiba	40
	0.20	0.1	10 *	4 *	13	25K	70	0	Bipolar-JFET	LF351	National	
	0.25			350 *	2000			0	Buffer Amplifier	**EL2004**	**† Elantec (2591)**	
										MP2004	MicroPwr	
	0.6	0.1	20 *	18 *	57 *	200K	80	0	Wideband-JFET	LF400	National	
	1	0.25	10	5	10 *	50 K	85	0	High Output Current	LH0101/HR	† Maxim	45
			10 *	5 *	10 *	50K	85	0	2 A Power	**ELH0101**	**† Elantec (2593)**	
										ELH0101C	**Elantec (2593)**	
			10	5	10	50K	85	0	2 A Power	LH0101	Maxim	
										LH0101C	Maxim	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
											(Cont'd)	
10	1	0.25	10	5	10	50K	85	0	2 A Power	LH0101	† National	
										LH0101C	National	
	5*		25*	85*	3000*	50K	88	0	85 MHz –3dB bandwidth, G = 1 to 40	CLC300A	◊ Comlinear	
	5	0.3	50	70 *	350	1K	45	1	Comp. for G>50	LH0132C	National	
	10	3	150	—	250	0.7K	50	1	100 MHz	9906	◊ OEI	5
	20K		50	4500*	10K*	40*	0		150 MHz –3dB bandwidth, up to 4 A output.	**WA01**	**Apex (2458)**	
	25	20	20	18	32	100K	70		Fast Settling	LH4104	† National	
										LH4104C	National	
	30	10	—	1 *	2.5 *	70K	70	0	High Performance	**MC1456**	**Motorola (2920)**	
	35	7	20 *	120	300	10K	70	1	High Speed, 100mA Output, Gain ± 2	**HA2542-2**	**† Harris (2737, 2747, 2750)**	10
										HA2542-5	**Harris (2737, 2747, 2750)**	
	40	10	—	1 *	2 *	70K	70	0	High Voltage	**MC1436**	**Motorola (2920, 2958)**	
										SG1436	◊ SiliconG	
			65	1	1	446K	110	0	High Current (5A), High Power	**OPA511AM**	**Burr-Brown (2536)**	
				1 *	1.5	—	70	0	2 A Continuous	**3573**	**Burr-Brown (2536)**	15
						50K	70	0	Output 20V@10A	**OPA501A**	**Burr-Brown (2536)**	
										OPA501R	**† Burr-Brown (2536)**	
									Output 28V@10A	**PA51**	**Apex (2458)**	
						500K	70	0	to ± 30V supply, 5A output	**PA73**	**Apex (2458)**	
					1.8 *	35K	70	0	± 30Vs, ± 5A, 67W.	**PA73M**	**† Apex (2458)**	20
									Hi-Rel Screened	**PA73Q**	**† Apex (2458)**	
	50	10	65	1	1.35	100K	70		High Current, High Power	**OPA501U**	**† Burr-Brown (2536, 2545)**	
										OPA501U/883B	**† Burr-Brown (2536, 2545)**	
	250	50	20 *	20 *	80	7.5K	74	1	High Speed, Fast Settling	AD509J	AD	
			25 *	12	40	7.5K	74	0	High Slew Rate	**EHA2512**	**‡ Elantec (2593)**	25
				12 *	40	7.5K	74	0	High Slew Rate	**HA2512**	**† Harris (2705, 2768)**	
				20 *	80	7.5K	74	1	80 V/µs Gain = 3	**HA2522**	**† Harris (2705, 2768)**	
				20	80	7.5K	74	2	High Slew Rate	**EHA2522**	**‡ Elantec (2594)**	
			30 *	—	80	7K	74	1	Fast Slewing	**3507J**	**Burr-Brown (2535)**	
				12	40	7.5K	74	0	High Slew Rate	**EHA2515**	**Elantec (2593)**	30
				12 *	40	7.5K	74	0	High Slew Rate	HA2515	Harris	
					80	7.5K	74	1	80 V/µs Gain = 3	**AM452-2**	**Datel (2577)**	
										HA2525	Harris	
				20	80	7.5K	74	2	High Slew Rate	**EHA2525**	**Elantec (2594)**	
				20 *	80	7.5K	90 *	1	High Slew Rate	1322	TeledyneP	35
										1322-01	† TeledyneP	
						70K	90 *	0	High Slew Rate/Temperature	OPA12HT	† Burr-Brown	
		200		15	70	25K	70	0	High Performance	LM318	TI	
	500	200		10	70 *	25K	100 *	0	High Speed	µPC318	NEC	
			—	15 *	50	25K	70	0	Precision, High Speed	LM318	LinearTech	40
										LM318	National	
										LM318	Thomson	
			5 *	1 *	25	25K	60	1	0.5 A, Wideband	LH0061C	National	
	650	35	33	40 *	38	2K	60	0	Fast Settling	**VA706K**	**VTC (3374)**	
		100	20	40 *	30	2K	60	0		**VA705J**	**VTC (3374)**	45
	700	50	20	40 *	158 *	10K	58	0	High-Speed	**VA707**	**VTC (3374)**	
	750	—	—	—	—	14K	—	1	Telephone Channel Amplifier	LS045	SGS	
	1000	100			0.5	100K	80			TCA1365	Siemens	
					2	100K	80			TCA365A	Siemens	
					4	100K	80			TCA2365A	Siemens	50

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Single Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
										(Cont'd)		
10	1000	100	15*	0.8*	1	100K *	60	0	Output 3.5A peak	**ULN3751Z**	**Sprague (3203)**	
		200	—	—	8 *	10K *	70 *	0	Output current to 3A	L165	SGS	
		300	6 *	—	9 *	5.6K	60	1	General Purpose, OC Output	SFC2861C	Thomson	
	1000 *	5000 *	50	150	6000	5K	60	0	150 MHz –3db bandwidth, G = 1–40	CLC103AI	Comlinear	
	1200	300	6	1 *	9 *	5.6K	65	1	General Purpose, High Voltage	TAA861	Thomson	5
	20000	6000	20 *	400 *	350	10K	60		Wideband, Fast Settling	EHA-2540-2	◊† Elantec	
			20	400 *	350	15K *	60	—	Wideband, Fast Settling	**HA2540-2**	**† Harris (2737, 2747, 2752)**	
			20 *	600 *	550	10 K	60		High slew rate, wideband.	EHA-2539-2	◊† Elantec	
						15K *	60	—	High Slew Rate, Wideband	**HA2539-2**	**† Harris (2737, 2747, 2753)**	
12	50	15	65	1 *	1.5	500K	70	0	to ± 28V supply, 5A adjustable output	**PA01**	**Apex (2458)**	10
	90	25	—	1 *	2 *	50K	50	0	High Voltage	**MC1436C**	**Motorola (2920, 2958)**	
										SG1436C	SiliconG	
		30	—	1 *	2.5	25K	110 *	0	High Performance	**MC1456C**	**Motorola (2920)**	
										LM1436	National	
	650	35		500	150*	10K	60	0	High Speed	**VA707J**	**VTC (3374)**	15
		120		100	100	10	60	2		**VA708J**	**† VTC (3374)**	
15	0.05	0.025	10	3	16 *	1 K	110	1	Instrumentation Amplifier	**AMP05A**	**PMI (2975)**	
										AMP05E	**PMI (2975)**	
		0.03	10 *	5 *	13 *	50K	70	0	FET Input, Bipolar/MOS Output	**CA081**	**GE/RCA (2645)**	
			25 *	0.48 *	0.16 *	10K	70	1	Low Power	ICL7614DC	Maxim	
										ICL7614DM	† Maxim	20
				1	1.6	80K	70	0	Low Power, Input Protected	ICL7613DC	GE/Intersil	
								1	Low Power	ICL7614DC	GE/Intersil	
									Low Power, Input Protected	ICL7615DC	GE/Intersil	
				1.4 *	1.6 *	6K	70	0	CMOS, Low Power, Programmable Low Bias	ICL7611DC	Maxim	
										ICL7611DM	† Maxim	25
	0.050	0.030	8 *	4 *	10 *	50K	70	0	MOS FET, Single Supply	**CA3160**	**† GE/RCA (2646)**	
				4.5 *	9 *	20K	70	0	MOS FET, Single Supply	**CA3140**	**† GE/RCA (2646)**	
			10 *	4 *	10 *	50K	70	1	MOS FET Single Supply, Strobe	**CA3130**	**† GE/RCA (2646)**	
			25 *	1	1.6	80K	70	0	Low Power	**ICL7611C**	**GE/Intersil (2673)**	30
										ICL7611C	Maxim	
									Low Power, Extended CMVR	**ICL7612C**	**GE/Intersil (2673)**	
										ICL7616C	GE/Intersil	
										ICL7612C	Maxim	
										ICL7616C	Maxim	35
	0.065	0.005	35	15 *	50	25K	70	0	Precision, High Speed, FET	LH0062C	National	
		0.01	20 *	100 *	50	25K	70	1	Wideband, High Slew Rate	HA5162-5	Harris	
			35	100	70	100	70			1345	TeledyneP	
	0.2	0.05	10 *	1 *	0.5 *	25K	70	0	JFET–741	LF13741	◊ National	
		0.1	10 *	3 *	13 *	50K	70	0	Bipolar-JFET	µA771LC	Fairchild	40
				4	13 *	25K	70	0	Bipolar JFET	TL081C	National	
		0.2	10 *	2 *	2	3K	70	0	Low-Power J-FET	**TL061C**	**Motorola (2920, 2960)**	
	0.20	0.05	25 *	50 *	350	1K	50	2	Ultra Fast FET	ADLH0032C	AD	
										MC0032C	Micra	
										LH0032C	National	45
	0.4	0.05	—	3 *	13 *	25K	70	1	Low Noise Bipolar-JFET	MCE70	MCE	
		0.2	—	3	13 *	25K	70	0	Bipolar JFET	**TL081**	**Motorola (2920, 2960)**	
										TL081	◊ TI	
										TL081C	Thomson	
										TC081	Toshiba	50
			10 *	1 *	3.5 *	3K	70	0	Low Power Bipolar-JFET	TL061C	TI	
									Programmable Bipolar JFET	TL066C	TI	
								1	Low Power Bipolar-JFET	TL060C	TI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
											(Cont'd)	
15	0.4	0.2	10 *									
				3 *	13 *	25K	70	0	Bipolar-JFET	µPC4081	NEC	
								1	Bipolar-JFET	HA17080	Hitachi	
										TL080C	TI	
				4 *	13 *	25K	80	0	JFET Input	**TL081C**	**Motorola (2920, 2960)**	
	50	25	12 *	—	—	2K	60	1	High Output Current	SFC2315	Thomson	5
		30	25	1	1.6	80k	70	0	Low Power, dual 1458	**GLC9458**	**GoldStar (2700)**	
									Low Power, quad 1458	**GLC9459**	**GoldStar (2700)**	
	100	20	100	125	400	200K	60		Fast Settling, Wideband	**OPA600B**	**Burr-Brown (2535)**	
										OPA600S	**† Burr-Brown (2535)**	
	350	150		170M	330	1.0K	60			**CA3450**	**GE/RCA (2645, 2654)**	10
	1000	300	2	60	9	30K	70		Supply Voltage ± 80V	LM12L	† National	
						40K	70		Supply Voltage ± 100V	LM12	† National	
	10000	2000	10 *	40	100	4K	75	0	Video Op Amp	**HA2544**	**◊† Harris (2737, 2747, 2754)**	
	20000	6000	20	9.5	600	30K	60			1342	TeledyneP	
			20 *	400 *	350	10K	60		Wideband, Fast Settling	EHA-2540-5	Elantec	15
			20	400 *	350	10K	60	—	Wideband, Fast Settling	**HA2540-5**	**Harris (2737, 2747, 2752)**	
				400	400	30K	60			1341	TeledyneP	
			20 *	600 *	550	10K	60		High slew rate, wideband.	EHA-2539-5	Elantec	
								—	High Slew Rate, Wideband	**HA2539-5**	**Harris (2737, 2747, 2753)**	
20				10	70	200K		4	High Speed Video Amp.	MAX450C	Maxim	20
	0.02	0.0005 *	75	1 *	6 *	50K	70	0	High Performance FET	**ICL8007M**	**† GE/Intersil (2673)**	
	0.025	—	50	1 *	0.5 *	25K	80	0	FET	AD3542J	◊ AD	
		0.002 *	50	1 *	0.5 *	25K	80 *	0	Low Noise	3542J	Burr-Brown	
										3542S	† Burr-Brown	
		0.01	20	1 *	1.5	50K	70	0	Low Cost FET Input	LH0042	† GE/Intersil	25
										LH0042	† National	
	0.05	—	25	1 *	6 *	25K	70	0	Low Cost FET	AD0042C	AD	
		0.005	25	1 *	1	25K	70	0	Low Cost FET	LH0042C	GE/Intersil	
										LH0042C	National	
	0.1	—	25	1 *	3	50K	80	0	Low Cost FET Input	AD503K	AD	30
										AD503S	† AD	
	0.2	0.15	20 *	3 *	6 *	25K	64	0	High Slew Rate FET	µA740	† GE/Intersil	
	0.3	—	100	10 *	250 *	80	80		FET Input	AH0008	† OEI	
	1	2		10	70	200K		4	High Speed Video Amp.	MAX451C	Maxim	
	2			350 *	2000			0	Buffer Amplifier	**EL2004C**	**Elantec (2591)**	35
	650	120	40	40 *	38	1K	60	0	Fast Settling	**VA706J**	**VTC (3374)**	
	1000	200	—	—	14 *	10K *	70 *	0	High efficiency output current to 4A	L465A	SGS	
		300	2	60	9	20K	65		Supply Voltage ± 80V	LM12CL	National	
									Supply Voltage ± 100V	LM12C	National	
	5000		400		100	100	80	0		9697	OEI	40
	50000	—	50	1000	1000	1000	50	1	Bipolar	9826	OEI	
25	0.01	0.05	20	3	16 *	1 K	100	1	Instrumentation Amplifier	**AMP05F**	**PMI (2975)**	
	0.1	0.05	20	3	16 *	1 K	100	1	Instrumentation Amplifier	**AMP05B**	**PMI (2975)**	
	5	1	0.3	15	2.5	10M	126	0	High Output Current, Comp. for G >50	**OP50A**	**† PMI (2970)**	
										OP50E	**† PMI (2970)**	45
	10 K		100	3.5	250	100 *	100 *	0	Wideband operation, low noise	AH0014	◊ OEI	
	500	200	25	30	200		50	0	100 mA Output Current	LH4101	† National	
										LH4101C	National	
30	0.001	0.0002 *	50	1 *	2.5	20K	86	0	Low Bias FET	**ICL8007AC**	**GE/Intersil (2673)**	
										ICL8007AM	**† GE/Intersil (2673)**	50

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Single Units											**(Cont'd)**	
30											(Cont'd)	
	2000	20	100	3000	1000				Wideband, for RADAR and SONAR.	AH9914	OEI	
	30000	10000	150	200	300	1K	50	0	Wideband	9916	OEI	
	50000	20000	100	300	1K	4K	90	1	Wideband	9914A	◊ OEI	
35	2	0.1	150	100	300	100K	70	0	High Slew Rate	HDS060	AD	
50	0.00001	—	—	—	0.5 *	20K	60	0	Ultra low Bias FET	**ICH8500A**	**GE/Intersil (2674)**	5
	0.0001	—	—	—	0.5 *	20K	60	0	Ultra low Bias FET	**ICH8500**	**GE/Intersil (2674)**	
	0.015	—	75	1 *	3	20K	70	0	Low Cost FET Input	AD503J	AD	
	0.05	—	75	1 *	6 *	20K	72	0	High Performance FET	1424	TeledyneP	
		0.0005 *	75	1 *	6 *	20K	70	0	High Performance, FET	**ICL8007C**	**GE/Intersil (2673)**	
100	10	3	1	15	2.5	7.5M	110	0		**OP50B**	**PMI (2970)**	10
										OP50F	**PMI (2970)**	
110	0.2	0.15	20 *	3 *	6 *	25K	64	0	High Slew Rate FET	µA740C	† GE/Intersil	
200	100 *		100 *	150	500	3.2 K	45	0	Internally Compensated, GaAs	AOP1510	Anadigics	
	2000	200	0.4	7	1.7	1000	100		Wide Bandwidth	**OPA27THT**	**† Burr-Brown (2532)**	
				38	10	1000	100		Wide Bandwidth	**OPA37HT**	**◊† Burr-Brown (2532)**	15
20000	10	25	100	1000	±4@±100			16	Wideband, high speed amplifier/buffer/current booster.	EHOS200SH	† Elantec	
					±12@±100			40	Wideband, high speed, amplifier/buffer/current booster.	EHO5100SH	† Elantec	
25000	5 *		100	1200 *	±12@±105			±2.5 to ±18	VIdeoideo line driver/video buffer.	**EL2033**	**† Elantec (2592)**	
					±12@±105			±2.5 to ±18	Video line driver/video buffer.	**EL2003**	**† Elantec (2591, 2595)**	
	16	10	0.3	60	15	20M	130	0	Low Noise, Wideband, Precision	MA367	AnalogSys	20
	20	15	0.6	60	17	10M	130	0	Ultra Low Distortion	MA362	AnalogSys	
	25	25	100	1000	±12@±100			40	Wideband, high speed amplifier/buffer/current booster.	EH05100AH	◊ Elantec	
	40	35	0.6	120	28	1M	114	1	Precision, Low Noise, High Speed	**HA5147A-2**	**† Harris (2737, 2747, 2759)**	
										HA5147A-5	**Harris (2737, 2747, 2759)**	
100000	80	75	1.8	120	28	700K	100	1	Precision, Low Noise, High Speed	**HA5147-2**	**† Harris (2737, 2747, 2759)**	25
										HA5147-5	**Harris (2737, 2747, 2759)**	
25000	25	25	100	1000	±4@±100	16			Wideband, high speed amplifier/buffer/current booster.	EHOS200AH	Elantec	
Dual Units												
—	8000 *	—	—	30	60 *	4K	—	0	GB Product = 400 MHz	LM159	† National	
										LM359	National	
	30000	—	—	15	30 *	11K		1	Similar to LM359	µPC4539	NEC	30
±9	500	±150	7	1	0.3		70		Low Power Dual Op Amp	LM2904	◊† Signetics	
										LM358A	◊† Signetics	
0.05	10	10		6*	1.4	1M	110		Low noise, precision.	**OP270A**	**† PMI (2970, 2972)**	
										OP270E	**PMI (2970, 2972)**	
0.06	3	2.8	0.9	0.4	0.1	400K	110	0	Ultra Low Offset Matched	LT1002AC	LinearTech	35
										LT1002AM	† LinearTech	
0.075	2	1	0.5	0.5 *	0.1	3K	120	0	Low Power	**OP200A**	**† PMI (2970, 2972)**	
										OP200E	**PMI (2970, 2972)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Dual Units												**(Cont'd)**
0.08	40	35	1	5	1.7	250K	114	0	Ultra Low Noise Instrumentation	OP227A	LinearTech	
										OP227E	LinearTech	
										OP237A	LinearTech	
										OP237E	LinearTech	
										MPOP227A	† MicroPwr	5
										MPOP227E	MicroPwr	
										OP227A	**† PMI (2970, 2972)**	
										OP227E	**PMI (2970, 2972)**	
										OP227A	† Solitron	
										OP227E	Solitron	10
				25*	11	250K	114	0		OP237A	Solitron	
										OP237E	Solitron	
	80	75	1.8	5	1.7	700	100	0	Ultra Low Noise Instrumentation	MPOP227G	MicroPwr	
0.1	3.5	3.5	0.4	1.2	0.25	500K	—	0		OP207A	† Solitron	
										OP207E	Solitron	15
									Ultra Low Offset Voltage	MPOP207A	† MicroPwr	
										MPOP207E	MicroPwr	
	4.5	4.2	1.3	0.4	0.1	350K	110	0	Ultra Low Offset Matched	LT1002C	LinearTech	
										LT1002M	† LinearTech	
	5	0.5	10	0.8	1.12 *	40K	104	0	Precision, Low Input Current	MPOP12C	† MicroPwr	20
										MPOP12G	MicroPwr	
	15	15		6*	1.4	800K	100		Low noise, precision.	**OP270F**	**PMI (2970, 2972)**	
0.12	0.25	0.25	1.5		0.1	250K	112	0	Low Noise	LT1024AC	LinearTech	
	55	50	1.5	5	1.7	250K	106	0	Ultra Low Noise Instrumentation	OP227B	LinearTech	
										OP227F	LinearTech	25
										MPOP227B	† MicroPwr	
										MPOP227F	MicroPwr	
										OP227B	**† PMI (2970, 2972)**	
										OP227F	**PMI (2970, 2972)**	
										OP227B	† Solitron	30
										OP227F	Solitron	
				25*	11	250K	106	0		OP237B	Solitron	
										OP237F	Solitron	
0.15	2	0.2	2.5	0.8	1.12 *	80K	104	0	Improved 108A, Low Bias, Compensated	MPOP12A	† MicroPwr	
										MPOP12E	MicroPwr	35
	4	2	1.5	0.5 *	0.1	2K	115	0	Low Power	**OP200F**	**PMI (2970, 2972)**	
	7	6	1.8	1.2 *	0.25 *	120K	100	0	Ultra Low Offset Voltage, Low Drift	µA714C	Fairchild	
										MP5507C	MicroPwr	
										OP07C	**‡ PMI (2970)**	
	15	3	2	0.02*	5K	500K	90	0	Precision, low voltage.	**OP290E**	**PMI (2970, 2972)**	40
			2.5	0.02*	5K	225K	85	0	Precision, low voltage.	**OP290A**	**† PMI (2970, 2972)**	
	20	0.8	2	1 *	0.2	1.5M	100	0	Precision	LT1013AC	LinearTech	
										LT1013AM	† LinearTech	
		2	2	100 *	—	500K	96	0	Low Power, Single/Dual Supply	**OP220A**	**† PMI (2970, 2972)**	
										OP220E	**PMI (2970, 2972)**	45
	80	3	1.5	—	0.2	1.5M	95	0	Low Power, Precision Matched	**OP221A**	**† PMI (2970, 2972)**	
										OP221E	**PMI (2970, 2972)**	
0.18	80	75	1.8	5	1.7	200K	106	0	Ultra Low Noise Instrumentation	MPOP227C	† MicroPwr	
										MPOP227D	MicroPwr	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Dual Units											**(Cont'd)**	
											(Cont'd)	
0.18	80	75										
			2	5	1.7	200K	106	0	Ultra Low Noise Instrumentation	OP227C	LinearTech	
										OP227G	LinearTech	
										OP237C	LinearTech	
										OP237G	LinearTech	
										OP227C	† **PMI (2970, 2972)**	5
										OP227G	**PMI (2970, 2972)**	
										OP227C	† Solitron	
										OP227G	Solitron	
				25*	11	200K	106	0		OP237C	Solitron	
										OP237G	Solitron	10
0.2	0.4	0.3	2		0.1	180K	108	0	Low Noise	LT1024C	LinearTech	
	0.7	0.35	1.5		0.1	250K	112	0	Low Noise	LT1024AM	† LinearTech	
	5	3.5	2	0.5 *	0.1	2K	110	0	Low Power	**OP200G**	**PMI (2970, 2972)**	
	20	20		6*	1.4	800K	100		Low noise, precision.	**OP270G**	**PMI (2970, 2972)**	
0.25	0.035	0.002	2.5	1 *	3 *	250K	80	—	Ultra Low Drift BiFET	AD647L	AD	15
	0.050	0.010	5	3	16				High-Speed BiFET	AD712C	AD	
	20	5	5	0.02*	5K	350K	80	0	Precision, low voltage.	**OP290F**	**PMI (2970, 2972)**	
0.3	1.3	0.5	2		0.1	180K	108	0	Low Noise	LT1024M	† LinearTech	
	2	0.2	3.5	0.8	1.12 *	80K	104	0	Improved 108A, Low Power, Compensated	MPOP12B	† MicroPwr	
										MPOP12F	MicroPwr	20
	6	6	1.3	1.2	0.25	400K	—	0		OP207B	† Solitron	
										OP207F	Solitron	
									Ultra Low Offset Voltage	MPOP207B	† MicroPwr	
										MPOP207F	MicroPwr	
	10	10		6.5*	6.5	500K	105	0	High speed, low noise.	**OP271A**	† **PMI (2971)**	25
										OP271E	**PMI (2971)**	
	15	15		6.5*	6.5	300K	95	0	High speed, low noise.	**OP271F**	**PMI (2971)**	
	25	2.5	5	100 *	—	300K	90	0	Low Power, Single/Dual Supply	**OP220B**	† **PMI (2970, 2972)**	
										OP220F	**PMI (2970, 2972)**	
	30	1.5	2.5	1 *	0.2	1.2M	97	0	Precision	LT1013C	LinearTech	
										LT1013M	† LinearTech	30
	100	5	2	—	0.2	1M	90	0	Low Power, Precision Matched	**OP221B**	† **PMI (2970, 2972)**	
										OP221F	**PMI (2970, 2972)**	
0.45	0.05	0.04	7	3.5	10	150K	86		High Speed Instrumentation Amplifier	LT1057AC	LinearTech	
										LT1057AM	† LinearTech	35
			10	3.5	10	150K	84			LT1058AC	LinearTech	
										LT1058AM	† LinearTech	
	25	5	1.2*	0.02*	5K	300K	80	0	Precision, low voltage.	**OP290G**	**PMI (2970, 2972)**	
0.5	0.004	0.003	2.8	2	2		96			**OPA2111BM**	**Burr-Brown (2532)**	
	0.005	0.001	0.7 *	0.1	0.05	30K	70	0	LinCMOS, Low Bias	TLC27L7I	TI	40
			2 *	0.1	0.05	30K	70	0	LinCMOS, Low Bias	TLC27L71	◊ TI	
				0.6	0.6	20K	70	0	LinCMOS, Medium Bias	TLC27M7I	TI	
			5 *	2.2	5.3	10K	70	0	LinCMOS, High Bias	TLC277I	TI	
	0.035	0.002	5	1 *	3 *	250K	80	—	Ultra Low Drift BiFET	AD647K	AD	
										AD647S	† AD	45
										AD647S/883B	† AD	
		0.005 *	5 *	1 *	3 *	300K *	80	0	Dual 542	AD642L	AD	
			5	2 *	3 *	250K	80	0	Dual 544	AD644L	AD	
			15	2 *	3 *	250K	80	0	Dual 544	AD644S	† AD	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Dual Units											**(Cont'd)**	
											(Cont'd)	
0.5												
	0.1	0.05	5	30	12	50K		0	Low Input Offset JFET	**MC33282**	**Motorola (2922)**	
	0.2	0.1	10 *	3	13	50K		0	BiFET, General Purpose	TL287I	◊ TI	
	2	0.2	5			40 K	96	1	Low Input Current	MP2108A	◊† MicroPwr	
										MP2208A	MicroPwr	
				1 *	0.3 *	40K	96	1	Dual 108A	LH2108A	† GE/Intersil	5
										PM2108A	**◊† PMI (2970, 2972)**	
						80K	96	1	Dual 108A	LH2108A	† LinearTech	
	3	2.8	2	0.6 *	0.17 *	150K	110	0	Dual Matched Instrumentation	MPOP10	† MicroPwr	
										MPOP10A	† MicroPwr	
										MPOP10E	MicroPwr	10
						200K	110	0	Dual Matched Instrumentation	**OP10**	**† PMI (2972)**	
										OP10A	**† PMI (2972)**	
	4	6	2	0.6 *	0.17 *	200K	106	0	Dual Matched Instrumentation	**OP10E**	**PMI (2972)**	
	7	1	5			80 K	96	1	Low Input Current	MP2308A	MicroPwr	
				1 *	0.3 *	60K	96	1	Dual 308A	LH2308A	GE/Intersil	15
		6	0.6 *	0.17 *	0.25 *	120K	100	0	Dual Matched Instrumentation	**OP10C**	**PMI (2972)**	
	20	0.1	10	3	13	50K	80	0	Bipolar-JFET	TL287C	◊ TI	
	35	15	0.7 *	0.1 *	0.04	500K*	88			TLC27L7M	† TI	
			2 *	0.7 *	0.6	280K*	88			TLC27M7M	† TI	
			5 *	2.3	4.5	40K*	82			TLC277M	† TI	20
0.5 *	60	5		3.0	1.0		70			TA75557	Toshiba	
										TA75558	Toshiba	
				5	2		70			TA75559	Toshiba	
0.5	120	7	3	—	0.2	800K	80	0	Low Power, Precision Matched	**OP221C**	**† PMI (2970, 2972)**	
										OP221G	**PMI (2970, 2972)**	25
	5000	700		9	125	50K	94			**CA3280A**	**GE/RCA (2646)**	
0.6	40	4	10	100 *	—	500 *	76	0	Low Power, Single/Dual Supply	**OP220C**	**† PMI (2970, 2972)**	
										OP220G	**PMI (2970, 2972)**	
0.75	0.008	0.006	6	2	2		90			**OPA2111AM**	**Burr-Brown (2532)**	
										OPA2115M	† Burr-Brown	30
				2 *	2 *		90		Low Noise	**OPA2111S**	**† Burr-Brown (2532)**	
	20	20		6.5*	6.5	300K	95	0	High speed, low noise.	**OP271G**	**PMI (2971)**	
	50	2	8	0.8	0.5	100K	90	0	Dual Matched	**OP04A**	**† PMI (2972)**	
										OP04E	**PMI (2972)**	
										OP14A	**† PMI (2972)**	35
										OP14E	**PMI (2972)**	
		5	8	0.8	0.25	100K	80	0	Dual Matched	MPOP03E	MicroPwr	
										MPOP04A	† MicroPwr	
										MPOP04E	MicroPwr	
										MPOP14A	† MicroPwr	40
										MPOP14E	MicroPwr	
									MPOP–04 With Internally Connected Vcc Terminal	MPOP03A	† MicroPwr	
0.8	0.075	0.05	12	3.0	8	100K	82		High Speed Instrumentation Amplifier	LT1057C	LinearTech	
										LT1057M	† LinearTech	
			15	3.0	8	100K	80			LT1058C	LinearTech	45
										LT1058M	† LinearTech	
1	0.01	0.005	10	1	1	300K	82		Precision Low Power BiFET	AD648B	AD	
										AD648K	AD	
										AD648T	† AD	
	0.035	0.005 *	10	1 *	3 *	300K *	80 *	0	Dual 542	AD642K	AD	
										AD642S	† AD	50
				2 *	3 *	250K	80	0	Dual 544	AD644K	AD	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Dual Units											**(Cont'd)**	
1											(Cont'd)	
	0.05	0.025	10	1	1	50K	80	0	Low Power BIFET	LF422A	National	
										LF442A	National	
	0.075	0.005	10	1 *	3 *	100K	76	—	Ultra Low Drift BiFET	AD647J	AD	
		0.025	10	3/4	20	200K	80		Precision High Speed BiFET	AD712B	AD	
				3.4	20	200K	80		Precision High Speed BiFET	AD712K	AD	
										AD712T	† AD	5
	0.1	0.05	10	3.0	10	100K	80		High Input Impedance Instrumentation Amplifier	LF412AC	LinearTech	
										LF412AM	† LinearTech	
						150K	100*		High Input Impedance Instrumentation Amplifier	OP215A	† LinearTech	
										OP215E	LinearTech	10
				13 *	10	150K	86	0	Dual JFET	**OP215A**	**† PMI (2971)**	
	0.2	0.1	10	3	10	50K	80	0	Wideband JFET	LF412A	National	
			10 *	3	13	50K		0	BiFET, General Purpose	TL288I	◊ TI	
			10	16	55	50K		0		**MC35083A**	**† Motorola (2923)**	
	40	5	10	0.15 *		300K	86 *	0	Micropower, Precision	**OP220H**	**PMI (2970, 2972)**	15
	500	600	—	2 *	50 *	20K	80	0	Transconductance Amplifier	LM11700A	National	
										LM13700A	National	
	1000	180	2	37	11	150K		0	Low Noise	**MC33077**	**◊ Motorola (2922, 2959)**	
1.0	0.2	0.1	10 *	8 *	30 *	50K	—	0		**MC34082A**	**Motorola (2922)**	
										MC35082A	**† Motorola (2922)**	20
				16 *	55 *	25K	—	—	Decompensated	**MC34083A**	**Motorola (2922)**	
						50K	—	—	Decompensated	**MC34083A**	**† Motorola (2922)**	
1.2	0.0007	0.0001	1 *	0.11	0.05	50K	65	0	LinCMOS, Low Bias	TLC27L9I	TI	
1.3	7	6	4.5	1.2 *	0.25 *	250K	100	0	Dual Matched Instrumentation	MPOP10C	MicroPwr	
										MP5510C	MicroPwr	25
1.5	0.15	0.1	0.7 *	0.1	0.04	500K*	88			TLC27L7C	TI	
			2	0.7	0.6	280K*	88			TLC27M7C	TI	
			5 *	2.3	4.5	40K	88			TLC277C	TI	
	50	5	10	2.5*	18*	50K	80	0		OP201	† Solitron	
										OP201H	Solitron	30
2	0.0007	0.0001	1 *	0.11	0.05	50K	65	0	LinCMOS, Low Bias	TLC27L4BI	TI	
	0.001 *	0.001 *	0.7 *	—	0.04 *	10K	70	0		TLC27L2BC	TI	
			2 *	—	0.6 *	10K	70	0	LinCMOS, Medium Bias	TLC27M2BC	TI	
			5 *	—	4.5 *	10K	70	0		TLC272BC	TI	
	0.005	0.001	0.7 *	0.1	0.5	30K	70	0	LinCMOS, Low Bias	TLC27L2BI	TI	35
			2 *	0.6	0.6	20K	70	0	LinCMOS, Medium Bias	TLC27M2BI	TI	
			5	2.2	5.3	10K		0	LinCMOS, High Bias	TLC252BC	TI	
			5 *	2.2	5.3	10K	70	0	LinCMOS, High Bias	TLC272BI	TI	
	0.015	0.012	15	2 *	2 *		82		Low Noise	**OPA2111K**	**Burr-Brown (2532)**	
	0.02	0.01	20	1	1	300K	76		Precision Low Power BiFET	AD648A	AD	
										AD648J	AD	
										AD648S	† AD	40
	0.03	0.015	7	0.30	0.01	100K	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD2706A	◊°† AdvLinear	
		0.025	7	0.4	0.7 *	15K	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD2701A	◊°† AdvLinear	
	0.05	0.03	10 *	1	1.6	80K *	70	0	Low Power, Dual 747	ICL7622AC	◊ GE/Intersil	
										ICL7622AM	◊† GE/Intersil	
										ICL7622AC	Maxim	
										ICL7622AM	† Maxim	45
									Low Power, Dual 1458	**ICL7621AC**	**GE/Intersil (2673)**	
										ICL7621AM	**† GE/Intersil (2673)**	50

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Dual Units											**(Cont'd)**	
											(Cont'd)	
2	0.05	0.03	10 *	1	1.6	80K *	70	0	Low Power, Dual 1458	ICL7621AC	Maxim	
										ICL7621AM	† Maxim	
		0.1	20	3	10	50K	80	0	Dual 0351A	LF353A	Thomson	
	0.075	0.025	10 *	4 *	13 *	50K	80	0	Precision BIFET	**MC35002A**	**† Motorola (2922)**	
		0.075 *	20 *	1 *	3 *	200K *	76 *	0	Dual 542	AD642J	AD	5
				2	3 *	100K	76	0	Dual 544	AD644J	AD	
	0.1	0.05	10 *	3 *	13 *	50K	80	0	Bipolar-JFET	µA772AC	Fairchild	
										µA772AM	† Fairchild	
				4 *	13 *	50K	80	0	Precision BIFET	**MC34002A**	**Motorola (2922)**	
	2	0.2	15			25 K	85	1	Low Input Current	MP2108	◊† MicroPwr	10
										MP2208	MicroPwr	
				1 *	0.3 *	50K	85	1	Dual 108	**PM2108**	**◊ PMI (2970, 2972)**	
									Dual 108	LH2108	† LinearTech	
	5	0.6	18	50	75		110	0		**VA2703**	**† VTC (3373)**	
										VA2713	**† VTC (3373)**	15
	45	5				100K	85			IR9358	◊ Sharp	
2 *	45	5		0.6	0.3		60			TA75358	Toshiba	
2	50	10		7.0	±3		90		Dual Power Op Amp	MA912	◊ AnalogSys	
			15	1 *	—	50K	70	0	Low Power, Single Supply	**CA158A**	**◊† GE/RCA (2645)**	
										LM158A	† SGS	20
		25	5	1.5 *	0.8	100K *	100 *		Matched Amplifier Pairs	3500MP	Burr-Brown	
		50	10	7	5	100K	80	1	Programmable, Radiation Hardened	**HS3569RH**	**◊‡ Harris (2716)**	
	75	5	10	0.8	0.25	50K	80	0	Dual Matched	MPOP14	† MicroPwr	
					0.5	50K	80	0	Dual Matched	MPOP04	† MicroPwr	
										MPOP04C	MicroPwr	25
										MPOP14C	MicroPwr	
									MPOP–04 With Internally Connected Vcc Terminal			
										MPOP03	† MicroPwr	
										MPOP03C	MicroPwr	
							90	0	Dual Matched	**OP04**	**PMI (2972)**	
										OP04C	**PMI (2972)**	30
										OP14	**† PMI (2972)**	
										OP14C	**PMI (2972)**	
		10	15	1 *	0.5 *	50K	80	1	Dual LM101A High Performance	LH2101A	GE/Intersil	
										LH2101A	Raytheon	
	100	20	10	5.7 *	16 *	220K	100 *	0	Precision Bipolar-JFET	**OP215B**	**† PMI (2971)**	35
										OP215F	**PMI (2971)**	
	150	30	3 *	1.3 *	2	10K	80	0	Low Power	**HA5152-2**	**† Harris (2706, 2737, 2747)**	
	200	75	3 *	8 *	1	100K	86	0	Low Noise, High Performance	**HA5102-2**	**† Harris (2706, 2737, 2747)**	
										HA5102-5	**Harris (2706, 2737, 2747)**	
				60 *	12	100K	86	1	Wideband	**HA5112-2**	**† Harris (2706, 2737, 2747)**	40
										HA5112-5	**Harris (2706, 2737, 2747)**	
	500	50	10 *	3.5 *	13 *	50K	80	1	High Performance, Single Supply	**MC33072A**	**◊ Motorola (2922)**	
										MC34072A	**Motorola (2922, 2960)**	
										MC35072A	**† Motorola (2922)**	
	750	150	2 *	16 *	5		100 *			**MC33078**	**◊ Motorola (2922, 2959)**	45
	800	200	—	10 *	13	50K	80	1	Dual 5534	SE5532	† Signetics	
										SE5532A	† Signetics	
	5000	600	7 *	2 *	50 *	—	80	0	Transconductance Amplifier, G = 12000 µmho.	LM13600A	Signetics	
2.5	150	20	5 *	1.8	0.8	30K	90	0	High Performance	LS204	◊ SGS	
										LS204A	SGS	50

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Dual Units											**(Cont'd)**	
3	—	200			6 *				Low Noise, Dual Power Supply	AN6557	◊ Panasonic	
										AN6558	◊ Panasonic	
3 *	0.03	0.005		1	3.5		70			TA75062	◊ Toshiba	
				3	13		70			TA75072	◊ Toshiba	
3	0.03	0.005		3	13	200K	76			IR9082	Sharp	5
	0.075	0.025	20	3	20	150K	76		Precision High Speed BiFET	AD712A	AD	
										AD712S	† AD	
	0.2			3	13	25K		0	BiFET, Low Offset	LF412	TI	
		0.05		4 *	15 *				JFET Input	µPC812	NEC	
			10 *	4 *	13 *	50K	80	0	Low Noise Bipolar-JFET	**TL072BC**	**Motorola (2922, 2960)**	10
		0.1	10 *	1 *	3.5 *	4K	80	0	Low Noise Bipolar-JFET	TL062BC	TI	
				2 *	2	4K	80	0	Low-Power J-FET	**TL062BC**	**Motorola (2922, 2960)**	
				3 *	13	50K	80	0	Bipolar-JFET	TL082B	◊ SGS	
					15 *	50K	80	0	Bipolar-JFET	**TL082B**	**Motorola (2922, 2960)**	
										TL082BC	TI	15
										TL288C	◊ TI	
										TL082BC	Thomson	
			10	16	55	25K		0	Decompensated	**MC35083**	**† Motorola (2923)**	
			20	0.7	8	25K	70	0	Wideband JFET	LF412	National	
				3.0	8	50K	82		High Input Impedance Instrumentation Amplifier	OP215C	† LinearTech	20
										OP215G	LinearTech	
	5	5	—	1	1	00K	100	0	Low Noise	SE5512	† Signetics	
	20	7.5	5 *	0.27 *	0.16 *	0K	70	0	Low Power Adjustable Current	ICL8022M	† GE/Intersil	
	80	10	15	2.5*	18*	50K	70	0		OP201E	Solitron	
										OP201F	† Solitron	25
		15	15	1 *	—	50K	70	0	Low Power, Single Supply	**CA258A**	**GE/RCA (2645)**	
										LM258A	National	
										LM258A	SGS	
		30	15	0.44	0.3	50K	80	0	Dual 741	µA747AM	† Fairchild	
										µA747EC	Fairchild	30
										LM747A	† National	
										LM747E	National	
	100	30	20	1*		25K	65			LM358A	Samsung	
				1 *	—	25K	65	0	Low Power, Single Supply	**CA358A**	**GE/RCA (2645)**	
										LM358A	National	35
										LM358	◊ SGS	
			30	—	—	25K	65	0	Low Power, Single Supply	LM358A	SGS	
	150	30	3 *	1.3 *	2	50K	80	0	Low Power	**HA5152-5**	**Harris (2706, 2737, 2747)**	
	500	200	—	4	3 *	—	—	—	High Performance, Low Noise	RC2041	Raytheon	
	750	400	3 *	—	2 *	20K	70	3	Audio Preamp	µA749C	Fairchild	40
	1000	200	—	8	6 *	—	—	—	High Performance, Low Noise	RC2043	Raytheon	
	5000	700	5 *	9 *	125 *	50K	80	1	Transconductance Amp	**CA3280**	**GE/RCA (2646)**	
3.0	0.2	0.1	10 *	8 *	30 *	25K	—	0		**MC34082**	**Motorola (2922)**	
										MC35082	**† Motorola (2922)**	
				16 *	55 *	25K	—	—	Decompensated	**MC34083**	**Motorola (2922)**	45
										MC34083	**† Motorola (2922)**	
3.5	300	50	5 *	1.5	1 *	—	86	0	High Performance	LS204	Thomson	
						20K	86	0	High Performance	LS204C	SGS	
4	0.01	0.005		4	10	32K	90			**CA5130A**	**◊ GE/RCA (2646)**	
										CA5160A	**GE/RCA (2646)**	50
	0.015	0.01		4	10	14K	83			**CA5260A**	**GE/RCA (2646)**	
	2	1	10 *	3	10 *	25K	70	2	Wideband	**MC34182**	**Motorola (2922, 2960)**	
	80	20	4 *	1 *	10	50K	70	0	High Slew Rate	SE5535	† Signetics	
	150	25	—	—	—	50K	70	0	2 Op Amp/Comparators	LM192	◊† National	
	200	50	20	5.4 *	15 *	200K	96 *	0	Precision Bipolar-JFET	**OP215C**	**† PMI (2971)**	55
										OP215G	**PMI (2971)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Dual Units											**(Cont'd)**	
4											(Cont'd)	
	250	100			0.7 *				General Purpose	AN1458	Panasonic	
										AN6572	Panasonic	
									General Purpose, Dual Power Supply	AN6571	Panasonic	
	500	75	10 *	4.5 *	13 *	25K	70	1	High Performance, Single Supply	**MC33072**	◊ **Motorola (2922)**	
										MC34072	**Motorola (2922, 2960)**	5
										MC35072	† **Motorola (2922)**	
		600	—	2 *	50 *	20K *	80	0	Transconductance Amplifier	LM13700	† National	
	700	100	25	—	9 *	18K	70	0	General Purpose, OC Output	TEC1761M	◊† Thomson	
	800	150		10	9	25K	70	0	Low Noise	NE5532	TI	
										NE5532A	TI	10
	1500	300	—	10 *	13 *	25K	70	1	Dual 5534	XR5532	◊ Exar	
										XR5532A	◊ Exar	
										XR5533	◊ Exar	
										XR5533A	◊ Exar	
										NE5532	**Signetics (3090)**	15
										NE5532A	**Signetics (3090)**	
										NE5533	† Signetics	
			5 *	10 *	13 *	25K	70	3	Can be compensated with 1 capacitor, but reduces BW and slew rate.	NE5533A	Signetics	
4.5	4	2	10 *	3	10 *	25K	70	2	Wideband	**MC33182**	**Motorola (2922)**	
	100	2		1.8	2.1	50 K	80		Low Power, Single Supply	**MC33172**	**Motorola (2922, 2959)**	20
										MC35172	† **Motorola (2923)**	
5	–150	30	7	0.6	0.2	50K	70	0	HighGain, Low Power Bipolar	LM258	TI	
	0.0007	0.0001	1 *	0.11	0.05	50K	65	0	LinCMOS, Low Bias	TLC252AC	TI	
										TLC27L4AI	TI	
	0.001 *	0.001 *	0.7 *	—	0.04 *	10K	70	0		TLC27L2AC	TI	
										TLC27L2AM	† TI	25
			2 *	—	0.6 *	10K	70	0		TLC27M2AC	TI	
										TLC27M2AM	† TI	
			5 *	—	4.5 *	10K	70	0		TLC272AC	TI	
										TLC272AM	† TI	30
	0.001	0.05		0.5	0.5	18K	85			**CA5420A**	**GE/RCA (2646)**	
	0.005	0.001	0.7 *	0.1	0.05	30K		0	LinCMOS, Low Bias	TLC25L2AC	◊ TI	
							70	0	LinCMOS, Low Bias	TLC27L2AI	TI	
			2 *	0.6	.0.6	20K	70	0	LinCMOS, Low Bias	TLC27M2AI	TI	
			5 *	2.2	5.3	10K	70	0	LinCMOS, High Bias	TLC272AI	TI	35
	0.03	0.015	7	0.30	0.01	100K	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD2706B	◊°† AdvLinear	
		0.02		4	10	50K	94			**CA3260A**	**GE/RCA (2646)**	
			6 *	4 *	10 *	50K *	70	0	Dual 3160	**CA3260AE**	**GE/RCA (2646)**	
										CA3260AT	† **GE/RCA (2646)**	
	0.04	0.02	15 *	45 *	9 *	20K	70	0	Dual 3140A, MOS FET	**CA3240A**	**GE/RCA (2646)**	40
	0.05	0.03	15 *	1	1.6	80K	70	0	Low Power, Dual 1458	**ICL7621BC**	**GE/Intersil (2673)**	
										ICL7621BM	† **GE/Intersil (2673)**	
										ICL7621BC	Maxim	
										ICL7621BM	† Maxim	
									Low Power, Dual 747	ICL7622BC	◊ GE/Intersil	45
										ICL7622BM	◊† GE/Intersil	
										ICL7622BC	Maxim	
										ICL7622BM	† Maxim	
	0.1	0.05	10 *	1 *	1 *	25K	70	0	Low Power JFET	LF442	National	
			10	2	0.6	25K	70		Low Power J-FET Input	**LF442C**	**Motorola (2921, 2958)**	50
		0.07	10 *	4 *	13 *	25K	80	0	JFET Input	**MC34002B**	**Motorola (2922)**	
		0.1	10 *	3 *	13 *	50K	80	0	Bipolar JFET	µA772BC	Fairchild	
										µA772BM	† Fairchild	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Dual Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
5											(Cont'd)	
	0.2	0.1	10 *	4 *	13 *	25K	70	0	Bipolar-JFET	**MC35002B**	**† Motorola (2922)**	
			30	4 *	13 *	50K	80	0	Dual 0351B	LF353B	Thomson	
	7.5	3	3 *	1 *	15 *	200K	70	0	Multi-Purpose Programmable	µA776M	† Fairchild	
	10	10	—	1	1	100K	100	0	Low Noise	NE5512	Signetics	
										NE5517	Signetics	5
										NE5517A	Signetics	
	25	13	10 *	3	10 *	25k	70	2	Wideband	**MC35182**	**† Motorola (2923)**	
	100	25	10	0.8	0.25	50K	70	0	Dual Matched	**OP04B**	**† PMI (2972)**	
										OP04D	**PMI (2972)**	
			20	0.8	0.25	25K	70	0	Dual Matched, High Performance	**OP14D**	**PMI (2972)**	10
						50K	70	0	Dual Matched	MPOP04B	† MicroPwr	
										MPOP04D	MicroPwr	
										MPOP14B	† MicroPwr	
										MPOP14D	MicroPwr	
									MPOP–04 With Internally Connected Vcc Terminal	MPOP03B	MicroPwr	15
										MPOP03D	MicroPwr	
		40	—	0.8 *	0.5 *	4K	60	0	Low Power	TL022M	◇† TI	
		50	20	0.8	0.25	25K	70	0	Dual Matched, High Performance	**OP14B**	**PMI (2972)**	
	150	30	7 *	1 *	—	50K	70	0	Half LM124	**CA158**	**◇† GE/RCA (2645)**	
										CA258	**GE/RCA (2645)**	20
										LM158	**† Motorola (2922)**	
										LM158	† National	
										LM258	National	
										LM158	† SGS	
										LM158	† Signetics	25
										LM258	◇ Signetics	
										SE532	† Signetics	
										LM158	† Thomson	
	200	80	—	0.8 *	0.5 *	1K	60	0	Low Power	TL022C	◇ TI	
	250	50	—	—	—	25K	65	0	2 Op Amp/Comparators	LM292	National	30
										LM392	National	
		80	—	0.8 *	0.5 *	1K	60	0	Low Power	IR9022	Sharp	
	500	50	10 *	1 *	0.6 *	50K	70	0	Single Supply	**MC3558**	**◇† Motorola (2922)**	
		200	—	—	10	50K	70	0	High Slew Rate 1558	**MC1558S**	**† Motorola (2922)**	
				1 *	0.5 *	50K	70	0	Dual 741	SFC2747M	† Thomson	35
					0.8 *	50K	70	0	Dual 741	LM1458M	† Thomson	
				1.0	0.5	50K	94			**LM1558**	**◇ GE/RCA (2645)**	
			—	2	0.8	20K	70	0	Low noise	LS4558N	† SGS	
					1.5 *	50K	70	0	Dual Wideband 741	RM4558	† Raytheon	
										RM4558	† TI	40
				2.5	1	20K	70	0	General Purpose	SE4558	◇† Signetics	
				2.5 *	1.5 *	20K	70	0	Dual Wideband 741C	MC4558	Samsung	
				2.5	1.5	50K	70	0	Dual Wideband 741	MC4558	† Thomson	
					1.5 *	50K	70	0	Dual Wideband 741	**GL4558**	**† GoldStar (2700)**	
										MC4558	**† Motorola (2922, 2959)**	45
										MC4558A	**Motorola (2922, 2959)**	
				3	1.5 *	50K	70	0	3 MHz Min. Bandwidth	RM4559	† Raytheon	
										RM4559	TI	
			2–15 *	1 *	0.5 *	50K	70	0	Dual 741	µA1558M	† Fairchild	
										µA747M	† Fairchild	50
										CA1558	**† GE/RCA (2645)**	
										CA747	**† GE/RCA (2645)**	
										MC1558	**† Motorola (2922)**	
										MC1747	**† Motorola (2921, 2958)**	
										LM1558	† National	55
										LM747	† National	
										PM747	**† PMI (2972)**	
										RM747	† Raytheon	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Dual Units											**(Cont'd)**	
											(Cont'd)	
5	500	200	2–15 *	1 *	0.5 *	50K	70	0	Dual 741	MC1558	† SGS	
										MC1558	† Signetics	
										µA747M	◊† TI	
										TA75458	Toshiba	
				3 *	0.25	25K	70	3	Dual MC1709	**MC1537**	**† Motorola (2921)**	5
	1000	200	—	0.12	7 *	30K	80	0	Low Noise, High Speed	LM833	National	
			2 *	15 *	7 *	25K	100 *	0	Low Noise, Audio	**LM833**	**Motorola (2921, 2958)**	
	5000	600	7 *	2 *	50 *	—	80	0	Transconductance Amplifier, G = 13000 µmho.	LM13600	Signetics	
	7000	8000	6000	—	2 *	50	80	0	Transconductance Amplifier	LM13600	National	
5.0	0.03	0.025	7	0.4	0.7 *	15K	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD2701B	◊°† AdvLinear	10
6	0.04	0.02	10 *	5 *	13 *	50K	80	0	MOS/FET Input, Bipolar/MOS Output	**CA082A**	**GE/RCA (2645)**	
	0.2	0.05	10 *	3 *	13 *	50K	80	0	Low Noise Bipolar-JFET	TL072M	† TI	
				4 *	10	35K	70	0	Low Noise Bipolar JFET	**TL072M**	**† Motorola (2922, 2960)**	
					13 *	50K	80	0	Low Noise Bipolar-JFET	**TL072AC**	**Motorola (2922, 2960)**	
										TL072AC	TI	15
		0.1	10 *	1	3.5	4K	80	0	BiFET, Low Power	TL062I	TI	
				1 *	3.5 *	4K	80	0	Low Power Bipolar-JFET	TL062AC	TI	
										TL062M	† TI	
				2 *	2	4K	80	0	Low-Power J-FET	**TL062AC**	**Motorola (2922, 2960)**	
										TL062M	**† Motorola (2922, 2960)**	20
				3	13	50K	80	0	BiFET, General Purpose	TL082I	TI	
									BiFET General Purpose	TL083I	TI	
									BiFET, Low Noise	TL072I	TI	
				3 *	13 *	50K	80	0	Bipolar JFET	XR082	◊ Exar	
										XR082M	† Exar	25
										XR083	◊ Exar	
										XR083M	† Exar	
										TL082A	**Motorola (2922, 2960)**	
										TL082AC	TI	
										TL082M	† TI	30
										TL083AC	TI	
										TL082AC	Thomson	
					13	50K	80	0	Bipolar-JFET	TL082A	◊ SGS	
				4 *	13 *	25K	80	0	JFET Input	**TL082M**	**† Motorola (2922, 2960)**	
	10	6	3 *	1 *	15 *	50K	70	0	Multi-Purpose Programmable	µA776C	Fairchild	35
	30	10	5 *	0.27 *	0.16 *	50K	70	0	Low Power Adjustable Current	ICL8022C	GE/Intersil	
	100	10	3 *	0.4	1	100K *	77	0	Ultra-Low Power	**HA5142**	**Harris (2706, 2737, 2747)**	
	150	40	6 *	1 *	10	50K	70	0	High Slew Rate	NE5535	Signetics	
			20	2.5*	18*	25K	70	0		OP201C	Solitron	
										OP201G	† Solitron	40
	200	500			2 *				Low Noise, Dual Power Supply	AN6556	◊ Panasonic	
	250	50	7 *	1 *	0.6 *	25K	65	0	Half LM244/324	**LM258**	**Motorola (2922, 2958)**	
										LM358	**Motorola (2921, 2958)**	
										NE532	Signetics	
		75	10 *	1 *	0.6 *	20K	70	0	Single Supply, I/O Operates to Ground	µA798C	Fairchild	45
	500	200	—	—	—	20K	70	0	General Purpose	IR91458	Sharp	
					1 *	20K	70	0	Wideband 741	µPC4557	NEC	
					2 *				Low Noise, Dual Power Supply	AN6555	◊ Panasonic	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Dual Units (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
											(Cont'd)	
6	500	200										
			—	—	2 *	20K	70	0	Wideband 741	µPC4559	NEC	
					5 *	20K	70	0	Wideband 741	µPC4556	NEC	
				1 *	0.5 *	20–50K	70	0	Dual 741C	XR1458	Exar	
										µA1458CC	◊ Fairchild	
										µA747C	Fairchild	5
										CA747C	**GE/RCA (2645)**	
										MC1458	**Motorola (2921, 2958)**	
										MC1747C	**Motorola (2921, 2958)**	
										LM1458	National	
										LM747C	National	10
										µPC1458	NEC	
										AN6550	◊ Panasonic	
										AN6551	◊ Panasonic	
										AN6552	◊ Panasonic	
										RC747	Raytheon	15
										MC1458	Signetics	
										µA747C	TI	
						20K	70	0	Dual 741C	MC1458	Samsung	
				1	0.5	20K	70	0	General Purpose	MC1458	TI	
			—	1 *	0.5 *	25K	70	0	Dual 741	SFC2747C	Thomson	20
					0.8 *	20K	70	0	Dual 741	LM1458C	Thomson	
				1.0	0.5	20K	86			**LM1458**	**GE/RCA (2645)**	
			—	2	0.5 *	20K	70	0	Dual Wideband 741C	**MC4558C**	**Motorola (2922, 2959)**	
					1	20K	70	0	Dual Wideband 741	MC4558C	Thomson	
						50K	70	0	General Purpose	NE4558	Signetics	25
				2 *	1.5 *	20K	70	0	Dual Wideband 741C	MC4558C	Samsung	
				3 *	1	20K	70	0	Low Noise	XR4739	Exar	
					1 *	20K	70	0	Low Noise	IR94558	Sharp	
					1	20K	70	0	Wideband 741	XR4558	◊ Exar	
										HA17558	Hitachi	30
										µPC4558	NEC	
										RC4558	Raytheon	
										RC4558	◊ TI	
				3	1.5	20K	70	0	3 MHz Min. Bandwidth	RC4559	Raytheon	
										RC4559	◊ TI	35
				6 *	2 *	20K	70	0	Low Noise	IR94559	Sharp	
				7 *	2.2 *	20 K	70	0	Supply Voltage ± 2 to ± 16 V	M5R4558	Mitsubishi	
			—	10 *	2.8 *	20K	70	0	Wideband 741	**XR4560**	**Exar (2607)**	
										µPC4560	NEC	
				15 *	5 *	20K	70	0	High Slew Rate	IR3F02	Sharp	40
			6 *	0.8 *	0.3	20K	70	0	Dual 741C	MC1458	◊ SGS	
			10 *	1 *	0.5 *	25K	70	0	Automotive Temperature Range (–40°C to 85°C)	SA747C	Signetics	
					10	20K	70	0	High Slew Rate 1458	**MC1458S**	**Motorola (2921, 2958)**	
			12 *	1 *	0.8 *	20K	70	0	Automotive Temperature Range (–40°C to 85°C)	SA1458	Signetics	
	650	120	10	40 *	30	4K	60	0		**VA2705K**	**VTC (3374)**	45
	1000	300	6 *	—	9 *	10K	65	0	General Purpose, OC Output	TEC1761C	◊ Thomson	
	1100	120	10	100	60			0		**VA2718K**	**VTC (3374)**	
										VA2718S	**† VTC (3374)**	
				300	80			0		**VA2717K**	**VTC (3374)**	
										VA2717S	**† VTC (3374)**	50
	1500	500	10	1 *	0.5 *	50K	70	0	Dual 741	µA747	◊† Signetics	
	2000	1000	—	—	1 *	6.5K	70	2	Low Noise	µA739C	Fairchild	
7		1	30			25 K	80	1	Low Input Current	MP2308	MicroPwr	
	–250	50	7 *	0.6	0.2	25K	65	0	Low Power, High Gain Bipolar	LM358	TI	
	200	50	—	—	—	25K	65	0	Single Supply	TL321C	TI	55

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Dual Units											**(Cont'd)**	
7											(Cont'd)	
	250	50			0.3 *				General Purpose	AN1358	Panasonic	
										AN6562	◊ Panasonic	
									General Purpose, Dual Power Supply	AN6561	◊ Panasonic	
					0.6 *		80 *	0		HA17904	Hitachi	
						32 K	85 *	0	Single Supply	M5N358	◊ Mitsubishi	5
				1.0		25K	88			**LM358**	**GE/RCA (2645)**	
						100K	100			**LM2904**	**GE/RCA (2645)**	
			7 *	—	—	100K *	50	0	Single Supply	LM2904	Thomson	
			7	0.2	0.25	25K	65	0	Dual Internal Compensation	**GL358A**	**GoldStar (2700)**	
			7 *	1 *	—	25K	65	0	Half LM224	µPC358	NEC	10
										LM358	Thomson	
					0.3 *	25K	65	0	Automotive Temperature Range (–40°C to 85°C)	SA532	Signetics	
7.5	800	300	10	1 *	0.5 *	25K	70	0	Dual 741C	µA747C	◊† Signetics	
	1500	500	1.5 *	1 *	0.25 *	15K	65	3	Matched Dual MC1709C	**MC1437**	**Motorola (2921)**	
8	–500	75	10 *	1	0.6	20K	70	0	Low Power	TL322I	TI	15
	500	75	10 *	1 *	0.6 *	20K		0	Split Supplies	**MC3358**	**Motorola (2922)**	
10	0.0007	0.0001	1 *	0.11	0.05	50K	65	0	LinCMOS, Low Bias	TLC27L4I	TI	
	0.001 *	0.001 *	0.7 *	—	0.04 *	10K	70	0		TLC27L2M	† TI	
			2 *	—	0.6 *	10K	70	0		TLC27M2M	† TI	
			5 *	—	4.5 *	10K	70	0		TLC272C	TI	20
										TLC272M	† TI	
	0.002	0.001		0.5	0.5	18K	85			**CA5420**	**GE/RCA (2646)**	
	0.005	0.001		6.16	0.25	1K	60			**CA5422**	**GE/RCA (2645)**	
		0.001 *	0.7 *	0.1	0.04 *	20K		0	LinCMOS, Low Bias	TLC27L2C	TI	
		0.001	0.7 *	0.1	0.05	30K	70	0	LinCMOS, Low Bias	TLC27LI	TI	25
										TLC27L2I	TI	
		0.001 *	2 *	0.6	0.6 *	20K		0	LinCMOS, Medium Bias	TLC27M2C	TI	
		0.001	2 *	0.6	0.6	20K	70	0	LinCMOS, Medium Bias	TLC27M2I	TI	
			5 *	2.2	5.3	10K	70	0	LinCMOS, High Bias	TLC272I	TI	
	0.01	0.005		4	10	18K	85			**CA5160**	**GE/RCA (2646)**	30
	0.015	0.01		4	10	18K	85			**CA5130**	◊ **GE/RCA (2646)**	
	0.03	0.015	7	0.30	0.01	100K	65	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD2706	◊°† AdvLinear	
	0.1	0.03	10	3	10	40K	90	1	JFET Input	MA336	AnalogSys	
		0.05		1 *	3 *			0	Low Power, JFET Input	µPC4062	◊ NEC	
		0.1	10 *	4 *	13 *	25K		0	JFET Input	**MC35002**	**† Motorola (2922)**	35
							80	0	JFET Input	**MC34002**	**Motorola (2922)**	
	0.2			3	13	25K		0	BiFET, General Purpose	LF353	TI	
		0.05		3 *	13 *	25K	70 *	0	Low Input Offset and Bias Currents	µPC4072	◊ NEC	
			10 *	3 *	13 *	25K	70	0	Low Noise Bipolar-FET	MCE72	MCE	
				4 *	13 *	25K	70	0	Low Noise Bipolar-FET	**TL072C**	**Motorola (2922, 2960)**	40
										TL072C	TI	
										TL072C	Thomson	
										TC072	◊ Toshiba	
						50K	80	0	Low Noise Bipolar-JFET	TL072BC	TI	
		0.1	10 *	3 *	13 *	50K	70	0	Bipolar JFET	µA772C	Fairchild	45
				4 *	13 *	25K	70	0	Dual 351	LF353	Thomson	
									Dual 351, Wide Band	**LF353**	**Motorola (2921, 2958)**	
										LF353	National	
	500	50	7	1	0.6	20K		0	Low Crossover Distortion	**MC3458**	**Motorola (2921, 2959)**	
			10 *	1 *	0.6 *	20K	70	0	Low Power	IR3F01	Sharp	50
		75	10 *	1 *	0.6 *	20K	70	0	Low Power	TL322C	TI	
	650	120		500	150*	10K	60	0		**VA2707J**	**VTC (3374)**	
	700	50	20	40 *	150 *	10K	58			**VA2707**	**VTC (3374)**	
		300	—	1 *	0.5 *	20K	60	0	Dual 741C	MC1458C	Samsung	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Dual Units											**(Cont'd)**	
											(Cont'd)	
10	700	300										
			6 *	0.8 *	0.3	20K	60	0	Dual 741C	MC1458C ◊ SGS		
			15 *	1.1 *	0.5 *	20K	60	0	General Purpose	**MC1458C**	**Motorola (2921, 2958)**	
	1000	100	15 *	0.8 *	0.8 *	100K	60	0	± 3.5A Peak Output	**ULN3755**	**Sprague (3203)**	
					5	100 K*	60	2	± 3.5 A Peak Output	ULN3753	Sprague	
		200		15 *	7 *				Low Noise, Wideband	µPC4570 ◊ NEC		5
10.0	0.03	0.03	7	0.7 *	0.7 *	10K	60	0	CMOS, Rail to Rail, Single/Dual 5V Supply	ALD4701 ◊°† AdvLinear		
	0.05	0.03	7	0.7 *	0.7 *	10K	60	0.0	CMOS, Rail to Rail, SIngle/Dual 5V Supply	ALD2701 ◊°† AdvLinear		
12	650	120	20	40 *	30	2K	60	0		**VA2705J**	**VTC (3374)**	
	1100	120	10	100	60			0		**VA2718J**	**VTC (3374)**	
				300	80			0		**VA2717J**	**VTC (3374)**	10
15	0.015	0.01		4	10	10K	80			**CA5260**	**GE/RCA (2646)**	
	0.05	0.03	10 *	5 *	13 *	50K	70	0	MOS/FET Input, Bipolar/MOS Output	**CA082**	**GE/RCA (2645)**	
			25 *	0.48 *	0.16 *	10K	70	0	Low Power	ICL7621DM † Maxim		
				1 *	1.6	80K *	70	0	Low Power, Dual 1458	**ICL7621DC**	**GE/Intersil (2673)**	
										ICL7621DC	Maxim	15
									Low Power, Dual 747	ICL7622DC ◊ GE/Intersil		
										ICL7622DC	Maxim	
	0.2	0.1	10 *	3 *	13 *	50K	70	0	Bipolar JFET	µA772LC	Fairchild	
		0.2	10 *	2 *	2	3K	70	0	Low-Power J-FET	**TL062C**	**Motorola (2922, 2960)**	
	0.4	0.2		3 *	13 *	20 K	70	0	JFET Input	M5T082	Mitsubishi	20
			10 *	1 *	3.5 *	3K	70	0	Low Power Bipolar-JFET	TL062C	TI	
										TL062C	Thomson	
				3 *	11 *	25K	70	0	Bipolar-JFET	µPC4082	NEC	
										µPC803	NEC	
					13 *	25K	70	0	Bipolar-JFET	XR082C	Exar	25
										XR083C	Exar	
										HA17082	Hitachi	
										HA17083	Hitachi	
										MCE82	MCE	
										MCE83	MCE	30
										TL082C	**Motorola (2922, 2960)**	
					13	25K	70	0	Bipolar-JFET	TL082 ◊ SGS		
					13 *	25K	70	0	Bipolar-JFET	TL082C	TI	
										TL083C	TI	
										TL082C	Thomson	35
										TC082	Toshiba	
				4 *	13 *	25K	70	0	Bipolar-JFET	TL082C	National	
	700	50	33	40 *	38	2K	58	0		**VA2706K**	**VTC (3374)**	
15 *	2500	250	—	0.35 *	1 *	3K *	70 *	0	Output current to 1A	L272	SGS	
										L272M	SGS	40
19	650	120		110	100	5 K	60	2		**VA2708**	**† VTC (3374)**	
20	0.02	0.0005 *	75	1 *	6 *	50K	70	0	FET Input Dual	**ICL8043M**	**† GE/Intersil (2673)**	
	850	100	40	40 *	38	1K	58	0		**VA2706J**	**VTC (3374)**	
50	0.05	0.0005 *	75	1 *	6 *	20K	70	0	FET Input Dual	**ICL8043C**	**GE/Intersil (2673)**	
300	0.010			1	1.8 *		86		Precision Low-Power BiFET	AD648C	AD	45
Triple Units												
5	0.05	0.03	10 *	1	1.6	80K *	70	0	Low Power	**ICL7631BC** ◊	**GE/Intersil (2673)**	
										ICL7631BM ◊†	**GE/Intersil (2673)**	
										ICL7631BC	Maxim	
										ICL7631BM †	Maxim	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Triple Units											**(Cont'd)**	
											(Cont'd)	
5	0.05	0.03	10 *	1	1.6	80K *	70	1	Low Power	ICL7632BC	◇ GE/Intersil	
										ICL7632BM	◇† GE/Intersil	
										ICL7632BC	Maxim	
										ICL7632BM	† Maxim	
	70	14	—	0.02 *	0.1 *	—	70	0	Micropower, Transconductance Amplifier	**CA3060**	**◇† GE/RCA (2646, 2649)**	5
7	150	50		1*	0.3	20K	70	0	Micropower	S144	Siltronics	
10	0.05	0.03	20 *	1	1.6	80K	70	0	Low Power	**ICL7631CC**	**◇ GE/Intersil (2673)**	
										ICL7631CM	**◇† GE/Intersil (2673)**	
										ICL7631CC	Maxim	
										ICL7631CM	† Maxim	10
								1	Low Power	ICL7632CC	◇ GE/Intersil	
										ICL7632CM	◇† GE/Intersil	
										ICL7632CC	Maxim	
										ICL7632CM	† Maxim	
20	0.05	0.03	30 *	1	1.6	80K	70	0	Low Power	**ICL7631EC**	**◇ GE/Intersil (2673)**	15
										ICL7631EC	Maxim	
								1	Low Power	ICL7632EC	◇ GE/Intersil	
										ICL7632EC	Maxim	
				1.4 *	1.6 *	10K	70	0	CMOS, Low Power, Programmable Bias	ICL7631EM	† Maxim	
										ICL7632EM	† Maxim	20
Quad Units												
	200			2.5	0.5	1.2K		0	Single Supply, Bipolar Norton Amplifier	LM3900	TI	
±9	500	±150	7	1	0.3		70		Low Power Quad Op Amp	LM324A	◇† Signetics	
0.1	1.0	0.2		1.0	0.3	2M	115			**OP400A**	**† PMI (2970, 2972)**	
										OP400E	**PMI (2970, 2972)**	
	25	25	1.2	4	0.75	1.5M	115	0	Precision, Wideband	**HA5134A**	**◇† Harris (2737, 2747, 2757)**	25
0.15	3	1	1.2		0.1	2M	120	0	Low Offset, Low Power	**OP400/883**	**† PMI (2970, 2972)**	
0.18	20	0.8	2	1 *	0.2	1.5M	100	0	Precision	LT1014AC	LinearTech	
										LT1014AM	† LinearTech	
0.2	50	50	2	4	0.75	1.2M	100	0	Precision, Low Noise	**HA5134**	**◇† Harris (2737, 2747, 2757)**	
0.25	20	20	10	0.3	0.2	1K	80	0	Instrumentation Amplifier	**INA258W**	**◇† Burr-Brown (2545)**	30
			15	0.3	0.2	1K	80	0	Instrumentation Amplifier	**INA258V**	**◇† Burr-Brown (2545)**	
			45	0.3	0.2	1K	80	0	Instrumentation Amplifier	**INA258U**	**◇† Burr-Brown (2545)**	
0.3	3.0	0.5		1.0	0.3	1M	115			**OP400B**	**† PMI (2970, 2972)**	
										OP400F	**PMI (2970, 2972)**	
	30	1.5	2.5	1 *	0.2	1.2M	97	0	Precision	LT1014C	LinearTech	35
										LT1014M	† LinearTech	
	1000	200	15	10		100K	80		Low Noise	LM837	National	
0.4	25	10	2		1.4	1M	110			**OP470A**	**† PMI (2971)**	
										OP470E	**PMI (2971)**	
0.5	0.075	0.025	10 *	4 *	13 *	50K	80	0	Precision BIFET	**MC35004A**	**† Motorola (2924)**	40
	0.1	0.05	5	30	12	50K		0	Low Input Offset JFET	**MC33284**	**Motorola (2924, 2959)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Quad Units											**(Cont'd)**	
0.5											(Cont'd)	
	15	3	5	0.02	0.005	700K	90	0		**OP490E**	**PMI (2970, 2972)**	
									Low Voltage	**OP490A**	**† PMI (2970, 2972)**	
	40	50	10	20	8			0		**VA4701S**	**† VTC (3374)**	
				90	40			0		**VA4711S**	**† VTC (3374)**	
	80	100	10	20	8			0		**VA4701J**	**VTC (3374)**	5
				90	40			0		**VA4711J**	**VTC (3374)**	
				500	150			0		**VA4721J**	**VTC (3374)**	
										VA4721S	**† VTC (3374)**	
	300	20	10	1.5	0.7	100K	100	0	Symmetrical, Matched	MPOP09A	† MicroPwr	
										MPOP09E	MicroPwr	10
										MPOP11	† MicroPwr	
										MPOP11A	† MicroPwr	
										MPOP11E	MicroPwr	
										MP5509A	† MicroPwr	
										MP5509E	MicroPwr	15
										MP5511A	† MicroPwr	
										MP5511E	MicroPwr	
										OP09A	**◇† PMI (2972)**	
										OP09E	**PMI (2972)**	
										OP11A	**◇† PMI (2972)**	20
										OP11E	**PMI (2972)**	
0.75	20	5	4 *	0.02	0.005	500K	80	0		**OP490F**	**PMI (2970, 2972)**	
0.8	25	10	4	6.5 *	6.5	500K	105	0	Low Noise	**OP471A**	**† PMI (2971)**	
										OP471E	**PMI (2971)**	
	50	20	4		1.4	800K	100			**OP470F**	**PMI (2971)**	25
1	25	5	4 *	0.02	0.005	400K	80	0		**OP490G**	**PMI (2970, 2972)**	
1.0	0.008	0.008	3.0	6.4	24		88		Wide Bandwidth	**OPA404S**	**◇† Burr-Brown (2533)**	
1.2	0.0007	0.0001	1 *	0.11	0.05	50K	65	0	LinCMOS, Low Bias	TLC27L9C	TI	
			2 *	2.2	5.3	10K	70	0	LinCMOS, High Bias	TLC279C	TI	
										TLC279I	TI	30
			2.1 *	0.635	0.62	25k	65	0	LinCMOS, Medium Bias	TLC27M9C	TI	
1.5	50	20	7	6.5 *	6.5	300K	95	0	Low Noise	**OP471F**	**PMI (2971)**	
2	0.0007	0.0001	1 *	0.1	0.04	50K	65	0	LinCMOS, Low Input Offset and Bias Currents	TLC27L4BC	TI	
			2 *	2.2	5.3	10K	70	0	LinCMOS, High Bias	TLC274BI	TI	
	0.001	0.001	0.7	0.1	0.04		77	0	Low Input Offset and Bias Currents, VDD = 1 to 16 V	TLC25L4BC	◇ TI	35
			0.7 *	0.1	0.05	30K	70	0	LinCMOS, Low Bias	TLC27L4BI	TI	
			5	2.3	4.5	10K	77	0	Low Input Offset and Bias Currents	TLC274BC	TI	
									Low Input Offset and Bias Currents, VDD = 1 to 16 V	TLC254BC	TI	
	0.03	0.025	7	0.4	0.7 *	15K	65	0	CMOS, Rail-to-Rail	ALD4701A	◇°† AdvLinear	
	0.2	2	10 *	4 *	13 *	50K	80	0	High Speed, JFET Input	TDB0347A	Thomson	40
	50	10	7 *	1 *	—	50K	70	0	Low Power	LM124A	† SGS	
			20	1 *	—	50K	70	0	Low Power	LM124A	† National	
										SG124A	† SiliconG	
	80	15	7 *	1 *	—	50K	70	0	Low Power	LM224A	SGS	
	400	200	5	5.5	3.0	25 K	100	0	±5 V power supplies.	**VA4741**	**† VTC (3374)**	45
										VA4742	**† VTC (3374)**	
	500	50	10 *	3 *	8	50K	80	0	High Performance Bipolar	**MC33074A**	**◇ Motorola (2924)**	
										MC34074A	**Motorola (2923, 2960)**	
										MC35074A	**† Motorola (2924)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Quad Units											**(Cont'd)**	
2.5	0.012	0.012	5.0	6.4	24		84		Wide Bandwidth	**OPA404K**	◊ **Burr-Brown (2533)**	
	50	5	10	750 *	0.25 *	400K *	100K	0	Quad Micropower OP–21	**OP421B**	† **PMI (2970, 2972)**	
										OP421F	**PMI (2970, 2972)**	
	75	10		0.8 *	0.4 *	50 K	80	0	Quad 741	PM148	PMI	
										PM248	PMI	5
	200	40	5 *	1.8	0.8	30K	90	0	High Performance	LS404	◊ SGS	
		75	3 *	8 *	1	100K	86	0	Low Noise, High Performance	**HA5104-2**	† **Harris (2706, 2737, 2747)**	
										HA5104-5	**Harris (2706, 2737, 2747)**	
				60 *	12	100K	86	1	Wideband	**HA5114-2**	† **Harris (2706, 2737, 2747)**	
										HA5114-5	**Harris (2706, 2737, 2747)**	10
	500	50	15	1.5	0.7	100K	100	0	Symmetrical, Matched	MPOP09B	† MicroPwr	
										MPOP09F	MicroPwr	
										MPOP11B	† MicroPwr	
										MPOP11F	MicroPwr	
										OP09B	† **PMI (2972)**	15
										OP09F	**PMI (2972)**	
										OP11B	† **PMI (2972)**	
										OP11F	**PMI (2972)**	
	750	150	2 *	16 *	5		100 *			**MC33079**	◊ **Motorola (2924, 2959)**	
3	0.03	0.005		1	3.5		70			TA75064	◊ Toshiba	20
				3	13		70			TA75074	◊ Toshiba	
						200K	76			IR9084	Sharp	
	0.2	0.05	10 *	4 *	13 *	25K	70	0	Low Noise Bipolar-JFET	TL074BC	TI	
		0.1	10 *	1 *	3.5 *	4K	80	0	Low Power Bipolar-JFET	TL064BC	TI	
				2 *	2	4K	80	0	Low-Power J-FET	**TL064BC**	**Motorola (2923, 2960)**	
				3 *	3	50K	80	0	JFET	TL084B	◊ SGS	25
										TL084BC	TI	
										TL084BC	Thomson	
	80	15	20	1 *	—	50K	70	0	Low Power	LM224A	National	
										SG224A	SiliconG	30
	100	30	—	1 *		25K	65	0	Low Power	LM324	Samsung	
			30	—	—	25K	65	0	Low Power	LM324A	SGS	
						100K	65	0	High Gain, Single Supply	LM324A	Thomson	
				1 *	—	25K	65	0	Low Power	LM324A	National	
										SG324A	SiliconG	35
	200	20		2.5	0.5	1.KK		0	Norton Amplifier, Bipolar	LM2900	◊ TI	
		30	5 *	3	1.2	25K	80	0	Noise 2µV Max	RM4156	† Raytheon	
					1.6 *	50K	80	0	Quad 741	XR4741M	◊† Exar	
				3.5 *	1.6 *	50K	80	0	Quad 741	**HA4741-2**	† **Harris (2706, 2737, 2747)**	
										HA4741-2	† Raytheon	40
				19 *	8 *	25K	80	0	Uncompensated 4156	RC4157	Raytheon	
	250	50	3 *	1.3	6 *	100K	80	0	Low Power	**HA5154**	**Harris (2706, 2737, 2747)**	
	1000	300		0.6	1	40 K			General Purpose, Radiation Hardened	**HS5104RH**	◊‡ **Harris (2717)**	
4	125	12	15	750 *	0.25 *	200K	96 *	0	Quad, Micropower OP–21	**OP421C**	† **PMI (2970, 2972)**	
										OP421G	**PMI (2970, 2972)**	45
4.5	100	2		1.8	2.1	50 K	80		Low Power, Single Supply	**MC33174**	**Motorola (2924, 2959)**	
										MC35174	† **Motorola (2924)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Quad Units											**(Cont'd)**	
4.5											(Cont'd)	
	500	75	10 *	3 *	10	25K	70	0	High Performance Bipolar	**MC33074**	◇ **Motorola (2924)**	
										MC34074	† **Motorola (2923, 2960)**	
										MC35074	**Motorola (2924)**	
5	–150	30		0.6	0.3	50K	70	0	Bipolar, General Purpose	LM224	TI	
	0.0007	0.0001	2 *	2.2	5.3	10K	70	0	LinCMOS, High Bias	TLC274AI	TI	5
			2.1 *	0.635	.62	25K	65	0	LinCMOS, Medium Bias	TLC27M4AC	TI	
	0.001	0.001	0.7	0.1	0.04	20K	77	0	Low Input Offset and Bias Currents	TLC27L4AC	TI	
									Low Input Offset and Bias Currents, VDD = 1 to 16 V	TLC25L4AC	◇ TI	
						30K	70	0	Low Input Offset and Bias Currents	TLC27L4AM	† TI	
			0.7 *	0.1	0.05	30K	70	0	LinCMOS, Low Bias	TLC27L4AI	TI	10
			2	0.7	0.6	20K	77	0	Low Input Offset and Bias Currents	TLC27M4BC	TI	
									Low Input Offset and Bias Currents, VDD = 1 to 16 V	TLC25M4BC	◇ TI	
			5	2.3	4.5	10K	70	0	Low Input Offset and Bias Currents	TLC274AM	† TI	
							77	0	Low Input Offset and Bias Currents	TLC274AC	TI	
									Low Input Offset and Bias Currents, VDD = 1 to 16 V	TLC254AC	TI	15
	0.005			0.1	0.05				LinCMOS, Low Bias	TLC27L9I	TI	
		0.001	2 *	0.6	0.6	20K	70	0	LinCMOS, Medium Bias	TLC25M4AC	◇ TI	
	0.03	0.025	7	0.4	0.7 *	15K	65	0	CMOS, Rail-to-Rail	ALD4701B	◇°† AdvLinear	
	0.05	0.03	10 *	1	1.6	80K *	70	0	High Bias	ICL7641BC	Maxim	
			15 *	1	1.6	80K	70	0	Low Power	**ICL7641BC**	◇ **GE/Intersil (2673)**	20
										ICL7641BM	◇† **GE/Intersil (2673)**	
										ICL7642BC	◇ **GE/Intersil (2673)**	
										ICL7642BM	◇† **GE/Intersil (2673)**	
										ICL7642BC	Maxim	
										ICL7642BM	† Maxim	25
				1.4 *	1.6 *	20K	76	0	High Bias	ICL7641BM	† Maxim	
		0.05	10	1	1	50K	80	0	Low Power BIFET	LF444A	National	
	0.1	0.05	10 *	4 *	13 *	50K	80	0	Precision BIFET	**MC35004B**	† **Motorola (2924)**	
		0.1	10 *	3 *	13 *	50K	80	0	Bipolar JFET	µA774BC	Fairchild	
										µA774BM	† Fairchild	30
	0.2	0.05	10 *	10 *	40 *	50K		0	High Speed, JFET Input	**MC34084A**	**Motorola (2923)**	
									High-Speed, JFET Input	**MC35084A**	† **Motorola (2924)**	
				20 *	80 *	50K		0	Decompensated MC34084 for Gain >2	**MC34085A**	**Motorola (2923)**	
									Decompensated MC35084 for Gain >2	**MC35085A**	† **Motorola (2924)**	
		0.1	10 *	4 *	13 *	50K	80	0	Precision BIFET	**MC34004B**	**Motorola (2923, 2959)**	35
									Wideband, Quad 351B	**LF347B**	**Motorola (2923, 2958)**	
										LF347B	National	
		4	10 *	4 *	13 *	50K	80	0	High Speed, JFET Input	TDB0347B	Thomson	
	100	20	—	0.8	0.4 *	1M	70	0	High Gain, Programmable	LM146	† Thomson	
		25	—	1 *	0.5 *	50K	70	0	High Gain, Programmable	LM148	† Thomson	40
										TDC0149	† Thomson	
									Quad 741 with Standard npn Input Stage	µA148M	† Fairchild	
										LM148	◇† **Motorola (2924)**	
										LM148	‡ National	
										LM148	† Raytheon	45
				4 *	2 *	50K	70	0	Wideband Quad 741 for Gains >5	LM149	‡ National	
		40	—	0.8 *	0.5 *	4K	60	0	Low Power	TL044M	† TI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Quad Units											**(Cont'd)**	
5											(Cont'd)	
	150	30	7 *	—	—	100K	70	0	High Gain, Single Supply	LM124	◊† Thomson	
				1 *	—	50K	70	0	Low Power	LM124	† SGS	
										LM224	◊ SGS	
									Low Power, Single Supply	LM258	◊ SGS	
	250	80	—	0.8 *	0.5 *	1K	60	0	Low Power	TL044C	TI	5
	300	50			1.6 *				Low Noise, Dual Power Supply	AN6554	◊ Panasonic	
			5 *	3	1.2	25K	80	0	Noise 2 µV Max	RC4156	Raytheon	
				3 *	1.6 *	25K	80	0	Quad 741	µPC4741	NEC	
				3.5 *	1.6 *	25K	80	0	Quad 741	XR4741C	◊ Exar	
										HA4741-5	**Harris (2706, 2737, 2747)**	10
										HA4741-5	Raytheon	
		80	5 *	1.5	1 *	20K	80	0	High Performance	LS404C	SGS	
	500	50	—	2 *	1.6 *	20K	70	0	Low Noise, Low Power	XR4212M	† Exar	
			7 *	1 *	0.6 *	50K	70	0	Low Power	MC3503	◊† SGS	
			10 *	1 *	0.6 *	—	70	0	Low Power, Single Supply	TDC3403	† Thomson	15
			10	1	0.6	200K	90	0	Low Power	MC3503	Signetics	
		200	—	3 *	1.5 *	50K	70	0	Quad 741, High Gain	XR4136M	† Exar	
										µA4136M	† Fairchild	
										MP4136	MicroPwr	
										RM4136	† Raytheon	20
				3.5	1.5	96	110	0	Programmable	TAB1042	Plessey	
										TAB1043	◊ Plessey	
			-	3 *	1.5 *	50K	70	0	Quad 741, High Gain	RM4136	TI	
			4 *	1.5	0.7	50K	70	0	Quad Matched 741	**OP11C**	**† PMI (2972)**	
										OP11G	**PMI (2972)**	25
			15 *	1	0.5 *	50K	70	0	Quad 741	**GL4559**	**† GoldStar (2700)**	
										MC4741	**† Motorola (2923, 2959)**	
6	0.2	0.05	10 *	3 *	13 *	50K	80	0	Low Noise Bipolar-JFET	MCE74	MCE	
										TL074M	† TI	
				4 *	13 *	25K	70	0	Low Noise Bipolar-JFET	TL074AC	TI	30
						50K	80	0	Low Noise Bipolar JFET	**TL074BC**	**Motorola (2923, 2960)**	
										TL074BC	Thomson	
									Low Noise Bipolar-JFET	**TL074AC**	**Motorola (2923, 2960)**	
										TL074AC	Thomson	
		0.1	10 *	1	2.5	4K	80	0	BiFET, Low Noise	TL064I	TI	35
				1 *	3.5 *	4K	80	0	Low Power Bipolar-JFET	TL064AC	TI	
				2 *	2	4K	80	0	Low-Power J-FET	**TL064AC**	**Motorola (2923, 2960)**	
										TL064M	**† Motorola (2923, 2960)**	
				3	13	50K	80	0	BiFET, General Purpose	TL084I	TI	
										TL084I	TI	40
									BiFET, Low Noise	TL074I	TI	
				3 *	13 *	50K	80	0	Bipolar JFET	XR084	Exar	
										XR084M	† Exar	
										MCE84	MCE	
										TL084A	**Motorola (2923, 2960)**	45
										TL084A	◊ SGS	
										TL084AC	TI	
										TL084M	† TI	
									Indiv. Program	XR096	Exar	
										XR096M	† Exar	50
									Programmable, Bipolar - JFET	XR094	Exar	
										XR094M	† Exar	
										XR095	Exar	
										XR095M	† Exar	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Bandwidth MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Quad Units												**(Cont'd)**
6											(Cont'd)	
	100	10	3 *	0.4	1.5	100K *	77	0	Ultra-Low Power	**HA5144**	**Harris (2706, 2737, 2747)**	
	200			1	0.5				Bipolar, General Purpose	LM228	TI	
		0.1	10 *	3 *	13 *	50K	80	0	High Speed, JFET Input	TL084AC	Thomson	
		50		1	0.5	25K	70	0	Bipolar, General Purpose	LM248	TI	
			—	1 *	0.5 *	25K	70	0	High Gain, Programmable	LM348	Thomson	5
										TDB0149	Thomson	
									Quad 741 with Standard npn Input Stage	µA248C	Fairchild	
										µA348C	Fairchild	
										GL348	**GoldStar (2700)**	
										LM248	**Motorola (2923)**	10
										LM348	**Motorola (2923, 2958)**	
										LM248	National	
										LM348	National	
										LM248	Raytheon	
										LM348	Raytheon	15
				1.0 *	0.5 *	25 K	70	0	Quad 741	LM348	Samsung	
			—	4 *	2 *	25K	70	0	Wideband Quad for Gains >5	LM249	National	
										LM349	National	
	250	20	25	750 *	0.25 *	200K *	90 *	0	Quad OP-21	**OP421H**	**PMI (2970, 2972)**	
		100	—	0.5	0.4 *	1M	70	0	High Gain, Programmable	LM346	Thomson	20
	500	50	—	1 *	1.2 *	25K	70	0	LM324 with Improved Output	RC3403A	◊† Raytheon	
				2	1.6	5K	70	0	Quad 741	XR4212C	Exar	
		100	—	1	0.4 *	20K	70	0	346 with separate bias resistor for each pair	XR346-2	Exar	
		200	—	1 *	0.5 *	20K	70	0	Quad 741	**MC4741C**	**Motorola (2923, 2959)**	
				3 *	1 *	20K	60–70	0	Quad 741	XR4136C	Exar	25
										µA4136C	Fairchild	
										MP4136C	MicroPwr	
										RC4136	Raytheon	
				3	1.7	20K	70	0	High Performance Quad µA741	RC4136	TI	
										RV4136	TI	30
					2	20K	70	0	High Performance Bipolar	TL136C	TI	
	650	120	10	40 *	30	4K	60	0		**VA4705K**	**VTC (3374)**	
7						25K	65	0	Quad Internal Compensation	**GL324A**	◊ **GoldStar (2700)**	
	–250	50		0.6	0.3	25K	65	0	General Purpose	LM324	TI	
						100K	50	0	Extended Temperature Range LM324	LM2902	◊ TI	35
	8	2	7 *	0.1	0.05	60 K	75	0	Wide Supply Range	LP124	National	
	150	30	—	—	—	20K	60	0	Single Supply	TA75902	Toshiba	
	250	50			0.3 *				General Purpose	AN1324	Panasonic	
										AN6564	◊ Panasonic	
					0.6 *	32 K	85 *	0	Single Supply	M5N324	Mitsubishi	40
			—	1 *		25K	65	0	Low Power	LM324A	Samsung	
				1.0		20K	86			**LM324**	**GE/RCA (2645)**	
			—	1M *	—	20K	70	0	Class AB Output	µPC3403	◊ NEC	
			7 *	—	—	10K *	50	0	Low Power	LM324	◊ SGS	
						25K	65	0	Single Supply	LM2902	◊ SGS	45
						100K *	50	0	Single Supply	LM2902	Thomson	
						100K	65	0	High Gain, Single Supply	LM324	Thomson	
				1 *	0.3 *	25K	65	0	Automotive Temperature Range (–40°C to 85°C)	SA534	Signetics	
	500	50	—	—	0.6 *	10K	70	0	General Purpose	IR3702	◊ Sharp	
8	–500	75	10 *	1	0.6	20K	70	0	Low Power, Bipolar	MC3303	TI	50
		100		1	0.6				Low Power, Bipolar	MC3302	TI	
	0.030	0.010		5.4	10	20	80		VICR to Negative Rail	**CA3410A**	**GE/RCA (2645)**	
	100	15	10 *	0.8	1.0 *	20K	70	0	Large Input Common Mode Range	LM3303	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Quad Units											**(Cont'd)**	
8											(Cont'd)	
	500	75	10 *	1 *	0.6 *	20K	70	0	Single Supply: I/O Operates to Ground	TDF3403	Thomson	
			10	1	0.6	200K	90	0	Low Power	MC3303	Signetics	
9	0.2	0.05	10 *	4 *	10	35K	70	0	Low Noise Bipolar JFET	**TL074M**	**† Motorola (2923, 2960)**	
		0.1	10 *	1 *	3.5 *	4K	80	0	Low Power Bipolar-JFET	TL064M	† TI	
			10	2	6	4K		0	Low Power JFET Input	**TL064V**	**Motorola (2923, 2960)**	5
			10 *	4 *	13 *	25K	80	0	JFET Input	**TL084M**	**† Motorola (2923, 2960)**	
	20	4	10 *	0.1	0.05	40 K	75	0	Wide Supply Range	LP324	National	
10	0.0007	0.0001	2 *	2.2	5.3	10K	70	0	LinCMOS, High Bias	TLC274I	TI	
			2.1 *	0.635	0.6	25K	65	0	LinCMOS, Low Input Offset and Bias Currents	TLC27M4C	TI	
	0.001	0.001	0.7 *	0.01	0.05	30K	70	0	LinCMOS, Low Bias	TLC27L4I	TI	10
			0.7	0.1	0.04	20K	77	0	Low Input Offset and Bias Currents	TLC27L4C	TI	
									Low Input Offset and Bias Currents, VDD = 1 to 16 V	TLC25L4C	◊ TI	
						30K	70	0	Low Input Offset and Bias Currents	TLC27L4M	† TI	
			2	0.7	0.6	20K	70	0	Low Input Offset and Bias Currents	TLC27M4M	† TI	
							77	0	Low Input Offset and Bias Currents, VDD = 1 to 16 V	TLC25M4C	◊ TI	15
							88			TLC27M4AM	† TI	
			5	2.3	4.5	10K	70	0	Low Input Offset and Bias Currents	TLC274C	TI	
										TLC274M	† TI	
							77	0	Low Input Offset and Bias Currents, VDD = 1 to 16 V	TLC254C	TI	
	0.03	0.03	7	0.7 *	0.7 *	10k	60	0	CMOS, Rail to Rail Single/Dual 5V supply	ALD4701	◊°† AdvLinear	20
	0.05	0.03	20 *	1 *	1.6 *	80K	70	0	Low Power	**ICL7641CC**	**◊ GE/Intersil (2673)**	
										ICL7641CM	**◊† GE/Intersil (2673)**	
										ICL7642CC	**◊ GE/Intersil (2673)**	
										ICL7642CM	**◊† GE/Intersil (2673)**	
										ICL7642CC	Maxim	25
										ICL7642CM	† Maxim	
				1.4 *	1.6 *	10K	70	0	High Bias	ICL7641CC	Maxim	
										ICL7641CM	† Maxim	
	0.1	0.03	10	3	10	40 K	90	1	JFET Input	MA374	AnalogSys	
		0.05		1 *	3 *		70 *	0	Low Power, JFET Input	µPC4064	NEC	30
			10	1	1	25K	70	0	Low Power BIFET	LF444	National	
				2	0.6	25K	70		Low-Power J-FET Input	**LF444C**	**Motorola (2923, 2958)**	
	0.2	0.05		3 *	13 *		70 *	0	Low Noise, JFET Input	µPC4074	◊ NEC	
			10 *	4 *	13 *	25K	70	0	Low Noise Bipolar-JFET	**TL074C**	**Motorola (2923, 2960)**	
										TL074C	TI	35
										TL075C	TI	
										TC075	Toshiba	
				10 *	40 *	25K		0	High Speed, JFET Input	**MC34084**	**Motorola (2923)**	
									High-Speed, JFET Input	**MC35084**	**† Motorola (2924)**	
				20 *	80 *	25K		0	Decompensated MC34084 for Gain >2	**MC34085**	**Motorola (2923)**	40
									Decompensated MC35084 for Gain >2	**MC35085**	**† Motorola (2924)**	
		0.1	10 *	3	13	25K	70	0	BiFET, General Purpose	LF347	TI	
				3 *	13 *	50K	70	0	Bipolar JFET	µA774C	Fairchild	
				4 *	13 *	25K	70	0	Bipolar-JFET	**MC34004**	**Motorola (2923, 2959)**	
										MC35004	**† Motorola (2924)**	45

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Operational Amplifiers-Characteristics (Cont'd)

Offset Voltage mV (25°C)	Bias Current nA (25°C)	Offset Current nA (25°C)	Voltage Drift µV/°C	Band-width MHz	Slew Rate V/µs	Voltage Gain V/V	CMRR dB	Comp.	Comments	Device	Source	Line
Quad Units											**(Cont'd)**	
10	0.2	0.1	10 *	4 *	13 *	25K	70	0			(Cont'd)	
									Bipolar-JFET, Quad 351	**LF347**	**Motorola (2923, 2958)**	
										LF347	National	
		4	10 *	4 *	13 *	25K	70	0	High Speed, JFET Input	TDB0347	Thomson	
	40	8	10 *	0.1	0.05	30 K	75	0	Wide Supply Range	LP2902	National	
	100	10	10 *	0.6	0.8	20K	70	0	Large Input Common Mode Range	LM3403	National	5
	500	50	—	1 *	0.6 *	20K	70	0	Low Power	IR93403	Sharp	
			7 *	1 *	0.6 *	20K	70	0	Low Power	MC3403	◊ SGS	
			10 *	1 *	0.6 *	—	70	0	Low Power, Single Supply	MC3403	Thomson	
			10	1	0.6	200K	90	0	Low Power	MC3403	Signetics	
	650	120		110	100	5 K	60	2		**VA4708**	**† VTC (3374)**	10
				500	150*	10K	60	0		**VA4707J**	**VTC (3374)**	
	700	50	20	40 *	150 *	10K	58	0		**VA4707**	**VTC (3374)**	
11	2	1	10 *	3	10 *	25K	70	2	Wideband	**MC34184**	**Motorola (2923, 2960)**	
11.5	4	2	10 *	3	10 *	25K	70	2	Wideband	**MC33184**	**Motorola (2924)**	
12	650	120	20	40 *	30	2K	60	0		**VA4705J**	**VTC (3374)**	15
12.5	25	13	10 *	3	10 *	25K	70	2	Wideband	**MC35184**	**† Motorola (2924)**	
15	0.040	0.030		5.4	10	20	70		VICR to Negative Rail	**CA3410**	**GE/RCA (2645)**	
	0.05	0.03	10 *	5 *	13 *	25K	70	0	MOS/FET Input, Bipolar/MOS Output	**CA084**	**GE/RCA (2645)**	
	0.2	0.1	10 *	3 *	13 *	50K	70	0	Bipolar-JFET	µA774LC	Fairchild	
		0.2	10 *	2 *	2	3K	70	0	Low-Power J-FET	**TL064C**	**Motorola (2923, 2960)**	20
	0.4	0.2	10 *	1 *	3.5 *	3K	70	0	Low Power Bipolar-JFET	TL064C	TI	
										TL064C	Thomson	
				3 *	11 *	25K	70	0	Bipolar-FET	µPC4084	NEC	
					13 *	25K	70	0	Bipolar-FET	XR084C	Exar	
										HA17084	Hitachi	25
										TL084	**Motorola (2923, 2960)**	
										TL084	◊ SGS	
										TL084C	TI	
										TL085C	TI	
									Indiv. Program.	XR096C	Exar	30
									Programmable Bipolar-JFET	XR094C	Exar	
										XR095C	Exar	
				25 *	13 *	25K		0	JFET Input	**TL084C**	**Motorola (2923, 2960)**	
	400	0.2	10 *	3 *	13 *	25K	70	0	High Speed, JFET Input	TL084C	Thomson	
	650	120	40	40 *	38	1K	60	0		**VA4706J**	**VTC (3374)**	35
20	0.05	0.03	30 *	0.044 *	0.016 *	10K	70	0	Low Bias	ICL7642M	† Maxim	
				1	1.6	80K	70	0	Low Power	**ICL7641EC**	◊ **GE/Intersil (2673)**	
										ICL7642EC	◊ **GE/Intersil (2673)**	
										ICL7642EC	Maxim	
				1.4 *	1.6 *	10K	70	0	High Bias	ICL7641EC	Maxim	40
										ICL7641EM	† Maxim	
	0.050	0.100	15*	0.5	0.6	2K	45	0	Low Power	**HI8573**	**Holt (2769)**	
30	0.05	0.1	15 *	1 *	0.8 *	1K *	70 *	0	Low Power	MC14573	◊ Motorola	
	1.0	0.2		0.8*	1.0 *	1000		0	Telecom	**MC143404**	**Motorola (2924)**	
					1.5 *	200		0	Telecom	**MC143403**	**Motorola (2924)**	45
260 *	0.004	0.004	3.0 *	6.4 *	35 *		92	0	Wideband	**OPA404B**	◊ **Burr-Brown (2533)**	
	0.008	0.008	3.0 *	6.4 *	35 *		88	0	Wideband	**OPA404A**	◊ **Burr-Brown (2533)**	
										OPA4045	◊† Burr-Brown	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Phase Locked Loops/Synthesizers

Function	Device	Source	Line
Count Extender, ÷4, ÷10/11 becomes ÷40/41			
	SP8790A	† Plessey	
	SP8790B	Plessey	
Count Extender, ÷8 (extends division ratio of a two modulus prescaler while retaining the difference, ie ÷10/11 becomes ÷80/81)			
	SP8794A	† Plessey	
	SP8794B	Plessey	
Counter Logic Control			
	SP8790	Plessey	5
Counter Logic Control (use with MC12012 for high frequency programming)			
	MC12014	Motorola	
Crystal Oscillator (2 to 20 MHz)			
	MC12061	Motorola	
Crystal Oscillator (250 kHz to 60 MHz)			
	CK1100A	Solarise	
	CK1114A	Solarise	
	CK1144A	◊ Solarise	10
	CK1145A	◊ Solarise	
Filter, Digital PLL			
	CD54HCT297	**† GE/RCA (2632)**	
	CD54HC297	**† GE/RCA (2632)**	
	CD74HCT297	**GE/RCA (2632)**	
	CD74HC297	**GE/RCA (2632)**	15
	54HCT297	† Signetics	
	54HC297	† Signetics	
	74HCT297	**Signetics (3003)**	
	74HC297	**Signetics (3003)**	
FSK Modulator/Demodulator (See also Telecommunications)			
	XR210	Exar	20
	XR210M	† Exar	
	XR2211C	Exar	
	XR2211M	† Exar	
	XR2212M	† Exar	
	XR2211C	Raytheon	25
	XR2211M	† Raytheon	
Intercarrier Frequency Modulator (internal PLL and Comparator)	4002Y-A	NCM	
Mixer, Double Balanced Analog Mixer			
	MC12002	◊ Motorola	
Phase Comparator and Programmable Counter			
	MC14568BA	◊† Motorola	
	MC14568BC	◊ Motorola	30
Phase Locked Frequency Controller			
	UC1633	**Unitrode (3326)**	
	UC1633/883	**Unitrode (3326)**	
	UC1634	**Unitrode (3326)**	
	UC1634/883	**Unitrode (3326)**	
	UC2633	Unitrode	35
	UC2634	Unitrode	
	UC3633	Unitrode	
	UC3634	Unitrode	
Phase Locked Loop			
	XR215	Exar	
	XR215M	† Exar	40
	μPD2833	† NEC	
	μPD2834	† NEC	
	SL652	Plessey	
	SDA2112-2	Siemens	
	NE564	Signetics	45
	NE568	Signetics	
	SE564	† Signetics	
	SN74LS297	TI	

Function	Device	Source	Line
Phase Locked Loop (CMOS)			
	F4046BC	Fairchild	
	F4046BM	† Fairchild	50
	CD4046A	**† GE/RCA (2635)**	
	CD4046AE	**GE/RCA (2635)**	
	CD4046B	**† GE/RCA (2635)**	
	CD4046BE	**GE/RCA (2635)**	
	MC14046BA	◊† Motorola	55
	MC14046BC	◊ Motorola	
	CD4046BC	National	
	CD4046BM	† National	
	74HCT7046A	**Signetics (3003)**	
	74HC4046A	**Signetics (3003)**	60
	74HC7046A	**Signetics (3003)**	
	883C4046B	† Sprague	
	883C4446B	† Sprague	
Phase Locked Loop, High Frequency			
	NE564	Sprague	
	SE564	† Sprague	65
Phase Locked Loop Module (for digital frequency selection, HF Receivers)			
	U3060M	Telefunken	
Phase Locked Loop Synthesizer, (AM/FM/TV sound)			
	DS8911	◊ National	
	DS8912	◊ National	
Phase Locked Loop System (multiplier, VCO and Op Amp)	XRS200	Exar	
Phase-Frequency Detector			
	MC12040	Motorola	70
Phase-Locked Loop, Low Power			
	LMC568	National	
Phase-Locked Oscillator			
	ML405	MicroLinear	
PLL Peripheral (VCO, mixer, amp for CB)			
	TA7310	Toshiba	
PLL Stereo Decoder			
	TCA4511	Siemens	
PLL with VCO (2.4 GHz prescaler)			
	SDA3252	Siemens	75
Prescaler, Divide by 20			
	MC3396	Motorola	
Prescaler, for FM Radio			
	DS8629	National	
	SP8629	Plessey	
Prescaler for PLL Tuner, Divide by 8			
	LB3500	Sanyo	
Prescaler for Safety Counter			
	SLE4502	Siemens	80
Prescaler for VHF/UHF, Divide by 64			
	CA3179	GE/RCA	
	MC12071	Motorola	
	DS8621	National	
Prescaler for VHF/UHF, Divide by 4			
	CA3199	GE/RCA	
Prescaler for VHF/UHF, Dual Modulus			
	DS8622	National	85
Prescaler, Low Power (÷ 64/65) 520 MHz			
	MC12025	Motorola	
Prescaler, Low Power (÷16/17), 150 MHz			
	μPB556	◊ NEC	
Prescaler, Low Power, (÷64/65/128/136), 1 GHz			
	μPB562	◊ NEC	
Prescaler, Low Power (÷64), 1.1 GHz			
	MC12073	Motorola	
Prescaler, Low Power (÷64), 225 MHz			
	MC12023	Motorola	90

Function	Device	Source	Line
Prescaler, Low Power (÷256), 1.1 GHz			
	MC12074	Motorola	
Prescaler, to 2.4 GHz			
	SDA3203	Siemens	
Prescaler, UHF (÷128 or 256), 2.4 GHz			
	MB505-24	Fujitsu	
Prescaler, UHF (÷2), 740 MHz			
	MC12090	Motorola	
Prescaler, Dual Modulus			
	TBB102	Siemens	95
Prescaler, Two Modulus Selectable ÷64/65 or ÷128/129 (for positive edge-triggered synthesizers)			
	MC12022A	Motorola	
	MC12022B	Motorola	
Prescaler, 0.05 to 1.3 GHz, Divide by 256			
	SP4742	Plessey	
Prescaler, 0.05 to 1.3 GHz, Divide by 4056 and 8192			
	SP4780	Plessey	
Prescaler, 0.08 to 1 GHz, Divide by 256			
	SP4642	Plessey	100
	SP4652	◊ Plessey	
	SP4653	◊ Plessey	
Prescaler, 0.08 to 1 GHz, Divide by 64			
	SP4632	Plessey	
Prescaler, 1 GHz, Divide by 256			
	SAB1256	Signetics	
Prescaler, 1 GHz, Divide by 64			
	SAB1164	Signetics	105
Prescaler, 2.2 GHz, Divide by 2			
	U822	Telefunken	
Prescaler, 2.2 GHz, Divide by 4			
	U824	Telefunken	
Prescaler, 2.4 GHz, Divide by 2			
	U842BS	Telefunken	
Prescaler, 2.4 GHz, Divide by 4			
	U844BS	Telefunken	
Prescaler, 2.6 GHz, Divide by 2			
	μPB581C	NEC	110
Prescaler, 2.6 GHz, Divide by 4			
	μPB582C	NEC	
Prescaler, 150 MHz, Divide by 16/17			
	μPB553A	◊ NEC	
Synthesizer, Frequency, CMOS			
	TDO1742	Signetics	
Synthesizer, Mobile Radio (2 device set)			
	NJ8811	Plessey	
	NJ8812	Plessey	115
	SP8901	Plessey	
	SP8906	Plessey	
Synthesizer, PLL			
	HCTR0347	Hughes	
	IMI145155	IMI	
	IMI145156	IMI	120
	IMI145157	IMI	
	IMI145158	IMI	
	MC145106	◊ Motorola	
	MC145145	◊ Motorola	
	MC145146	◊ Motorola	125
	MC145151	◊ Motorola	
	MC145152	◊ Motorola	
	MC145155	◊ Motorola	
	MC145156	◊ Motorola	
	MC145157	◊ Motorola	130
	MC145158	◊ Motorola	
	MC145159	◊ Motorola	
	DS8906	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Phase Locked Loops/Synthesizers (Cont'd)

Function	Device	Source	Line
Synthesizer, PLL		(Cont'd)	
	DS8907	National	
	DS8908	◊ National	
	LC7210	◊ Sanyo	
	LC7220	◊ Sanyo	
	LC7225	◊ Sanyo	5
	HEF4750	Signetics	
	SAA1057	Signetics	
	TC9106B	Toshiba	
	TC9109B	Toshiba	
	TC9111B	Toshiba	10
	TC9300-003A	Toshiba	
	TC9300-008	Toshiba	
Synthesizer, PLL Serial Input System Black			
	MB87001A	Fujitsu	
Synthesizer (programmable divider, to 1021 channels, adder, phase comparator)			
	HCTR0320	Hughes	
Synthesizer (programmable dividers, phase comparator)			
	S187B	Siemens	15
Synthesizer, 25 MHz			
	ST1172A	**STI**	**(3207)**
Tone Decoder	XRL567C	Exar	
	XRL567M	† Exar	
	XR2211C	Exar	
	XR2211M	† Exar	20
	XR2213C	Exar	
	XR2213M	† Exar	
	XR567AC	Exar	
	XR567AM	† Exar	
	LM567	† National	25
	LM567C	National	
	XR2211C	Raytheon	
	XR2211M	† Raytheon	
	LM567C	Samsung	
	NE567	Signetics	30
	SE567	† Signetics	
VCO	SP1658	Plessey	
	SN74LS624	TI	
	SN74LS628	TI	
VCO and Phase Comparator			
	LM565	Motorola	35
	NE565	Motorola	
	LM565	National	
	LM565C	† National	
	NE565	Signetics	
	SE565	† Signetics	40
	TA7133	Toshiba	
VCO Function Generator, (Includes square and triangular waveforms - but not sine.)			
	XR2207	Exar	
	XR2207C	Exar	
	XR2209C	Exar	
	XR2209M	† Exar	45
	LM566	National	
	LM566C	† National	
	XR2207C	Raytheon	
	XR2207M	† Raytheon	
	NE566	Signetics	50
	SE566	† Signetics	
VCO Phase Comparator, Multiplier			
	SL651	Plessey	
VCO Phase Comparator, Multiplier, with Auxiliary Amplifier	SL650	† Plessey	

Function	Device	Source	Line
VCO Waveform Generator (includes sinewave output among its functions)			
	XR205	Exar	
	XR2206	† Exar	55
	XR2206	Exar	
	XR2206C	Exar	
	XR2206M	† Exar	
	XR8038	◊ Exar	
	XR8038A	◊ Exar	60
	XR8038M	† Exar	
	ICL8038C	**GE/Intersil (2677)**	
	ICL8038M	**† GE/Intersil (2677)**	
VCO, Dual	SN54S124	† TI	
	SN74LS625	TI	65
	SN74LS629	TI	
	SN74S124	TI	
Dual (for 46/49 MHz cordless phone)			
	MC145160	◊ Motorola	
	MC145166	Motorola	
	MC145167	Motorola	70
Dual Tone Decoder			
	XR2567C	Exar	
	XR2567M	† Exar	
Two Modulus Control and Phase Comparator (for SP8793)	MJ8820	Plessey	
Two Modulus Prescaler (÷3/4)			
	SP8720	Plessey	
Two Modulus Prescaler (÷4/8)			
	11C91C	Fairchild	75
	11C91M	† Fairchild	
	MC12009	◊ Motorola	
	SP8740	Plessey	
Two Modulus Prescaler (÷5/6)			
	MC12009	◊ Motorola	
Two Modulus Prescaler (÷6/7)			
	SP8741	Plessey	80
Two Modulus Prescaler (÷8/9)			
	MC12011	Motorola	
	SP8743	Plessey	
Two Modulus Prescaler (÷10/11)			
	11C90C	Fairchild	
	11C90M	† Fairchild	
	MC12013	Motorola	85
	SP8643	Plessey	
	SP8647	Plessey	
	SP8685	Plessey	
	SP8690	Plessey	
Two Modulus Prescaler (÷15/16)			
	MC3393	Motorola	90
Two Modulus Prescaler (÷20/21), 225 MHz			
	MC12019	Motorola	
Two Modulus Prescaler (÷32/33), 225 MHz			
	MC12015	Motorola	
Two Modulus Prescaler (÷40/41)			
	SP8793	Plessey	
	SP8793A	Plessey	
Two Modulus Prescaler (÷40/41), 225 MHz			
	MC12016	Motorola	95
Two Modulus Prescaler (÷64/65/32/33/16/17), 500 MHz	µPB571	NEC	
Two Modulus Prescaler (÷64/65/128/129), 900 MHz			
	µPB566	◊ NEC	

Function	Device	Source	Line
Two Modulus Prescaler (÷64/65, 128/129)			
	MB501	Fujitsu	
	MB501L	Fujitsu	
Two Modulus Prescaler (÷64/65), 225 MHz			
	MC12017	Motorola	100
Two Modulus Prescaler (÷64/256)			
	CA3163	GE/RCA	
	CA3179	GE/RCA	
	MC12071	Motorola	
	DS8621	National	
Two Modulus Prescaler (÷80/81)			
	SP8792	Plessey	105
	SP8792A	Plessey	
Two Modulus Prescaler (÷80/81/40/41/20/21), 500 MHz	µPB572	NEC	
Two Modulus Prescaler (÷128/129), 520 MHz			
	MC12018	Motorola	
Four Modulus Prescaler (÷239,240/255/256)			
	SP8906	Plessey	
Four Modulus Prescaler (÷478/480/510/512)			
	SP8901	Plessey	110

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Telecommunication Circuits

Function	Device	Source	Line
-	29C14	Intel	
Active Trunk Termination Circuit	L545	SGS	
ADPCM Processor (transcoding PCM and ADPCM)	DS2168	Dallas	
ADPCM-PCM Transcoder	DS2167	Dallas	
	TEL721	Stantel-STC	5
Amplifier, Telephone Audio	**MC34119**	**Motorola (2945, 2960)**	
Analog, Front End	MSM6950	OKI	
Analog Processor, for DSP V.22bis Modems	**SSI73M214**	**SiliconSys (3199)**	
Asynchronous Receiver/Transmitter Interface	**T7112**	**AT&T (2470, 2478)**	
Bandsplit Filter, DTMF	G8865X	CMD Micro	10
Battery Feed (–48V)	**LB1011AB**	**AT&T (2508)**	
	LB1012AD	**AT&T (2510)**	
Bit Synchronizer/PSK Demodulator	**STEL2110**	**STI (3212)**	
Block Phase Estimator (provides a phase reference for demodulating binary PSK or quadrature PSK data in the presence of phase roll)	**STEL2210**	**STI (3212)**	
B82S Transcoder	XRT5670	Exar	15
Call Progress and Tone Detector (detects special information tones and error tones)	M984	Teltone	
Call Progress Tone Detector	**NE5900**	**Signetics (3110)**	
	SSI75T980	**SiliconSys (3199)**	
	SSI75T981	**SiliconSys (3199)**	
	SSI75T982	**SiliconSys (3199)**	20
	SS981	SiliconSys	
	M980	Teltone	
	M981	Teltone	
	M982	Teltone	
Call Progress Tone Generator (generates standard tones)	M991	Teltone	25
CCITT, S-Bus Interface Circuit	PEB2080	Siemens	
CCITT Signalling System Controller	MK5027	Thomson	
Central Office Interface, A-Law	MH89635	Mitel	
Central Office Interface, μ-Law	MH89630	Mitel	
Click Suppressor	ZSY07	ITT	30
Clock Extraction Module	EF7332	Thomson	
Clock Recovery Circuit	**T7032**	**AT&T (2473)**	
	T7033	**AT&T (2473)**	
CMOS CCITT, X.25 LAPB/LAPD Controller	**MK5025**	**Thomson (3282)**	

Function	Device	Source	Line
Codec, A-Law	5156	Fairchild	35
	CD22357	**GE/RCA (2638)**	
	2911A-1	Intel	
	MA556	◊ Marconi	
	TP3021	◊ National	
	TP5156A	National	40
	M5156	SGS	
	MK5156	Thomson	
Codec, Continuously Variable Slope Delta Codec	MA367	Marconi	
Codec/Filter	AM7901A	AMD	
	AM7905A	AMD	45
	GM3054	**GoldStar (2701)**	
	GM3057	**GoldStar (2701)**	
	MC1403	**Motorola (2958)**	
	M5913	SGS	
	M5914	SGS	50
	M5916	SGS	
	M5917	SGS	
	TCM29C18	TI	
	TCM29C19	TI	
Codec/Filter, A-Law	**G24357**	**CMD Micro (2550)**	55
	μA30S57	Fairchild	
	μA3057	Fairchild	
	F30S67	Fairchild	
	MB6022	Fujitsu	
	CD22303	GE/RCA	60
	S3506	Gould	
	S44235	Gould	
	MA59C17	Marconi	
	MT8961	Mitel	
	MT8963	◊ Mitel	65
	MT8965	Mitel	
	MT8967	◊ Mitel	
	TP3057	National	
	TP3057-1	National	
	TP3067	National	70
	MSM6932AS	OKI	
	MSM6962RS	OKI	
	SC11302	Sierra	
	TCM29C17	TI	
	TCM2917	TI	75
	MK5326	◊ Thomson	
	MK5356	Thomson	
Codec/Filter, A-Law, Parallel Interface	SC11306	Sierra	
Codec/Filter, A-Law, Serial Interface, High Output Drive	SC11312	Sierra	
Codec/Filter, High Precision	**T7522**	**AT&T (2485)**	80
	T7523	**AT&T (2486)**	
Codec/Filter, Pin Selectable μ-Law or A-Law	TCM29C13	TI	
Codec/Filter, Pin Selectable μLaw or A Law	TCM2916	TI	
Codec/Filter, μ-Law	**G24352**	**CMD Micro (2550)**	
	G24353	**CMD Micro (2550)**	85
	G24354	**CMD Micro (2550)**	
	F30S54	Fairchild	
	F30S64	Fairchild	
	F3054	Fairchild	
	MB6021	Fujitsu	90

(Continued)

Function	Device	Source	Line
Codec/Filter, μ-Law			(Cont'd)
	CD22302	GE/RCA	
	S3507	◊ Gould	
	MT3507	Hitachi	
	29C16	Intel	
	2916	Intel	95
	MA59C16	Marconi	
	MT8960	Mitel	
	MT8962	◊ Mitel	
	MT8964	Mitel	
	MT8966	◊ Mitel	100
	TP3051	National	
	TP3052	National	
	TP3052-1	National	
	TP3053	National	
	TP3053-1	National	105
	TP3054	National	
	TP3054-1	National	
	TP3056	National	
	TP3064	National	
	MSM6933AS	OKI	110
	SC11301	Sierra	
	TCM29C16	TI	
	TCM2916	TI	
	ETC5051	Thomson	
	ETC5056	Thomson	115
	MK5316	Thomson	
	MK5320	◊ Thomson	
Codec/Filter, μ-Law or A-Law	MC145501	Motorola	
	MC145502	Motorola	
	MC145503	Motorola	120
	MC145505	Motorola	
Codec/Filter, μ-Law or A-Law Companding	**TS5070**	**◊ Thomson (3290)**	
	TS5071	◊ Thomson	
Codec/Filter, μ-Law or A-Law (Pin Selectable)	**T7500**	**◊ AT&T (2470, 2482)**	
	T7513	**◊ AT&T (2484)**	125
	29C13	Intel	
	29C50	Intel	
	29C51	Intel	
	2913	Intel	
	2914	Intel	130
	MA59C13	Marconi	
	MA59C14	Marconi	
	MC145500	Motorola	
	PEB2060	Siemens	
	TCM29C14	TI	135
	TCM2913	TI	
	TCM2914	TI	
	TCM4913	TI	
	TCM4914	TI	
Codec/Filter, μ-Law, Parallel Interface	SC11305	Sierra	140
Codec/Filter, μ-Law, Serial Interface, High Output Drive	SC11311	Sierra	
Codec/Filter, Dual, μ-Law or A-Law (Pin Selectable)	**T7512**	**◊ AT&T (2483)**	
Codec, Pin Selectable μ-Law or A-Law	ZNPCM1	Ferranti	
	S291	Siemens	
Codec, Transition Encoded Modulation	MT8950	◊ Mitel	145
Codec, μ-Law	5116	Fairchild	
	5151	Fairchild	
	CD22354	**GE/RCA (2638)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Telecommunication Circuits (Cont'd)

Function	Device	Source	Line
Codec, μ-Law		(Cont'd)	
	2910A	Intel	
	TP3020	◊ National	
	TP5116A	National	
	TP5117A	National	
	MSM6917	OKI	5
	M5116	SGS	
	TCM2910A	TI	
	MK5116	Thomson	
	MK5151	Thomson	
Codec, μ–255 Law (Companding)			
	TCM2909	TI	10
Codec Filter. μ-Law			
	MSM6963	OKI	
Communication Terminal Module			
	EF7333	Thomson	
Companding A/D and D/A Converter			
	MM8100	National	
Companding A/D Converter			
	DF331A	Siliconix	
Companding D/A Converter			
	DF332A	Siliconix	15
Compandor (signal expander/compressor)			
	XR2216	Exar	
	NE570	**Signetics (3099)**	
	NE571	**Signetics (3099)**	
	NE572	**Signetics (3100)**	
	SA571	**† Signetics (3099)**	20
	SA572	† Signetics	
Conference Trunk, Serial PCM Interface (for six telephones/persons)			
	S3547	Gould	
Convolutional Encoder and Viterbi Decoder			
	ST15268	STI	
Crosspoint Switch, CCITT G732			
	MA811	**◊ Marconi (2889)**	
Crosspoint Switch (double 4x4 matrix)			
	RC4444	Raytheon	25
	RM4444	Raytheon	
Crosspoint Switch for PBX			
	U145	Telefunken	
Crosspoint Switch (2x8 matrix)			
	M089	SGS	
	M099	SGS	
Crosspoint Switch (4x4 matrix with control memory)			
	CD22100	**GE/RCA (2638)**	30
	MC142100	Motorola	
	MC145100	† Motorola	
	μPD22100	NEC	
	M22100	SGS	
	EFB7310	Thomson	35
Crosspoint Switch (4x4x2 with control memory)			
	CD22101	**GE/RCA (2638)**	
	CD22102	**GE/RCA (2638)**	
Crosspoint Switch (8x4 matrix)			
	MT8804A	Mitel	
Crosspoint Switch (8x12 matrix)			
	MT8812	Mitel	
Crosspoint Switch (12x8 with control memory)			
	SSI78A093	**SiliconSys (3199)**	40
Crosspoint Switch (32x32 matrix)			
	sc11320	Sierra	
Crosspoint Switch (8x8 matrix)			
	129EH-P	**AT&T (2497)**	

Function	Device	Source	Line
CTCSS (continuous tone-controlled squelch system) Encoder/Decoder			
	MC1938	NEC	
	MC4137	NEC	
	MC4138	NEC	45
Current Limiter (for electronic telephones)			
	LB1028BB	AT&T	
Current Limiter (for PBX System)			
	LB1019AB	AT&T	
Data Access Arrangement (DAA)			
	DS6112	Dallas	
Data Buffer, 212A			
	XR2125	**Exar (2605)**	
Data Link Controller (controls link level for CCITT X.25 protocol)	WD2512	WDC	50
Data Link Controller (synchronous for HDLC, SDLC, ADCCP, CCITT X.25, ISDN,and LAPD protocols)			
	WD25C17	WDC	
Data Set Interface, Asynchronous/Synchronous Converter	MC145428	Motorola	
Data-Over-Voice Multiplexer, Full-Duplex			
	M922	Teltone	
Delta Modulation System, Continuously Variable Slope			
	HC55536	Harris	
	HC55564	**◊ Harris (2768)**	55
	MC3417	Motorola	
	MC3418	Motorola	
	MC3517	† Motorola	
	MC3518	† Motorola	
Delta Modulation System, Exponentially Variable Stepsize Algorithm			
	S2842	Siltronics	60
Delta Sigma Modulator/Demodulator			
	ZNPCM2	Ferranti	
Dial Pulse Counter and Hook Monitor			
	M959	Teltone	
Dialer, Microcomputer (clock, duration, fee pulse counter, redial, storage)			
	SAA6002	ITT	
	MK5170	Thomson	
Dialer, Pulse	XRT5992	Exar	65
	AY5-9151A	GIM	
	AY5-9151B	GIM	
	S2560G	Gould	
	HD61825A	Hitachi	
	HD61825B	Hitachi	70
	DF320	ITT	
	DF820	ITT	
	DF821	ITT	
	DF822	ITT	
	DF823	ITT	75
	MT4320	Mitel	
	MT4325	Mitel	
	MM53144	National	
	MM53190	National	
	MM53413	National	80
	MM5393	National	
	MM5394	National	
	MSM5249	OKI	
	MV4320	Plessey	
	MV4322	Plessey	85
	MV4323	Plessey	
	MV4325	Plessey	
	MV4326	Plessey	
	MV4327	Plessey	
	STC2560	S-MOS	
	STC2565	S-MOS	90

(Continued)

Function	Device	Source	Line
Dialer, Pulse		(Cont'd)	
	KS5804	◊ Samsung	
	KS5805	◊ Samsung	
	KS5806	◊ Samsung	
	MK50981	Samsung	95
	MK50992	Samsung	
	MK50993	Samsung	
	M760A	SGS	
	M761	SGS	
	M761A	SGS	100
	MK50981	Thomson	
	MK50982	Thomson	
	MK50991	Thomson	
	MK50992	Thomson	
Dialer, Pulse Repertory, 9 Number			
	UM91610	UMC	105
Dialer, Pulse Repertory, 10 Number			
	MA5271	Marconi	
	UM91611	UMC	
Dialer, Pulse Repertory, 20 Number			
	STC2570C	S-MOS	
Dialer, Pulse/Tome with 20 One-Touch Dial Memories			
	LR48062	Sharp	
Dialer, Pulse/Tone			
	XRT5990	Exar	110
	MB87003	Fujitsu	
	MB87004	Fujitsu	
	GM5370	**GoldStar (2701)**	
	GM5371	**GoldStar (2701)**	
	GM5372	**GoldStar (2701)**	115
	UM91531	UMC	
Dialer, Pulse Tone and DTMF			
	PSB8510	Siemens	
Dialer, Pulse/Tone for Binary Code Input			
	LR4809	Sharp	
Dialer, Pulse/Tone Repertory (nine 18-digit memory)			
	MC145412	◊ Motorola	
	MC145413	◊ Motorola	120
Dialer, Pulse/Tone Repertory, 4 Number			
	LR4807	Sharp	
Dialer, Pulse/Tone Repertory, 10 Number			
	GL5376	GoldStar	
	GM5375	**◊ GoldStar (2701)**	
	MA5272	Marconi	
	MA5273	Marconi	125
	MA5274	Marconi	
	PBM3915	◊ RIFA	
	STC2580C	S-MOS	
	LR4802	Sharp	
	LR4803	Sharp	130
	MK5374	Thomson	
	MK5375	Thomson	
	MK5376	Thomson	
	UM91260	**UMC (3321)**	
Dialer, Pulse/Tone Repertory, 20 Number			
	UM91270	**UMC (3322)**	135
Dialer, Pulse/Tone Repertory, 21 Number			
	LR4806	Sharp	
	LR48065	Sharp	
	LR48066	Sharp	
Dialer, Pulse/Tone Repertory, 24 Number			
	MA5452	Marconi	
	MA5453	Marconi	140
	MA547	◊ Marconi	
Dialer, Pulse/Tone, Slave			
	UM9160	UMC	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR–Telecommunication Circuits (Cont'd)

Function	Device	Source	Line
Dialer, Pulse/Tone (up to 28 digits)			
	GM5373	◊ **GoldStar (2701)**	
Dialer, Pulse/Tone with Microprocessor Interface			
	MA525	Marconi	
Dialer, Pulse/Tone with Last Number Redial			
	MB87007	Fujitsu	
	MB87008	Fujitsu	
	GM5056	GoldStar	5
	MA5262	Marconi	
	MA5263	Marconi	
	MA5402	Marconi	
	MA5403	Marconi	
	MA5412	Marconi	10
	MA5413	Marconi	
	LR4804	Sharp	
	LR4805	Sharp	
	LR48081	Sharp	
	LR48082	Sharp	15
	TEL527	Stantel-STC	
	MK5370	Thomson	
	MK5371	Thomson	
	MK53721	**Thomson (3294)**	
	MK53762	**Thomson (3293)**	20
	UM91230	UMC	
Dialer, Pulse/Tone with Redial			
	MC145410	◊ Motorola	
Dialer, Pulse/Tone (with 10 number memory)			
	LR4801D	Sharp	
	LR4802A	Sharp	
	LR4802I	Sharp	25
Dialer, Pulse/Tone (with 16 number memory)			
	LR48211	Sharp	
Dialer, Pulse/Tone with 20 Memories (one-touch/two-touch dial)			
	LR48063	Sharp	
	LR48064	Sharp	
Dialer, Pulse/Tone with 20 One Touch Dial Memories			
	LR48067	Sharp	
Dialer, Pulse/Tone (10 number repertory)			
	GM5376	◊ **GoldStar (2701)**	30
Dialer, Pulse with Last Number Redial			
	MA522	Marconi	
	MA542	◊ Marconi	
	52981	Marconi	
	LR40981A	Sharp	
	LR40982	Sharp	35
	LR40991	Sharp	
	LR40992	Sharp	
	LR40993	Sharp	
	LR40994	Sharp	
	T40992	UMC	40
	T40993	UMC	
	UM9151-2	UMC	
	UM9152	UMC	
Dialer, Pulse with Last Number Redial and Speech Network	MA528	Marconi	
Dialer, Pulse (with 16-bit FIFO)			
	M969	Teltone	45
Dialer, Push Button Telephone Dialer Circuit (converts push button inputs to pulses)			
	MM53143	National	
Dialer, Repertory			
	CET200	Fairchild	
	MK5175	Thomson	
	SFF19200	Thomson	
Dialer, Repertory with Last Number Redial			
	T91603	UMC	50

Function	Device	Source	Line
Dialer, Repertory, 10 Number			
	LR4173	Sharp	
	LR4174	Sharp	
Dialer, Repertory, 20 Number, 9/18 Digit LCD Display Driver	RM9901	◊ RIFA	
Dialer, Tone	LR4087	Sharp	
	LR4089	Sharp	55
	LR4091	Sharp	
	LR4092	Sharp	
	TEA3046	Thomson	
	TEA7030	Thomson	
	TEA7036	Thomson	60
Dialer Tone/Repertory, 10 Number			
	MK5176	Thomson	
	MK5177	Thomson	
Dialer, Tone with Last Number Redial			
	MA531	Marconi	
	UM9169	UMC	
Dialer, Tone with Last Number Redial and Speech Network	MA530	Marconi	65
Dialer, Tone with Speech Network and DC Line Voltage Regulator	**LB1008AE**	**AT&T (2506)**	
	MC34010A	**Motorola (2941)**	
	MC34011A	**Motorola (2941, 2959)**	
	PBL3780	RIFA	
Digital Frequency Detector, 2600 Hz Center Frequency with 75 Hz Bandwidth			
	S3524	Gould	70
Digital Line Interface Circuit			
	MT8970	Mitel	
Digital Line Interface Circuit (full duplex transmission)			
	S8970	Gould	
Digital Line Interface Controller			
	TP3110	National	
	TP3112	National	
	TP3120	National	75
	TP3122	National	
Digital Line Interface Module			
	MH89700	Mitel	
Digital Network Interface Circuit, ISDN Compatible			
	MT8972	Mitel	
Digital Signal Processor			
	S77C20	Gould	
	S7720	Gould	80
Digital Signaling Interface			
	LC1046AM	**AT&T (2489)**	
Digital Telephone Circuit (D-Phone)			
	MT8994	Mitel	
	MT8995	Mitel	
Digital Time/Space Crosspoint Switch			
	MT8981D	Mitel	
Digital Time/Space Crosspoint Switch (8x32)			
	S8980	Gould	85
Digital Timer/Space Switch			
	MT8980D	◊ Mitel	
Digital Trunk Interface (CEPT)			
	MT8979	Mitel	
Digital Trunk Interface Circuit, CEPT			
	MH89780	Mitel	
	MT8978	◊ Mitel	
Digital Trunk Interface Circuit, DS1/ESF			
	MH89760	Mitel	90
Digital Trunk Interface Circuit, DS1/T1			
	MT8975	◊ Mitel	

Function	Device	Source	Line
Digital Trunk Interface Circuit (DS1/T1 link)			
	S8975	Gould	
Digital Trunk Interface Module (DS1/T1)			
	MH89750	Mitel	
Digital Trunk Interface, T1/ESF			
	MT8976	Mitel	
Digital Trunk PLL, T1/CEPT			
	MT8940	◊ Mitel	95
Digital Trunk PLL (T1/CEPT link)			
	S8940	Gould	
Digital Trunk Transmit Equalizer, T1			
	MH89761	Mitel	
Direct Access Adapter			
	UM9161	UMC	
DMI (Digital Multiplexed Interface) Chip Set, Consists Of:	DS-1 Chip Set	AT&T	
DMI (Digital Multiplexed Interface) Framer			
	N229CG	AT&T	100
	N229GB	AT&T	
	T7229	AT&T	
DMI (Digital Multiplexed Interface) Maintenance Buffer			
	N229FB	AT&T	
DMI (Digital Multiplexed Interface) Receive Synchronizer			
	N257AU	◊ **AT&T (2488)**	
DMI (Digital Multiplexed Interface) Transmit Formatter			
	N257AL	◊ **AT&T (2488)**	105
Document Image Compressor/Expander CCITT			
	AM7970	AMD	
Driver/Receiver Combination, RS–232C, V–28			
	MC145406	◊ **Motorola (2954)**	
DSI (Digital Signaling Interface)			
	LC1046AG	**AT&T (2489)**	
DS1 Line Interface			
	SSI78P233	**SiliconSys (3199)**	
DS1, 24-Channel			
	229JT	**AT&T (2487)**	110
DS1, 32-Channel			
	N1000AC	AT&T	
DTMF Generator			
	PDB3535	SGS	
DTMF, Receiver			
	SC11271	Sierra	
DTMF, Transceiver (call progress mode)			
	SC11290	Sierra	
DTMF Transmitter with Redial			
	M6569B1	SGS	115
DTMF Transmitter with Redial and Output Flash			
	M6579B1	SGS	
Electronic Telephone Tone Ringer			
	TEL1500	Stantel-STC	
Encoder/Decoder, Manchester (conforms to StarLAN specifications)			
	MK5033N	**Thomson (3284)**	
Encoder 8 of 8 Keyboard to Binary Encoder (4x4 key input to 4 line output)			
	MC14419	Motorola	
Filter, Band Pass, Sixth Order			
	TS8550	Thomson	120
Filter, Band Pass, Eighth Order			
	TS8551	Thomson	
Filter, Bandpass (DTMF)			
	AMS3044	Aptek	
	AMS3045	Aptek	
	CH1295	◊ Cermetek	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Filter, Bandpass (DTMF)		(Cont'd)	
	CH1296	◊ Cermetek	
	S3525A	◊ Gould	
	MT8865	◊ Mitel	
Filter, Bandsplit (DTMF)			
	MV8865	Plessey	
	S3525A	SiliconSys	5
	S3525B	SiliconSys	
	TT6177	Teltone	
Filter, C-Message (notch/program weighting)			
	RF5651	EG&G-Reticon	
Filter, CAFIR (Cascadable Adaptive Finite Impulse Response)	**DSP56200**	**Motorola (2894)**	
Filter, High Pass			
	RF5611	**EG&G-Reticon (2590)**	10
Filter, High Pass, Programmable			
	S3529	Gould	
Filter, High Pass, Third Order			
	TS8530	Thomson	
Filter, High Pass, Sixth Order			
	TS8531	Thomson	
	TS8532	Thomson	
Filter, Low Pass			
	RF5613	**EG&G-Reticon (2590)**	15
Filter, Low Pass Butterworth, Eighth Order			
	TS8514	Thomson	
Filter, Low Pass Chebychev, Eight Order			
	TS8513	Thomson	
Filter, Low Pass, Fifth Order			
	TS8510	Thomson	
Filter, Low Pass Linear Phase, Dual			
	MC145415	◊ Motorola	
Filter, Low Pass, Programmable			
	S3526	◊ Gould	20
	S3528	◊ Gould	
Filter, Low Pass Speech (dual, tunable)			
	MC145414	◊ Motorola	
Filter, Low Pass, Seventh Order			
	TS8511	Thomson	
	TS8512	Thomson	
Filter, Notch	**RF5612**	**EG&G-Reticon (2590)**	25
Filter, Notch, Sixth Order			
	TS8540	Thomson	
Filter, PCM	AMS3064	Aptek	
	AMS3065	Aptek	
	MC4264	NEC	
Filter, PCM Transmit/Receive			
	G8912B	CMD Micro	30
	CD22413A	GE/RCA	
	CD22414A	GE/RCA	
	HC5512	**◊ Harris (2768)**	
	HC5512A	**◊ Harris (2768)**	
	HC5512C	**◊ Harris (2768)**	35
	HC5512D	**◊ Harris (2768)**	
	2912A	Intel	
	TP3040	National	
	TP3040A	National	
	MSM6912	OKI	40
	TCM2912B	TI	
	TCM2912C	TI	
	ETC5040	Thomson	
Filter, Second-Order Switched Capacitor			
	XR1010	**Exar (2602)**	

Function	Device	Source	Line
Filter, Telecom/Datacom Instrumentation			
	XR1020	**Exar (2601)**	45
Filter/Tone Generator, Single Frequency Tunable Bandpass/Notch			
	S3526B	Gould	
Filter Tone Signaling, 2600 Hz			
	MC145432	Motorola	
Filter with 10-Bit A/D Converter			
	RT5640	EG&G-Reticon	
Filter, Fourth Order Switched Capacitor (Stand Alone Mode with RC or Crystal)			
	XR1001	**Exar (2602)**	
	XR1003	Exar	50
	XR1004	Exar	
	XR1007	Exar	
	XR1008	**Exar (2602)**	
Filter, Fourth-Order Switched Capacitor (Stand Alone Mode with RC or Crystal)			
	XR1002	Exar	
Filter, Sixth Order Switched Capacitor Butterworth (low pass)	MF6	National	55
Filter, Seventh Order, Programmable (medical telemetry)	**HSCF24040**	**◊ HoneywellSPT (2998, 3000)**	
Filter, Seventh-Order Elliptic Low Pass			
	XR1015	**Exar (2601)**	
	XR1016	**Exar (2601)**	
FM/IF System for Cordless Telephones			
	HA12441V	Hitachi	
FM Transmitter (for cordless phones)			
	MC2831	**Motorola (2959)**	60
Format Converter, 8-Bit			
	MA803	◊ Marconi	
Frame Aligner/Time Slot Zero Receiver			
	MA808	**◊ Marconi (2890)**	
FSK IF Amplifier, Detector			
	MC13055	**Motorola (2939, 2959)**	
FSK Receiver, Wideband			
	MC3356	**Motorola (2939, 2959)**	
Gain Control Circuit with Balance Impedance Switching			
	MA571	Marconi	65
HBD3/AMI Encoder/Decoder			
	TCM2202	TI	
HB3 Encoder	MJ1440	Plessey	
HDB3/AMI Encoder/Decoder			
	TCM2222	◊ TI	
HDB3/AMI Equipment Line Interface			
	TCM2203	TI	
	TCM2204A	TI	70
HDB3 to NRZ Binary Encoder/Decoder			
	MA815	**Marconi (2890)**	
HDB3 Transcoder, with Error Detection (10 kb/s to 2.048 Mb/s)	**CD22103A**	**GE/RCA (2637)**	
ISDN Burst Transceiver Circuit			
	PEB2095	Siemens	
ISDN Communications Controller (for LAPD protocol)			
	PEB2070	Siemens	
ISDN S Interface Device			
	TP3420	National	75
ISDN Subscriber Access Controller			
	PEB2085	Siemens	
ISDN Dual Data Link Controller (DDLC)			
	MC145488	Motorola	

Function	Device	Source	Line
LAN Jitter Attenuator (T1 transmission line)			
	CS61600	Crystal	
Limiter (limits voltage on two-wire speech)			
	U225	Telefunken	
Line Interface Circuit			
	L3000	SGS	80
Line Memory (high speed)			
	LH5015	Sharp	
Line Sense Relay (senses telephone line current from 20 to 125 mA)	M949	◊ Teltone	
Loop Extender Circuit			
	MH89726	Mitel	
	MH89728	Mitel	
Loopback (4-wire)			
	SSI78A400	**SiliconSys (3199)**	85
Loopback (4-wire with gain)			
	SSI78A420	**SiliconSys (3199)**	
Master Digital-Loop Transceiver, 80 kb/s			
	MC145422	Motorola	
Master Digital-Loop Transceiver, 160 kb/s			
	MC145421	Motorola	
Modem Circuit	T7019	AT&T	
Modem Circuit, Analog Front End for FAX modems			
	SC11030	Sierra	90
Modem Circuit, Analog Front End for High-Speed V.26, V.27, V.29 and V.33 modems			
	SC11033	Sierra	
Modem Circuit, Analog Front End Receiver			
	TS68950	**Thomson (3288)**	
	TS68951	**Thomson (3288)**	
Modem Circuit, Analog Front End XMIT/RCVR, Clock Generator	**TS68952**	**Thomson (3288)**	
Modem Circuit, Asynchronous Monochip CCITT V.23			
	EFG7513	Thomson	95
Modem Circuit, Bell 103			
	TMS99532A	TI	
Modem Circuit, Bell 103 and 212A, CCITT V.21 and V.22, 300/1200 bps			
	SC11015	Sierra	
Modem Circuit, Bell 103, Bell 212A and CCITT V.21/V.22	SCII006	Sierra	
	SC11014	Sierra	
Modem Circuit, Bell 103 or CCITT V.21			
	SC11002	Sierra	100
	SC11003	Sierra	
Modem Circuit, Bell 103 with Power Down Mode (300 bps)	STC9424C	◊ S-MOS	
Modem Circuit, Bell 103/113			
	CH1262	Cermetek	
	CH1267	Cermetek	
	CH1280	Cermetek	105
	S3530	◊ Gould	
	MT3530	Mitel	
	MM74HC942	National	
	STC9471	S-MOS	
	STC9472	S-MOS	110
Modem Circuit, Bell 103/113/108, Bell 202 and CCITT V.21/V.23	AM7911	AMD	
Modem Circuit, Bell 103/212A			
	SSI73K212	**SiliconSys (3199)**	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Telecommunication Circuits (Cont'd)

Function	Device	Source	Line
Modem Circuit, Bell 103/212A, CCITT V.21 and V.22, 300/1200 bps	SC11016	Sierra	
Modem Circuit, Bell 103 (300 bps)	STC9422C	◊ S-MOS	
Modem Circuit, Bell 103 (3300 baud)	MC145443	Motorola	
Modem Circuit, Bell 201B/C, 212A, CCITT V.22 and V.26	MP7223	MicroPwr	
Modem Circuit, Bell 202 or CCITT V.23	TCM3101	TI	5
	TCM3105	TI	
Modem Circuit, Bell 212A	CH1760	Cermetek	
	CH1763	Cermetek	
	CH1765	Cermetek	
	CH1770	Cermetek	10
	S35213	Gould	
	MT35213	Mitel	
	VL7C212A	**VLSI Tech (3332)**	
Modem Circuit, Bell 212A and CCITT V.22, DPSK	**TSG7515**	**Thomson (3289)**	
Modem Circuit, Bell 212A Demodulator	**XR2122**	**Exar (2604)**	15
Modem Circuit, Bell 212A Modulator	**XR2121**	**Exar (2604)**	
Modem Circuit, Bell 212A (module w/FCC registered DAA)	DS6101	Dallas	
	DS6103	Dallas	
Modem Circuit, Bell 212A or CCITT V.22	EFG7515	Thomson	
Modem Circuit, Bell 212A or 103	µA212A	Fairchild	20
	F1212	Fairchild	
Modem Circuit, Bell 212A/103, CCITT V.21, V.22 and V.22bis	F2224	Fairchild	
Modem Circuit, Bell 212A, 103, CCITT V.21, V.22	F2212	Fairchild	
Modem Circuit, Bell 300 Baud	MSM6946	OKI	
Modem Circuit, Bell 1200 baud	MSM6947	OKI	25
Modem Circuit, Bell 212A, CCITT V.22	**XR2130**	**Exar (2603)**	
Modem Circuit, Bell 212A or 103	µA212AT	Fairchild	
Modem Circuit, CCITT	CH1263	Cermetek	
	CH1268	Cermetek	
	EFB7510	Thomson	30
	EFB7511	Thomson	
	EFB7512	Thomson	
Modem Circuit, CCITT V.21/V.23, Bell 103/113/202/140	EF7910	Thomson	
Modem Circuit, CCITT V.21/V.23, Bell 103/113/202/148	AM7910	AMD	
Modem Circuit, CCITT V.21 with Power Down Mode (300bps)	STC9423C	◊ S-MOS	35
Modem Circuit, CCITT V.21 (300 baud)	MC145442	Motorola	
Modem Circuit, CCITT V.21 (300 bps)	STC9421C	◊ S-MOS	

Function	Device	Source	Line
Modem Circuit, CCITT V.22/V.21 (1200/600 baud)	**SSI73K221**	**SiliconSys (3199)**	
Modem Circuit, CCITT V.22/V.21, 1200 bps	**SSI73K222**	**SiliconSys (3199)**	
Modem Circuit, CCITT V.22 (1200/600 baud)	µAV22	Fairchild	40
Modem Circuit, CCITT V.22bis	**XR2400**	**Exar (2603)**	
Modem Circuit, CCITT V.22bis, V.22/V.21, Bell 212/103 (1200/300 bps)	**SSI73K224**	**SiliconSys (3199)**	
Modem Circuit, CCITT V.23	**SSI73M223**	**SiliconSys (3199)**	
Modem Circuit, CCITT V.23 (1200 baud)	**CD22223**	**GE/RCA (2637)**	
Modem Circuit, CCITT (1200 baud)	MSM3953	OKI	45
	MSM6927	OKI	
Modem Circuit, CCITT (300 baud)	MSM6926	OKI	
Modem Circuit, Controller for SC11004, SC11014and SC11015 300/1200 bps modems	SC11017	Sierra	
Modem Circuit, Controller for SC11006, 300/1200/2400 bps	SC11011	Sierra	
Modem Circuit, Controller for SC11016 300/1200 bps modem	SC11027	Sierra	50
	SC11028	Sierra	
	SC11037	Sierra	
Modem Circuit, Controller for 300/1200 bps modem	SC11007	Sierra	
	SC11008	Sierra	
Modem Circuit, Data Over Voice	MT8840	Mitel	55
Modem Circuit, FSK Bell 103, PSK Bell 212A and CCITT V.21/.22, QPSK V.22bis	SC11006	Sierra	
Modem Circuit, FSK Modulator/Demodulator	XR210	Exar	
	XR210M	† Exar	
Modem Circuit, K221 with V.23 mode for European Applications	**SSI73K322**	**SiliconSys (3199)**	
Modem Circuit, K224 with V.23 mode for European Applications	**SSI73K324**	**SiliconSys (3199)**	60
Modem Circuit, Low Power K212	**SSI73K212L**	**SiliconSys (3199)**	
Modem Circuit, Low Power K221	**SSI73K221L**	**SiliconSys (3199)**	
Modem Circuit, Low Power K222	**SSI73K222L**	**SiliconSys (3199)**	
Modem Circuit, Low Power K224	**SSI73K224L**	**SiliconSys (3199)**	
	SSI73K324L	**SiliconSys (3199)**	65

Function	Device	Source	Line
Modem Circuit, Low Power K322	**SSI73K322L**	**SiliconSys (3199)**	
Modem Circuit, Low Power, 2400/1200/300 bps, V.22 bis, V.22/V.21, Bell 212/103.	SSIK224L	SiliconSys	
Modem Circuit, Power Line and Twisted Pair	**NE5050**	**Signetics (3097)**	
Modem Circuit, PSK Modulator/Demodulator, Bell 201/212A, CCITT V.22/V.26	XR2123	Exar	
	XR2123A	Exar	70
Modem Circuit, V.22bis, Analog Front End	S3550	Gould	
Modem Circuit, V.22bis, Provides the DSP Portion of the system,such as A/D, D/A (part of XR–2401/02 chip set)	XR2402C	Exar	
Modem Circuit, V.22bis, 2400, 1200, 200 bps (part of XR–2401/02 chip set)	XR2401C	Exar	
Modem Circuit (300 bps)	STC9420C	◊ S-MOS	45
Modem Circuit, 300/1200 bps)	SC11004	Sierra	75
Modem Circuit, 1200 bps	STC9120C	S-MOS	
Modem Circuit, 1200/600/300 bps, Bell 212/103, CCITT V.22/V.21 with Integral 16C450 UART.	**SSI73K222U**	**SiliconSys (3199)**	
Modem Circuit, 2400 bps Data Pump	SSI214DS	SiliconSys	
Modem Circuit, 1200/300 bps, Bell 212A/103 with Integral 16C450 UART.	SSiK212U	SiliconSys	
Modem Filter, Bell 103 (300 baud)	**RM5630**	**EG&G-Reticon (2590)**	80
Modem Filter, Bell 212A/CCITT V.22	**XR2126**	**Exar (2605)**	
	XR2129	**Exar (2605)**	
	S35212	◊ Gould	
	S35212A	Gould	
	MT35212A	◊ Mitel	85
	SC11000	Sierra	
	SC11001	Sierra	
	SC11005	Sierra	
Modem Filter, Bell 212A/CCITT V.22	**XR2127**	**Exar (2605)**	
	XR2128	**Exar (2605)**	90
Modem Filter, CCITT V.21, V.23, V.26	**XR1001**	**Exar (2602)**	
Modem Filter Combination, V.26/Bell 201, Delay Equalizer, V.23/Bell 202 and 3kHz Lowpass	**RM5636**	**EG&G-Reticon (2590)**	
Modem Filter Combination, V.27/Bell 208, Delay Equalizer, V.23/Bell 202 and 3 kHz Lowpass	**RM5637**	**EG&G-Reticon (2590)**	
Modem Filter Combination, V.29/Bell 209, Delay Equalizer, and 3 kHz Lowpass	**RM5638**	**EG&G-Reticon (2590)**	
Modem Filter, FSK Bell 103	XR2103	Exar	95
	XR2103A	Exar	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Telecommunication Circuits (Cont'd)

Function	Device	Source	Line
Modem Filter, FSK Bell 103/113	STC9482	S-MOS	
Modem Filter, FSK CCITT V21	STC9481	S-MOS	
Modem Filter, PSK Bell 212A	XR2120	Exar	
Modem Filter with Equalizer, 212A/V.22	**SSI73M3522**	**SiliconSys (3199)**	
Modem Filter (300 baud)	**RM5631**	**EG&G-Reticon (2590)**	5
	MC145440	Motorola	
	MC145441	Motorola	
Modem Filter (1200 baud)	CH1710	Cermetek	
	CH1720	Cermetek	
	CH1730	Cermetek	10
	CH1740	Cermetek	
	VL7C211	VLSI Tech	
Modem Filter, 1200 Baud, 212/V.22	**RM5632**	**EG&G-Reticon (2590)**	
Modem Filter, 2400 Baud, V.22 bis	**RM5635**	**EG&G-Reticon (2590)**	
Modem, FSK Modulator	XR2206	† Exar	15
	XR2206	Exar	
Modem Interface	T7011	AT&T	
Modem Interface and Receiver Filter Circuit (300 baud modem)	CH1230	Cermetek	
Modem Receiver, FSK (IEEE 802.4)	**NE5081**	**Signetics (3099)**	
Modem System, FSK	XR14412V	Exar	20
	MC14412	Motorola	
Modem System, FSK, 1200 Baud	SSI180	SiliconSys	
Modem Transmitter, FSK (IEEE 802.4)	**NE5080**	**Signetics (3098)**	
Modem (300 bps)	VL7C103	VLSI Tech	
Modem, 1200 bps V.22/212	STC9490C	S-MOS	25
Multifrequency Interface Line Circuit	LS342	◊ SGS	
PCM Conference Call and Attenuation/Noise Suppresion Circuit	M116F1	SGS	
PCM Elastic Store	MJ1474	Plessey	
PCM, Frame Aligner Circuit	PEB2040	Siemens	30
PCM Interface (2048 kbps)	**SSI78P243**	**SiliconSys (3199)**	
PCM Line Interface (1.544 or 2.048 MHz data rate)	CS61534	Crystal	
PCM Line Receiver and Clock Recovery Circuit	**XRT5650**	**Exar (2610)**	
	XRT5750	Exar	

Function	Device	Source	Line
PCM Line Repeater, T1, T148C and 2 Mb/s (two-chip set)	**XRT5600**	**Exar (2610)**	35
	XRT5620	**Exar (2610)**	
	XRT5720	Exar	
PCM Line Repeater, T1, 1.544 Mb/s	**CD22301**	**GE/RCA (2637)**	
	SSI22301	SiliconSys	
PCM, Memory Time Switch (for 2.048, 4.096, and 8.192 MHz PCM systems)	PEB2045	Siemens	40
PCM, Peripheral Board Controller	PEB2050	Siemens	
	PEB2051	Siemens	
PCM Receiver	MJ1472	Plessey	
	MJ1473	Plessey	
PCM Repeater	XRC240	Exar	45
	XRC262	Exar	
	XRC277	Exar	
	RPT82	**PMI (2975)**	
	RPT83	**PMI (2975)**	
	RPT87	**PMI (2975)**	50
PCM Repeater, Two-Chip Set (TIC)	XRC587	Exar	
	XRC588	Exar	
PCM Repeaters	**RPT86**	**PMI (2975)**	
PCM Signal Monitor	SP1450B	Plessey	
	SP1455B	Plessey	55
PCM Transceiver	**XRT5681**	**Exar (2608)**	
PCM Transceiver, T1	**XRT5684**	**Exar (2609)**	
	XRT5690	**Exar (2609)**	
PCM Transceiver (8Mbit)	**XRT5683**	**Exar (2608)**	
PCM Transcoder	HC5560	Harris	60
PCM 8-bit Format Converter	MJ1410	Plessey	
Polarity Guard	LS346	◊ SGS	
Polynomial Generator/Checker (for character-oriented data communication links)	SCN2653A	Signetics	
Power Supply, uses line surplus for peripherals	**TEA1080**	**Signetics (3113)**	
Pulse and Tone Telephone Dialer	TCM99531	TI	65
R-Interface Module (RIM), Implements the rate adaption function within a Terminal Adaptor.	MH89500	Exar	
	MH89500	Mitel	
Random Number Generator	**T7001**	**◊ AT&T (2472)**	
RC Decoder, Seven Channel	NE5045	Signetics	
RC Encoder, Programmable 7-Channel	NE5044	Signetics	70
Receiver/Decoder, Serial Bi-Phase (detects 10-bit data bytes)	**UM83C71**	**UMC (3317)**	
Receiver, FM/FSK/VHF	**MC3364**	**Motorola (2939, 2959)**	

Function	Device	Source	Line
Receiver (MFRZ forward and backward)	**SSI78A217F**	**SiliconSys (3199)**	
Relay Driver (for 48 V telephone relays)	LS1014AB	AT&T	
	DS1686	† National	75
	DS1687	† National	
	DS3686	National	
	DS3687	National	
	PBD3510	RIFA	
	PBD3511	RIFA	80
	PBD3513	RIFA	
	PBD3515	RIFA	
	PBD3520	RIFA	
	UDN2585A	**Sprague (3203)**	
	UDN2588A	**Sprague (3203)**	85
	UDN2956A	Sprague	
	UDN2957A	Sprague	
Relay Driver (for 48 V telephone relays) See also Interface, Memory and Peripheral Drivers	**UDN2580A**	**Sprague (3203)**	
Relay Driver, Quad	μA3680	Fairchild	
Relay Driver, Quad Negative Voltage	μA3680C	Fairchild	90
	DS3680	National	
Relays, High Voltage, Optically Coupled	**LH1085AT**	**AT&T (2515)**	
Reverse Line Interface Circuit (performs 2-wire to 4-wire conversion while emulating telephone instrument electrical functions when co-located with switching system.)	AMS2039	Aptek	
	AMS2040	Aptek	
	AMS2041	Aptek	95
	AMS2042	Aptek	
Ring Detector	LB1006	SGS	
Ring Detector (operates from 14 to 66 Hz)	ZN480E	Ferranti	
	ZN480J	† Ferranti	
Ring Detector (operates from 16 to 68 Hz)	**LB1006AB**	**◊ AT&T (2505)**	100
S/T Interface for ISDN	**T7250**	**◊ AT&T (2470, 2480)**	
SASSD Circuit with SL1 Codec Interface	MA857	Marconi	
Serial Communications Controller (two independent HDLC channels)	SAB82520	Siemens	
Serial Receiver (changes T1-D2 or T1-D3 input to parallel output)	R8060	Rockwell	
	SSI78P8060	**SiliconSys (3199)**	105
Serial Transmitter (generates 193-Bit data stream in T1-D2 or T1-D3 format)	R8050	Rockwell	
	SSI78P8050	**SiliconSys (3199)**	
Shift Register, Dual 1008 Bit	MA802	◊ Marconi	
Slave Digital-Loop Transceiver, 80 kb/s	MC145426	Motorola	
Slave Digital-Loop Transceiver, 160 kb/s	MC145425	Motorola	110

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Telecommunication Circuits (Cont'd)

Function	Device	Source	Line
Speaker Circuit, Voice Switched			
	MC34018	**Motorola (2944, 2959)**	
Speakerphone Circuit			
	CS262	Cherry	
	CS272	Cherry	
	XRT6420-2	Exar	
	XRT6425	Exar	5
	PBM3910	◊ RIFA	
	KA2420	Samsung	
	LB1020	SGS	
	IR3N33	◊ Sharp	
	IR3N81	Sharp	10
Speakerphone Circuit, Voice Switched			
	MC34118	**Motorola (2944, 2960)**	
Speakerphone Circuit (volume pre-set)			
	IR3N84	Sharp	
Speakerphone (two-chip set)			
	LB1020AF	**AT&T (2512)**	
	LB1021AD	**AT&T (2512)**	
	XRT6420	Exar	15
	XRT6421	Exar	
Speakerphone with Built-In Speech Network			
	IR3.N83	Sharp	
Speech Circuit for ECM/Dynamic Receiver			
	IR3.82	Sharp	
Speech Circuit for Electronic Telephones			
	XRT5995	Exar	
	GL6901	◊ **GoldStar (2701)**	20
	HA16803	Hitachi	
	MC34014	**Motorola (2943, 2959)**	
	TP5700	National	
	TP5700A	National	
	PBL3726-X	RIFA	25
	PBL3781	RIFA	
	LS288	SGS	
	LS356	◊ SGS	
	LS388	SGS	
	LS656	SGS	30
	IR3N31	◊ Sharp	
	TEA1060	Signetics	
	TEA1061	Signetics	
	TEA1067	**Signetics (3112)**	
	TEL106	Stantel-STC	35
	U4056B	Telefunken	
	U4056B1	Telefunken	
	U454B	Telefunken	
Speech Circuit (mask programmable)			
	PBL3726	SGS	
Speech Circuit, Telephone Speech Network (with dialer interface)	**MC34114**	**Motorola (2943, 2960)**	40
Speech Circuit with DTMF Interface			
	L3212	SGS	
	PSB4500	Siemens	
	PSB4501	Siemens	
Speech Circuit with DTMF Interface (low voltage)			
	L3211	SGS	
Speech Network and Tone Dialer			
	MC34013	◊ **Motorola (2943, 2959)**	45
Speech Network for Ceramic Microphone/Receiver			
	IR3N38	Sharp	
StarLAN Hub (10-port stand-alone)			
	WDLAN-H10	WDC	

Function	Device	Source	Line
Subscriber Line Interface Circuit			
	AM7950	AMD	
	AM7953	AMD	
	AMS2002	Aptek	50
	AMS2006	Aptek	
	AMS3081	Aptek	
	AMS3082	Aptek	
	HC5502A	◊ **Harris (2768)**	
	HC5504	◊ **Harris (2768)**	55
	HC5508	◊ Harris	
	HC5509	◊ Harris	
	MH88500	Mitel	
	MH89610	Mitel	
	MH89620	Mitel	60
	MC34F19	Motorola	
	MC34F19A	Motorola	
	MC3419	Motorola	
	MC3419A	Motorola	
	MC3419C	Motorola	65
	PBL3736	RIFA	
	PBL3762	RIFA	
	KA2412	Samsung	
	LS285A	SGS	
	TCM42048	◊ TI	70
	TCM42078	TI	
	TCM4208	TI	
Subscriber Line Interface Circuit, A-Law			
	MH89615	Mitel	
	MH89625	Mitel	
Subscriber Line Interface Circuit, Digital Adaptor (a TCM ISDN compatible,two wire, short loop transceiver)	TP3401	National	75
Subscriber Line Interface Circuit (performs 2-wire to 4-wire conversion)			
	LS285A	SGS	
	TCM4204A	TI	
	TCM4207A	TI	
Subscriber Line Interface Circuit (two chip set)			
	G24002	◊ **CMD Micro (2551)**	
	G24010	◊ **CMD Micro (2551)**	80
Subscriber Line Interface Circuit with Magnetic Compensation			
	TP3200	National	
	TP3202	National	
	TP3204	National	
Subscriber Lne Interface Circuit			
	TCM4205A	TI	
Subscriber Network Interface Circuit (CCITT 1.430 and T Interface Compatible)	MT8930	Mitel	85
Switch, Bilateral (for remote subscriber line test unit)			
	LB1060AB	AT&T	
Switchook, Electronic (optically coupled SPST switch)			
	LH1056A TYPE	**AT&T (2513)**	
	LH1061A TYPE	**AT&T (2514)**	
Telephone Battery Feed Circuit			
	LB1011	SGS	
Telephone Controller (single-chip 8-bit CMOS microcontroller)			
	SAB80C382	Siemens	90
	SAB80C482	Siemens	
Telephone Restricter			
	CRN3300	Thomson	
Telephone (single-chip)			
	LB1009	SGS	

Function	Device	Source	Line
Telephone, One-Chip Microcomputer			
	LR4820	Sharp	
Teleset Audio Interface (CPU to audio control)			
	MC145429	Motorola	95
Teletex Analog Component			
	GL3917	**GoldStar (2699)**	
Teletext, Color Video Display Generator (NAPLPS protocol)	R6549	Rockwell	
Teletext CRT Controller for CEPT videotex standard			
	SAA5350	Signetics	
Time Division Multiplexing, Temporal Matrix for 8x8 frame switching			
	EF7331	Thomson	
Time Slot Access Circuit			
	MJ1446	Plessey	100
Time Slot Assigner Circuit			
	MA5981	**Marconi (2889)**	
	MA5983	Marconi	
	MC14416	Motorola	
	MC14417	Motorola	
	MC14418	Motorola	105
Time Slot Zero Receiver			
	MJ1445	Plessey	
Time Slot Zero Transmitter			
	MJ1444	Plessey	
Token Ring Jitter Attenuator (IEEE 802.5 network)			
	CS80600	Crystal	
Tone Decoder	G8860X	◊ CMD Micro	
	XR2567	Exar	110
	XR2567M	† Exar	
	MT8860	Mitel	
	MT8862	◊ Mitel	
	MT8863	◊ Mitel	
	MV8860	Plessey	115
	MV8862	Plessey	
	MV8863	Plessey	
	IR3N05/N	Sharp	
Tone Decoder, MF			
	SSI78A207	**SiliconSys (3199)**	
Tone Decoder (operates from 0.01 Hz to 500 kHz)			
	XR2211C	Exar	120
	XR2211M	† Exar	
	XR567AC	Exar	
	XR567AM	† Exar	
	LM567C	National	
	XR2211C	Raytheon	125
	XR2211M	† Raytheon	
	LM567C	Samsung	
	NE567	Signetics	
	SE567	† Signetics	
Tone Decoder, PABX			
	MSM6920	OKI	130
Tone Decoder, Terminal			
	MSM6945	OKI	
Tone Geneerator (DTMF)			
	S2559E	Gould	
Tone Generator (CCITT R1 tones)			
	M993	Teltone	
Tone Generator (DTMF)			
	ICM7206A	**GE/Intersil (2677)**	
	ICM7206B	**GE/Intersil (2677)**	135
	ICM7206C	**GE/Intersil (2677)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Tone Generator (DTMF) (Cont'd)			
	ICM7206D	**GE/Intersil (2677)**	
	CD22859	**GE/RCA (2637)**	
	GL6801	**GoldStar (2701)**	
	GM5380	◊ **GoldStar (2701)**	
	S25089	Gould	5
	S2559F	Gould	
	S2579	Gould	
	SBA5091	ITT	
	SRA5089	ITT	
	MC14410	Motorola	10
	MM53125	National	
	MM53130	National	
	MM5395	National	
	TP5088	◊ National	
	TP5089	National	15
	μPC767	NEC	
	PBD3534	RIFA	
	PBD3535	RIFA	
	PBD3551	RIFA	
	KA2413	Samsung	20
	KS5808	◊ Samsung	
	MK5089	Samsung	
	M751	SGS	
	S3359	Siemens	
	PCD311	Signetics	25
	PCD3312	Signetics	
	STC5089	Sprague	
	STC5089	Stantel-STC	
	STC5089L	Stantel-STC	
	TCM5087	TI	30
	TCM5089	TI	
	MK5087	Thomson	
	MK5089	Thomson	
	MK5091	Thomson	
	MK5092	Thomson	35
	MK5094	Thomson	
	MK5380	Thomson	
	MK5389	Thomson	
	UM95087	UMC	
	UM95089	UMC	40
	UM9559E	UMC	
	UM9559F	UMC	
Tone Generator (DTMF) with Call Progress Detection			
	SSI75T2090	**SiliconSys (3199)**	
Tone Generator (DTMF) with Redial			
	S2569	◊ Gould	
	S2569A	Gould	45
	UM9169A	UMC	
Tone Generator (generates 15 tone pairs)			
	AMS3501	Aptek	
Tone/Pulse Dialer (5 memory)			
	UM91225A	**UMC (3321)**	
	UM91225B	**UMC (3321)**	
	UM91225C	**UMC (3321)**	50
	UM91225D	**UMC (3321)**	
Tone/Pulse Dialer (10 memory)			
	UM91261	**UMC (3321)**	
Tone/Pulse Dialer (10 pps)			
	UM91210E	**UMC (3320)**	
	UM91220	**UMC (3320)**	
Tone/Pulse Dialer (15 memory)			
	UM91265	**UMC (3322)**	55
Tone/Pulse Dialer (20 pps)			
	UM91210F	**UMC (3320)**	

Function	Device	Source	Line
Tone Receiver	**G8870**	◊ **CMD Micro (2547)**	
	MT8872	◊ Mitel	
Tone Receiver Circuit, Dual (with filters)			
	AMS3210	Aptek	
	G8880	**CMD Micro (2546)**	60
Tone Receiver, DTMF			
	AMS3201	Aptek	
	AMS88205-5NC	Aptek	
	CD22202	◊ **GE/RCA (2636)**	
	CD22203	**GE/RCA (2636)**	
	CD22204E	**GE/RCA (2636)**	65
	MH88305	Mitel	
	MT8870	◊ Mitel	
	MT8870-1	◊ Mitel	
	SC11202	Sierra	
	SC11203	Sierra	70
	SC11204	Sierra	
	SC11270	Sierra	
	SSI75T201	**SiliconSys (3199)**	
	SSI75T202	**SiliconSys (3199)**	
	SSI75T203	**SiliconSys (3199)**	75
	SSI75T204	**SiliconSys (3199)**	
	SSI75T957	**SiliconSys (3199)**	
	M927	Teltone	
	M937	◊ Teltone	
	M947	◊ Teltone	80
	M948	◊ Teltone	
	M956	Teltone	
	M957	Teltone	
	M967	Teltone	
	TT6174	Teltone	85
	MK5102-5	Thomson	
	MK5103-5	Thomson	
Tone Receiver, DTMF (hybrid)			
	AMS3020	Aptek	
	AMS3023	Aptek	
	AMS3024	Aptek	90
	AMS3101	◊ Aptek	
	AMS3103	◊ Aptek	
	AMS3104	◊ Aptek	
	M988	Teltone	
Tone Receiver, 12 kHz			
	AMS3050	Aptek	95
Tone Receiver, 16 kHz			
	AMS3051	Aptek	
Tone Recever, DTMF			
	MT8880	◊ Mitel	
Tone Ringer	ZN488E	Ferranti	
	GL6840	GoldStar	
	HA16802	Hitachi	100
	HA16804	Hitachi	
	HA16805	Hitachi	
	ML8204	SGS	
	ML8205	SGS	
	IR3N32/N	◊ Sharp	105
	IR3N34/N	◊ Sharp	
Tone Ringer (bridge output)			
	GM6840	**GoldStar (2701)**	
Tone Ringer Driver			
	TCM1531	TI	
	TCM1532	TI	

(Continued)

Function	Device	Source	Line
Tone Ringer Driver (Cont'd)			
	TCM1536	TI	110
	TCM1539	TI	
Tone Ringer (operates from ring signal, drives piezoelectric element)			
	LB1004AC	◊ AT&T	
	LB1005AB	◊ **AT&T (2504)**	
	LB1005BB	◊ **AT&T (2504)**	
	LB1005CB	◊ **AT&T (2504)**	115
	CS34017	Cherry	
	MC34012	**Motorola (2942, 2959)**	
	MC34017	**Motorola (2942, 2959)**	
Tone Ringer (operates from ring signal, drives speaker)			
	CS8204	Cherry	
	CS8205	Cherry	120
	XRT8205	Exar	
	S2561	◊ Gould	
	MC34012-1	**Motorola (2942, 2959)**	
	MC34012-2	**Motorola (2942, 2959)**	
	MC34012-3	**Motorola (2942, 2959)**	125
	KA2410	Samsung	
	KA2411	Samsung	
	KA2418	Samsung	
	KA2419	Samsung	
	ML8204	Samsung	130
	M764	SGS	
	M764A	SGS	
	PSB6520	Siemens	
	PSB6521	Siemens	
Tone Ringer (2-tone)			
	LB1005	SGS	135
	LS1240	SGS	
	LS1241	SGS	
Tone Ringer (32-tone)			
	LB1004	SGS	
Tone Transceiver (DTMF)			
	SSI75T2089	**SiliconSys (3199)**	
Transceiver, DTMF (Integrated)			
	SC11280	Sierra	140
	SC11289	Sierra	
Transceiver, 4-Wire Digital, Multi-Point Baseband			
	29C53	◊ Matra-Harris	
Transcoder, B8ZS, B6ZS, and HDB3 to NRZ			
	MC145439	Motorola	
Transcoder, HDB31/AMI to NRZ			
	MC142103	Motorola	
Transmission Circuit w/ Dialer Interface, Low Voltage			
	TEA1068	Signetics	145
Transmitter/Encoder, Serial Bi-Phase (10 bits per data byte transmission)			
	UM83C70	**UMC (3317)**	
Transmitter, Two-Wire, 4 to 20 mA (DIE package designed to be Integrated into transducer hybrids)			
	XTR101 DIE	**Burr-Brown (2538)**	
Tri-Port Memory (T1 carrier)			
	R8040	Rockwell	
T1/CEPT Elastic Store			
	DS2175	Dallas	
T1/CEPT PCM Transmitter			
	R8070	Rockwell	150

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Telecommunication Circuits (Cont'd)

Function	Device	Source	Line
T1 Line Interface			
	SSI78185	◊ SiliconSys	
T1 Line Interface (1.544 MHz data rate)			
	CS61544	Crystal	
T1 Receiver Buffer			
	DS2176	Dallas	
T1, Serial T1 Transceiver (193E,S)			
	DS2180	Dallas	
UNITS (User Network Interface for Switches)			
	T7252	◊ **AT&T**	**(2470, 2481)** 5
Videotext, Error Correction			
	MSM6254	OKI	
Viterbi Decoder (for forward error correction)			
	STEL2015	**STI**	**(3206)**
	STEL2016	**STI**	**(3206)**
	STEL2017	**STI**	**(3206)**
	STI2010	**STI**	**(3210)** 10
Voice Frequency Level Expander			
	LB1026AA	AT&T	
	LB1026AB	AT&T	
Voice Processor, for Voice Storage, Security System Telecommunications			
	UM5100	UMC	
Voice Transmission Privacy Circuit			
	DVS100	Marconi	
Single-Chip Telephone Circuit			
	LB1009AE	AT&T	15
	LB1009BE	AT&T	
Dual Tone Generator (touchtone frequencies)			
	SBA5089	ITT	
	PSB8592	Siemens	
	PSB8593	Siemens	20
	S359	Siemens	
	PCD3311	Signetics	
	EFB7189	Thomson	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Delayed Switch ON/OFF (for driving relays, lamps, etc.)			
	PBA3008	RIFA	
	PBA3009	RIFA	
Digital Clock Timer			
	LR3419	Sharp	
Event/Hour Meter, 5–1/2 Digit LCD Drive			
	ICM7249	**GE/Intersil (2669)**	
	ICM7249M	**† GE/Intersil (2669)**	5
Internal Current Source			
	XR320	Exar	
Long Period (1 sec to 50 hours)			
	M51849	Mitsubishi	
Low Voltage CR Timer			
	TC9160	Toshiba	
Micropower, Long Range (microseconds to days)			
	XR2243	Exar	
Precision	LM122	† National	10
	LM2905	◊ National	
	LM322	National	
	LM3905	National	
Programmable (includes a counter for long time delays) Binary Control			
	XR2240C	Exar	
	XR2240M	† Exar	15
	μA2240C	◊ Fairchild	
	ICM7240	**GE/Intersil (2670)**	
	ICM7242	**GE/Intersil (2670)**	
	ICM7250	**GE/Intersil (2670)**	
	ICM7260	GE/Intersil	20
	LS7210	**LSIComp (2867)**	
	ICM7240	◊ Maxim	
	ICM7242	◊ Maxim	
	ICM7250	◊ Maxim	
	ICM7260	◊ Maxim	25
	MC14541BA	† Motorola	
	MC14541BC	Motorola	
	μA2240C	TI	
Programmable Timer			
	ZN1036D	Ferranti	
	ZN1036E	Ferranti	30
	LR3472	Sharp	
Time Delay Generator (0–20 ns, 1 ps resolution)			
	16G060	**GigaBit (2689)**	
Timer	XRL555	◊ Exar	
	XR555C	Exar	
	XR555M	† Exar	35
	μA555C	Fairchild	
	NE555	GE/Intersil	
	CA555	† GE/RCA	
	CA555C	GE/RCA	
	HA17555	Hitachi	40
	M5E555	Mitsubishi	
	M5E555A	Mitsubishi	
	MC1455	**Motorola (2958)**	
	MC1555	† Motorola	
	LM555C	National	45
	μPC1555	NEC	
	RC555	Raytheon	
	NE555	Samsung	
	NE555	Signetics	
	SE555	† Signetics	50
	SE555C	† Signetics	
	ULN2430M	Sprague	

(Continued)

Function	Device	Source	Line
Timer		(Cont'd)	
	355A/C	◊ TeledyneS	
	355B/M	◊† TeledyneS	
	NE555	TI	55
	SA555	† TI	
	SE555	† TI	
	LM555	Thomson	
	TA7326	Toshiba	
	TA7327	Toshiba	60
Timer, CMOS, Low Voltage, 2.5 MHz, 2%			
	ALD1504	AdvLinear	
Timer, CMOS, 2.5 MHz, 2%			
	ALD1502	AdvLinear	
Timer (CMOS 555), Low Power			
	ICM7555	**◊ GE/Intersil (2670)**	
	ICM7555M	**† GE/Intersil (2670)**	
	GLC555	**GoldStar (2700)**	65
	ICM7555	◊ Maxim	
	μPD5555	NEC	
	μPD5556	NEC	
Timer (CMOS 555), Low Power			
	KS555	◊ Samsung	
Timer (CMOS 555), Low Power, 2.0 MHz, 2%			
	ALD555	◊ AdvLinear	70
Timer (CMOS 555), Low Voltage, 2.0 MHz, 2%			
	ALD555-1	◊ AdvLinear	
Timer, LinCMOS			
	TLC555C	TI	
	TLC555I	TI	
	TLC555M	TI	
Timer, LinCMOS, 1-Volt Operation			
	TLC551	TI	75
	TLC552	TI	
	TLC552C	TI	
Timer with ÷12 Counter (time constant 7200 RC)			
	ZN1034E	Ferranti	
Timer with Counter, (time constant 128 RC)			
	XR2242C	Exar	
	XR2242M	† Exar	80
Dual, CMOS, Low Voltage, 2.0 MHz, 2%			
	ALD2504	◊ AdvLinear	
Dual, CMOS, 2.5 MHz, 2%			
	ALD2502	◊ AdvLinear	
Dual (CMOS 556) Low Power			
	ICM7556	**GE/Intersil (2670)**	
	ICM7556M	**† GE/Intersil (2670)**	
	GLC556	**GoldStar (2700)**	85
	ICM7556	◊ Maxim	
Dual (dual 555)			
	XRL556C	Exar	
	XRL556M	† Exar	
	XR556C	Exar	
	XR556M	† Exar	90
	μA556C	Fairchild	
	MC3456	Motorola	
	MC3556	◊† Motorola	
	LM556	† National	
	LM556C	National	95
	NE556	Samsung	
	NE556	Signetics	
	NE556-1	Signetics	
	SA556	Signetics	
	SA556-1	Signetics	100

(Continued)

Function	Device	Source	Line
Dual (dual 555)		(Cont'd)	
	SE556	† Signetics	
	SE556-1	† Signetics	
	SE556-1C	† Signetics	
	NE556	TI	
	SA556	TI	105
	SE556	† TI	
	LM556	Thomson	
Dual (dual 555), Pinout Variations			
	XR2556C	Exar	
	XR2556M	† Exar	
Dual (dual 555)			
	M5E556A	Mitsubishi	110
Dual Timer, LinCMOS			
	TLC556C	TI	
	TLC556I	TI	
	TLC556M	† TI	
Quad, CMOS, Los Voltage, 2.0 MHz, 2%			
	ALD4503	◊ AdvLinear	
Quad, CMOS, 2.0 MHz, 2%			
	ALD4501	◊ AdvLinear	115
Quad, Current Sink Output			
	XR558C	Exar	
	XR558M	† Exar	
	NE558	Samsung	
	NE558	Signetics	
	SA558	Signetics	120
	SE558	† Signetics	
Quad, Current Source Output			
	XR559C	Exar	
	XR559M	† Exar	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Voltage Regulators

Fixed, Positive

Output Voltage, V	Output Current (mA)	Device	Source	Line
2.2	35	LBR022BS	AT&T	
2.6	100	μA78L02AC	TI	
		μA78L02C	TI	
		TA7316	Toshiba	
4	100	AN78L04	Panasonic	5
4.6	35	LBR046AS	AT&T	
5		**IP1R18A-05**	**IPS (2854, 2857)**	
		IP2R18A-05	**IPS (2854, 2857)**	
		IP3R18A-05	**IPS (2854, 2857)**	
	35	LBR050AB	AT&T	10
		LBR050AC	AT&T	
		LBR050AK	AT&T	
		LBR050AS	AT&T	
	100	μA78L05C	Fairchild	
		M5278L05	Mitsubishi	15
		LM2931-5	**Motorola (2926, 2929, 2958)**	
		LM2931A-5.0	**Motorola (2926, 2929, 2958)**	
		MC78L05AC	**Motorola (2926, 2959)**	
		MC78L05C	**Motorola (2926, 2959)**	
		LM140LA-5	National	20
		LM78L05A	National	
		LM78L05C	National	
		LP2950A	National	
		LP2950C	National	
		LP2951A	National	25
		LP2951C	National	
		μPC78L05	NEC	
		AN78L05	◊ Panasonic	
		MC78L05	Samsung	
		μA78L05AC	TI	30
		μA78L05C	TI	
		TA78L005	Toshiba	
		TA78L005A	Toshiba	
	150	LM3931-5	◊ National	
		LM2930-5	TI	35
		LM330-5	TI	
	200	μA1524A	Fairchild	
		μA3524A	◊ Fairchild	
		LM109H	**Motorola (2926)**	
		LM209H	**Motorola (2926)**	40
		LM309H	**Motorola (2926)**	
		LM109H	† National	
		LM209H	◊ National	
		LM2930-5	National	
		LM309H	National	45
		LM330-5	National	
		SG109T	† SiliconG	
		SG209T	SiliconG	
		SG309T	SiliconG	
		SFC2109	† Thomson	50
		SFC2209	Thomson	
		SFC2309	Thomson	
	250	LM342-5	National	
	300	AN78N05	Panasonic	
	400	L4805	SGS	55
	500	μA78M05C	Fairchild	
		μA78M05M	† Fairchild	
		IP78M05	**IPS (2854)**	
		IP78M05A	**IPS (2854)**	
		IP78M05AC	**IPS (2854)**	60

(Continued)

Output Voltage, V	Output Current (mA)	Device	Source	Line
5	500			(Cont'd)
		IP78M05C	**IPS (2854)**	
		TDD1605	◊ ITT	
		M5F78M05	Mitsubishi	
		MC78M05C	**Motorola (2926, 2959)**	
		LM341-5	National	65
		LM78M05	National	
		μPC78M05	◊ NEC	
		MC78M05C	Samsung	
		L2605	SGS	
		L4705	SGS	70
		L487	SGS	
		L78M05C	SGS	
		SG140-05T	† SiliconG	
		SG340-05T	SiliconG	
		SG7805ACT	SiliconG	75
		SG7805AT	† SiliconG	
		μA78M05C	TI	
		μA78M05M	† TI	
		TEA7034	Thomson	
	750	CS925	Cherry	80
		CS935	Cherry	
		LM2925	National	
		LM2935	National	
		LM2935	SGS	
	1000	μA109M	◊† Fairchild	85
		μA309C	Fairchild	
		M5F7805	Mitsubishi	
		LM109K	**† Motorola (2926)**	
		LM209K	**Motorola (2926)**	
		LM309K	**Motorola (2926)**	90
		LM109K	‡ National	
		LM209K	◊ National	
		LM2940C-12	National	
		LM2940C-15	National	
		LM2940C-5.0	National	95
		LM309K	National	
		μPC7805	NEC	
		AN7805	Panasonic	
		MC7805C	Samsung	
		L7805	† SGS	100
		L7805C	SGS	
		SG109K	† SiliconG	
		SG209K	SiliconG	
		SG309K	SiliconG	
		SG7805ACP	SiliconG	105
		SG7805AP	† SiliconG	
		SG7805CP	† SiliconG	
		SG7805P	SiliconG	
		μA7805C	TI	
		μA7805	† Thomson	110
		SFC2109M	Thomson	
		TA78005A	Toshiba	
		UC7805A	**† Unitrode (3325)**	
		UC7805AC	**Unitrode (3325)**	
	1500	μA7805C	Fairchild	115
		μA7805M	† Fairchild	
		GL7805	GoldStar	
		IP140-5	**† IPS (2854)**	
		IP140A-5	**† IPS (2854)**	
		IP240-5	**IPS (2854)**	120
		IP240A-5	**IPS (2854)**	
		IP340-5	**◊ IPS (2854)**	
		IP340A-5	**◊ IPS (2854)**	
		IP7805	**† IPS (2854)**	
		IP7805A	**† IPS (2854)**	125

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Fixed, Positive (Cont'd)

Output Voltage, V	Output Current (mA)	Device	Source	Line
5	1500		(Cont'd)	
		IP7805AC	**IPS (2854)**	
		IP7805C	**IPS (2854)**	
		LM140-5	† IPS	
		LM240-5	IPS	
		LM340-5	IPS	5
		LAS15A05	Lambda	
		LAS1505	Lambda	
		42094-005	Micropac	
		LM140-5	**◊† Motorola (2926, 2928)**	
		LM340-5	**Motorola (2926, 2928)**	10
		MC7805	**† Motorola (2926)**	
		MC7805A	**† Motorola (2926)**	
		MC7805AC	**Motorola (2926)**	
		MC7805C	**Motorola (2926)**	
		TL780-5C	**Motorola (2926)**	15
		LM140-5	† National	
		LM140A-5	† National	
		LM2931-5	National	
		LM2940-5	National	
		LM340-5	National	20
		LM340A-5	National	
		LM7805	◊ National	
		L7805AC	SGS	
		SG140-05K	SiliconG	
		SG140-05R	SiliconG	25
		SG240-05	◊ SiliconG	
		SG340-05K	SiliconG	
		SG340-05R	SiliconG	
		SG7805ACK	SiliconG	
		SG7805ACR	SiliconG	30
		SG7805AK	† SiliconG	
		SG7805CK	SiliconG	
		SG7805CR	SiliconG	
		SG7805K	† SiliconG	
		LM340-5	TI	35
		TL780-05C	TI	
		UC7805	**† Unitrode (3325)**	
		UC7805C	**Unitrode (3325)**	
	2000	HA17805P	Hitachi	
		LAS16A05	Lambda	40
		LAS1605	Lambda	
		LAS1605B	Lambda	
		L78S05	† SGS	
		L78S05C	SGS	
	3000	μA123	Fairchild	45
		μA223	† Fairchild	
		μA323	Fairchild	
		SH123	† Fairchild	
		SH223	Fairchild	
		SH323	Fairchild	50
		IP123	**† IPS (2854)**	
		IP123A	**† IPS (2854)**	
		IP223	**IPS (2854)**	
		IP223A	**IPS (2854)**	
		IP323	**IPS (2854)**	55
		IP323A	**IPS (2854)**	
		LM123	† IPS	
		LM223	IPS	
		LM323	◊ IPS	
		LAS14A05	◊ Lambda	60
		LAS1405	Lambda	
		LAS1405B	Lambda	

(Continued)

Output Voltage, V	Output Current (mA)	Device	Source	Line
5	3000		(Cont'd)	
		LM123	† LinearTech	
		LM123A	† LinearTech	
		LM323	LinearTech	65
		LM323A	† LinearTech	
		LT123A	† LinearTech	
		LT323A	† LinearTech	
		LM123	**† Motorola (2927)**	
		LM123A	**† Motorola (2927)**	70
		LM223	**Motorola (2927)**	
		LM223A	**Motorola (2927)**	
		LM323	**Motorola (2927)**	
		LM323A	**Motorola (2927)**	
		MC78T05	**† Motorola (2926)**	75
		MC78T05A	**† Motorola (2926)**	
		MC78T05AC	**Motorola (2926)**	
		MC78T05C	**Motorola (2926)**	
		LM123	† National	
		LM137HV	† National	80
		LM223	National	
		LM223A	National	
		LM323	National	
		LM323A	National	
		LM323	Samsung	85
		SG123	† SiliconG	
		SG123A	SiliconG	
		SG137HV	† SiliconG	
		SG153-05	† SiliconG	
		SG223	SiliconG	90
		SG223A	SiliconG	
		SG253-05	◊ SiliconG	
		SG323	SiliconG	
		SG323A	SiliconG	
		SG353-05	SiliconG	95
		LM123	◊† Thomson	
		LM323	Thomson	
	5000	μA78H05	Fairchild	
		μA78H05A	Fairchild	
		LAS19A05	Lambda	100
		LAS1905	Lambda	
		LAS1905B	Lambda	
		LT1003C	LinearTech	
		LT1003M	† LinearTech	
		42050-055	Micropac	105
		42052-055	Micropac	
	8000	LAS39A05	Lambda	
		LAS39A05K	Lambda	
		LAS3905	Lambda	
		LAS3905K	Lambda	110
	10000	μA78P05	Fairchild	
		MLM196-05	Micropac	
		MLM396-05	◊ Micropac	
		42050-510	Micropac	
		42052-510	Micropac	115
	20000	42055-520	Micropac	
5.1	35	LBR051AB	AT&T	
5.2	35	LBR052AS	AT&T	
6	100	AN78L06	◊ Panasonic	
		TA78L006	Toshiba	120
		TA78L006A	Toshiba	
	300	AN78N06	Panasonic	
	500	μA78M06C	Fairchild	
		μA78M06M	† Fairchild	
		TDD1606	◊ ITT	125
		M5F78M06	Mitsubishi	
		MC78M06C	**Motorola (2927)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Voltage Regulators (Cont'd)

Fixed, Positive (Cont'd)

Output Voltage, V	Output Current (mA)	Device	Source	Line
6	500		(Cont'd)	
		AN78M06	Panasonic	
		MC78M06C	Samsung	
		L78M06C	SGS	
		SG140-06T	† SiliconG	
		SG340-06T	SiliconG	5
		SG7806ACT	SiliconG	
		SG7806AT	† SiliconG	
		SG7806CT	SiliconG	
		SG7806T	† SiliconG	
		μA78M06C	TI	10
	1000	M5F7806	Mitsubishi	
		AN7806	† Panasonic	
		MC7806C	Samsung	
		SG7806ACP	SiliconG	
		SG7806AP	† SiliconG	15
		SG7806CP	SiliconG	
		SG7806P	† SiliconG	
		μA7806	Thomson	
	1500	μA7806C	Fairchild	
		GL7806	GoldStar	20
		LAS15A06	Lambda	
		LAS1506	Lambda	
		LM340-6	**Motorola (2926, 2928)**	
		MC7806	**† Motorola (2927)**	
		MC7806A	**† Motorola (2927)**	25
		MC7806AC	**Motorola (2927)**	
		MC7806C	**Motorola (2927)**	
		L7806	† SGS	
		L7806AC	SGS	
		L7806C	SGS	30
		SG140-06K	SiliconG	
		SG140-06R	SiliconG	
		SG240-06	◊ SiliconG	
		SG340-06K	SiliconG	
		SG340-06R	SiliconG	35
		SG7806ACK	SiliconG	
		SG7806ACR	SiliconG	
		SG7806AK	† SiliconG	
		SG7806CK	SiliconG	
		SG7806CR	SiliconG	40
		SG7806K	† SiliconG	
		μA7806C	TI	
	2000	HA17806P	Hitachi	
		CJSE017	Solitron	
		CJSE019	Solitron	45
		CJSE021	Solitron	
	3000	**MC78T06**	**† Motorola (2927)**	
		MC78T06C	**Motorola (2927)**	
	10000	42050-610	Micropac	
		42052-610	Micropac	50
	20000	42055-620	Micropac	
6.2	100	μA78L62C	Fairchild	
		μA78L06AC	TI	
		μA78L06C	TI	
7	100	HA17807	Hitachi	55
		AN78L07	◊ Panasonic	
		TA78L007	Toshiba	
		TA78L007A	Toshiba	
	300	AN78N07	Panasonic	
	500	M5F78M07	Mitsubishi	60
		AN78M07	Panasonic	

(Continued)

Output Voltage, V	Output Current (mA)	Device	Source	Line
7			(Cont'd)	
	1000	M5F7807	Mitsubishi	
		AN7807	Panasonic	
	10000	42050-710	Micropac	
		42052-710	Micropac	65
	20000	42055-720	Micropac	
7.5	100	TA78L075	Toshiba	
		TA78L075A	Toshiba	
	1000	L78C75C	SGS	
		L78S75	† SGS	70
		L7875	† SGS	
		L7875C	SGS	
8	100	**MC78L08AC**	**Motorola (2959)**	
		MC78L08C	**Motorola (2927, 2959)**	
		μPC78L08	NEC	75
		AN78L08	◊ Panasonic	
		μA78L08AC	TI	
		μA78L08C	TI	
		TA78L008	Toshiba	
		TA78L008A	Toshiba	80
	150	LM2930-8	TI	
	200	LM2930-8	National	
	300	AN78N08	Panasonic	
	500	μA78M08C	Fairchild	
		μA78M08M	† Fairchild	85
		TDD1608	ITT	
		M5F78M08	Mitsubishi	
		MC78M08C	**Motorola (2927)**	
		μPC78M08	◊ NEC	
		AN78M08	Panasonic	90
		MC78M08C	Samsung	
		L78M08C	SGS	
		SG140-08T	† SiliconG	
		SG340-08T	SiliconG	
		SG7808ACT	SiliconG	95
		SG7808AT	† SiliconG	
		SG7808CT	SiliconG	
		SG7808T	† SiliconG	
		μA78M08C	TI	
		μA2808	Thomson	100
	1000	M5F7808	Mitsubishi	
		μPC7808	NEC	
		AN7808	Panasonic	
		MC7808C	Samsung	
		SG7808ACP	SiliconG	105
	1500	μA7808C	Fairchild	
		μA7808M	† Fairchild	
		GL7808	GoldStar	
		HA17808	Hitachi	
		LAS15A08	Lambda	110
		LAS1508	Lambda	
		LM140-8	**◊† Motorola (2926, 2928)**	
		LM340-8	**Motorola (2926, 2928)**	
		MC7808	**† Motorola (2927)**	
		MC7808A	**† Motorola (2927)**	115
		MC7808AC	**Motorola (2927)**	
		MC7808C	**Motorola (2927)**	
		L7808	† SGS	
		L7808AC	SGS	
		L7808C	SGS	120
		SG140-08K	SiliconG	
		SG140-08R	SiliconG	
		SG240-08	◊ SiliconG	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Fixed, Positive (Cont'd)

Output Voltage, V	Output Current (mA)	Device	Source	Line
8	1500		(Cont'd)	
		SG340-08K	SiliconG	
		SG340-08R	SiliconG	
		SG7808ACK	SiliconG	
		SG7808ACR	SiliconG	
		SG7808AK	† SiliconG	5
		SG7808CK	SiliconG	
		SG7808CR	SiliconG	
		SG7808K	† SiliconG	
		μA7808C	TI	
	2000	LAS16A08	Lambda	10
		LAS1608	Lambda	
		LAS1608B	Lambda	
	3000	**MC78T08**	**Motorola (2927)**	
		MC78T08C	**Motorola (2927)**	
	5000	μA78H08C	Fairchild	15
	10000	42052-810	Micropac	
		SG7808AP	† SiliconG	
		SG7808CP	SiliconG	
		SG7808P	† SiliconG	
	20000	42055-820	Micropac	20
8.2	100	μA78L82C	Fairchild	
8.5	400	L4885	SGS	
	500	L2685	SGS	
		L4785	SGS	
	1000	μA7885C	◊ Fairchild	25
		MC7885C	Samsung	
		μA7885C	TI	
9	100	μA78L09C	Fairchild	
		AN78L09	◊ Panasonic	
		μA78L09AC	TI	30
		μA78L09C	TI	
		TA78L009	Toshiba	
		TA78L009A	Toshiba	
	300	AN78N09	Panasonic	
	500	M5F78M09	Mitsubishi	35
	1000	M5F7809	Mitsubishi	
		AN7809	Panasonic	
	1500	GL7809	GoldStar	
		L78S09	† SGS	
		L7809	SGS	40
		SL78S09C	SGS	
	10000	42052-910	Micropac	
	20000	42055-920	Micropac	
10	100	M5278L10	Mitsubishi	
		μPC78L10	NEC	45
		AN78L10	◊ Panasonic	
		AN78M10	Panasonic	
		μA78L10AC	TI	
		μA78L10C	TI	
		TA78L010	Toshiba	50
		TA78L010A	Toshiba	
	200	LH0075	◊ National	
	300	AN78N10	Panasonic	
	400	L4810	SGS	
	500	TDD1610	ITT	55
		M5F78M10	Mitsubishi	
		μPC78M10	◊† NEC	
		MC78M10C	Samsung	
		L2610	SGS	
		L4710	SGS	60
		μA78M10C	TI	

(Continued)

Output Voltage, V	Output Current (mA)	Device	Source	Line
10			(Cont'd)	
	1000	M5F7810	Mitsubishi	
		AN7810	Panasonic	
	1500	LAS15A10	Lambda	
		LAS1510	Lambda	65
		μA7810C	TI	
	2000	L78S10	† SGS	
		L78S10C	SGS	
	9000	42050-109	Micropac	
		42052-109	Micropac	70
	20000	42055-1020	Micropac	
10.3	35	LBR103DB	AT&T	
12		**IP1R18A-12**	**IPS (2854, 2857)**	
		IP2R18A-12	**IPS (2854, 2857)**	
		IP3R18A-12	**IPS (2854, 2857)**	75
	35	LBR120AB	AT&T	
	100	μA78L12C	Fairchild	
		M5278L12	Mitsubishi	
		MC78L12AC	**† Motorola (2927, 2959)**	
		MC78L12C	**Motorola (2927, 2959)**	80
		LM140LA-12	† National	
		LM340LA-12	National	
		LM78L12A	National	
		LM78L12C	National	
		μPC78L12	NEC	85
		AN78L12	◊ Panasonic	
		MC78L12	† Samsung	
		μA78L12AC	TI	
		μA78L12C	TI	
		TA78L012	Toshiba	90
		TA78L012A	Toshiba	
	250	LM342-12	National	
	300	52051-012	Micropac	
		AN78N12	Panasonic	
	500	μA78M12C	Fairchild	95
		μA78M12M	† Fairchild	
		IP78M12	**IPS (2854)**	
		IP78M12A	**IPS (2854)**	
		IP78M12AC	**IPS (2854)**	
		IP78M12C	**IPS (2854)**	100
		TDD1612	ITT	
		M5F78M12	Mitsubishi	
		MC78M12C	**Motorola (2927, 2959)**	
		LM341-12	National	
		LM78M12	National	105
		μPC78M12	NEC	
		AN78M12	Panasonic	
		MC78M12C	Samsung	
		L78M12C	SGS	
		SG140-12T	† SiliconG	110
		SG340-12T	SiliconG	
		SG7812ACT	SiliconG	
		SG7812AT	† SiliconG	
		SG7812CT	SiliconG	
		SG7812T	† SiliconG	115
		μA78M12C	TI	
		μA78M12M	† TI	
	1000	M5F7812	Mitsubishi	
		μPC7812	NEC	
		MC7812C	Samsung	120
		STK521	Sanyo	
		STK541	Sanyo	
		SG7812ACR	SiliconG	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Voltage Regulators (Cont'd)

Fixed, Positive (Cont'd)

Output Voltage, V	Output Current (mA)	Device	Source	Line
12	1000		(Cont'd)	
		SG7812AR	† SiliconG	
		SG7812CR	SiliconG	
		SG7812R	† SiliconG	
		μA2812	Thomson	
		TA78012A	Toshiba	5
		UC7812	**† Unitrode (3325)**	
		UC7812C	**Unitrode (3325)**	
	1500	μA7812C	Fairchild	
		μA7812M	† Fairchild	
		GL7812	GoldStar	10
		IP140-12	**† IPS (2854)**	
		IP140A-12	**† IPS (2854)**	
		IP240-12	**IPS (2854)**	
		IP240A-12	**IPS (2854)**	
		IP340-12	**◊ IPS (2854)**	15
		IP340A-12	**◊ IPS (2854)**	
		IP7812	**† IPS (2854)**	
		IP7812A	**† IPS (2854)**	
		IP7812AC	**IPS (2854)**	
		IP7812C	**IPS (2854)**	20
		LM140-12	† IPS	
		LM240-12	IPS	
		LM340-12	IPS	
		LAS15A12	Lambda	
		LAS1512	Lambda	25
		42094-012	Micropac	
		LM140-12	**◊† Motorola (2926, 2928)**	
		LM140A-12	**◊† Motorola (2926, 2928)**	
		LM340-12	**Motorola (2926, 2928)**	
		LM340A-12	**Motorola (2926, 2928)**	30
		MC7812	**† Motorola (2927)**	
		MC7812A	**† Motorola (2927)**	
		MC7812AC	**Motorola (2927)**	
		MC7812C	**Motorola (2927)**	
		TL780-12C	**Motorola (2926)**	35
		LM140-12	† National	
		LM140A-12	† National	
		LM2940-12	National	
		LM340-12	National	
		LM340A-12	National	40
		LM7812	National	
		L7812	† SGS	
		L7812AC	SGS	
		L7812C	SGS	
		SG140-12K	† SiliconG	45
		SG140-12R	† SiliconG	
		SG240-12	◊ SiliconG	
		SG340-12K	SiliconG	
		SG340-12P	SiliconG	
		SG340-12R	SiliconG	50
		SG7812ACK	SiliconG	
		SG7812ACP	SiliconG	
		SG7812AK	† SiliconG	
		SG7812CK	SiliconG	
		SG7812CP	SiliconG	55
		SG7812K	† SiliconG	
		μA7812C	TI	
		LM340-12	TI	
		TL780-12C	TI	
		UC7812A	**† Unitrode (3325)**	60
		UC7812AC	**Unitrode (3325)**	

(Continued)

Output Voltage, V	Output Current (mA)	Device	Source	Line
12			(Cont'd)	
	2000	HA17812P	Hitachi	
		LAS16A12	Lambda	
		LAS1612	Lambda	
		LAS1612B	Lambda	65
		STK531	Sanyo	
		L78S12C	SGS	
		L7812	† SGS	
		L7812C	SGS	
	3000	**IP123-12**	**† IPS (2854)**	70
		IP123A-12	**† IPS (2854)**	
		IP223-12	**IPS (2854)**	
		IP223A-12	**IPS (2854)**	
		IP323-12	**IPS (2854)**	
		IP323A-12	**IPS (2854)**	75
		LAS14A12	◊ Lambda	
		LAS1412	Lambda	
		LAS1412B	Lambda	
		52053-012	Micropac	
		MC78T12	**† Motorola (2927)**	80
		MC78T12A	**† Motorola (2927)**	
		MC78T12AC	**Motorola (2927)**	
		MC78T12C	**Motorola (2927)**	
		SG153-12	† SiliconG	
		SG253-12	◊ SiliconG	85
		SG353-12	SiliconG	
	5000	μA78H12A	Fairchild	
		LAS19A12	Lambda	
		LAS1912	Lambda	
		LAS1912B	Lambda	90
	8000	42050-128	Micropac	
		42052-128	Micropac	
	10000	μA78P12	Fairchild	
		MLM196-12	Micropac	
		MLM396-12	◊ Micropac	95
	16000	42055-1216	Micropac	
13.2	100	TA78L132	◊ Toshiba	
		TA78L132A	◊ Toshiba	
13.8	1500	LAS15CB	◊ Lambda	
14	8000	42050-148	Micropac	100
		42052-148	Micropac	
	16000	42055-1416	Micropac	
15		**IP1R18A-15**	**IPS (2854, 2857)**	
		IP2R18A-15	**IPS (2854, 2857)**	
		IP3R18A-15	**IPS (2854, 2857)**	105
	35	LBR150AS	◊ AT&T	
	100	μA78L15C	Fairchild	
		MC78L15AC	**Motorola (2928, 2959)**	
		MC78L15C	**Motorola (2928, 2959)**	
		LM140LA-15	† National	110
		LM340LA-15	National	
		LM78L15A	National	
		LM78L15C	National	
		μPC78L15	NEC	
		AN78L15	◊ Panasonic	115
		MC78L15	Samsung	
		μA78L15AC	TI	
		μA78L15C	TI	
		TA78L015	Toshiba	
		TA78L015A	Toshiba	120
	250	LM342-15	National	
	300	52051-015	Micropac	
		AN78N15	Panasonic	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Fixed, Positive (Cont'd)

Output Voltage, V	Output Current (mA)	Device	Source	Line
15			(Cont'd)	
	500	μA78M15C	Fairchild	
		μA78M15M †	Fairchild	
		IP78M15	**IPS (2854)**	
		IP78M15A	**IPS (2854)**	
		IP78M15AC	**IPS (2854)**	5
		IP78M15C	**IPS (2854)**	
		TDD1615	ITT	
		M5F78M15	Mitsubishi	
		MC78M15C	**Motorola (2928, 2959)**	
		LM341-15	National	10
		LM78M15	National	
		μPC78M15	NEC	
		AN78M15	Panasonic	
		MC78M15C	Samsung	
		L78M15C	SGS	15
		SG140-15T †	SiliconG	
		SG7815ACT	SiliconG	
		SG7815AT †	SiliconG	
		SG7815CT	SiliconG	
		SG7815T †	SiliconG	20
		μA78M15C	TI	
	1000	M5F7815	Mitsubishi	
		μPC7815 †	NEC	
		MC7815C	Samsung	
		L7815 †	SGS	25
		L7815C	SGS	
		SG7815ACR	SiliconG	
		SG7815AR †	SiliconG	
		SG7815CR	SiliconG	
		SG7815R †	SiliconG	30
		TA78015A	Toshiba	
		UC7815	**† Unitrode (3325)**	
		UC7815A	**† Unitrode (3325)**	
		UC7815AC	**Unitrode (3325)**	
		UC7815C	**Unitrode (3325)**	35
	1500	μA7815C	Fairchild	
		μA7815M †	Fairchild	
		GL7815	GoldStar	
		IP140-15	**† IPS (2854)**	
		IP140A-15	**† IPS (2854)**	40
		IP240-15	**IPS (2854)**	
		IP240A-15	**IPS (2854)**	
		IP340-15	**◇ IPS (2854)**	
		IP340A-15	**◇ IPS (2854)**	
		IP7815	**† IPS (2854)**	45
		IP7815A	**† IPS (2854)**	
		IP7815AC	**IPS (2854)**	
		IP7815C	**IPS (2854)**	
		LM140-15 †	IPS	
		LM240-15	IPS	50
		LAS15A15	Lambda	
		LAS1515	Lambda	
		42094-015	Micropac	
		LM140-15 ◇†	**Motorola (2926, 2928)**	
		LM340-15	**Motorola (2926, 2928)**	55
		MC7815	**† Motorola (2928)**	
		MC7815A	**† Motorola (2928)**	
		MC7815AC	**Motorola (2928)**	
		MC7815C	**Motorola (2928)**	
		LM140-15 †	National	60
		LM140A-15 †	National	

(Continued)

Output Voltage, V	Output Current (mA)	Device	Source	Line
15	1500		(Cont'd)	
		LM2940-15	National	
		LM340-15	National	
		LM340A-15	National	
		LM7815	National	65
		L7815AC	SGS	
		SG140-15K †	SiliconG	
		SG140-15R †	SiliconG	
		SG240-15 ◇	SiliconG	
		SG7815ACK	SiliconG	70
		SG7815ACP	SiliconG	
		SG7815AK †	SiliconG	
		SG7815CK	SiliconG	
		SG7815CP	SiliconG	
		SG7815K †	SiliconG	75
		μA7815C	TI	
		LM340-15	TI	
		TL780-15C	TI	
	2000	HA17815P	Hitachi	
		LAS16A15	Lambda	80
		LAS1615	Lambda	
		LAS1615B	Lambda	
		L78S15 †	SGS	
		L78S15C	SGS	
		CJSE001	Solitron	85
		CJSE003	Solitron	
		CJSE005	Solitron	
	3000	**IP123-15**	**† IPS (2854)**	
		IP123A-15	**† IPS (2854)**	
		IP223-15	**IPS (2854)**	90
		IP223A-15	**IPS (2854)**	
		IP323-15	**IPS (2854)**	
		IP323A-15	**IPS (2854)**	
		LAS14A15 ◇	Lambda	
		LAS1415	Lambda	95
		LAS1415B	Lambda	
		52053-015	Micropac	
		MC78T15	**† Motorola (2928)**	
		MC78T15A	**† Motorola (2928)**	
		MC78T15AC	**Motorola (2928)**	100
		MC78T15C	**Motorola (2928)**	
		SG153-15 †	SiliconG	
		SG253-15 ◇	SiliconG	
		SG353-15	SiliconG	
	5000	LAS19A15	Lambda	105
		LAS1915	Lambda	
		LAS1915B	Lambda	
	8000	42050-158	Micropac	
		42052-158	Micropac	
	10000	MLM196-15	Micropac	110
		MLM396-15 ◇	Micropac	
	16000	42055-1516	Micropac	
16	8000	42050-168	Micropac	
		42052-168	Micropac	
	12000	42055-1612	Micropac	115
18	100	**MC78L18AC**	**Motorola (2928)**	
		MC78L18C	**Motorola (2928)**	
		AN78L18 ◇	Panasonic	
		TA78L018	Toshiba	
		TA78L018A	Toshiba	120
	300	52051-018	Micropac	
		AN78N18	Panasonic	
	500	TDD1618	ITT	
		M5F78M18	Mitsubishi	
		MC78M18C	**Motorola (2928)**	125

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Voltage Regulators (Cont'd)

Fixed, Positive (Cont'd)

Output Voltage, V	Output Current (mA)	Device	Source	Line
18	500		(Cont'd)	
		μPC78M18	NEC	
		AN78M18	Panasonic	
		MC78M18C	Samsung	
		L78M18C	SGS	
		SG140-18T	† SiliconG	5
		SG340-18T	SiliconG	
		SG7818ACT	SiliconG	
		SG7818AT	† SiliconG	
		SG7818CT	SiliconG	
		SG7818T	† SiliconG	10
	1000	M5F7818	Mitsubishi	
		μPC7818	NEC	
		AN7818	† Panasonic	
		MC7818C	Samsung	
		STK522	Sanyo	15
		STK542	Sanyo	
		L7818	† SGS	
		L7818C	SGS	
		SG7817AP	† SiliconG	
		SG7818ACP	† SiliconG	20
		SG7818AP	SiliconG	
		SG7818P	SiliconG	
		μA2818	Thomson	
	1500	μA7818C	Fairchild	
		μA7818M	† Fairchild	25
		HA17818	Hitachi	
		LAS15A18	Lambda	
		LAS1518	Lambda	
		42094-018	Micropac	
		LM340-18	**Motorola (2926, 2928)**	30
		MC7818	**† Motorola (2928)**	
		MC7818A	**† Motorola (2928)**	
		MC7818AC	**Motorola (2928)**	
		MC7818C	**Motorola (2928)**	
		L7818AC	SGS	35
		SG140-18K	SiliconG	
		SG140-18R	SiliconG	
		SG240-18	◊ SiliconG	
		SG340-18K	SiliconG	
		SG340-18R	SiliconG	40
		SG7818ACK	SiliconG	
		SG7818ACP	SiliconG	
		SG7818AK	† SiliconG	
		SG7818CK	SiliconG	
		SG7818CP	SiliconG	45
		SG7818K	† SiliconG	
		μA7818C	TI	
	2000	**MC78T18**	**† Motorola (2928)**	
		MC78T18C	**Motorola (2928)**	
		STK532	Sanyo	50
		L78S18	† SGS	
		L78S18C	SGS	
	3000	52053-018	Micropac	
	8000	42050-188	Micropac	
		42052-188	Micropac	55
	12000	42055-1812	Micropac	
		42055-1812	Toshiba	
20	100	AN78L20	◊ Panasonic	
		TA78L020	Toshiba	
		TA78L020A	Toshiba	60
	300	AN78N20	Panasonic	
	500	M5F78M20	Mitsubishi	

(Continued)

Output Voltage, V	Output Current (mA)	Device	Source	Line
20	500		(Cont'd)	
		MC78M20C	**Motorola (2928)**	
		AN78M20	Panasonic	
		L78M20C	SGS	65
		SG140-20T	† SiliconG	
		SG340-20T	SiliconG	
		SG7820ACT	SiliconG	
		SG7820AT	† SiliconG	
		SG7820CT	SiliconG	70
		SG7820T	† SiliconG	
		μA78M20C	TI	
	1000	LAS15A20	Lambda	
		LAS1520	Lambda	
		M5F7820	Mitsubishi	75
		AN7820	Panasonic	
		SG140-20K	† SiliconG	
		SG140-20R	† SiliconG	
		SG240-20K	◊ SiliconG	
		SG340-20P	SiliconG	80
		SG340-20R	SiliconG	
		SG7820K	† SiliconG	
		SG7820R	† SiliconG	
	2000	CJSE009	Solitron	
		CJSE011	Solitron	85
		CJSE013	Solitron	
	8000	42050-208	Micropac	
		42052-208	Micropac	
		42055-2010	Micropac	
22	4000	42050-224	Micropac	90
		42052-224	Micropac	
	10000	42055-2210	Micropac	
24	100	**MC78L24AC**	**Motorola (2928)**	
		MC78L24C	**Motorola (2928)**	
		AN78L24	◊ Panasonic	95
		TA78L024	Toshiba	
		TA78L024A	Toshiba	
	300	52051-024	Micropac	
		AN78N24	Panasonic	
		STK507	Sanyo	100
	500	μA78M24C	Fairchild	
		μA78M24M	† Fairchild	
		TDD1624	ITT	
		M5F78M24	Mitsubishi	
		MC78M24C	**Motorola (2928)**	105
		μPC78M24	NEC	
		AN78M24	Panasonic	
		MC78M24C	Samsung	
		L78M24C	SGS	
		SG140-24T	† SiliconG	110
		SG340-24T	SiliconG	
		SG7824ACT	SiliconG	
		SG7824AT	† SiliconG	
		SG7824CT	SiliconG	
		SG7824T	† SiliconG	115
		μA78M24C	TI	
	1000	M5F7824	Mitsubishi	
		μPC7824	NEC	
		AN7824	† Panasonic	
		MC7824C	Samsung	120
		STK523	Sanyo	
		L7824	† SGS	
		L7824C	SGS	
		SG7824ACP	SiliconG	
		SG7824AP	† SiliconG	125
		SG7824CP	SiliconG	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Fixed, Positive (Cont'd)

Output Voltage, V	Output Current (mA)	Device	Source	Line
24	1000		(Cont'd)	
		SG7824P	† SiliconG	
		μA2824	Thomson	
	1500	μA7824C	Fairchild	
		μA7824M	† Fairchild	
		GL7824	GoldStar	5
		LAS15A24	Lambda	
		LAS1524	Lambda	
		42094-024	Micropac	
		LM340-24	**Motorola (2926, 2928)**	
		MC7824	**† Motorola (2928)**	10
		MC7824A	**† Motorola (2928)**	
		MC7824AC	**Motorola (2928)**	
		MC7824C	**Motorola (2928)**	
		SG140-24K	SiliconG	
		SG140-24R	SiliconG	15
		SG340-24K	SiliconG	
		SG340-24P	SiliconG	
		SG340-24R	SiliconG	
		SG7824ACK	SiliconG	
		SG7824ACR	SiliconG	20
		SG7824AK	† SiliconG	
		SG7824CK	SiliconG	
		SG7824CR	SiliconG	
		SG7824K	† SiliconG	
		μA7824C	TI	25
	2000	HA17824P	Hitachi	
		MC78T24	**† Motorola (2928)**	
		MC78T24C	**Motorola (2928)**	
		STK533	Sanyo	
		L78S24	† SGS	30
		L78S24C	SGS	
	3000	52053-024	Micropac	
	4000	42050-244	Micropac	
		42052-244	Micropac	
	10000	42055-2410	Micropac	35
26	4000	42050-264	Micropac	
		42052-264	Micropac	
	8000	42055-2608	Micropac	
28	4000	42050-284	Micropac	
		42052-284	Micropac	40
	8000	42055-2808	Micropac	
30	300	52051-030	Micropac	
	1500	42094-030	Micropac	
	3000	52053-030	Micropac	
	4000	42050-304	Micropac	45
		42052-304	Micropac	
32	4000	42050-324	Micropac	
		42052-324	Micropac	
34	4000	42050-344	Micropac	
		42052-344	Micropac	50
75	10	**TL780-15C**	**Motorola (2926)**	

Fixed, Negative

Output Voltage, V	Output Current (mA)	Device	Source	Line
2	1000	MC7902C	Samsung	
	1500	LAS18A02	Lambda	
		LAS1802	Lambda	
3	100	MC79L03AC	Motorola	55
		MC79L03C	Motorola	
4	100	AN79L04	Panasonic	
	300	AN79N04	Panasonic	
5		**IP1R17A-05**	**IPS (2854, 2857)**	
		IP2R17A-05	**IPS (2854, 2857)**	60
		IP3R17A-05	**IPS (2854, 2857)**	
		IP1R19A-05	**IPS (2854, 2857)**	
		IP2R19A-05	**IPS (2854, 2857)**	
		IP3R19A-05	**IPS (2854, 2857)**	
	100	**MC79L05AC**	**Motorola (2959)**	65
		MC79L05C	**Motorola (2926, 2959)**	
		LM320L05	◊ National	
		LM79L05	National	
		LM79L05A	National	
		AN79L05	Panasonic	70
		MC79L05C	Samsung	
		MC79L05	TI	
		MC79L05A	TI	
	250	LM320ML05	National	
	300	AN79N05	Panasonic	75
	500	μA79M05AC	Fairchild	
		μA79M05M	† Fairchild	
		IP79M05	**IPS (2854)**	
		IP79M05A	**IPS (2854)**	
		IP79M05AC	**IPS (2854)**	80
		IP79M05C	**IPS (2854)**	
		M5F79M05	Mitsubishi	
		MC79M05	**◊ Motorola (2926, 2959)**	
		LM120H5	† National	
		LM320H5	National	85
		LM320MP5	National	
		LM79M05	◊ National	
		MC79M05C	Samsung	
		SG120-05T	† SiliconG	
		SG220-05T	SiliconG	90
		SG320-05T	SiliconG	
		μA79M05C	TI	
		μA79M05M	† TI	
	1000	M5F7905	Mitsubishi	
		μPC7905	NEC	95
		AN7905	Panasonic	
		MC7905C	Samsung	
		SG120-05P	† SiliconG	
		SG220-05P	SiliconG	
		SG320-05P	SiliconG	100
	1500	μA7905C	Fairchild	
		μA7905M	† Fairchild	
		GL7905	**GoldStar (2701)**	
		IP120-5	**† IPS (2854)**	
		IP120A-5	**† IPS (2854)**	105
		IP220-5	**IPS (2854)**	
		IP220A-5	**IPS (2854)**	
		IP320-5	**IPS (2854)**	
		IP320A	**IPS (2854)**	
		IP7905	**† IPS (2854)**	110
		IP7905A	**† IPS (2854)**	
		IP7905AC	**IPS (2854)**	
		IP7905C	**IPS (2854)**	
		LM120-5	† IPS	
		LM220-5	IPS	115
		LM320-5	◊ IPS	
		LAS18A05	Lambda	
		LAS1805	Lambda	
		42095-005	Micropac	
		MC7905C	**Motorola (2926)**	120
		LM120K5	† National	
		LM320K5	National	
		LM320T5	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Voltage Regulators (Cont'd)

Fixed, Negative (Cont'd)

Output Voltage, V	Output Current (mA)	Device	Source	Line
5	1500		(Cont'd)	
		LM7905	National	
		L7905C	SGS	
		SG120-05K	† SiliconG	
		SG220-05K	SiliconG	
		SG220-05R	SiliconG	5
		SG320-05K	SiliconG	
		SG320-05R	SiliconG	
		SG7905A	† SiliconG	
		SG7905C	SiliconG	
		μA7905C	TI	10
		μA7905	Thomson	
		UC7905	**◇† Unitrode (3325)**	
		UC7905A	**◇† Unitrode (3325)**	
		UC7905AC	**◇ Unitrode (3325)**	
		UC7905C	**◇ Unitrode (3325)**	15
	5000	42051-055	Micropac	
5.2		**IP1R17A-5.2**	**IPS (2854, 2857)**	
		IP2R17A-5.2	**IPS (2854, 2857)**	
		IP3R17A-5.2	**IPS (2854, 2857)**	
		IP1R19A-5.2	**IPS (2854, 2857)**	20
		IP2R19A-5.2	**IPS (2854, 2857)**	
		IP3R19A-5.2	**IPS (2854, 2857)**	
	500	SG120-5	† SiliconG	
		SG220-5	SiliconG	
		SG320-5	SiliconG	25
	1500	LAS18A052	◇ Lambda	
		LAS18052	Lambda	
		MC7905	Motorola	
		MC7905.2C	**Motorola (2927)**	
		L7952C	SGS	30
		SG7905	† SiliconG	
	3000	LM145K5	† National	
		LM345K5	National	
5.2	1000	MC7905-2C	Samsung	
6	100	AN79L06	Panasonic	35
	300	AN79N06	Panasonic	
	500	M5F79M06	Mitsubishi	
		MC79M06C	Samsung	
		μA79M06C	TI	
	1000	M5F7906	Mitsubishi	40
		AN7906	Panasonic	
		MC7906C	Samsung	
	1500	LAS18A06	Lambda	
		LAS1806	Lambda	
		MC7906C	**Motorola (2927)**	45
		μA7906C	TI	
	2000	CJSE018	Solitron	
		CJSE020	Solitron	
	5000	42051-065	Micropac	
7	300	AN79N07	Panasonic	50
	500	M5F79M07	Mitsubishi	
	1000	M5F7907	Mitsubishi	
		AN7907	Panasonic	
	5000	42051-075	Micropac	
8	300	AN79N08	Panasonic	55
	500	μA79M08AC	Fairchild	
		μA7908M	† Fairchild	
		M5F79M08	Mitsubishi	
		MC79M08C	Samsung	
		SG120-08T	† SiliconG	60
		SG320-08T	SiliconG	
		μA79M08C	TI	

(Continued)

Output Voltage, V	Output Current (mA)	Device	Source	Line
8			(Cont'd)	
	1000	μA7908C	Fairchild	
		M5F7908	Mitsubishi	
		MC7908C	**Motorola (2927)**	65
		μPC7908	NEC	
		MC7908C	Samsung	
		L7908C	SGS	
		SG120-08K	† SiliconG	
		SG120-08R	† SiliconG	70
		SG320-08K	SiliconG	
		SG320-08P	SiliconG	
		SG320-08R	SiliconG	
		SG7908	† SiliconG	
		SG7908A	† SiliconG	75
		SG7908AC	SiliconG	
		SG7908C	SiliconG	
		μA7908C	TI	
	1500	GL7908	GoldStar	
		LAS18A08	Lambda	80
		LAS1808	Lambda	
	5000	42051-085	Micropac	
9	300	AN79N09	Panasonic	
	500	M5F79M09	Mitsubishi	
	1000	M5F7909	Mitsubishi	85
		AN7909	Panasonic	
	1500	42051-095	Micropac	
10	300	AN79N10	Panasonic	
	500	M5F79M10	Mitsubishi	
		MC79M10	Samsung	90
	1000	M5F7910	Mitsubishi	
		AN7910	Panasonic	
	1500	LAS18A10	Lambda	
		LAS1810	Lambda	
	5000	42051-105	Micropac	95
12		**IP1R17A-12**	**IPS (2854, 2857)**	
		IP2R17A-12	**IPS (2854, 2857)**	
		IP3R17A-12	**IPS (2854, 2857)**	
		IP1R19A-12	**IPS (2854, 2857)**	
		IP2R19A-12	**IPS (2854, 2857)**	100
		IP3R19A-12	**IPS (2854, 2857)**	
	100	**MC79L12AC**	**Motorola (2927, 2959)**	
		MC79L12C	**Motorola (2927, 2959)**	
		LM320L12	National	
		LM79L12	National	105
		LM79L12A	National	
		AN79L12	Panasonic	
		MC79L12C	Samsung	
		MC79L12	TI	
		MC79L12A	TI	110
	200	LM120H12	† National	
		LM320H12	National	
		SG120-12T	† SiliconG	
		SG220-12T	SiliconG	
		SG320-12T	SiliconG	115
	300	52052-012	Micropac	
		AN79N12	Panasonic	
	500	μA79M12AC	Fairchild	
		μA79M12M	† Fairchild	
		IP79M12	**IPS (2854)**	120
		IP79M12A	**IPS (2854)**	
		IP79M12AC	**IPS (2854)**	
		IP79M12C	**IPS (2854)**	
		M5F79M12	Mitsubishi	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Fixed, Negative (Cont'd)

Output Voltage, V	Output Current (mA)	Device	Source	Line
12	500			(Cont'd)
		MC79M12C ◊	**Motorola (2927, 2959)**	
		LM320MP12	National	
		LM79M12 ◊	National	
		MC79M12C	Samsung	
		μA79M12C	TI	5
		μA79M12M †	TI	
	1000	M5F7912	Mitsubishi	
		LM120K12 †	National	
		LM320K12	National	
		LM320T12	National	10
		μPC7912	NEC	
		AN7912	Panasonic	
		MC7912C	Samsung	
		SG120-12P †	SiliconG	
		SG220-12P	SiliconG	15
		SG320-12P	SiliconG	
	1500	μA7912C	Fairchild	
		μA7912M †	Fairchild	
		GL7912	**GoldStar (2701)**	
		IP120-12 †	**IPS (2854)**	20
		IP120A-12 †	**IPS (2854)**	
		IP220-12	**IPS (2854)**	
		IP220A-12	**IPS (2854)**	
		IP320-12	**IPS (2854)**	
		IP320A-12	**IPS (2854)**	25
		IP7912 †	**IPS (2854)**	
		IP7912A †	**IPS (2854)**	
		IP7912AC	**IPS (2854)**	
		IP7912C	**IPS (2854)**	
		LM120-12 †	IPS	30
		LM220-12	IPS	
		LM320-12 ◊	IPS	
		LAS18A12	Lambda	
		LAS1812	Lambda	
		42095-012	Micropac	35
		MC7912AC	Motorola	
		MC7912C	**Motorola (2927)**	
		LM7912	National	
		L7912C	SGS	
		SG120-12K †	SiliconG	40
		SG220-12K	SiliconG	
		SG220-12R	SiliconG	
		SG320-12K	SiliconG	
		SG320-12R	SiliconG	
		SG7912 †	SiliconG	45
		SG7912A †	SiliconG	
		SG7912AC	SiliconG	
		SG7912C	SiliconG	
		μA7912C	TI	
		μA7912	Thomson	50
		UC7912 ◊†	**Unitrode (3325)**	
		UC7912A ◊†	**Unitrode (3325)**	
		UC7912AC ◊	**Unitrode (3325)**	
		UC7912C ◊	**Unitrode (3325)**	
	3000	52054-012	Micropac	55
	4000	42051-124	Micropac	
14	4000	42051-144	Micropac	
15		**IP1R17A-15**	**IPS (2854, 2857)**	
		IP2R17A-15	**IPS (2854, 2857)**	
		IP3R17A-15	**IPS (2854, 2857)**	60
		IP1R19A-15	**IPS (2854, 2857)**	
		IP2R19A-15	**IPS (2854, 2857)**	
		IP3R19A-15	**IPS (2854, 2857)**	

(Continued)

Output Voltage, V	Output Current (mA)	Device	Source	Line
15				(Cont'd)
	100	**MC79L15AC**	**Motorola (2928, 2959)**	
		MC79L15C	**Motorola (2928, 2959)**	65
		LM320L15	National	
		LM79L15	National	
		LM79L15A	National	
		AN79L15	Panasonic	
		MC79L15C	Samsung	70
		MC79L15	TI	
		MC79L15A	TI	
	200	LM120H15 †	National	
		LM320H15	National	
		SG120-15T †	SiliconG	75
		SG220-15T	SiliconG	
		SG320-15T	SiliconG	
	250	LM320ML15	National	
	300	52052-015	Micropac	
		AN79N15	Panasonic	80
	500	μA79M15AC	Fairchild	
		μA79M15M †	Fairchild	
		GL7909	**GoldStar (2701)**	
		IP79M15	**IPS (2854)**	
		IP79M15A	**IPS (2854)**	85
		IP79M15AC	**IPS (2854)**	
		IP79M15C	**IPS (2854)**	
		M5F79M15	Mitsubishi	
		MC79M15C	**Motorola (2928, 2959)**	
		LM320MP15	National	90
		LM79M15 ◊	National	
		MC79M15C	Samsung	
		μA79M15C	TI	
	1000	M5F7915	Mitsubishi	
		MC79L15A	**Motorola (2928, 2959)**	95
		LM120K15 †	National	
		LM320K15	National	
		LM320T15	National	
		μPC7915	NEC	
		AN7915	Panasonic	100
		MC7915C	Samsung	
		SG120-15R †	SiliconG	
		SG220-15R	SiliconG	
		SG320-15R	SiliconG	
	1500	μA7915C	Fairchild	105
		μA7915M †	Fairchild	
		GL7915	**GoldStar (2701)**	
		IP120-15 †	**IPS (2854)**	
		IP120A-15 †	**IPS (2854)**	
		IP220-15	**IPS (2854)**	110
		IP220A-15	**IPS (2854)**	
		IP320-15	**IPS (2854)**	
		IP320A-15	**IPS (2854)**	
		IP7915 †	**IPS (2854)**	
		IP7915A †	**IPS (2854)**	115
		IP7915AC	**IPS (2854)**	
		IP7915C	**IPS (2854)**	
		LM120-15 †	IPS	
		LM220-15	IPS	
		LM320-15 ◊	IPS	120
		LAS18A15	Lambda	
		LAS1815	Lambda	
		42095-015	Micropac	
		MC7915AC	**Motorola (2928)**	
		MC7915C	**Motorola (2928)**	125

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Voltage Regulators (Cont'd)

Fixed, Negative (Cont'd)

Output Voltage, V	Output Current (mA)	Device	Source	Line
15	1500		(Cont'd)	
		LM120-15	‡ National	
		LM7915	National	
		L7915C	SGS	
		SG120-15K	† SiliconG	
		SG220-15K	SiliconG	5
		SG220-15P	SiliconG	
		SG320-15K	SiliconG	
		SG320-15P	SiliconG	
		SG7915	† SiliconG	
		SG7915A	† SiliconG	10
		SG7915AC	SiliconG	
		SG7915C	SiliconG	
		μA7915C	TI	
		μA7915	Thomson	
		UC7915	**◇† Unitrode (3325)**	15
		UC7915A	**◇† Unitrode (3325)**	
		UC7915AC	**◇ Unitrode (3325)**	
		UC7915C	**◇ Unitrode (3325)**	
	2000	42051-154	Micropac	
		CJSE002	Solitron	20
		CJSE004	Solitron	
		CJSE006	Solitron	
	3000	52054-015	Micropac	
16	4000	42051-164	Micropac	
18	100	**MC79L18C**	**Motorola (2928)**	25
		AN79L18	Panasonic	
	300	52052-018	Micropac	
		AN79N18	Panasonic	
	500	M5F79M18	Mitsubishi	
		MC79M18	Samsung	30
		SG120-18T	† SiliconG	
		SG320-18T	SiliconG	
	1000	M5F7918	Mitsubishi	
		μPC7918	NEC	
		AN7918	Panasonic	35
		MC7918C	Samsung	
	1500	LAS18A18	Lambda	
		LAS1818	Lambda	
		42095-018	Micropac	
		MC79L18AC	**Motorola (2928)**	40
		MC7918C	**Motorola (2928)**	
		L7918C	SGS	
		SG120-18K	† SiliconG	
		SG120-18R	† SiliconG	
		SG320-18K	SiliconG	45
		SG320-18P	SiliconG	
		SG320-18R	SiliconG	
		SG7918	† SiliconG	
		SG7918A	† SiliconG	
		SG7918AC	SiliconG	50
		SG7918C	SiliconG	
		μA7918C	TI	
	3000	52054-018	Micropac	
	4000	42051-184	Micropac	
20	100	AN79L20	Panasonic	55
	300	AN79N20	Panasonic	
	500	M5F79M20	Mitsubishi	
		SG120-20T	† SiliconG	
		μA79M20C	TI	
	1000	M5F7920	Mitsubishi	60
		AN7920	Panasonic	

(Continued)

Output Voltage, V	Output Current (mA)	Device	Source	Line
20			(Cont'd)	
	1500	LAS18A20	Lambda	
		LAS1820	Lambda	
		L7920C	SGS	
		SG120-20K	† SiliconG	65
		SG120-20R	† SiliconG	
		SG7920	† SiliconG	
		SG7920A	† SiliconG	
		SG7920AC	SiliconG	
		SG7920C	SiliconG	70
	2000	CJSE010	Solitron	
		CJSE012	Solitron	
		CJSE014	Solitron	
	3000	42051-204	Micropac	
22	3000	42051-223	Micropac	75
24	100	MC79L24AC	Motorola	
		MC79L24C	**Motorola (2928)**	
		AN79L24	Panasonic	
	300	52052-024	Micropac	
		AN79N24	Panasonic	80
	500	M5F79M24	Mitsubishi	
		MC79M24C	Samsung	
		μA79M24C	TI	
	1000	M5F7924	Mitsubishi	
		μPC7924	NEC	85
		AN7924	Panasonic	
		MC7924C	Samsung	
	1500	**GL7924**	**◇ GoldStar (2701)**	
		LAS18A24	Lambda	
		LAS1824	Lambda	90
		42095-024	Micropac	
		MC7924C	**◇ Motorola (2928)**	
		L7924C	SGS	
		μA7924C	TI	
	3000	42051-243	Micropac	95
		52054-024	Micropac	
26	3000	42051-263	Micropac	
28	3000	42051-283	Micropac	
30	300	52052-030	Micropac	
	1500	42095-030	Micropac	100
	3000	42051-303	Micropac	
		52054-030	Micropac	
32	3000	42051-323	Micropac	
36	3000	42051-363	Micropac	

Fixed, Dual

Output Voltage, V	Output Current (mA)	Device	Source	Line
+5, +5	750,10	LM2935	National	105
		LM2935	SGS	
	1000,50	LT1005C	LinearTech	
		LT1005M	LinearTech	
	3000,75	LT1035	LinearTech	
±6	5000	42051	Micropac	110
±12	100	LM126	† National	
		LM326	National	
±15	100	XR1468	Exar	
		XR1568	† Exar	
		XR4195	◇ Exar	115
		MC1468	**Motorola (2931)**	
		MC1568	**† Motorola (2931)**	
		LM125	† National	
		LM325	National	
		RC4195	Raytheon	120
		RM4195	† Raytheon	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Output Voltage, V	Output Current (mA)	Device	Source	Line
Fixed, Dual			**(Cont'd)**	
±15	100		(Cont'd)	
		SG1468	SiliconG	
		SG1568	† SiliconG	
		SG4501	SiliconG	
	200	SG1501A	† SiliconG	
		SG2501A	SiliconG	
		SG3501A	SiliconG	5
12,5	3000,75	LT1036C	LinearTech	
		LT1036M	† LinearTech	
Adjustable, Positive				
7	3000	**IP3R07**	**IPS (2854, 2857)**	
		IP3R07A	**IPS (2854, 2857)**	10
16	1.3 40	**ICL7663**	◊ **GE/Intersil (2675)**	
	1.5 40	ICL7663	◊ Maxim	
	2 40	ICL7663A	Maxim	
		MAX663	Maxim	
	4 8000	LAS39U	Lambda	15
20	1.2 10000	LM196	◊ National	
		LM396	National	
	2 20	SFC2300	Thomson	
24	3 150	LM2931	National	
26	1.8 12	**CA3085**	**† GE/RCA (2650)**	20
27	0 200	LH0075	◊† National	
		LH0075C	National	
30	2 20	LM100	† GE/Intersil	
		SFC2100	† Thomson	
		SFC2200	Thomson	25
	3 Shunt	TL430C	TI	
	1000	μPC317	NEC	
	1800	L200	SGS	
	4 1500	LAS15U	◊ Lambda	
	2000	LAS16U	◊ Lambda	30
	3000	LAS14AU	◊ Lambda	
	5000	LAS19U	◊ Lambda	
	4.5 12	μA305C	Fairchild	
		LM305	GE/Intersil	
		LM305	National	35
		μPC305	NEC	
		SG305	SiliconG	
	5 500	μA78MGC	Fairchild	
	1000	μA78GC	Fairchild	
	5000	μ78HG	Fairchild	40
32	1.2 100	TL317	TI	
	1000	LT1038C	LinearTech	
		LT1038M	† LinearTech	
	3000	μA150	† Fairchild	
		μA250	Fairchild	45
		μA350	Fairchild	
		IP150	**† IPS (2854)**	
		IP150A	**† IPS (2854)**	
		IP250	**IPS (2854)**	
		IP250A	**IPS (2854)**	50
		IP350	**IPS (2854)**	
		IP350A	**IPS (2854)**	
		LM150	† IPS	
		LM250	IPS	
		LM350	IPS	55
		LLM350	Lambda	
		LM150	† LinearTech	
		LM150A	† LinearTech	

(Continued)

Output Voltage Hi	Low	Output Current (mA)	Device	Source	Line
32	1.2	3000		(Cont'd)	
			LM350	LinearTech	
			LM350A	LinearTech	60
			LT150A	† LinearTech	
			LT350A	LinearTech	
			LM150	**◊† Motorola (2929)**	
			LM250	**Motorola (2929)**	
			LM350	**Motorola (2929)**	65
			LM150	† National	
			LM250	National	
			LM350	National	
			SG150	† SiliconG	
			SG150A	SiliconG	70
			SG250	◊ SiliconG	
			SG250A	◊ SiliconG	
			SG350	SiliconG	
			SG350A	SiliconG	
			UC150	**† Unitrode (3325)**	75
			UC250	**Unitrode (3325)**	
			UC350	**Unitrode (3325)**	
		5000	μA138	† Fairchild	
			μA238	Fairchild	
			μA338	Fairchild	80
			IP138	**† IPS (2854)**	
			IP138A	**† IPS (2854)**	
			IP238	**IPS (2854)**	
			IP238A	**IPS (2854)**	
			IP338	**◊ IPS (2854)**	85
			IP338A	**◊ IPS (2854)**	
			LM138	† IPS	
			LM238	IPS	
			LM338	IPS	
			LLM338	Lambda	90
			LM138	† LinearTech	
			LM338	LinearTech	
			LT138A	† LinearTech	
			LT338A	LinearTech	
			LM138	† National	95
			LM238	National	
			LM338	National	
			SG138	† SiliconG	
			SG138A	† SiliconG	
			SG238	SiliconG	100
			SG238A	SiliconG	
			SG338	SiliconG	
			SG338A	SiliconG	
36	1.7	100	**CA3085A**	**† GE/RCA (2650)**	
	2.5	100	μA431AC	Fairchild	105
			TL431C	**Motorola (2960)**	
			TL431M	**† Motorola (2960)**	
			TL431C	TI	
			TL431M	† TI	
	2.85	2000	TDA200	Thomson	110
37	1.2	100	**LM117L**	**† Motorola (2929)**	
			LM217L	**Motorola (2929)**	
			LM317L	**Motorola (2929)**	
			LM317L	National	
		500	SG117	† SiliconG	115
			SG217	SiliconG	
			SG217A	SiliconG	
			SG317	SiliconG	
			SG317A	SiliconG	
		1000	M5N317L	Mitsubishi	120
		1500	μA117M	◊† Fairchild	
			μA317C	Fairchild	
			GL317	**GoldStar (2701)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Voltage Regulators (Cont'd)

Adjustable, Positive (Cont'd)

Output Voltage Hi	Low	Output Current (mA)	Device	Source	Line
37	1.2	1500		(Cont'd)	
			IP117	**† IPS (2854)**	
			IP117A	**† IPS (2854)**	
			IP217	**IPS (2854)**	
			IP217A	**IPS (2854)**	
			IP317	**IPS (2854)**	5
			IP317A	**IPS (2854)**	
			LM117	† IPS	
			LM217	IPS	
			LM317	◊ IPS	
			LLM317	Lambda	10
			LM117	† LinearTech	
			LM317	LinearTech	
			LT117A	† LinearTech	
			LT317A	LinearTech	
			MCELM117	MCE	15
			MCELM217	MCE	
			MCELM317	MCE	
			LM117	**† Motorola (2929)**	
			LM217	**Motorola (2929)**	
			LM317	**Motorola (2929)**	20
			LM117	‡ National	
			LM217	National	
			LM317	National	
			LM117	† SGS	
			LM217	SGS	25
			LM317	SGS	
			SG117	† SiliconG	
			SG117A	SiliconG	
			SG217	SiliconG	
			SG217A	SiliconG	30
			SG317	SiliconG	
			SG317A	SiliconG	
			LM217	TI	
			LM317	TI	
			LM117	◊† Thomson	35
			LM317	† Thomson	
			UC117	**† Unitrode (3325)**	
			UC217	**Unitrode (3325)**	
			UC317	**Unitrode (3325)**	
		3000	**IP1R07A**	**IPS (2854)**	40
			IP2R07A	**IPS (2854)**	
	2	150	µA723C	Fairchild	
			µA723M	† Fairchild	
			µA723	GE/Intersil	
			CA723	**† GE/RCA (2650)**	45
			CA723C	**GE/RCA (2650)**	
			LM723	**† GE/RCA (2650)**	
			LM723C	**GE/RCA (2650)**	
			HA17723	Hitachi	
			MC1723	**† Motorola (2929, 2958)**	50
			MC1723C	**Motorola (2929, 2958)**	
			LM723	◊‡ National	
			LM723C	◊ National	
			LM723	† Samsung	
			LM723	◊† SGS	55
			LM723C	SGS	
			µA723	† Signetics	
			µA723C	Signetics	
			SA723C	Signetics	
			SG723	† SiliconG	60
			SG723C	SiliconG	
			µA723	◊ TI	

(Continued)

Output Voltage Hi	Low	Output Current (mA)	Device	Source	Line
37	2	150		(Cont'd)	
			µA723C	◊ TI	
			µA723M	◊† TI	
			SFC2723C	† Thomson	65
			SFC2723EC	Thomson	
	2.5	250	**LM317M**	**Motorola (2929)**	
	5	25	µA376C	◊ Fairchild	
			LM376	National	
38	2	100	SG3532	SiliconG	70
		150	LAS1000	Lambda	
			LAS723	◊ Lambda	
40	4.5	12	µA105M	◊† Fairchild	
			LM105	‡ National	
			LM205	◊ National	75
			SG105	† SiliconG	
			SG205	SiliconG	
			LM105	† Thomson	
			LM205	Thomson	
		45	µA305AC	Fairchild	80
			LM305A	National	
			SG305A	SiliconG	
			LM305	Thomson	
46	1.7	100	**CA3085B**	**† GE/RCA (2650)**	
48	2	100	SG1532	† SiliconG	85
			SG2532	SiliconG	
		150	LAS1100	Lambda	
			LAS723B	◊ Lambda	
56	8	1000	CJCA001	Solitron	
			CJCA007	Solitron	90
57	1.2	500	LM117HV	† LinearTech	
			LM317HV	LinearTech	
			LT317AHV	LinearTech	
		1500	**IP117AHV**	**† IPS (2854)**	
			IP117HV	**† IPS (2854)**	95
			IP217AHV	**IPS (2854)**	
			IP217HV	**IPS (2854)**	
			IP317AHV	**IPS (2854)**	
			IP317HV	**IPS (2854)**	
			LM117HV	† IPS	100
			LM217HV	IPS	
			LM317HV	◊ IPS	
			LM117AHV	† LinearTech	
			LM317AHV	LinearTech	
			LT117AHV	† LinearTech	105
			LM117HV	‡ National	
			SG117HV	† SiliconG	
77	2	150	TDB1146	Thomson	
125	1.25	700	TL783C	TI	
1000	0	100	**MC1466**	**Motorola (2931)**	110
			MC1566	**† Motorola (2931)**	

Adjustable, Negative

15	1.25	10000	MLM196N	† Micropac	
			MLM396N	◊ Micropac	
16	1.3	40	ICL7664	GE/Intersil	
	2	40	ICL7664	◊ Maxim	115
			MAX664	Maxim	
24	2.2	5000	µA79HG	Fairchild	
27	0	200	LH0076	◊† National	
			LH0076C	National	
30	0.035	20	LM304	National	120
			SG304	SiliconG	
			LM304	Thomson	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

IS THIS A BORROWED COPY?

Avoid the hassle and order your own personal two-volume set of IC MASTER. It's the surest way to simplify your IC selection efforts.

Only IC MASTER allows you to examine and compare the specifications, relative strengths, and weaknesses of all devices in serious contention for your application. And only IC MASTER brings you actual manufacturers' data sheets, allowing you to make complete and definitive device selections.

You can order IC MASTER simply by charging it to your VISA or MasterCard credit card. To place your order call Marie Botta at (516) 227-1314.

Adjustable, Negative (Cont'd)

Output Voltage Hi	Low	Output Current (mA)	Device	Source	Line
30				(Cont'd)	
	2.2	500	μA79MGC	Fairchild	
		1000	μA79GC	Fairchild	
	2.6	5	LAS79HG	Lambda	
		1500	LAS18U	◊ Lambda	
		5000	LAS79HG	Laserpath	5
32	1.0	3000	LT1033C	LinearTech	
			LT1033M	† LinearTech	
	1.2	3000	LM333	National	
37	1.2	500	**LM337M**	**Motorola (2929)**	
		1000	M5N337L	Mitsubishi	10
		1500	**IP137**	**† IPS (2854)**	
			IP137A	**† IPS (2854)**	
			IP237	**IPS (2854)**	
			IP237A	**IPS (2854)**	
			IP337	**◊ IPS (2854)**	15
			IP337A	**◊ IPS (2854)**	
			LM137	† IPS	
			LM237	IPS	
			LM337	IPS	
			LM137	† LinearTech	20
			LM337	LinearTech	
			LT137A	† LinearTech	
			LT337A	LinearTech	
			MCELM137	MCE	
			MCELM237	MCE	25
			MCELM337	MCE	
			LM137	**◊† Motorola (2929)**	
			LM237	**Motorola (2929)**	
			LM337	**Motorola (2929)**	
			LM137	‡ National	30
			LM237	National	
			LM337	National	
			LT137A	◊† National	
			LT337A	National	
			SG137	† SiliconG	35
			SG137A	† SiliconG	
			SG237	SiliconG	
			SG237A	SiliconG	
			SG337	SiliconG	
			SG337A	SiliconG	40
			LM337	TI	
			LM137	† Thomson	
			LM337	Thomson	
			UC137	**† Unitrode (3325)**	
			UC237	**Unitrode (3325)**	
			UC337	**◊ Unitrode (3325)**	45
40	0.015	20	LM104	‡ National	
			LM204	◊ National	
			SG104	† SiliconG	
			SG204	SiliconG	
			SG304	SiliconG	50
			LM104	† Thomson	
			LM204	Thomson	
47	1.2	500	LM137HV	† LinearTech	
			LM337HV	LinearTech	55
			LT137AHV	† LinearTech	
			LT337AHV	LinearTech	
		1500	**IP137AHV**	**† IPS (2854)**	
			IP137HV	**† IPS (2854)**	
			IP237AHV	**IPS (2854)**	
			IP237HV	**IPS (2854)**	60
			IP337AHV	**◊ IPS (2854)**	
			IP337HV	**◊ IPS (2854)**	

(Continued)

Output Voltage Hi	Low	Output Current (mA)	Device	Source	Line
47	1.2	1500		(Cont'd)	
			LM137HV	† IPS	
			LM237HV	IPS	65
			LM337HV	IPS	
			LM137HV	† LinearTech	
			LM337HV	LinearTech	
			LT137AHV	† LinearTech	
			LT337AHV	LinearTech	70
			LM237HV	National	
			LM337HV	National	
			SG237HV	SiliconG	
			SG337HV	SiliconG	
56	8	1000	CJCA002	Solitron	75
			CJCA008	Solitron	
57	1.2	100	LM337L	National	
		1500	LM137	‡ National	
			LM237	National	
			LM337	National	80
			LM137	† Thomson	
			LM337	Thomson	
			UC137	**† Unitrode (3325)**	
			UC237	**Unitrode (3325)**	
			UC337	**◊ Unitrode (3325)**	85

Adjustable, Dual

± 15.5	± 14.5	100	**MC1468**	**Motorola (2931)**	
			MC1568	**† Motorola (2931)**	
± 20	± 8	100	**MC1468**	**Motorola (2931)**	
			MC1568	**† Motorola (2931)**	
			SG1468	SiliconG	90
			SG1568	† SiliconG	
	± 14.5	100	SG1468T	SiliconG	
			SG1568T	† SiliconG	
± 28	± 10	100	SG1502	† SiliconG	
			SG2502	SiliconG	95
			SG3502	SiliconG	
			SG4501	SiliconG	
± 42	± 0.01	100	XR4194M	† Exar	
		200	MCE4194	MCE	
			RC4194	Raytheon	100
			RM4194	† Raytheon	

Switching Regulators

PWM Controller, Current Mode		UC1842	Signetics	
		UC2842	Signetics	
		UC3842C	Signetics	
Regulating PWM		IP1P12	IPS	105
		IP1P125	**IPS (2854, 2856)**	
		IP2P125	**IPS (2856)**	
		IP3P125	**IPS (2854, 2856)**	
		IP5568	**IPS (2854)**	
SMPS Control		IPSP01	IPS	110
		IP1P00	**IPS (2854, 2856)**	
		IP1P01	**IPS (2854, 2856)**	
		IP1060A	IPS	
		IP1060B	IPS	
		IP2P00	**IPS (2856)**	115
		IP2P01	**IPS (2856)**	
		IP3P00	**IPS (2854, 2856)**	
		IP3P01	**IPS (2854)**	
Switching Regulator Circuit		Si9110	Siliconix	
		Si9111	Siliconix	120
Switching Regulator Circuit (with on-board MOSFET)		Si9101	Siliconix	
		Si9102	Siliconix	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Voltage Regulators (Cont'd)

Switching Regulators (Cont'd)

Output Voltage Hi	Low	Output Current (mA)	Device	Source	Line
Switching Regulator Circuit (150 mA)			**RC4190**	**Raytheon (2983)**	
			RM4190	**Raytheon (2983)**	
Switching Regulator Circuits			CS1524	Cherry	
			CS1524A	† Cherry	
			CS1525A	Cherry	5
			CS1527A	Cherry	
			CS1842A	Cherry	
			CS1843A	Cherry	
			CS2524	Cherry	
			CS2524A	Cherry	10
			CS2525A	Cherry	
			CS2527A	Cherry	
			CS2842A	Cherry	
			CS2843A	Cherry	
			CS3524	Cherry	15
			CS3524A	Cherry	
			CS3525A	Cherry	
			CS3527A	Cherry	
			CS3843A	Cherry	
			CS5560N	◊ Cherry	20
			CS5560S	◊ Cherry	
			CS5561N	Cherry	
			CS5561S	Cherry	
			CS593C	◊ Cherry	
			CS594C	Cherry	25
			CS594M	† Cherry	
			CS595C	Cherry	
			XR1524	† Exar	
			XR1525A	**† Exar (2607)**	
			XR1527A	**† Exar (2607)**	30
			XR2230	◊ Exar	
			XR2235	Exar	
			XR2524	◊ Exar	
			XR2525A	**Exar (2607)**	
			XR2527A	**Exar (2607)**	35
			XR3524	◊ Exar	
			XR3525A	**Exar (2607)**	
			XR3527A	**Exar (2607)**	
			XR494	◊ Exar	
			XR495	◊ Exar	40
			μA494C	Fairchild	
			μA494M	† Fairchild	
			μA78S40C	◊ Fairchild	
			μA78S40M	◊† Fairchild	
			SH1605A	Fairchild	45
			ZN1060E	† Ferranti	
			ZN1066E	Ferranti	
			ZN1066J	† Ferranti	
			MB3759	Fujitsu	
			MB3760	Fujitsu	50
			CA1523	**◊ GE/RCA (2650)**	
			CA1524	**◊† GE/RCA (2650)**	
			CA2524	**GE/RCA (2650)**	
			CA3524	**GE/RCA (2650)**	
			GL494	**GoldStar (2701)**	55
			HA16654	Hitachi	
			HA17524	Hitachi	
			IP1D03	**IPS (2855)**	
			IP1524	**† IPS (2854)**	
			IP1524B	**† IPS (2854)**	60
			IP1525A	**† IPS (2854)**	
			IP1526	**† IPS (2854, 2856)**	
			IP1526A	**† IPS (2854, 2856)**	
			IP1527A	**IPS (2854)**	

(Continued)

Output Voltage Hi	Low	Output Current (mA)	Device	Source	Line
Switching Regulator Circuits					(Cont'd)
			IP1842	**† IPS (2854, 2856)**	65
			IP1843	**† IPS (2854)**	
			IP1844	**IPS (2854)**	
			IP1845	**IPS (2854, 2856)**	
			IP2524	IPS	
			IP2524B	IPS	70
			IP2525A	IPS	
			IP2526	**IPS (2856)**	
			IP2526A	**IPS (2856)**	
			IP2527A	IPS	
			IP2842	**◊ IPS (2856)**	75
			IP2843	**◊ IPS (2856)**	
			IP2844	**IPS (2856)**	
			IP2845	**IPS (2856)**	
			IP33063	IPS	
			IP34060A	**◊ IPS (2854)**	80
			IP34063	**◊ IPS (2854)**	
			IP35060A	**IPS (2854)**	
			IP35063	**IPS (2854)**	
			IP3524	**◊ IPS (2854)**	
			IP3524B	**IPS (2854)**	85
			IP3525A	**◊ IPS (2854)**	
			IP3526	**◊ IPS (2854, 2856)**	
			IP3526A	**◊ IPS (2854, 2856)**	
			IP3527A	**◊ IPS (2854)**	
			IP3842	**IPS (2854, 2856)**	90
			IP3843	**IPS (2854, 2856)**	
			IP3844	**IPS (2854, 2856)**	
			IP3845	**IPS (2854, 2856)**	
			IP494A	**IPS (2854)**	
			IP494AC	**◊ IPS (2854)**	95
			IP5560	**◊ IPS (2854)**	
			IP5560C	**IPS (2854)**	
			IP5561	**◊ IPS (2854)**	
			IP5561C	**IPS (2854)**	
			TDA1060	IPS	100
			LAS3800	◊ Lambda	
			LAS3840	Lambda	
			LAS4082	Lambda	
			LAS6300L	Lambda	
			LAS6320	Lambda	105
			LAS6330A	Lambda	
			LAS6331A	Lambda	
			LAS6350	Lambda	
			LAS6351	Lambda	
			LAS6380	Lambda	110
			LAS6381	Lambda	
			LT1524	† LinearTech	
			LT1525A	† LinearTech	
			LT1526	† LinearTech	
			LT1527A	† LinearTech	115
			LT3524	LinearTech	
			LT3525A	LinearTech	
			LT3526	LinearTech	
			LT3527A	LinearTech	
			SG1524	† LinearTech	120
			SG1525A	LinearTech	
			SG1527A	LinearTech	
			SG3524	LinearTech	
			SG3525A	LinearTech	
			SG3527A	LinearTech	125
			UC1846	† LinearTech	
			UC1847	† LinearTech	
			UC3846	LinearTech	
			UC3847	LinearTech	
			MAX4193	Maxim	130

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Switching Regulators (Cont'd)

Switching Regulator Circuits

Output Voltage Hi	Output Voltage Low	Output Current (mA)	Device	Source	Line
				(Cont'd)	
			MAX4391	Maxim	
			MAX630	Maxim	
			MAX634	Maxim	
			M5T494	Mitsubishi	
			μA78S40	**Motorola (2930)**	5
			MC33063	**◊ Motorola (2930)**	
			MC34060	**Motorola (2930, 2960)**	
			MC34063	**Motorola (2930, 2960)**	
			MC34129	**Motorola (2930, 2945, 2960)**	
			MC3420	Motorola	10
			MC35060	**Motorola (2930)**	
			MC35063	**† Motorola (2930)**	
			MC3520	† Motorola	
			SG1525A	**† Motorola (2931)**	
			SG1526	**Motorola (2931)**	15
			SG1527A	**† Motorola (2931)**	
			SG2525A	**Motorola (2931)**	
			SG2526	**Motorola (2931)**	
			SG2527A	**Motorola (2931)**	
			SG3525A	**Motorola (2931)**	20
			SG3526	**Motorola (2931)**	
			SG3527A	**Motorola (2931)**	
			TL494C	**Motorola (2931)**	
			TL494M	**† Motorola (2931)**	
			LH1605	† National	25
			LH1605C	National	
			LM1524	† National	
			LM1578	† National	
			LM2524	National	
			LM3524	National	30
			LM3578	National	
			μPC1042	NEC	
			μPC494	† NEC	
			RC4191	Raytheon	
			RC4192	Raytheon	35
			RC4193	Raytheon	
			RC4391	Raytheon	
			RM4191	† Raytheon	
			RM4192	† Raytheon	
			RM4193	Raytheon	40
			RM4391	Raytheon	
			RL3525A	RIFA	
			RL3846	RIFA	
			μA78S40	Samsung	
			L296	SGS	45
			L296P	SGS	
			L4960	SGS	
			L4962	SGS	
			L4964	SGS	
			SG1524A	SGS	50
			SG1525A	† SGS	
			SG1527A	SGS	
			SG2524	SGS	
			SG2524A	SGS	
			SG2525A	SGS	55
			SG2527A	SGS	
			SG3525A	SGS	
			SG3527A	SGS	
			UC1840	SGS	
			UC2840	SGS	60
			UC3840	SGS	

(Continued)

Switching Regulator Circuits

Output Voltage Hi	Output Voltage Low	Output Current (mA)	Device	Source	Line
				(Cont'd)	
			UD1524A	SGS	
			IR3M01	Sharp	
			IR3M02	Sharp	
			IR3M02A/N	Sharp	65
			IR9494	Sharp	
			TDA4600-2	Siemens	
			TDA4601	Siemens	
			TDA4700A	◊ Siemens	
			TDA4718A	◊ Siemens	70
			NE5560	**Signetics (3129)**	
			NE5561	**Signetics (3130)**	
			NE5562	**Signetics (3131)**	
			NE5568	**Signetics (3133)**	
			SE5560	† Signetics	75
			SE5561	† Signetics	
			SE5562	Signetics	
			SG3524	Signetics	
			SG1524	◊† SiliconG	
			SG1524B	SiliconG	80
			SG1525A	† SiliconG	
			SG1526	◊† SiliconG	
			SG1526A	SiliconG	
			SG1527A	† SiliconG	
			SG2524	◊ SiliconG	85
			SG2524B	SiliconG	
			SG2525A	SiliconG	
			SG2526	◊ SiliconG	
			SG2526A	SiliconG	
			SG2527A	SiliconG	90
			SG3524	◊ SiliconG	
			SG3524B	SiliconG	
			SG3525A	SiliconG	
			SG3526	◊ SiliconG	
			SG3526A	SiliconG	95
			SG3527A	SiliconG	
			SM600	SiliconG	
			SM601	SiliconG	
			SM602	SiliconG	
			SM610	SiliconG	100
			SM611	SiliconG	
			SM612	SiliconG	
			PWM125A	◊† Siliconix	
			PWM125C	◊ Siliconix	
			PWM127A	◊† Siliconix	105
			PWM127C	◊ Siliconix	
			PWM25A	† Siliconix	
			PWM25C	Siliconix	
			PWM27A	† Siliconix	
			PWM27C	Siliconix	110
			SI9100	Siliconix	
			TL493C	TI	
			TL494C	TI	
			TL494M	† TI	
			TL495C	TI	115
			TL497AC	TI	
			TL594C	TI	
			TL595C	TI	
			TEA1001	Thomson	
			TEA2018	Thomson	120
			TEA2019	Thomson	
			UAA4001	Thomson	
			UAA4003	Thomson	
			UAA4006	Thomson	
			L296	**Unitrode (3323)**	125
			PIC600	Unitrode	
			PIC601	Unitrode	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR–Voltage Regulators (Cont'd)

Switching Regulators (Cont'd)

Output Voltage Hi	Low	Output Current (mA)	Device	Source	Line
Switching Regulator Circuits				(Cont'd)	
			PIC602	Unitrode	
			PIC610	Unitrode	
			PIC611	Unitrode	
			PIC612	Unitrode	
			PIC625	Unitrode	5
			PIC626	Unitrode	
			PIC627	Unitrode	
			PIC635	Unitrode	
			PIC636	Unitrode	
			PIC637	Unitrode	10
			PIC645	Unitrode	
			PIC646	Unitrode	
			PIC647	Unitrode	
			PIC655	Unitrode	
			PIC656	Unitrode	15
			PIC657	Unitrode	
			PIC660	Unitrode	
			PIC661	Unitrode	
			PIC662	Unitrode	
			PIC670	Unitrode	20
			PIC671	Unitrode	
			PIC672	Unitrode	
			PIC730	Unitrode	
			PIC740	◊ Unitrode	
			PIC800	Unitrode	25
			PIC801	Unitrode	
			PIC810	Unitrode	
			PIC811	Unitrode	
			UC1524	**Unitrode (3323)**	
			UC1524/883B	**† Unitrode (3323)**	30
			UC1524A	**Unitrode (3323)**	
			UC1524A/883B	**† Unitrode (3323)**	
			UC1525A	**Unitrode (3323)**	
			UC1525A/883B	**† Unitrode (3323)**	
			UC1526/883B	**† Unitrode (3323)**	35
			UC1526A	**Unitrode (3323)**	
			UC1527A	**Unitrode (3323)**	
			UC1527A/883B	**† Unitrode (3323)**	
			UC1535	Unitrode	
			UC1840	**Unitrode (3323)**	40
			UC1840/883B	**† Unitrode (3323)**	
			UC1842/883B	**† Unitrode (3323)**	
			UC2524	**Unitrode (3323)**	
			UC2524A	**Unitrode (3323)**	
			UC2525A	**Unitrode (3323)**	45
			UC2526A	**Unitrode (3323)**	
			UC2527A	**Unitrode (3323)**	
			UC2840	**Unitrode (3323)**	
			UC3524	**Unitrode (3323)**	
			UC3524A	**Unitrode (3323)**	50
			UC3525A	**Unitrode (3323)**	
			UC3526A	**Unitrode (3323)**	
			UC3527A	**Unitrode (3323)**	
			UC3840	**Unitrode (3323)**	
			UC493A	**† Unitrode (3323)**	55
			UC493AC	**Unitrode (3323)**	
			UC494A	**† Unitrode (3323)**	
			UC494AC	**Unitrode (3323)**	
			UC495	**Unitrode (3323)**	
			UC495A	**† Unitrode (3323)**	60
			UC495AC	**Unitrode (3323)**	
			UC495B	**† Unitrode (3323)**	
			UC495BC	**Unitrode (3323)**	

Output Voltage Hi	Low	Output Current (mA)	Device	Source	Line
Switching Regulator, 1 A			**MC33129**	**Motorola (2930)**	
			UC1842A	**† Motorola (2930)**	65
			UC1843A	**† Motorola (2930)**	
			UC2842A	**◊ Motorola (2930)**	
			UC2843A	**◊ Motorola (2930)**	
			UC3842A	**Motorola (2930, 2960)**	
			UC3843A	**Motorola (2930, 2960)**	70
Switching Regulator, 2.5 A			LT1071C	LinearTech	
			LT1071M	† LinearTech	
Switching Regulator, 5 A			LT1070C	LinearTech	
			LT1070M	† LinearTech	
Switching Regulator, 5A			LT1070M	TI	75

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Microprocessor Power Supply System Voltage Regulator	LM2984C	National	
AC Detector (Detects presence or absence of a/c signals, includes adjustable threshold and time delay.)	3050	Intech	
AC, Line Current Consumption Circuit for Switch Mode Power Supplies	TDA4814	Siemens	
AC Phase Control	TEA1007	Telefunken	
	U211B	Telefunken	5
AC Phase Control. See also SCR this section	TEA1087	Telefunken	
	U111	Telefunken	
Active Filter, Adaptive High-Pass	LF581	Gennum	
Active Filter, Mask Programmable	U3408M	Telefunken	
Active Filter, Resistor Programmable	FLJ-R	Datel	10
	FLJ-R3	Datel	
	FLJ-R8	Datel	
	FLJ-VR	Datel	
	RU5621	**EG&G-Reticon (2590)**	
	RU5622	**EG&G-Reticon (2590)**	15
Active Filter, Voltage Programmable	FLJ-VB	Datel	
	FLJ-VH	Datel	
	FLJ-VL	Datel	
Active Filters	**RU5620**	**EG&G-Reticon (2590)**	
Active Filters (See also Linear - Telecommunications Circuits)	UAF11	Burr-Brown	20
	UAF11H	† Burr-Brown	
	UAF21	◊ **Burr-Brown (2540)**	
	UAF21H	◊† **Burr-Brown (2540)**	
	UAF31	◊ Burr-Brown	
	UAF41	◊ **Burr-Brown (2540)**	25
	CH1290	Cermetek	
	CH1295	◊ Cermetek	
	CH1296	◊ Cermetek	
	FLTU2	◊ **Datel (2577)**	
	RU5621	**EG&G-Reticon (2590)**	30
	RU5622	**EG&G-Reticon (2590)**	
	LTC1059C	LinearTech	
	LTC1059M	† LinearTech	
	LTC1060C	LinearTech	
	LTC1061C	LinearTech	35
	LTC1061M	† LinearTech	
	LTC1062C	LinearTech	
	LTC1062M	† LinearTech	
	MF10	◊ Maxim	
	AF100	† National	40
	AF150	National	
	AF151	National	
Air Flow Sensor	SG3509	SiliconG	
Air-Core Meter Driver	LM1819	National	
Alarm Circuits, Temperature	3030	Intech	45
Alarm Circuits, Tone Alarm (Comparator with AC output)	3010	Intech	
Alarm Circuits, Tri-state Alert/Alarm (LED Driver)	3020	Intech	
Analog Delay Line (bucket brigade device, 1024 samples)	**RD5108**	◊ **EG&G-Reticon (2590)**	
Analog Delay Line (bucket brigade device, 256 samples)	**RD5106**	◊ **EG&G-Reticon (2590)**	
Analog Delay Line (bucket brigade device, 512 samples)	**RD5107**	◊ **EG&G-Reticon (2590)**	50
Analog Multiplier, Quad.	AH5890	OEI	
Analog Shift Register (Bucket Brigade Device) Dual 512 stage, acts as a variable delay line in the audio frequency range)	MN3001	Panasonic	
	MN3003	Panasonic	
	MN3010	Panasonic	
Analog Shift Register (Bucket Brigade Device, 1024 stage)	MN3007	Panasonic	55
	MN3204	Panasonic	
	MN3207	Panasonic	
Analog Shift Register (Bucket Brigade Device, 128 Stage)	MN3006	Panasonic	
Analog Shift Register (Bucket Brigade Device, 2048 stage)	MN3008	Panasonic	
Analog Shift Register (Bucket Brigade Device, 256 Stage)	MN3009	Panasonic	60
Analog Shift Register (Bucket Brigade Device, 3328 stage)	MN3011	Panasonic	
Analog Shift Register (Bucket Brigade Device) (3,5,190 stages)	MN3012	Panasonic	
Analog Shift Register (Bucket Brigade Device, 4096 stage)	MN3005	Panasonic	
Analog Shift Register (Bucket Brigade Device, 512 stage)	MN3002	Panasonic	
	MN3004	Panasonic	65
Analog Shift Register Clock Generator/Driver	MN3101	Panasonic	
Analog Signal Processor - contains two transconductance amplifiers, two current-mode switches, output voltage buffer amplifier, and precision comparator	GAP01A	PMI	
	GAP01B	† PMI	
	GAP01E	PMI	
	GAP01F	PMI	70
Attenuator, Digital Controlled (0.5 dB attenuation per step)	CDG4469	TopazSemi	
Attenuator, 3 1/2-Digit BCD, digitally controlled	AD7525K	AD	
	AD7525T	† AD	
Attenuator, 6-Bit (0.25dB/step, 0 to 15.75dB range)	CDG4460J	TopazSemi	
Attenuator, 8-Bit (0.50dB/step, 0 to 127.5dB range)	CDG4469J	TopazSemi	75
Auto-Zero (reduces input offset voltage of an amplifier to 5 μV)	LMC669	National	
Balanced Mixer, Double balanced with oscillator	**NE602**	**Signetics (3101)**	
	SA602	† Signetics	
Balanced Modulator/Demodulator	AD630	AD	
	MC1496	**Motorola (2939, 2958)**	80
	MC1596	† **Motorola (2939)**	
	LM1496	National	
	LM1596	† National	
	SL640C	Plessey	
	SL641C	Plessey	85
	LS025	◊ SGS	
	S042	Siemens	
	MC1496	Signetics	
	MC1596	† Signetics	
	SG1496	◊ SiliconG	90
	SG1596	◊ SiliconG	
	TA7320	Toshiba	
Battery Charger, Sealed Lead Acid	UC3906	Unitrode	
Battery Monitor, Pulse-Load Type	CS188	Cherry	
	CS2516	Cherry	95
Bit Rate Generator	MC145411	◊ Motorola	
Blowout Resistant Transistor (simulates 40 V transistor with special protection)	LM195	◊† National	
	LM295	National	
	LM395	National	
Bridge Transducer Switch	**UC3704**	**Unitrode (3327)**	100
Calibrator, High Precision	HCAL24010	HoneywellSPT	
Carrier Current Transceiver	LM1893	◊ National	
Clock and Data Recovery Circuit (2.4 GHz NRZ data rate)	**16G040**	**GigaBit (2689)**	
Comparator, Cache Address	**TMS2150-4**	**TI (3227)**	
Comparator, Drives Lamps, Relays or Logic Loads	4082/03	Burr-Brown	105
Comparator, Programmable Quad, Micropower	LP165	National	
	LP365	National	
Comparator, Read Chain Data	TL712	◊ TI	
	TL721	◊ TI	
Comparator, Window (Internally set limits)	MK104	AnalogSys	110
	4115/04	Burr-Brown	
Comparator, Window (tri-output)	CS2015	Cherry	
Comparator, Dual, ECL Compatible	μA6687M	† Fairchild	
	μA6687V	Fairchild	
Comparators, Programmable with Memory (High/Low Comparator)	CA3099	† GE/RCA	115
Constant Current Source, 1 μA to 10 mA	LM234	LinearTech	
	LM334	LinearTech	
	LM134	† National	
	LM234	National	
	LM334	National	120
Control Circuit for Switched-Mode Power Supply	**TEA1039**	**Signetics (3134)**	
Control, Power Supply	TDA2582	Signetics	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Other Devices (Cont'd)

Function	Device	Source
Controller, Bang-Bang for ON-OFF Control Loops	LTC1041	LinearTech
Controller, Switch Mode Power Supply	**UC1850**	**Unitrode (3323)**
	UC1850/883B	**Unitrode (3323)**
	UC2850	Unitrode
	UC3850	**Unitrode (3323)**
Converter, LVDT to digital, 14 bit	2S54	AD
Converter, LVDT to digital, 16 bit	2S56	AD
Converter, RMS to DC (300 MHz 3dB bandwidth)	LT1088	LinearTech
Coordinate Converter (polar to cartesian)	5090A	OEI
CRT Geometry/Focus Corrector	C310	Intronics
	C311	Intronics
	C312	Intronics
	C410	† Intronics
	C411	† Intronics
Current Mirror, Adjustable Ratio NPN	TL010	TI
Current Mode PWM Control Circuit	LS2842A	◊ Gennum
Current Sensing Latch	SG1549	◊† SiliconG
	SG2549	◊ SiliconG
	SG3549	◊ SiliconG
Current Source, 4-Bit	μA9650C	Fairchild
Current Source, 7 A Constant	HS7067	National
	HS7107	National
Current/Voltage Mode PWM Controller	**UC1825**	**Unitrode (3323)**
	UC1825/883B	**† Unitrode (3323)**
	UC2825	**Unitrode (3323)**
	UC3825	**Unitrode (3323)**
Current-Mode Control (1 MHz hysteretic)	CS320	◊ Cherry
	CS321	◊ Cherry
Current-Mode PWM Controller	CS3842A	Cherry
	UC1842	† SGS
	UC2842	SGS
	UC3842	SGS
	SG1842	◊† SiliconG
	SG1843	◊† SiliconG
	SG1846	◊† SiliconG
	SG1847	◊† SiliconG
	SG2842	SiliconG
	SG2843	SiliconG
	SG2846	SiliconG
	SG2847	SiliconG
	SG3842	SiliconG
	SG3843	SiliconG
	SG3846	SiliconG
	SG3847	SiliconG
	UC1842	**† Unitrode (3323)**
	UC1843	**† Unitrode (3323)**
	UC1844	**Unitrode (3323)**
	UC1845	**Unitrode (3323)**
	UC1846	**† Unitrode (3323)**
	UC1846/883B	**† Unitrode (3323)**
	UC1847	**† Unitrode (3323)**
	UC1847/883B	**† Unitrode (3323)**

(Continued)

Function	Device	Source
Current-Mode PWM Controller		(Cont'd)
	UC2842	**Unitrode (3323)**
	UC2843	**Unitrode (3323)**
	UC2844	**Unitrode (3323)**
	UC2845	**Unitrode (3323)**
	UC2846	**Unitrode (3323)**
	UC2847	**Unitrode (3323)**
	UC3842	**Unitrode (3323)**
	UC3843	Unitrode
	UC3844	**Unitrode (3323)**
	UC3845	**Unitrode (3323)**
	UC3846	**Unitrode (3323)**
	UC3847	**Unitrode (3323)**
Data Acquisition Controller for A/D Converter (ASCII Output)	CY600	Cybernetic
Data Acquisition Shift Register	SDA8020	Siemens
Data Acquisition System, 4 Channel Differential, 13-Bit A/D	ML2200	MicroLinear
Data Acquisition System, 6 Channel, Sample/Hold, Pulse Width Output	μA9708	Fairchild
Data Acquisition System, 8 Channel Differential, 16 Channel Single Ended, Sample/Hold, 12-Bit Conversion (2 device set)	AD363K	◊ AD
	AD363S	◊† AD
	AD364J	◊ AD
	AD364K	◊ AD
	AD364S	◊† AD
	AD364T	◊† AD
	HDAS8MC	**Datel (2577)**
	HDAS8MM	**† Datel (2574, 2577)**
Data Acquisition System, 8 Channel (expandable), Sample/Hold, 8-Bit Conversion	MN7120	MicroNet
	MN7120H	† MicroNet
Data Acquisition System, 8 Channel, Sample/Hold, 12-Bit A/D	MN7140	MicroNet
	MN7140H	† MicroNet
Data Acquisition System, 8 Channel, 8-Bit Conversion, Microprocessor Compatible	AD7581A	AD
	AD7581B	AD
	AD7581C	AD
	AD7581J	AD
	AD7581K	AD
	AD7581L	AD
	ZN437E	Ferranti
	ZN437J	† Ferranti
	MP7581A	MicroPwr
	MP7581B	MicroPwr
	MP7581C	MicroPwr
	MP7581J	MicroPwr
	MP7581K	MicroPwr
	MP7581L	MicroPwr
	MP7581S	† MicroPwr
	MP7581T	† MicroPwr
	MP7581U	† MicroPwr
	ADC0808	◊ National
	ADC0809	◊ National
	SI520	Siliconix
	SI8602	Siliconix

Function	Device	Source
Data Acquisition System, 8-Channel, 12-Bit A/D Converter with Reference, Clock, Three-State Outputs, Microprocessor Interface	HS9410J	HybridSys
	HS9410K	HybridSys
	HS9410S/B	† HybridSys
	HS9410T	† HybridSys
Data Acquisition System, 12 Bit	MN7150	MicroNet
Data Acquisition System, 12-Bit A/D Converter (0.024 % FSR), 16 Single-Ended Inputs, and S/H Amplifier	SDM862A	◊ Burr-Brown
	SDM862B	◊ Burr-Brown
	SDM862J	◊ Burr-Brown
	SDM862K	◊ Burr-Brown
	SDM862R	◊† Burr-Brown
	SDM862S	◊† Burr-Brown
	SDM863A	◊ Burr-Brown
	SDM863B	◊ Burr-Brown
	SDM863J	◊ Burr-Brown
	SDM863K	◊ Burr-Brown
	SDM863R	◊† Burr-Brown
	SDM863S	◊† Burr-Brown
Data Acquisition System, 16 Channel or 8 Channel Differential, 12-Bit A/D	AD362K	◊ AD
	AD362S	◊† AD
	AD369K	**AD (2427)**
	AD369S	**† AD (2427)**
	SDM854	◊ Burr-Brown
	SDM856J	◊ Burr-Brown
	SDM856K	◊ Burr-Brown
	SDM857	◊ Burr-Brown
	HS362	HybridSys
Data Acquisition System, 16 Channel, Sample/Hold, 12-Bit Conversion	**HDAS16MC**	**Datel (2577)**
	HDAS16MM	**† Datel (2574, 2577)**
Data Acquisition System, 16 Channel 8-Bit Conversion	**DAS952R**	**Datel (2577)**
	ADC0816C	National
	ADC0817C	† National
Data Acquisition System, 16 Element or 8 Channel Differential, Sample/Hold, 12-Bit Conversion	**DAS5712**	**Intech (2799)**
	DAS5714	**Intech (2799)**
	DAS5716	**Intech (2799)**
DC/DC Converter (± 15 Vdc, ± 15 mA output)	PWR70	Burr-Brown
DC/DC Converter (± 15 Vdc, ± 25 mA output)	PWR71	Burr-Brown
	PWR74	Burr-Brown
DC/DC Converter (± 15 Vdc, 100 mA output)	PWR72	Burr-Brown
DC/DC Converter (1.5 W output)	PWR2XX	Burr-Brown
DC/DC Converter (2 W output)	PWR3XX	Burr-Brown
	PWR6XX	Burr-Brown
DC/DC Converter (3 W output)	PWR4XX	Burr-Brown
DC/DC Converter (4 W output)	PWR5XX	Burr-Brown
DC/DC Converter (5 W output)	PWR7XX	Burr-Brown
	PWR8XX	Burr-Brown

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
DC/DC Converter (450 mW output)	PWR1XX	Burr-Brown	
DC to DC Converter	IR3M03A	Sharp	
DC to DC Converter (–15V to –5.2V)	**PS9002**	**Intech (2799)**	
DC to DC Converter (±5–16V to four outputs)	724	Burr-Brown	
DC to DC Converter (±5–16V to dual outputs)	722	Burr-Brown	5
DC to DC Converter (four channel, dual output)	PWR1017	Burr-Brown	
DC to DC Converter, Universal Microprocessor Power Supply Controller	TCA5600	Motorola	
DC to DC Converter (5 V to –15, –10, –5, 10 and 15 V)	AD7560	AD	
DC to DC Converter (12V to 5V)	**A970**	◊† **Intech (2799)**	
DC to DC Converter (28V to 5V)	**A971**	◊ **Intech (2799)**	10
	A972	◊ **Intech (2799)**	
	PS2805	**Intech (2799)**	
	PS2815	**Intech (2799)**	
DC-DC Converter (0.9V–1.7V to 3V or 5.5V)	S424	Siltronics	
DC-to-DC Converter (+5V, ±15V outputs)	PWR5038	Burr-Brown	15
DC-to-DC Converter (±12V, ±15V outputs from +5V)	PWR5104	Burr-Brown	
	PWR5105	Burr-Brown	
DC-to-DC Converter (5V to ±10V)	MAX680	Maxim	
DC-to-DC Converter (13 to 50 V)	**PS6009**	**Intech (2799)**	
DC-to-DC Converter (13 to 60 V)	**PS6008**	**Intech (2799)**	20
DC-to-DC Converter, 1500V Isolation (±7V, ±18V outputs)	PWS725	Burr-Brown	
DC-to-DC Converter, 3500V Isolation (±7V, ±18V outputs)	PWS726	Burr-Brown	
Deglitcher (suppresses transients at outputs of D/A)	4902	TeledyneP	
	4902HR	TeledyneP	
Digital Compact Disc Sample and Hold Circuit	HA12077NT	Hitachi	25
Digital Compact Disc 16-Bit DAC	HA12076NT	Hitachi	
Digital Gain Set, for setting gain of op-amps	LF13006	National	
	LF13007	National	
Digital to Resolver Converter, 14-Bit	MDRC	ILC-DDC	
Digital to Resolver/Synchro Converter	DSC11520	ILC-DDC	30
Digital to Synchro and Digital to Resolver Converter, 14-Bit	DSC644	ILC-DDC	
	EDSC	ILC-DDC	
Digital to Synchro Converter, 14-Bit	DSC544	ILC-DDC	
Divider (See also Multipliers/Dividers below.)	AD535J	AD	
	AD535K	AD	35
	DIV100	◊ **Burr-Brown (2540)**	
Driver, Control Circuit for Fast Switching Transistors	UAA4002	Thomson	
Driver, Switch Driver, for Power Transistors	SG1629	◊† SiliconG	
	SG3629	◊ SiliconG	
Driver, Dual High Current MOSFET Compatible Output Driver	**UC1706**	† **Unitrode (3324, 3326)**	40
	UC3706	**Unitrode (3324, 3326)**	
Driver, Dual, High-Current MOSFET Output	**UC1707**	† **Unitrode (3324, 3326)**	
	UC3707	**Unitrode (3324, 3326)**	
Driver, Four Channel	LAS8071P	Lambda	
	LAS8091P	Lambda	45
Equalizer	ML202	MicroLinear	
Fiber Optic Data Link	3712T/R	Burr-Brown	
	3713T/R	Burr-Brown	
	3714T	Burr-Brown	
Fiber Optics, Dual Detector	NCM6003Z	NCM	50
Filter, Low Pass, Seventh Order Elliptic	**XR1015**	**Exar (2601)**	
	XR1016	**Exar (2601)**	
Filter, Switched Capacitor (notch filter)	**RF6651**	**EG&G-Reticon (2590)**	
Filter, Switched Capacitor (1 octave bandpass)	**RM5606A**	**EG&G-Reticon (2590)**	
Filter, Switched Capacitor (1/2 octave bandpass)	**RM5605A**	**EG&G-Reticon (2590)**	55
Filter, Switched Capacitor (1/3 octave bandpass)	**RM5604A**	**EG&G-Reticon (2590)**	
Filter, Switched Capacitor (5th order highpass)	**RF5611A**	**EG&G-Reticon (2590)**	
Filter, Switched Capacitor (6th order bandpass)	**RF5614A**	**EG&G-Reticon (2590)**	
	RF5616A	**EG&G-Reticon (2590)**	
Filter, Switched Capacitor (7th order lowpass)	**RF5609A**	**EG&G-Reticon (2590)**	60
Filter, Switched-Capacitor (programmable)	TSGF04	Thomson	
	TSGF08	Thomson	
	TSGF12	Thomson	
Filter, Dual Universal	ML2110	MicroLinear	
Filter, Dual Universal (high frequency)	ML2111	MicroLinear	65
Flasher (LED)	LM3909	National	
Flasher, Pulse Generator	U175	Telefunken	
	U176	Telefunken	
Fluid Detector (oscillator, balance detector)	CS166	Cherry	
	LM1830	National	70
	ULN2429A	Sprague	
Fluid Level Detector (non-flammable fluids)	LM1042	National	
Flux Valve to Digital Converter	FDC632	ILC-DDC	
Flyback Converter Regulator Control Circuit	TDA4600	Motorola	
Frequency Switch, Programmable	MC3344	Motorola	75
Frequency-to-Voltage Converter (precision)	CS2907	Cherry	
	CS2917	Cherry	
	XR2917	Exar	
	LM2907	◊ National	
	LM2917	◊ National	80
	L290	SGS	
	L291	SGS	
	L292	SGS	
	L293	SGS	
	4736	TeledyneP	85
	LM2907	◊ TI	
	LM2917	TI	
Function Generator, D/A Controller	CY360	◊ Cybernetic	
Gain/Attenuator Block	ML203	MicroLinear	
Gain Control, programmable gain/loss control	SC11310	Sierra	90
Gain Control, Programmable gain/loss control with EEPROM	SC11410	Sierra	
Ground Fault Interrupter	HA16636	Hitachi	
Hall Effect Devices (sense magnetic field) See also Digital-Other Digital Devices	HKZ101	Siemens	
	SAS231W	Siemens	
	UGN3013	Sprague	95
	UGN3019	Sprague	
	UGN3030	Sprague	
	UGN3040	Sprague	
	UGN3501	Sprague	
	UGS3019	† Sprague	100
	UGS3030	† Sprague	
	TL172C	TI	
	TL173C	TI	
	TL3101	TI	
Hall Effect Switches (senses magnetic field)	UGN3119T	Sprague	105
	UGN3119U	Sprague	
	UGN3120T	Sprague	
	UGN3120U	Sprague	
	UGN3140T	Sprague	
	UGN3140U	Sprague	110
	UGS3119T	Sprague	
	UGS3119U	Sprague	
	UGS3120T	Sprague	
	UGS3120U	Sprague	
	UGS3140T	Sprague	115
	UGS3140U	Sprague	
Hall-Effect Switch (for alternating magnetic field)	TLB4902F	Siemens	
	TLE4901F	Siemens	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Other Devices (Cont'd)

Function	Device	Source
Image Area Sensor, Linear Self Scanning		
	RA128x128	EG&G-Reticon
	RA256x256B	EG&G-Reticon
Image Rotator	6125A	OEI
Image Sensor, Area, Linear Self-Scanning		
	RA0100A	EG&G-Reticon
	RA0128A	EG&G-Reticon
	RA1441A	◊ EG&G-Reticon
Image Sensor, Area, 488x380 Element, CCD		
	CCD222	Fairchild
Image Sensor, CC Photodiode		
	CCPD128x4	EG&G-Reticon
	CCPD128x8	EG&G-Reticon
	RL0256D	EG&G-Reticon
	RL0512D	EG&G-Reticon
	RL0512R	EG&G-Reticon
	RL1024D	EG&G-Reticon
	RL1282D	EG&G-Reticon
	RL1284D	EG&G-Reticon
	RL1288D	EG&G-Reticon
	RL2048D	EG&G-Reticon
Image Sensor, Circular, Self Scanning		
	RO64	EG&G-Reticon
	RO720B	EG&G-Reticon
Image Sensor, Linear Self Scanning		
	RL0064A	EG&G-Reticon
	RL0128E	EG&G-Reticon
	RL0128G	EG&G-Reticon
	RL0128L	EG&G-Reticon
	RL0128S	EG&G-Reticon
	RL0128SAF	EG&G-Reticon
	RL0256C	EG&G-Reticon
	RL0256E	EG&G-Reticon
	RL0256G	EG&G-Reticon
	RL0512C	EG&G-Reticon
	RL0512E	EG&G-Reticon
	RL0512G	EG&G-Reticon
	RL0512S	EG&G-Reticon
	RL1024C	EG&G-Reticon
	RL1024G	EG&G-Reticon
	RL1024H	EG&G-Reticon
	RL1024S	EG&G-Reticon
	RL1024SF	EG&G-Reticon
	RL1728H	EG&G-Reticon
	RL2048H	EG&G-Reticon
	RL4096	EG&G-Reticon
	RL512SAF	EG&G-Reticon
	CCD111	Fairchild
	CCD112	Fairchild
	CCD122	Fairchild
	CCD123	Fairchild
	CCD133	Fairchild
	CCD134	Fairchild
	CCD143	Fairchild
	CCD145	Fairchild
	CCD151	Fairchild
	μPD795	NEC
Image Sensor, Linear Self-Scanning		
	RL01024SAX	EG&G-Reticon
	RL0128SAX	EG&G-Reticon
	RL0256CEQ	EG&G-Reticon
	RL0512SAX	EG&G-Reticon
Image Sensor, 128x1, CCD		
	TC102	TI
Image Sensor, 256x1, CCD		
	CCD111	Fairchild
	CCD112	Fairchild

Function	Device	Source
Image Sensor, 386x488, CCD (B&W)		
	LZ22187	◊ Sharp
Image Sensor, 386x488, CCD (Color)		
	LZ22188	◊ Sharp
Image Sensor, 500x580, CCD (B/W, PAL)		
	LZ22291	Sharp
Image Sensor, 510x490, CCD (B/W, NTSC)		
	LZ22251	Sharp
Image Sensor, 510x490, CCD (color, NTSC)		
	LZ22250G	Sharp
Image Sensor, 1024x1, CCD		
	CCD133	Fairchild
	CCD134	Fairchild
	μPD795	NEC
Image Sensor, 1728x1, CCD		
	CCD121	Fairchild
	CCD122	Fairchild
	CCD123	Fairchild
Image Sensor, 2048x1, CCD		
	CCD143	Fairchild
	CCD145	Fairchild
	μPD792	NEC
	μPD799	NEC
	TC103	TI
Image Sensor, 3456x1, CCD		
	CCD151	Fairchild
	TC104	TI
Image Sensor, 4096x1, CCD		
	μPD791	NEC
Image Sensor, 192x165, CCD		
	TC210	TI
	TC211	TI
Image Sensor, 2952x1, CCD		
	TC106-1	TI
Image Sensor, 754x488, CCD		
	TC240	TI
	TC241	TI
Infrared Remote Control System		
	SDA2008	Siemens
Isolation Power Supply (4 kV peak isolation)		
	725	**Burr-Brown (2539)**
Isolation Power Supply (8 kV isolation)		
	726	**Burr-Brown (2539)**
Lamp Monitors for 24 V Systems (trucks, buses, railroad, and marine use)		
	ULN2457A	Sprague
Laser Diode Driver Circuit		
	IR3C07/N	Sharp
Level Detector, Fluid		
	LM903	National
Level Detector, Logarithmic, 10 Step Analog		
	NSL4944	National
Level Detector, Precision Dual		
	CS122	Cherry
Level Detector, 12-Point (for fluorescent displays)		
	LC7555	Sanyo
	LC7556	Sanyo
Level Meter, Analog Input Drives a Bar of LED's		
	LB1405	Sanyo
	UAA170	Siemens
	UAA180	Siemens
Level Meter, 5-Dot LED		
	GL1223	**GoldStar (2699)**

Function	Device	Source
Light Activated Switch		
	ZNP100	Ferranti
	ZNP102	Ferranti
	ZNP103	Ferranti
	ULN3330	Sprague
Light Detector (with buffer amplifier)		
	U123	Telefunken
Light Sensor	ULN3311D	† Sprague
	ULN3311T	Sprague
	ULN3312D	† Sprague
	ULN3312T	Sprague
Line Sensor, 2,048-Bit, CCD		
	LZ2020	◊ Sharp
Linear Hall-Effect Devices		
	TL3103C	TI
	TL3103I	TI
Low Battery Indicator, Triggers on 3 V (for use with 3 NiCd cells)	ICM7201	GE/Intersil
LVDT Signal Conditioner		
	NE5521	**Signetics (3126)**
	SE5521	Signetics
LVDT to Digital Converter (1 kHz to 10 kHz reference frequency)	2S50/460	† AD
	2S50/560	AD
LVDT to Digital Converter (400 Hz reference frequency)		
	2S50/410	† AD
	2S50/510	AD
Magnetic Amplifier Control Circuit		
	UC1838	Unitrode
	UC2838	Unitrode
	UC3838	Unitrode
Micropower Regulator and Comparator (125 mA output current)	LT1020C	LinearTech
	LT1020M	† LinearTech
Moisture Sensor		
	HIO55001-6	Harris
Motor and Actuator Driver		
	ICH8510I	GE/Intersil
	ICH8520I	GE/Intersil
	ICH8530I	GE/Intersil
Motor, Brushless DC Motor Commutator		
	LS7262	**LSIComp (2867)**
Motor, Brushless DC Motor Speed Controller, 4 Phase		
	LS7264	**LSIComp (2867)**
Motor, DC Motor Controller (position and velocity control)	GL1200	Galil
Motor Driver, Full Bridge, Dual		
	L298	**Unitrode (3326)**
Motor Driver, Dual, Schottky Diode		
	UC1610	**† Unitrode (3326)**
	UC3610	**Unitrode (3326)**
Motor, Motion Control (controls motor position, velocity or torque (2-chip set)		
	MCC3000	Galil
Motor Speed Regulator, Auto Reverse		
	TDA7272	◊ SGS
Motor Speed Regulator (for small dc motors). See also Linear—Consumer Circuits.		
	CS2907	Cherry
	CS2917	Cherry
	KA2401	Samsung
	KA2402	Samsung
	KA2403	Samsung
Motor, Stepper Motor Controller		
	UC3517	**Unitrode (3326)**

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Other Devices (Cont'd)

Function	Device	Source	Line
Motor, Stepper Motor Driver			
	PBL3717A	SGS	
	UC3770	Unitrode	
Multifunction Converter (generates output = (V1÷V2)			
	LH0094	National	
	LH0094C	National	
Multifunction Converters (XY/Z)expM			
	4301	Burr-Brown	5
	4302	**Burr-Brown (2540)**	
Multiplier/Divider			
	AD632A	**Burr-Brown (2539)**	
	AD632B	**Burr-Brown (2539)**	
	AD632S	**† Burr-Brown (2539)**	
	AD632T	**† Burr-Brown (2539)**	10
Multipliers	AD539J	AD	
	AD539K	AD	
	AD539S	† AD	
	AD632	AD	
	MPY534	**Burr-Brown (2539)**	15
	XR2208	Exar	
	XR2208M	† Exar	
	XR2228	Exar	
	XR2228M	† Exar	
	ICL8013C	**GE/Intersil (2677)**	20
	ICL8013M	**† GE/Intersil (2677)**	
	CA3091	† GE/RCA	
	A8495	◊ Intech	
	MC1494	Motorola	
	MC1495	Motorola	25
	MC1594	† Motorola	
	MC1595	† Motorola	
	SG1495	◊ SiliconG	
	SG1595	◊† SiliconG	
	TA7158	Toshiba	30
Multipliers/Dividers			
	AD532J	AD	
	AD532K	AD	
	AD532S	† AD	
	AD533J	AD	
	AD533K	AD	35
	AD533L	AD	
	AD533S	† AD	
	AD534J	AD	
	AD534K	AD	
	AD534L	AD	40
	AD534S	† AD	
	AD534T	† AD	
	AD538	AD	
	MPY100	**◊ Burr-Brown (2539)**	
	MPY100A	**◊ Burr-Brown (2539)**	45
	MPY100S	**◊† Burr-Brown (2539)**	
	MPY634	**Burr-Brown (2539)**	
	4203	◊ Burr-Brown	
	4203S	◊† Burr-Brown	
	4204	◊ Burr-Brown	50
	4204S	◊† Burr-Brown	
	4205	◊ Burr-Brown	

(Continued)

Function	Device	Source	Line
Multipliers/Dividers		(Cont'd)	
	4205S	◊† Burr-Brown	
	4206	◊ Burr-Brown	
	4213	◊ Burr-Brown	55
	4213S	◊† Burr-Brown	
	4213U	**◊ Burr-Brown (2544)**	
	4213V	**◊ Burr-Brown (2544)**	
	4213W	◊ Burr-Brown	
	4214	◊ Burr-Brown	60
	4214M	◊† Burr-Brown	
	RC4200	Raytheon	
	RC4200A	Raytheon	
Noise Generator (psuedo-ramdom sequence generator for audio)	MM5837	National	
Optocoupler (used with telephone ring detector)			
	TIL181	TI	65
Optoelectronic Detector/Interface			
	CS2012	Cherry	
Optoelectronic switch, Twilight Sensor			
	ULN3390D	Sprague	
	ULN3390T	Sprague	
Optoisolator, Buffer Open-Collector Output (5kV peak isolation)	OPI8013	◊ TI	
Optoisolator, Buffer Totem-Pole Output (5kV peak isolation)	OPI8012	◊ TI	70
Optoisolator, Inverter Open-Collector Output (5kV peak isolation)	OPI8015	◊ TI	
Optoisolator, Inverter Totem-Pole Output (5kV peak isolation)	OPI8014	◊ TI	
Optoisolator, Open-Collector Output (3kV dc isolation)			
	HCPL2502	TI	
	6N135	TI	
	6N136	TI	75
	6N137	TI	
Optoisolator, Dual Open-Collector Output (3kV dc isolation)	HCPL2630	TI	
Oscillator, Crystal Clock (250 kHz to 60 MHz)			
	CK1100A	Solarise	
	CK1114A	Solarise	
	CK1144A	◊ Solarise	80
	CK1145A	◊ Solarise	
Oscillator, Fixed Frequency (10 Hz to 20 kHz)			
	4025	Burr-Brown	
Oscillator, Resistor Tuneable			
	ROJ20	Datel	
Oscillator, Quadrature			
	4423	**Burr-Brown (2540)**	
Over/Under-Voltage Detector, Dual			
	ICL7665	**◊ GE/Intersil (2676)**	85
Overvoltage and Overtemperature Protector			
	MPC2011	Motorola	
	MPC2012	Motorola	
	MPC2014	Motorola	
	MPC2015	Motorola	
Overvoltage Protector			
	L2OV12	Lambda	90
	L2OV15	Lambda	
	L2OV18	Lambda	
	L2OV20	Lambda	
	L2OV24	Lambda	
	L2OV5	Lambda	95
	L2OV6	Lambda	
	L2OV9	Lambda	

(Continued)

Function	Device	Source	Line
Overvoltage Protector		(Cont'd)	
	L6OV12	Lambda	
	L6OV15	Lambda	
	L6OV24	Lambda	100
	L6OV5	Lambda	
	L6OV6	Lambda	
	MC34062	Motorola	
	MC3423	**Motorola (2959)**	
	MC3523	† Motorola	105
	μPC3423	◊ NEC	
	SG1542	◊† SiliconG	
	SG2542	◊ SiliconG	
	SG3423	◊ SiliconG	
	SG3423A	SiliconG	110
	SG3523	◊† SiliconG	
	SG3523A	† SiliconG	
	SG3542	◊ SiliconG	
Overvoltage Protector (up to 35 V, 10 A)			
	42092-1010	Micropac	
	42092-1210	Micropac	115
	42092-1410	Micropac	
	42092-1610	Micropac	
	42092-1810	Micropac	
	42092-2010	Micropac	
	42092-510	Micropac	120
	42092-610	Micropac	
	42092-710	Micropac	
	42092-810	Micropac	
	42092-910	Micropac	
Overvoltage Protector (up to 35 V, 15 A)			
	42092-1015	Micropac	125
	42092-1215	Micropac	
	42092-1415	Micropac	
	42092-1615	Micropac	
	42092-1815	Micropac	
	42092-2015	Micropac	130
	42092-515	Micropac	
	42092-615	Micropac	
	42092-715	Micropac	
	42092-815	Micropac	
	42092-915	Micropac	135
Overvoltage Protector (up to 35 V, 20 A)			
	42093-0520	Micropac	
	42093-0620	Micropac	
	42093-0720	Micropac	
	42093-0820	Micropac	
	42093-0920	Micropac	140
	42093-1020	Micropac	
	42093-1220	Micropac	
	42093-1420	Micropac	
	42093-1620	Micropac	
	42093-1820	Micropac	145
	42093-2020	Micropac	
Overvoltage Protector (up to 35 V, 25 A)			
	42093-0525	Micropac	
	42093-0625	Micropac	
	42093-0725	Micropac	
	42093-0825	Micropac	150
	42093-0925	Micropac	
	42093-1025	Micropac	
	42093-1225	Micropac	
	42093-1425	Micropac	
	42093-1625	Micropac	155
	42093-1825	Micropac	
	42093-2025	Micropac	
Overvoltage Protector (up to 35 V, 30 A)			
	42093-0530	Micropac	
	42093-0630	Micropac	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Other Devices (Cont'd)

Function	Device	Source	Line
Overvoltage Protector (up to 35 V, 30 A) (Cont'd)			
	42093-0730	Micropac	
	42093-0830	Micropac	
	42093-0930	Micropac	
	42093-1030	Micropac	
	42093-1230	Micropac	5
	42093-1430	Micropac	
	42093-1630	Micropac	
	42093-1830	Micropac	
	42093-2030	Micropac	
Overvoltage Protector (up to 35 V, 35 A)			
	42093-0535	Micropac	10
	42093-0635	Micropac	
	42093-0735	Micropac	
	42093-0835	Micropac	
	42093-0935	Micropac	
	42093-1035	Micropac	15
	42093-1235	Micropac	
	42093-1435	Micropac	
	42093-1635	Micropac	
	42093-1835	Micropac	
	42093-2035	Micropac	20
Overvoltage Protector (up to 35 V, 6 A)			
	42092-056	Micropac	
	42092-066	Micropac	
	42092-076	Micropac	
	42092-086	Micropac	
	42092-096	Micropac	25
	42092-106	Micropac	
	42092-126	Micropac	
	42092-146	Micropac	
	42092-166	Micropac	
	42092-186	Micropac	30
	42092-206	Micropac	
Peak Detector (senses and holds peak)			
	4085	**Burr-Brown (2540)**	
	4085M	**† Burr-Brown (2540)**	
	AH503	◊ OEI	
	AH504	◊ OEI	35
	5030A	◊ OEI	
	5032A	◊ OEI	
	5902	† OEI	
	PKD01	**PMI (2975)**	
	PKD01A	**† PMI (2975)**	40
	PKD01B	**† PMI (2975)**	
Phase Control	TLE3101	Siemens	
	TLE3102	Siemens	
	TLE3103	Siemens	
	TLE3104	Siemens	45
Phase/Frequency Comparator (1 GHz)			
	10G044-2	**◊ GigaBit (2689)**	
Phase/Frequency Comparator (750 MHz data rate)			
	16G044-3	**GigaBit (2689)**	
Photo Diode Signal Processor			
	TDA5708	Signetics	
PIN Diode Driver			
	DH0035	† National	
	DH0035C	National	50
	UDS5791H	† Sprague	
Pluse Width Modulator Controller			
	UC3845	SGS	
Potentiometer, E^2			
	X9103	**Xicor (3395)**	
	X9103M	**† Xicor (3395)**	
	X9104	**Xicor (3395)**	55
		(Continued)	

Function	Device	Source	Line
Potentiometer, E^2 (Cont'd)			
	X9104M	**† Xicor (3395)**	
	X9503	**Xicor (3395)**	
	X9503M	**† Xicor (3395)**	
Potentiometer, E^2 (with 8-bit DAC and voltage reference)	SC22300	Sierra	
Potentiometer, Dual Double	TDA1074A	Signetics	60
Potentiometer, 3 1/2-Digit BCD			
	AD7525K	AD	
	AD7525L	AD	
	AD7525U	† AD	
Potentiometer, 5-Volt Only (nonvolatile)			
	X9MME	**Xicor (3415)**	
Power Control Zero Voltage Switch			
	SL445A	Plessey	65
Power Converter, Off-Line (50W)			
	HS9503	National	
Power Supply Control (voltage reference, over and under voltage sensing)			
	LBR SERIES	AT&T	
	XR1543	Exar	
	XR2543	Exar	
	XR3543	Exar	70
	SG1543	◊† SiliconG	
	SG1544	◊† SiliconG	
	SG2543	◊ SiliconG	
	SG2544	◊ SiliconG	
	SG3543	◊ SiliconG	75
	SG3544	◊ SiliconG	
	UC1543	**† Unitrode (3324)**	
	UC1543/883B	**† Unitrode (3324)**	
	UC1544	**† Unitrode (3324)**	
	UC1544/883B	**† Unitrode (3324)**	80
	UC1901	**† Unitrode (3324)**	
	UC1901/883B	**† Unitrode (3324)**	
	UC1903	**† Unitrode (3324)**	
	UC2543	**Unitrode (3324)**	
	UC2544	**Unitrode (3324)**	85
	UC2901	**Unitrode (3324)**	
	UC2903	**Unitrode (3324)**	
	UC3543	**◊ Unitrode (3324)**	
	UC3544	**◊ Unitrode (3324)**	
	UC3901	**Unitrode (3324)**	90
	UC3903	**Unitrode (3324)**	
Power Supply Control (voltage reference, quad over and under voltage sensing)			
	ULN8130A	Sprague	
	ULN8131A	Sprague	
Power Supply Controller (negative switch-mode)			
	RC4292	**Raytheon (2982)**	
	RM4292	**Raytheon (2982)**	95
Power Supply Controller (resonant mode 10 kHz to 1 MHz)	**LD405**	**Gennum (2687)**	
Power Supply Controller, Resonant Mode (10KHz to 1 MHz)	LS405	Gennum	
Power Supply Controller (voltage reference, pulse generator and timing circuitry, error amp)			
	LA5700	Sanyo	
	TL496C	TI	
Power Supply, Linear Regulator, High Efficiency			
	UC1834	**† Unitrode (3324)**	100
	UC1834/883B	**† Unitrode (3324)**	
	UC2834	**Unitrode (3324)**	
	UC3834	**Unitrode (3324)**	
Power Supply Monitoring IC (monitors independent voltages)	TDA4917A	Siemens	

Function	Device	Source	Line
Power Supply Overvoltage Sensing Circuit, Pin Programmable			
	MC35062	Motorola	105
Power Supply Overvoltage Sensing Circuit, Three-Terminal			
	MC34061	Motorola	
	MC34061A	Motorola	
	MC35061A	Motorola	
Power Supply Supervisory Circuit			
	SG3524	◊ SGS	
	SG3524A	SGS	110
	UC3524A	SGS	
	TL7702A	TI	
	TL7705A	TI	
	TL7709A	TI	
	TL7712A	TI	115
	TL7715A	TI	
Power Supply Supervisory Circuit, Over-Voltage Monitor			
	MC3423	◊ TI	
Power Supply Supervisory Circuit (triple over/under voltage transient supervision)			
	S2862	Siltronics	
Power Supply Supervisory/Over-Under Voltage Protection Circuit			
	MC3425	Motorola	
Pressure Sensors, Piezoresistive (integral gain-set resistor)	1210	ICSensors	120
	1220	ICSensors	
Programmable Tone/Noise Generator			
	SN76494	TI	
	SN76496	TI	
Proximity Detector, Electromagnetic			
	CS191	Cherry	
	CS209	Cherry	125
Pulse Width Modualtor (PWM) Control Circuit with On-Chip 5 Volt Precision Reference			
	TL594I	**Motorola (2931)**	
Pulse Width Modulator			
	HS3761RH	**‡ Harris (2717)**	
	SLE4520	Siemens	
Pulse Width Modulator Controller			
	UC3843	SGS	
	UC3844	SGS	130
Pulse Width Modulator Controller, Programmable, Off-Line	SG1840	◊† SiliconG	
	SG2840	SiliconG	
	SG3840	SiliconG	
Pulse Width Modulator, Primary Side			
	XRT469	Exar	
Pulse Width Modulator (PWM) Control Circuit with On-Chip 5 Volt Precision Reference			
	MC33060A	**Motorola (2930)**	135
	MC34060A	**Motorola (2930, 2960)**	
	MC35060A	**† Motorola (2930)**	
	TL594C	**Motorola (2931)**	
	TL594M	**† Motorola (2931)**	
Pulse Width Modulator with Precise 5 Volt Reference			
	μA1524A	† Fairchild	140
	μA2524A	Fairchild	
	μA3524A	◊ Fairchild	
Pulse Width Modulator, Single Uncommitted			
	TL496	TI	
	TL497A	TI	
Pulse Width Modulator, Single-Ended			
	UC1823	**Unitrode (3323)**	145
	UC1823/883B	**Unitrode (3323)**	
		(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Pulse Width Modulator, Single-Ended (Cont'd)			
	UC2823	**Unitrode (3323)**	
	UC3823	**Unitrode (3323)**	
Pulse-Width Modulator Control System (for switching regulators, motor-speed controllers)			
	XR2230	◊ Exar	
Pulse-Width Modulator, Single Uncommitted			
	LT1070	TI	
	MC34060	TI	5
Pulse-Width Modulator, Dual Uncommitted			
	SG2524	TI	
	SG2525A	TI	
	SG2527A	TI	
	SG3525A	TI	
	SG3527A	TI	10
	TL493	TI	
	TL494	TI	
	TL495	TI	
	TL594	TI	
	TL595	TI	15
PWM Controller, Programmable, Off Line			
	UC1841	**Unitrode (3323)**	
	UC2841	**Unitrode (3323)**	
	UC3841	**Unitrode (3323)**	
Radial Error Signal Processor			
	TDA5709	Signetics	
Reference voltage, –10 V.			
	REF08A	**† PMI (2975)**	20
	REF08G	**PMI (2975)**	
	REF08H	**PMI (2975)**	
Reference Voltage, (± 5 V)			
	LT1029AC	LinearTech	
	LT1029AM	† LinearTech	
	LT1029C	LinearTech	25
	LT1029M	† LinearTech	
Reference Voltage, ± 10 V			
	AD2702J	AD	
	AD2702L	AD	
	AD2702S	† AD	
	AD2702U	AD	30
	AD2712K	AD	
	AD2712L	AD	
	AD2720	AD	
	R675B-3	† HybridSys	
	R675C-3	HybridSys	35
	HC2702	◊ HyComp	
	HC2702-883	† HyComp	
	HC2712	◊ HyComp	
	HC2712-883	† HyComp	
Reference Voltage, ± 10V			
	52101	◊† Micropac	40
Reference Voltage, Pin-Programmable Outputs (± ± 5V, 5V and 10V, –5V and –10V dual outputs or 5V, –5V, 10V, –10V single outputs			
	AD588A	**AD (2426)**	
Reference Voltage, Pin-Programmable Outputs (± 5V, 5V and 10V, –5V and –10V dual outputs or 5V, –5V, 10V, –10V single outputs)			
	AD588B	**AD (2426)**	
	AD588C	**AD (2426)**	
	AD588S	**† AD (2426)**	
	AD588T	**† AD (2426)**	45
Reference Voltage, Programmable			
	TL430	TI	
	TL431	TI	

Function	Device	Source	Line
Reference Voltage (two terminal active circuit) 1.225 V			
± 1%)	LT1034	LinearTech	
	MP5010	† MicroPwr	
	MP5010A	† MicroPwr	50
	LM113	† National	
	LM113-1	† National	
	LM113-2	National	
	LM313	National	
	9491AM	† TeledyneS	55
	9491B	TeledyneS	
	9491BM	TeledyneS	
Reference Voltage (two terminal active circuit) 1.235			
V ± 2%	LM185-1	† LinearTech	
	LM385-1	LinearTech	
	LT1004C	LinearTech	60
	LT1004M	† LinearTech	
	LM285-1	Motorola	
	LM385-1	**Motorola (2958)**	
	LM385B-1	**Motorola (2958)**	
	LM185	† National	65
	LM285	National	
	LM385	◊ National	
Reference Voltage, 1.2 V			
	HS5010	HybridSys	
Reference Voltage, 1.23 V			
	AD589J	AD	
	AD589K	AD	70
	AD589L	AD	
	AD589M	AD	
	AD589S	† AD	
	AD589T	† AD	
	AD589U	† AD	75
	ICL8069	**GE/Intersil (2676)**	
	ICL8069M	**† GE/Intersil (2676)**	
	ICL8069	◊ Maxim	
	ICL8069M	◊† Maxim	
	LM185-1	† National	80
	LM285-1	National	
	LM385-1	National	
Reference Voltage, 1.26 V (two terminal active circuit)			
	ZN423	Ferranti	
Reference Voltage, 2.45 V (two terminal active circuit)			
	VR182A	Datel	
	VR182B	Datel	85
	VR182C	Datel	
	ZN404	Ferranti	
	ZN458	Ferranti	
	ZN458A	Ferranti	
	ZN458B	Ferranti	90
Reference Voltage, 2.5 V			
	AD1403	AD	
	AD1403A	AD	
	AD580J	AD	
	AD580K	AD	
	AD580L	AD	95
	AD580S	† AD	
	AD580T	† AD	
	AD580U	† AD	
	AD580J	LinearTech	
	AD580K	LinearTech	100
	AD580L	LinearTech	
	AD580S	† LinearTech	
	AD580T	† LinearTech	
	AD580U	† LinearTech	
	LM136-2	† LinearTech	105
	LM336-2	LinearTech	

(Continued)

Function	Device	Source	Line
Reference Voltage, 2.5 V (Cont'd)			
	LM385-2	LinearTech	
	LT1004C-2	LinearTech	
	LT1004M-2	† LinearTech	110
	LT1009C-2	LinearTech	
	LT1009M-2	† LinearTech	
	LT1019C-2	LinearTech	
	LT1019M-2	† LinearTech	
	AD580J	Maxim	
	AD580K	Maxim	115
	AD580L	Maxim	
	AD580M	Maxim	
	AD580S	† Maxim	
	AD580T	† Maxim	
	AD580U	† Maxim	120
	MP5540	MicroPwr	
	LM285-2	Motorola	
	LM385-2	**Motorola (2958)**	
	LM385B-2	**Motorola (2958)**	
	MC1403	**Motorola (2958)**	125
	MC1403A	**Motorola (2958)**	
	MC1503	◊† Motorola	
	MC1503A	◊† Motorola	
	LM136-2	† National	
	LM136A-2	† National	130
	LM185-2	† National	
	LM236-2	National	
	LM236A-2	National	
	LM285-2	National	
	LM336-2	National	135
	LM368-2	National	
	LM385-2	National	
	μPC1060	NEC	
Reference voltage, 2.5 V.			
	REF03G	**PMI (2975)**	
	REF43F	**PMI (2969, 2975)**	140
	REF43G	**PMI (2969, 2975)**	
Reference Voltage, 2.5 V			
	REF03	Raytheon	
	REF03C	Raytheon	
	REF03D	Raytheon	
	SG1503	SiliconG	145
	SG2503	SiliconG	
	SG3503	SiliconG	
	LT1009M	◊ TI	
	TDB0136	Thomson	
	TDC0136	† Thomson	150
Reference Voltage, 2.5 V (trimmable output)			
	ZNREF025	Ferranti	
	SSI6505	SiliconSys	
Reference Voltage, 2.5 (1% Tolerence)			
	REF25	Ferranti	
Reference Voltage, 2.5, 5.0, 7.5, and 10.0 V			
	AD584J	AD	
	AD584K	AD	155
	AD584L	AD	
	AD584S	† AD	
	AD584T	† AD	
	AD584U	† AD	
	AD584J	Maxim	160
	AD584K	Maxim	
	AD584L	Maxim	
	AD584S	† Maxim	
	AD584T	† Maxim	
	AD584U	† Maxim	165

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Other Devices (Cont'd)

Function	Device	Source	Line
Reference Voltage, 2.5, 5.0, 7.5, and 10.0V			
	AD584	Maxim	
Reference voltage, 2.5V.			
	REF43B	**† PMI (2969, 2975)**	
Reference Voltage, 2.5V (1% tolerance)			
	REF25Z	Ferranti	
Reference Voltage, 4 V (trimmable output)			
	ZNREF040	Ferranti	
Reference Voltage, 4V			
	LB1081AC	AT&T	5
Reference Voltage, 5 V			
	AD586	**AD (2424)**	
	LT1021-5	LinearTech	
	REF02	† LinearTech	
	REF02A	† LinearTech	
	REF02C	LinearTech	10
	REF02D	LinearTech	
	REF02E	LinearTech	
	REF02H	LinearTech	
	REF02	◊ Maxim	
	REF02A	Maxim	15
	REF02C	Maxim	
	REF02D	Maxim	
	REF02E	Maxim	
	REF02H	Maxim	
	MPREF-02	† MicroPwr	20
	MPREF-02A	† MicroPwr	
	MPREF-02C	MicroPwr	
	MPREF-02D	MicroPwr	
	MPREF-02F	MicroPwr	
	MPREF-02H	MicroPwr	25
	MPREF-05	† MicroPwr	
	LM136-5	† National	
	LM136A-5	† National	
	LM168-5	† National	
	LM236-5	National	30
	LM236A-5	National	
	LM268-5	National	
	LM336-5	National	
	LM336B-5	National	
	LM368-5	National	35
	REF02	**◊‡ PMI (2975)**	
	REF02A	**‡ PMI (2975)**	
	REF02C	**‡ PMI (2975)**	
	REF02D	**PMI (2975)**	
	REF02E	**PMI (2975)**	40
	REF02H	**PMI (2975)**	
	REF05A	**PMI (2975)**	
	REF05B	**† PMI (2975)**	
	REF02	Raytheon	
	REF02A	Raytheon	45
	REF02C	Raytheon	
	REF02D	Raytheon	
	REF02E	Raytheon	
	REF02H	Raytheon	
	TSC9495C	TeledyneS	50
Reference Voltage, 5 V (trimmable output)			
	ZNREF050	Ferranti	
	SSI6506	SiliconSys	
Reference Voltage, 5.0 V			
	LT1019C-5	LinearTech	
	LT1019M-5	† LinearTech	
Reference Voltage, 5V (trimmable output)			
	LB1081BC	AT&T	55
Reference Voltage, 5V (1% Tolerance)			
	REF50	Ferranti	
	REF50Z	Ferranti	

Function	Device	Source	Line
Reference Voltage, 6.2 V			
	LM168-6	† National	
	LM268-6	National	
	LM368-6	National	60
Reference Voltage, 6.2V (trimmable output)			
	ZNREF062	Ferranti	
Reference Voltage, 6.9 V			
	LM129	† LinearTech	
	LM329	LinearTech	
Reference Voltage, 6.9 V Temperature Stabilized			
	LM199A	† LinearTech	
	LM399A	LinearTech	65
	LM129	† National	
	LM199	◊† National	
	LM199A	◊† National	
	LM299	National	
	LM299A	National	70
	LM329	National	
	LM399	National	
	LM399A	National	
	LM3999	National	
Reference Voltage, 6.95 V			
	LM199	† LinearTech	75
	LM399	LinearTech	
Reference Voltage, 6V (trimmable output)			
	LB1081CC	AT&T	
Reference Voltage, 7 V			
	LTZ1000	LinearTech	
	LT1021-7	LinearTech	
Reference Voltage, 7V (trimmable output)			
	LB1081DC	AT&T	80
Reference Voltage, 8V (trimmable output)			
	LB1081EC	AT&T	
Reference Voltage, 10 V			
	AD587	**AD (2425)**	
	LT1021-10	LinearTech	
	AD581J	Maxim	
	AD581K	Maxim	85
	AD581L	Maxim	
	AD581S	† Maxim	
	AD581T	† Maxim	
	AD581U	† Maxim	
Reference Voltage, 10 V, Kelvin Sensed Output (1 mV accuracy)	MAX671C	Maxim	90
	MAX671M	Maxim	
Reference Voltage, 10 V, Kelvin Sensed Output (2.5 mV accuracy)	MAX670C	Maxim	
	MAX670M	Maxim	
Reference Voltage, 10 V (trimmable output)			
	REF101J	**Burr-Brown (2540)**	
	REF101S	**† Burr-Brown (2540)**	95
	ZNREF100	Ferranti	
	SSI6507	SiliconSys	
Reference Voltage, 10 V(or –10 V)			
	AD2700J	AD	
	AD2700L	AD	
	AD2700S	† AD	100
	AD2700U	† AD	
	AD2701J	AD	
	AD2701L	AD	
	AD2701S	† AD	
	AD2701U	† AD	105
	AD2710K	AD	
	AD2710L	AD	
	AD2720A	AD	

(Continued)

Function	Device	Source	Line
Reference Voltage, 10 V(or –10 V)		(Cont'd)	
	AD2720C	AD	
	AD2720S	† AD	110
	AD2720T	† AD	
	AD581J	AD	
	AD581K	AD	
	AD581L	AD	
	AD581S	† AD	115
	AD581T	† AD	
	AD581U	† AD	
	REF10	**Burr-Brown (2540)**	
	REF101	**Burr-Brown (2540)**	
	HSREF01	HybridSys	120
	R675B-1	† HybridSys	
	R675B-4	† HybridSys	
	R675B-5	† HybridSys	
	R675C-1	HybridSys	
	R675C-5	HybridSys	125
	HC2700	◊ HyComp	
	HC2700-883	† HyComp	
	HC2701	◊ HyComp	
	HC2701-883	† HyComp	
	HC2710	◊ HyComp	130
	HC2710-883	† HyComp	
	HC2711	◊ HyComp	
	HC2711-883	† HyComp	
	AD581J	LinearTech	
	AD581K	LinearTech	135
	AD581L	LinearTech	
	AD581S	† LinearTech	
	AD581T	† LinearTech	
	AD581U	† LinearTech	
	LH0070	◊† LinearTech	140
	LT1031	† LinearTech	
	REF01	† LinearTech	
	REF01A	† LinearTech	
	REF01C	LinearTech	
	REF01E	LinearTech	145
	REF01H	LinearTech	
	AD2700J	◊ Maxim	
	AD2700L	◊ Maxim	
	AD2700S	◊ Maxim	
	AD2700U	◊ Maxim	150
	AD2701J	◊ Maxim	
	AD2701K	◊ Maxim	
	AD2701L	◊ Maxim	
	AD2701S	◊† Maxim	
	AD2701U	◊† Maxim	155
	AD2710L	◊ Maxim	
	REF01	◊ Maxim	
	REF01A	Maxim	
	REF01C	Maxim	
	REF01D	Maxim	160
	REF01E	Maxim	
	REF01H	Maxim	
	MPREF-01	† MicroPwr	
	MPREF-10	† MicroPwr	
	LH0070	† National	165
	LM168-10	† National	
	LM268-10	National	
	LM368-10	National	
	REF01	**◊‡ PMI (2975)**	
	REF01A	**◊‡ PMI (2975)**	170
	REF01C	**‡ PMI (2975)**	
	REF01E	**PMI (2975)**	
	REF01H	**PMI (2975)**	
	REF10A	**† PMI (2975)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source	Line
Reference Voltage, 10 V(or −10 V) (Cont'd)			
	REF10B	**† PMI (2975)**	
	REF01	Raytheon	
	REF01A	Raytheon	
	REF01C	Raytheon	
	REF01D	Raytheon	5
	REF01E	Raytheon	
	REF01H	Raytheon	
	TSC9496C	TeledyneS	
Reference Voltage, 10.0 V			
	LT1019C-10	LinearTech	
	LT1019M-10	† LinearTech	10
Reference Voltage, 10.24 V			
	LH0071	National	
	LH0071-0	National	
	LH0071-1	National	
	LH0071-2	‡ National	
Reference Voltage (10V precision)			
	AD581	Maxim	15
Reference Voltage, 1.26 V (1% tolerance)			
	REF12	† Ferranti	
	REF12Z	Ferranti	
Reference Voltage, 10V (trimmable output)			
	52065	† Micropac	
	52098	◊† Micropac	
Reference Voltage, 2.5 V			
	SR25D	Ferranti	20
	LT1009	◊ TI	
Regulator Controller (for high current low dropout regulator)	**UC1835**	**Unitrode (3324)**	
	UC1836	**† Unitrode (3324)**	
	UC2835	**Unitrode (3324)**	
	UC2835	**Unitrode (3324)**	25
	UC2836	**Unitrode (3324)**	
	UC3835	**Unitrode (3324)**	
	UC3836	**Unitrode (3324)**	
Regulator Diode with Amplifier (6.8 to 11 V)			
	MCA Series	Motorola	
	MCAseries	Motorola	30
Relays, High Voltage, Optically Coupled			
	LH1056A TYPE	**AT&T (2513)**	
	LH1061A TYPE	**AT&T (2514)**	
	LH1061AB	**AT&T (2514)**	
	LH1085AT	**AT&T (2515)**	
Resolver and Synchro Systems			
	MSC2S20	AD	35
	SDC1740	AD	
	SDC1741	AD	
	SDC1742	AD	
	1S14	AD	
	1S20	AD	40
	1S24	AD	
	1S40	AD	
	1S44	AD	
	1S60	AD	
	1S61	AD	45
	1S64	AD	
	1S74	AD	
	2S20	AD	
	5S70	AD	
	5S72	AD	50
	HMSDC-8700	ILC-DDC	
	HRCDX-14	ILC-DDC	
	HRCT14	◊ ILC-DDC	
	HRDC10	ILC-DDC	
	HRDC14	ILC-DDC	55
	HSCDX-14	ILC-DDC	

(Continued)

Function	Device	Source	Line
Resolver and Synchro Systems (Cont'd)			
	HSCT14	ILC-DDC	
	HSDC14	ILC-DDC	
	HSDC8915	ILC-DDC	
	HSDC8916	ILC-DDC	60
	HSDC8917	ILC-DDC	
	HSDC8918	ILC-DDC	
	HSDC8919	ILC-DDC	
	HSDC8920	ILC-DDC	
	HSDC8921	ILC-DDC	65
	HSDC8922	ILC-DDC	
	HXCDX-14	ILC-DDC	
	HXDC10	ILC-DDC	
	HXDC14	ILC-DDC	
	SDC14520	ILC-DDC	70
	SDC19100	ILC-DDC	
Resolver, Digital to Resolver Converter (DRC)			
	DRC1765	◊† AD	
	DRC1766	◊† AD	
	DRC10520	ILC-DDC	
Resolver to Digital Converter (10-bits)			
	RDC630	ILC-DDC	75
Resolver to Digital Converter (12-bits)			
	RDC632	ILC-DDC	
Resolver to Digital Converter (14-bits)			
	RDC634	ILC-DDC	
Resolver to Digital Converter (16-bits)			
	RDC502	ILC-DDC	
Resolver to Digital Converter, 10- to 14-Bit Programmable Resolution			
	SDC14564	◊ ILC-DDC	
	SDC14565	◊ ILC-DDC	80
	SDC14566	◊ ILC-DDC	
Resolver to Digital Converter, 10-Bit Resolution			
	RDC19190	ILC-DDC	
Resolver to Digital Converter, 12-Bit			
	IDC14542	ILC-DDC	
	IDC35300	ILC-DDC	
Resolver to Digital Converter, 12-Bit Resolution			
	RDC19191	ILC-DDC	85
Resolver to Digital Converter, 14-Bit			
	IDC14544	ILC-DDC	
Resolver to Digital Converter, 14-Bit Resolution			
	RDC19192	ILC-DDC	
	RDC19198	ILC-DDC	
Resolver to Digital Converter, 16-Bit Resolution			
	RDC19193	ILC-DDC	
	RDC19199	ILC-DDC	90
Resolver to Digital Converters (10, 12, 14 or 16-bit)			
	RDC19200	ILC-DDC	
Resonant-Mode Controller			
	UC1860	**Unitrode (3323)**	
	UC2860	**Unitrode (3323)**	
	UC3860	**Unitrode (3323)**	
Ring Demodulator/Balanced Mixer			
	SI8901A	Siliconix	95
RMS to DC Converter			
	AD536AJ	AD	
	AD536AK	AD	
	AD536AS	† AD	
	AD636J	AD	
	AD636K	AD	100
	AD637J	AD	
	AD637K	AD	
	4340	Burr-Brown	
	4341	**Burr-Brown (2540)**	

(Continued)

Function	Device	Source	Line
RMS to DC Converter (Cont'd)			
	LH0091	† National	105
	LH0091C	National	
Sample and Hold Circuit			
	SHM9MM	**Datel (2574)**	
	SH376	**Intech (2799)**	
Sample and Hold Circuits			
	LF198	AMD	
	LF298	AMD	110
	LF398	† AMD	
	ADSHC-85	AD	
	ADSHC-85E	† AD	
	ADX346	AD	
	AD346	◊ AD	115
	AD582K	AD	
	AD582S	† AD	
	AD583K	AD	
	AD583S	† AD	
	AD585J	AD	120
	AD585S	† AD	
	HTC0300	**AD (2423)**	
	HTC0500	AD	
	HTS0025	AD	
	MN245	Analogic	125
	MP250M	◊ Analogic	
	MP260	Analogic	
	MP261	Analogic	
	MP270	Analogic	
	MP271	Analogic	130
	MP272	Analogic	
	MP282A	Analogic	
	LB1127AAK	**AT&T (2516)**	
	SHC298AM	**Burr-Brown (2543)**	
	SHC5320K	**Burr-Brown (2543)**	135
	SHC5320S	**Burr-Brown (2543)**	
	SHC600B	**Burr-Brown (2543)**	
	SHC76BM	Burr-Brown	
	SHC76K	Burr-Brown	
	SHC80	Burr-Brown	140
	SHC803	**Burr-Brown (2543)**	
	SHC804	**Burr-Brown (2543)**	
	SHC85	**Burr-Brown (2543)**	
	SHC85ET	**Burr-Brown (2543)**	
	SHMHUMC	Datel	145
	SHMHUMM	† Datel	
	SHMIC-1	**Datel (2577)**	
	SHMIC-1M	† Datel	
	SHMLM-2	**Datel (2577)**	
	SHM20C	**Datel (2577)**	150
	SHM20M	† Datel	
	SHM360	**Datel (2572, 2577)**	
	SHM361	**Datel (2572, 2577)**	
	SHM40MC	**Datel (2572, 2577)**	
	SHM40MM	**† Datel (2572, 2574, 2577)**	155
	SHM45MC	**Datel (2571, 2577)**	
	SHM45MM	**† Datel (2571, 2574, 2577)**	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

LINEAR—Other Devices (Cont'd)

Function	Device	Source	Line
Sample and Hold Circuits (Cont'd)			
	SHM486OC	Datel	
	SHM4860M	**† Datel (2577)**	
	SHM6MM	**† Datel (2574, 2577)**	
	SHM7MC	**Datel (2577)**	
	SHM91MC	**Datel (2571, 2577)**	5
	SHM91MM	**† Datel (2571, 2574, 2577)**	
	μA198M	† Fairchild	
	μA298C	Fairchild	
	IH5110	† GE/Intersil	
	IH5111	† GE/Intersil	10
	IH5112	GE/Intersil	
	IH5113	GE/Intersil	
	IH5114	GE/Intersil	
	IH5115	GE/Intersil	
	HA2420-2	**Harris (2703, 2737, 2742)**	15
	HA2420/883	**Harris (2703, 2737, 2742)**	
	HA2425-5	**† Harris (2737, 2742, 2747)**	
	HA5320-2	**† Harris (2737, 2747)**	
	HA5320-5	**Harris (2737, 2747)**	
	HA5330-2	**† Harris (2737, 2743, 2747)**	20
	HA5330-5	**Harris (2737, 2743, 2747)**	
	HA5330/883	**Harris (2737, 2743, 2747)**	
	HS346	HybridSys	
	HS9704	HybridSys	
	HS9705	HybridSys	25
	HS9714K	HybridSys	
	HS9714TB	† HybridSys	
	HS9716K	HybridSys	
	HS9716TB	† HybridSys	
	HS9720	HybridSys	30
	SH8518	ILC-DDC	
	ASH240	Intech	
	ASH250	Intech	
	ASH270	Intech	
	A880	**Intech (2799)**	35
	A881	Intech	
	A882	**Intech (2799)**	
	SH343	**† Intech (2799)**	
	SH344	**† Intech (2799)**	
	SH346	**† Intech (2799)**	40
	SH347	**† Intech (2799)**	
	SH377	**† Intech (2799)**	
	LF198	† LinearTech	
	LF198A	† LinearTech	
	LF398	LinearTech	45
	LF398A	LinearTech	
	MN343	MicroNet	
	MN343H	† MicroNet	
	MN344	MicroNet	
	MN344H	† MicroNet	50
	MN346	MicroNet	
	MN346H	† MicroNet	
	MN347	MicroNet	
	MN347H	† MicroNet	
	MN375A	MicroNet	55
	MN7130	MicroNet	
	MN7130H	† MicroNet	
	LF198	‡ National	

(Continued)

Function	Device	Source	Line
Sample and Hold Circuits (Cont'd)			
	LF198A	† National	
	LF298	National	60
	LF298A	National	
	LF398	National	
	LF398A	National	
	LH0023	† National	
	LH0023C	National	65
	LH0043	† National	
	LH0043C	National	
	LH0053	† National	
	LH0053C	National	
	SHM6401	National	70
	μPC398	NEC	
	5021	◊ OEI	
	5025	◊ OEI	
	SMP10A	**† PMI (2975)**	
	SMP10B	**† PMI (2975)**	75
	SMP10E	**PMI (2975)**	
	SMP10F	**PMI (2975)**	
	SMP11A	**† PMI (2975)**	
	SMP11B	**† PMI (2975)**	
	SMP11E	**PMI (2975)**	80
	SMP11F	**PMI (2975)**	
	SMP11G	**PMI (2975)**	
	SMP81E	**PMI (2975)**	
	SMP81F	**PMI (2975)**	
	L298	SGS	85
	LF198	† Signetics	
	LF298	Signetics	
	LF398	Signetics	
	NE5060	Signetics	
	NE5537	Signetics	90
	SE5537	† Signetics	
	SSM2300	SSM	
	CSH101A	◊† TeledyneC	
	4856	TeledyneP	
	4860	TeledyneP	95
	4860HR	† TeledyneP	
SCR/TRIAC Control (for push-button control)			
	UAA4007	Thomson	
	UAA4008	Thomson	
SCR/TRIAC Control (Long Cycle)			
	TEA1510	Thomson	
SCR/TRIAC Control (phase control)			
	UAA145	◊ Telefunken	100
	UAA146	◊ Telefunken	
	U208	Telefunken	
	U209	Telefunken	
	U212	Telefunken	
SCR/TRIAC Control, (zero voltage control)			
	TEA1511	Thomson	105
Security Detector, Data Receiver/Transmitter			
	CS212	Cherry	
Sensor/Controller, Air Temperature			
	MS120	◊ AnalogSys	
Sensor Transmitter, 4–20 mA			
	AD693	**AD (2444)**	
Serial Analog Delay, Tapped (bucket brigade with 32 taps)	RT0032A	EG&G-Reticon	
Servo Amplifier, for Motor Control			
	ZN409CE	Ferranti	110
Servo Controller			
	EL2017	**◊ Elantec (2591)**	
Servo Controller, for VTR or dc Servos			
	LB1601	Sanyo	

Function	Device	Source	Line
Servo Controller, Proportional Control			
	XR2264	◊ Exar	
	XR2265	◊ Exar	
Servo Controller, Radio Controlled Cars, 2 Channel			
	XR2266	Exar	115
Shunt Regulator			
	IR9431	Sharp	
Signal Processor, Real Time Digital Processing of Analog Signals (programmable)			
	2920	Intel	
	2921	Intel	
Smart Power Switch			
	UC3720	**Unitrode (3326)**	
Smoke Detector, Interconnectable			
	MC14468	Motorola	120
SMPS Controller			
	GL8901	**GoldStar (2701)**	
Sonar Ranging Module			
	SN28827	TI	
	SN28828	TI	
	TL851	TI	
	TL853	TI	125
Sonar Ranging Receiver			
	TL852	TI	
Stabilizer, 33V	gl574	GoldStar	
Start-Up Controller, Off-Line			
	SG1540	† SiliconG	
	SG2540	SiliconG	
	SG3540	SiliconG	130
Stepper Motor Controller, Intelligent Ramping			
	CY525	Cybernetic	
Supervisory Power Supply Circuit (non-inverting voltage detector)	MAX8211	Maxim	
	MAX8212	Maxim	
Supply Voltage Supervisor			
	TL7702M	† TI	
	TL7705M	† TI	135
Switch Bank, Programmable EEPROM Digital/Analog Switch Bank and Memory Circuit			
	SC22304	Sierra	
Switched Capacitor Array			
	SCA6	SiliconSys	
Switched Capacitor Filter, Low Pass, Butterworth, 4th Order	TLC04	TI	
	TLC14	TI	
Switched Capacitor Filter, Second Order			
	XR1010	**Exar (2602)**	140
Switched Capacitor Filter, Universal			
	MF5	National	
Switched Capacitor Filter, Dual, General Purpose, 2nd Order	TLC10	TI	
	TLC20	TI	
Switched Capacitor Filter, Dual (second order)			
	MF10A	† National	
	MF10C	National	145
Switched Capacitor Filter, Fourth Order			
	MF8	National	
Switched Capacitor Voltage Converter			
	LT1054C	LinearTech	
	LT1054M	† LinearTech	
Switched Capacitor Voltage Converter (positive to negative)	LMC7660	National	
Switched Capacitor Voltage Converter (with error flag to detect output faults)			
	LMC7669	National	150

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Function	Device	Source
Switches	ICL8018AC	GE/Intersil
	ICL8018AM	† GE/Intersil
	ICL8019AC	GE/Intersil
	ICL8019AM	† GE/Intersil
	ICL8020AC	GE/Intersil
	ICL8020AM	† GE/Intersil
Switching Regulator Control System (low power dc-to-dc converter)	S420	Siltronics
Switchmode Driver for DC Motors	**L292**	◊ **Unitrode (3326)**
Switchmode Pulse Width Modulation Control Circuit	**MC34060**	**Motorola (2930, 2960)**
	MC35060	† **Motorola (2930)**
	TL494I	**Motorola (2931)**
Synchro and Resolver to BCD Tracking Converter, 5-Decade, Pin-Programmable	SDC14700	ILC-DDC
Synchro/Resolver, reference Oscillator	REF15001	ILC-DDC
Synchro to Digital and Resolver to Digital Converter, 1 and 36 Speed	SDC361	ILC-DDC
	SDC362	ILC-DDC
Synchro to Digital Converter (16-bits)	SDC502	ILC-DDC
Synchro to Digital Converter, 10- to 14-Bit Programmable Resolution	SDC14560	◊ ILC-DDC
	SDC14561	◊ ILC-DDC
	SDC14562	◊ ILC-DDC
	SDC14563	◊ ILC-DDC
Synchro to Digital Converter (10-bits)	SDC630	ILC-DDC
Synchro to Digital Converter (12-bits)	SDC632	ILC-DDC
Synchro to Digital Converter (14-bits)	SDC634	ILC-DDC
Temperature and Air Flow Sensor	UC1730	◊† Unitrode
	UC2730	Unitrode
	UC3730	Unitrode
Temperature Controlled Differential Pair	μA726M	† Fairchild
Temperature, Set-Point Controller	AD596	AD
	AD597	AD
Temperature Transducers	AD590I	† AD
	AD590J	† AD
	AD590K	† AD
	AD590L	† AD
	AD590M	AD
	AD592	† AD
	AD590I	† **GE/Intersil (2677)**
	AD590J	† **GE/Intersil (2677)**
	AD590K	† **GE/Intersil (2677)**
	AD590L	† **GE/Intersil (2677)**
	AD590M	† **GE/Intersil (2677)**
	LM134	† LinearTech
	LM234	LinearTech
	MMBTS102	◊ Motorola

(Continued)

Function	Device	Source
Temperature Transducers (Cont'd)	MMBTS103	◊ Motorola
	MMBTS105	◊ Motorola
	LM134	† National
	LM135	‡ National
	LM234	National
	LM334	National
	LM335	National
	LM34	† National
	LM34C	National
	LM35	National
	LM35C	National
	LM3911	National
	REF02	‡ **PMI (2975)**
	REF02A	‡ **PMI (2975)**
	REF02C	‡ **PMI (2975)**
	REF02D	**PMI (2975)**
	REF02E	**PMI (2975)**
	REF02H	**PMI (2975)**
	REF05A	**PMI (2975)**
	REF05B	† **PMI (2975)**
	LA7011	Sanyo
	TDB0135	† Thomson
	TDC0134	† Thomson
Thermal Converter (matched transistors, diffused resistors)	4131	Burr-Brown
Threshold Switch (oscillator, switch with hysteresis)	TCA105	Siemens
Threshold Switch (2/3 supply voltage)	CS560	Cherry
	TCA345A	Siemens
Timer/Divider, Programmable	**TC5043**	**Toshiba (3308)**
Tone Decoder (traffic signal control and detector)	LA2200	Sanyo
Track and Hold	AD389	AD
	HTS0010	AD
	THA05203	ILC-DDC
	THA05210	ILC-DDC
	TH8530	ILC-DDC
	MN0300A	MicroNet
	MN050	MicroNet
	MN373	MicroNet
	MN376	MicroNet
	MN377	MicroNet
	MN379	MicroNet
	4866	TeledyneP
Track and Hold (4-channel simultaneous)	CS31412	Crystal
Track and Hold (13-bit with controlled hold time)	DGL13	ILC-DDC
Traffic Information Control System (ARI-DK type)	LA2211	Sanyo
Transconductance Block, Programmable	Iv560	Gennum
Transient Protection Circuit (up to ± 125 V)	MC3397T	Motorola
Transient Suppressor	L3121	SGS
	L3122	SGS
Transient Voltage/Current Suppressor	L3101	SGS
Transient Voltage Suppressor	LS5018	SGS
	LS5060	SGS
	LS5120	SGS

Function	Device	Source
Transient Voltage Suppressor, Dual Asymmetrical, 180 V	TISP218A	TI
	TISP318A	TI
Transient Voltage Suppressor, Dual Asymmetrical, 290 V	TISP229A	TI
Transient Voltage Suppressor, Dual Asymmetrical, 82V	TISP108A	TI
Transient Voltage Suppressor, 270 V, 1.3W	TPA270	Thomson
Transient Voltage Suppressor, 270 V, 20W	TPC270	Thomson
Transient Voltage Suppressor, 270 V, 5W	TPB270	Thomson
Transient Voltage Suppressor, 62 V, 1.3W	TPA62	Thomson
Transient Voltage Suppressor, 62 V, 20W	TPC62	Thomson
Transient Voltage Suppressor, 62 V, 5W	TPB62	Thomson
Transversal Filter, Quad Chirped (for discrete Fourier transform and power spectral density applications)	**RT5601A**	**EG&G-Reticon (2590)**
	RT5602A	**EG&G-Reticon (2590)**
Triac Angle Firing Control Circuit	**TDA1185**	**Motorola (2935)**
Triac Controller	TEA1511	Thomson
Trigonometric Function Generator (sine, cosine, tan, etc. and inverse functions)	AD639A	AD
	AD639B	AD
	AD639S	† AD
Video Buffer, 40 MHz	MAX452	Maxim
Video Buffer, 40 MHz (With 2-Channel Multiplexer)	MAX453	Maxim
Video Buffer, 40 MHz (With 4-Channel Multiplexer)	MAX454	Maxim
Video Buffer, 40 MHz (With 8-Channel Multiplexer)	MAX455	Maxim
Video Delay, CCD	CCD321A	◊ Fairchild
Video, IF and RF Amplifiers	SE592	TI
Voice Synthesizer	**UM5000**	**UMC (4329)**
Voltage Comparator, Quad	**GL339**	◊ **GoldStar (2700)**
Voltage Converter, + 5 V to ± 5 V	**VI7660C**	**Datel (2577)**
	VI7660M	**Datel (2577)**
	ICL7660	**GE/Intersil (2675)**
	LTC1044C	LinearTech
	LTC1044M	† LinearTech
	ICL7660C	Maxim
	ICL7660M	Maxim
	SI7660B	◊ Siliconix
	SI7660C	◊ Siliconix
Voltage Converter, converts + 4.5 to + 20V to −4.5 to −20V	**ICL7662C**	**GE/Intersil (2675)**
	ICL7662M	**GE/Intersil (2675)**

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

LINEAR—Other Devices (Cont'd)

Function	Device	Source
Voltage Converter, Inverting, −5V or Programmable	MAX635	Maxim
Voltage Converter, Inverting, −12V or Programmable	MAX636	Maxim
Voltage Converter, Inverting, −15V or Programmable	MAX637	Maxim
Voltage Converter, Step-Down, 5V or Programmable	MAX638C	Maxim
	MAX638M	† Maxim
Voltage Converter, Step-Up, + 5V or Programmable	MAX631	Maxim
	MAX641C	Maxim
	MAX641M	† Maxim
Voltage Converter, Step-Up, + 12V or Programmable	MAX642C	Maxim
	MAX642M	† Maxim
	MIC632	◊ Maxim
Voltage Converter, Step-Up, + 15V or Programmable	MAX633	Maxim
	MAX643C	Maxim
	MAX643M	† Maxim
Voltage Converter, Switched Capacitor	LTC1044M	TI
Voltage Converter, 5 to ± 10V	MAX680C	Maxim
	MAX680E	Maxim
	MAX680M	† Maxim
Voltage Converter, 120 Vac to 5 Vdc 3A	HS9151	National
Voltage Detector, Indicator, Regulator, (programmable zener)	**ICL8211C**	**GE/Intersil (2676)**
	ICL8211M	**† GE/Intersil (2676)**
	ICL8212C	**GE/Intersil (2676)**
	ICL8212M	**† GE/Intersil (2676)**
Voltage Doubler/Inverter, Converts, 4.5–20 V to 9 to 40 V or −4.5 to −20 V	SI7661B	◊ Siliconix
	SI7661C	◊ Siliconix
Voltage Doubler/Inverter, Converts 4.5–20V to 9 to 40V or −4.5 to −20V.	SI7661A	◊ Siliconix
Voltage Doubler/Inverter, 1.5–10V to 3 to 20V or −1.5 to −10V.	**ICL7660**	**GE/Intersil (2675)**
	ICL7660	◊ Maxim
	SI7660A	◊ Siliconix
	SI7660B	◊ Siliconix
	SI7660C	◊ Siliconix
	TSC7660	TeledyneS
Voltage/Frequency Converter (0–20 MHz range)	**VC401J**	**◊ VTC (3373)**
	VC401S	**◊ VTC (3373)**
Voltage Level Alarm	3041	Intech
Voltage Level Alarm, Quad	3040	Intech
Voltage Monitor (battery manager)	DS1259	Dallas
Voltage Monitor (battery manager with lithium cell)	DS1260	Dallas
Voltage Monitor (power monitor)	DS1231	Dallas
Voltage Monitor (with watchdog or activity timer)	DS1232	Dallas
Voltage Regulator, 110/220 Vac to 5Vdc, Adjustable output 1.3V to 10V at 50mA Over/under Voltage Detection, Full-wave Rectification	MAX600	◊ Maxim
	MAX602	◊ Maxim
	MAX610	◊ Maxim
	MAX612	◊ Maxim
Voltage Regulator, 110/220 Vac to 5Vdc, Fixed output, Variable Microprocessor Reset Half-wave rectification	MAX601	◊ Maxim
	MAX611	◊ Maxim
Voltage Stabilizer (33 V)	**GL574**	**GoldStar (2701)**
Voltage to Frequency Converter	ADVFG32	AD
	AD537J	AD
	AD537K	AD
	AD537S	† AD
	AD651	AD
	AD651A	AD
	AD651B	AD
	AD651J	AD
	AD651K	AD
	AD651S	† AD
	AD654	AD
	VFC100	**Burr-Brown (2542)**
	VFC32	**Burr-Brown (2542, 2544)**
	VFC320	**Burr-Brown (2542)**
	VFQ1	**Datel (2577)**
	VFC3802	**◊ Intech (2799)**
	VFC3805	**◊ Intech (2799)**
	VFC3810	**◊ Intech (2799)**
	IR9331	Sharp
	SSM2031	SSM
	4731	† TeledyneP
	4731HR	† TeledyneP
	4732	TeledyneP
	4732HR	† TeledyneP
	4733	† TeledyneP
	4733HR	TeledyneP
	4734	TeledyneP
	4734HR	† TeledyneP
	4735	† TeledyneP
	4735HR	† TeledyneP
	4736HR	† TeledyneP
	4739	TeledyneP
	4743	TeledyneP
	TDB0131	Thomson
Voltage to Frequency/Frequency to Voltage Converter	AD650J	AD
	AD650K	AD
	AD650S	† AD
	VFC42	**Burr-Brown (2542)**
	VFC42M	**† Burr-Brown (2542)**
	VFC52	**Burr-Brown (2542)**
	VFC52M	**† Burr-Brown (2542)**
	VFC62	**Burr-Brown (2542)**
	VFV10K	Datel
	VFV100K	Datel

(Continued)

Function	Device	Source
Voltage to Frequency/Frequency to Voltage Converter (Cont'd)	XR4151	◊ Exar
	A8400	**Intech (2799)**
	A8402	**Intech (2799)**
	A8404	**Intech (2799)**
	MCEVFC32	◊ MCE
	MPVFC32B	MicroPwr
	MPVFC32K	MicroPwr
	MPVFC32S	MicroPwr
	LM131	† National
	LM131A	‡ National
	LM231	National
	LM231A	National
	LM331	National
	LM331A	National
	RC4151	Raytheon
	RC4152	Raytheon
	RC4153	Raytheon
	RM4153	† Raytheon
	4780	TeledyneP
	4781	TeledyneP
	4782	TeledyneP
	9400	TeledyneS
	9401	TeledyneS
	9402	TeledyneS
Voltage-to-Current Converter/Transmitter	**XTR110**	**Burr-Brown (2538)**
Window Discriminator (indicates voltage above, below, inside, or outside two adjustable limits)	TCA965	Siemens
Window Discriminator (indicates when input is above or below two limits)	CS180	Cherry
Zero Voltage and Zero Crossing Triggers (triac and SCR control)	CA3058	◊† GE/RCA
	CA3059	**◊† GE/RCA (2649)**
	CA3079	**† GE/RCA (2649)**
	CA3059	**Motorola (2932)**
	CA3079	**Motorola (2932)**
	UAA1016B	**Motorola (2933)**
	TCA785	† Siemens
	TDA1023	Signetics
	TEA1024	Telefunken
	U106	Telefunken
	U217	Telefunken
	U263	Telefunken
	TA7606	Toshiba
Dual Over/Under-Voltage Detector	ICL7665	◊ Maxim
	ICL7665A	Maxim
	ICL7665B	Maxim
Dual Smart Switch	**UC1728**	**Unitrode (3327)**

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

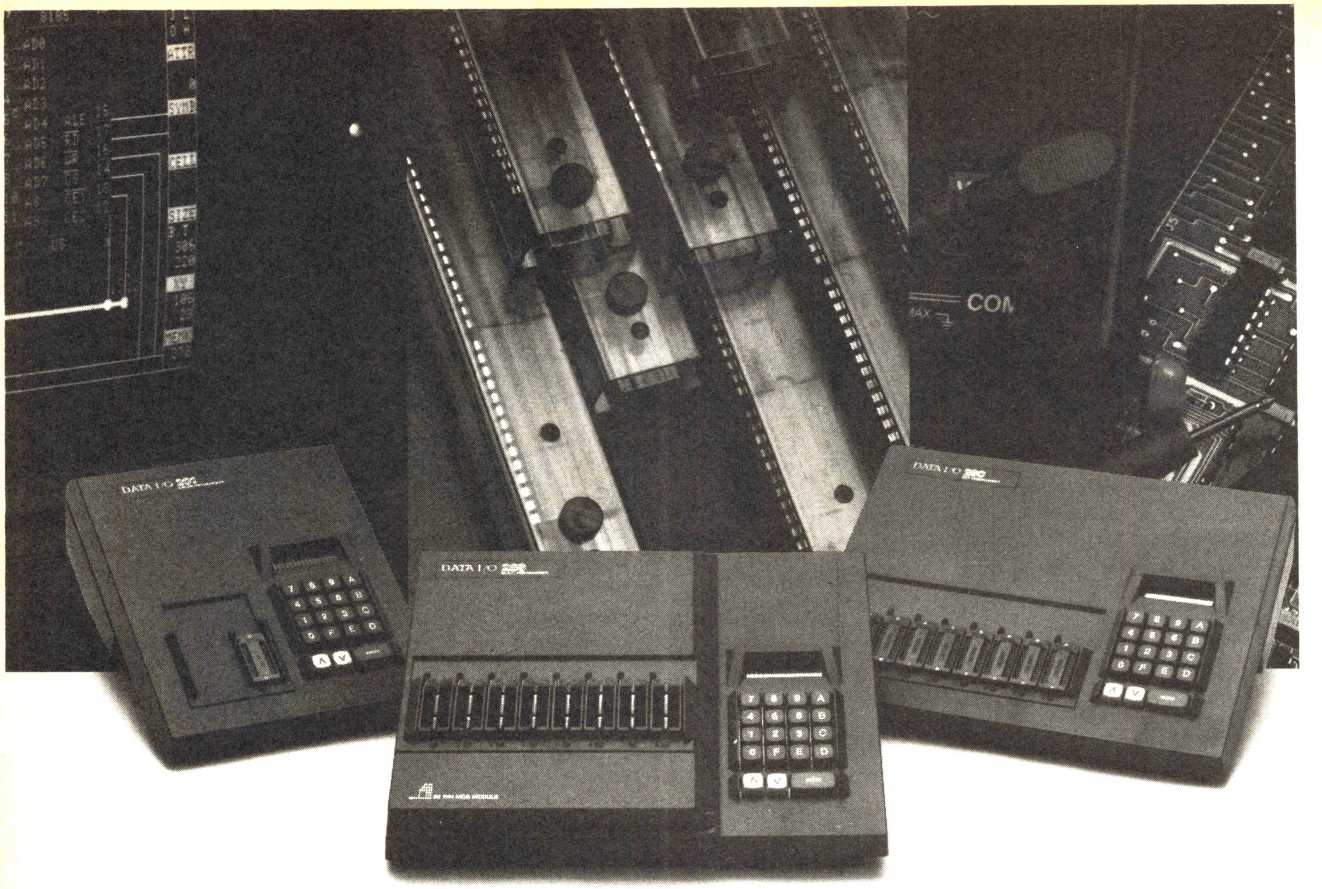
© IC MASTER 1988

IS THIS A BORROWED COPY

Avoid the hassle and order your own personal two-volume set of IC MASTER. It's the surest way to simplify your IC selection efforts.

Only IC MASTER allows you to examine and compare the specifications, relative strengths, and weaknesses of all devices in serious contention for your application. And only IC MASTER brings you actual manufacturers' data sheets, allowing you to make complete and definitive device selections.

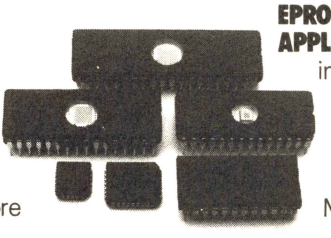
You can order IC MASTER simply by charging it to your VISA or MasterCard credit card. To place your order call Marie Botta at (516) 227-1314.



NOW YOU CAN AFFORD TO CHOOSE HIGH PERFORMANCE.

With the addition of the new 288 Multi Programmer, Data I/O®'s family of low-cost programmers achieves a level of performance and device support never before available in this price range. You can now afford to put our programmers anywhere you need them—in the engineering lab, on the production floor, or in field service. And each programmer supports manufacturer-specified algorithms, so you can expect Data I/O's high programming reliability.

THE 288: A FLEXIBLE ARCHITECTURE TO SUPPORT ALL YOUR DEVICE CHOICES. Choose the 288 with standard 512K bytes of RAM, to support more device types and packages than any other comparably priced gang or set programmer. Removable socket modules, device updates, and expandable RAM options (up to two megabytes), allow you to set or gang program 24- to 40-pin EPROMs, microcontrollers, and PLCCs. With all this flexibility in one programmer, your device choices won't be limited today, or in the future.



THE 280 AND 201: AFFORDABLE EPROM SUPPORT FOR ANY APPLICATION. From engineering and production to field service, the 280 Set Programmer and 201 EPROM Programmer support virtually any MOS and CMOS EPROM or EEPROM up to 512K bits. The 280 gives you the flexibility to program large data files into sets of devices in just one simple operation. And as a high-speed duplicator, it can program up to eight devices at once.

Choose the 201 when you want Data I/O reliability in a single-socket EPROM programmer. Whether you use it in your lab or take it on site for service calls, you won't have to compromise performance simply because the cost is out of reach.

FIND OUT JUST HOW LITTLE HIGH PERFORMANCE COSTS. Call us today for more information about our family of low-cost programmers.

1-800-247-5700
Dept. 189

Distributed by Hamilton/Avnet, Norvelle, Palomar, and Wyle.

Data I/O Corporation 10525 Willows Road N.E., P.O. Box 97046, Redmond, WA 98073-9746, U.S.A. (206) 881-6444/Telex 15-2167
FutureNet 9310 Topanga Canyon Boulevard, Chatsworth, CA 91311-5728 (818) 700-0691/Telex 910-494-2681
Data I/O Canada 6725 Airport Road, Suite 302, Mississauga, Ontario L4V 1V2 (416) 678-0761/Telex 06968133
Data I/O Europe World Trade Center, Strawinskylaan 633, 1077 XX Amsterdam, The Netherlands (20) 622866/Telex 16616 DATIO NL
Data I/O Japan Sumitomoseimei Higashishinbashi Bldg., 8F, 2-1-7, Higashi-Shinbashi, Minato-ku, Tokyo 105, Japan (03) 432-6991/Telex 2522685 DATAIO J

DATA I/O

© 1987 Data I/O Corporation

INTRODUCTION TO MEMORY

The Memory Section provides initial selection information and data on E²PROMs, RAMs, and ROMs as well as other memory devices. In these particular sections, the devices are characterized by organization (words and bits/word) and by access times. In order to assure that the access times are comparable, whenever possible the times are shown in nanoseconds over the full rated temperature range for the devices (i.e., 0° to 70°C for commercial units and −55°C to 125°C for military units). The full temperature nanosecond value is marked "nsF". When this value isn't specified, the guaranteed nanosecond value at room temperature is listed followed by "nsR". "Typical" values are invariably much faster than the guaranteed ones so that such listings place these memories higher on the list than they otherwise would appear.

Category	
Character Generators	1302
Code Converters	1303
FIFOs, LIFOs	1304
E²PROMs	1308
PROMs	1316
RAMs	
Bubble	1337
Dynamic	1337
Static	1346
ROMs	1389
Shift Registers	
Dynamic	1393
Static	1393

MEMORY—Character Generators

Format	Number of Output Lines	Input Logic levels	Supply Voltage, V	Device	Source	Line
5x7	1	TTL	5	DM76S128	† National	
				DM76S64	† National	
				DM86S128	National	
				DM86S64	National	
				DM8678	National	5
	5	MOS	5	MM52116FDW	National	
		TTL	5	RO3-2513	GIM	
	35	TTL	5	MSL9650	OKI	
7x9	1	TTL	5	DM76S128	† National	
				DM76S64	† National	10
				DM86S128	National	
				DM86S64	National	
				DM8678	National	
	7	MOS	5	MM52116FDX	National	
7x11	1	TTL	5	CRT8002	SMC	15
14 Segments						
	14	TTL	5	MSL9664	OKI	
				MSL9665	OKI	
16 Segments						
	16	TTL	5	MSL9662	OKI	
				MSL9663	OKI	
18x16 Japanese						
	16	TTL	5	MSM28101A	OKI	20
				MSM28201A	OKI	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Code Conversion From	To	Bits In	Bits Out	Process	Supply Voltage, V	Device	Source	Line
Degree-Sine						6086	MMI	
						6087	MMI	
EBCDIC-ASCII		12	8	Bipolar	5	DM8576AAA	National	
Binary-BCD		6	6	Bipolar	5	SN54185A †	TI	
BCD-Binary		6	6	Bipolar	5	SN54184 †	TI	5

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—FIFOs, LIFOs

First-in First-out

Words	Bits/ Word	Data Rate MHz (max)	Supply Voltage, V	Device	Source	Line
16	4	8.0 *	3–15	**CD40105B †**	**GE/RCA (2634)**	
				CD40105BE	**GE/RCA (2634)**	
		10.0	5	74F403	Fairchild	
				N9403	Signetics	
		12.0	5	SN54LS222 ◊†	TI	5
				SN54LS224 ◊†	TI	
				SN74LS222	TI	
				SN74LS224	TI	
		20.0	5	SN74LS227	TI	
				SN74LS228	TI	10
	5	10.0	5	SN74S225	MMI	
				SN74S225	**TI (3229)**	
		20.0	5	SN74S225A	MMI	
	9	—	5	**74HCT7030**	**Signetics (3003)**	
				74HC7030	**Signetics (3003)**	15
24	4	2.5	5–16	MS618 †	RTC	
32	8	0.5	–12,5	AM2812C	AMD	
				AM2812L	AMD	
				MJ2812	Plessey	
		1.0	–12,5	AM2812ADC	AMD	20
				AM2812AL	AMD	
		20	5	TMC3220	TRW-LSI	
	9	0.5	–12,5	AM2813C	AMD	
				AM2813L	AMD	
				MJ2813	Plessey	25
		1.0	–12,5	AM2813AC	AMD	
				AM2813AL	AMD	
64	4	0.7	–12,5	AM3341C	AMD	
		1.0	–12,5	AM2841C	AMD	
				AM2841M †	AMD	30
				MJ2841	Plessey	
		1.2	–12,5	AM2841A	AMD	
			5	**CY3341C**	**Cypress (2567)**	
		2	5	**CY3341-2M †**	**Cypress (2567)**	
				CY3341M	**Cypress (2567)**	35
		2.0	5	**CY3341-2C**	**Cypress (2567)**	
		5.0	5	**CY7C401-5C**	**Cypress (2567)**	
				CY7C403-5C	**Cypress (2567)**	
				67L401	MMI	
		7.0	5	C57401 †	MMI	40
				57401 ◊	MMI	
		10	5	67C401-10	MMI	
				67C4013-10	MMI	
		10.0	5	**CY7C401-10C**	**Cypress (2567)**	
				CY7C401-10M †	**Cypress (2567)**	45
				CY7C402-10M †	**Cypress (2567)**	
				CY7C403-10C	**Cypress (2567)**	
				CY7C403-10M †	**Cypress (2567)**	
				CY7C404-10M †	**Cypress (2567)**	
				74F413	Fairchild	50
				C57401A †	MMI	
				C67401	MMI	
				57401A ◊†	MMI	
				67401 ◊	MMI	
				DM87S401	National	
				SSI67C401	SiliconSys	55

(Continued)

Words	Bits/ Word	Data Rate MHz (max)	Supply Voltage, V	Device	Source	Line
64	4					(Cont'd)
		15	5	67C401-15	MMI	
				67C4013-15	MMI	
		15.0	5	**CY7C401-15C**	**Cypress (2567)**	
				CY7C401-15M †	**Cypress (2567)**	60
				CY7C402-15M †	**Cypress (2567)**	
				CY7C403-15C	**Cypress (2567)**	
				CY7C403-15M †	**Cypress (2567)**	
				CY7C404-15M †	**Cypress (2567)**	
				C67401A	MMI	65
				67401A	MMI	
				DM87S401A	National	
		16.7	5	C67401B	MMI	
				67401B	MMI	
		17.0	5	C67L401	MMI	70
		25	5	**IDT72401**	**IDT (2805, 2833)**	
				IDT72403	**IDT (2805, 2833)**	
		25.0	5	**CY7C403-25C**	**Cypress (2567)**	
				CY7C403-25M †	**Cypress (2567)**	
				57411A ◊†	MMI	75
		35.0	5	67411A	MMI	
	5	5.0	5	67L402	MMI	
		7.0	5	C57402 †	MMI	
				57402 ◊†	MMI	
		10	5	67C402-10	MMI	80
				67C4023-10	MMI	
		10.0	5	**CY7C402-10C**	**Cypress (2567)**	
				CY7C404-10C	**Cypress (2567)**	
				C57402A †	MMI	
				C67402	MMI	85
				57402A ◊†	MMI	
				67402 ◊	MMI	
				DM87S402	National	
				SSI67C402	SiliconSys	
		10.5	5	**MK45264-70**	**Thomson (3276)**	90
				MK45265-70	**Thomson (3276)**	
		13.3	5	**MK45264-55**	**Thomson (3276)**	
				MK45265-55	**Thomson (3276)**	
		15	5	67C402-15	MMI	
				67C4023-15	MMI	95
				67C4033-10	MMI	
				67C4033-15	MMI	
		15.0	5	**CY7C402-15C**	**Cypress (2567)**	
				CY7C404-15C	**Cypress (2567)**	
				C67402A	MMI	100
				67402A	MMI	
				DM87S402A	National	
		16.7	5	C67402B	MMI	
				67402B	MMI	
		17.0	5	C67L402	MMI	105
				C67L403	MMI	
		25	5	**IDT72402**	**IDT (2805, 2833)**	
				IDT72404	**IDT (2805, 2833)**	
				57413A ◊†	MMI	
		25.0	5	**CY7C404-25C**	**Cypress (2567)**	110
				CY7C404-25M †	**Cypress (2567)**	
				57412A ◊	MMI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—FIFOs, LIFOs (Cont'd)

First-in First-out (Cont'd)

Words	Bits/ Word	Data Rate MHz (max)	Supply Voltage, V	Device	Source	Line
64	5				(Cont'd)	
		35	5	**IDT72413**	**IDT (2805)**	
				67413A	MMI	
		35.0	5	67412A	MMI	
	8	15	5	**CY7C408-15C**	**Cypress (2567)**	
				CY7C408-15M †		
					Cypress (2567)	5
		35	5	**CY7C408C**	**Cypress (2567)**	
				CY7C408M †	**Cypress (2567)**	
				DM75X431 †	National	
				DM85X431	National	
	8/9	9	Serializing FIFO	67417	MMI	10
	9	15	5	**CY7C409-15C**	**Cypress (2567)**	
				CY7C409-15M †		
					Cypress (2567)	
		15.0	5	TDC1030 ◊†	TRW-LSI	
		25	5	**CY7C408-25C**	**Cypress (2567)**	
				CY7C408-25M †		
					Cypress (2567)	15
				CY7C409-25C	**Cypress (2567)**	
				CY7C409-25M †		
					Cypress (2567)	
		35	5	**CY7C408-35C**	**Cypress (2567)**	
				CY7C408-35M †		
					Cypress (2567)	
				CY7C409-35C	**Cypress (2567)**	20
				CY7C409-35M †		
					Cypress (2567)	
64K	RAM Controller			674219	MMI	
132/128						
	9	0.65	5	WD1510-00	Western	
		1.0	5	WD1510-01	Western	
256	9	20.0	5	TMC3139	TRW-LSI	25
512	9		5	DS2009-120 ◊		
					Dallas	
				DS2009-35 ◊	Dallas	
				DS2009-50 ◊	Dallas	
				DS2009-65 ◊	Dallas	
				DS2009-80 ◊	Dallas	30
				IDT7200LA-120		
					◊‡ IDT (2805, 2826)	
				IDT7200LA-25	**◊‡ IDT (2805, 2826)**	
				IDT7200LA-30	**◊‡ IDT (2805, 2826)**	
				IDT7200LA-35	**◊‡ IDT (2805, 2826)**	
				IDT7200LA-40	**◊‡ IDT (2805, 2826)**	35
				IDT7200LA-50	**◊‡ IDT (2805, 2826)**	
				IDT7200LA-65	**◊‡ IDT (2805, 2826)**	
				IDT7200LA-80	**◊‡ IDT (2805, 2826)**	
				IDT7200SA-120		
					◊‡ IDT (2805, 2826)	
				IDT7200SA-25	**◊‡ IDT (2805, 2826)**	40
				IDT7200SA-30	**◊‡ IDT (2805, 2826)**	
				IDT7200SA-35	**◊‡ IDT (2805, 2826)**	
				IDT7200SA-40	**◊‡ IDT (2805, 2826)**	
				IDT7200SA-50	**◊‡ IDT (2805, 2826)**	
				IDT7200SA-65	**◊‡ IDT (2805, 2826)**	45
				IDT7200SA-80	**◊‡ IDT (2805, 2826)**	
				IDT7201LA-30	**◊‡ IDT (2805, 2826)**	
				IDT7201SA-30	**◊‡ IDT (2805, 2826)**	
				MK4501-10 †	**Thomson (3268)**	
				MK4501-65	**Thomson (3268)**	50
				MK4501-80 †	**Thomson (3268)**	
				UM4501	**UMC (3311)**	
					(Continued)	

Words	Bits/ Word	Data Rate MHz (max)	Supply Voltage, V	Device	Source	Line
512	9				(Cont'd)	
		4.2	5	**MK4501-20**	**Thomson (3268)**	
		5.7	5	**MKB4501-82 †**		
					Thomson (3296)	
				MK4501-15	**Thomson (3268)**	55
		7	5	**IDT7201LA-120**	**IDT (2805, 2826)**	
				IDT7201LA-120B	**IDT (2805, 2826)**	
				IDT7201SA-120	**IDT (2805, 2826)**	
				IDT7201SA-120B	**IDT (2805, 2826)**	
		7.1	5	**MKB4501-81 †**		
					Thomson (3296)	60
				MK4501-12	**Thomson (3268)**	
		8.3	5	SRT4501-120	SpaceResearch	
		10	5	**IDT7201LA-80**	**IDT (2805, 2826)**	
				IDT7201LA-80B	**IDT (2805, 2826)**	
				IDT7201SA-80	**IDT (2805, 2826)**	65
				IDT7201SA-80B	**IDT (2805, 2826)**	
		12	5	**IDT7201LA-65**	**IDT (2805, 2826)**	
				IDT7201LA-65B	**IDT (2805, 2826)**	
				IDT7201SA-65	**IDT (2805, 2826)**	
				IDT7201SA-65B	**IDT (2805, 2826)**	70
		12.5	5	SRT4501-80	SpaceResearch	
		13	5	MA7001 ‡	Marconi	
		15	5	**CY7C412-15C**	**Cypress (2567)**	
				CY7C412-15M †		
					Cypress (2567)	
				IDT7201LA-50	**IDT (2805, 2826)**	75
				IDT7201LA-50B	**IDT (2805, 2826)**	
				IDT7201SA-50	**IDT (2805, 2826)**	
				IDT7201SA-50B	**IDT (2805, 2826)**	
		15.4	5	SRT4501-65	SpaceResearch	
		25	5	**CY7C412-25C**	**Cypress (2567)**	80
				CY7C412-25M †		
					Cypress (2567)	
				IDT7201LA-40B †		
					IDT (2805, 2826)	
				IDT7201SA-40B †	**IDT (2805, 2826)**	
		27	5	**IDT7201LA-35**	**IDT (2805, 2826)**	
				IDT7201SA-35	**IDT (2805, 2826)**	85
		30	5	**CY7C412-30C**	**Cypress (2567)**	
				CY7C412-30M †		
					Cypress (2567)	
		40	5	**CY7C412-40C**	**Cypress (2567)**	
				CY7C412-40M †		
					Cypress (2567)	
		65	5	**CY7C412-65C**	**Cypress (2567)**	90
				CY7C412-65M †		
					Cypress (2567)	
910	8	14.5	5	µPD41101-1	NEC	
		29.4	5	µPD41101-2	NEC	
				µPD41101-3	NEC	
1024	5	20	5	**MKB4505M-50 †**		
					Thomson (3300)	95
				MK4505M-50	**Thomson (3272)**	
		30	5	**MKB4505M-33 †**		
					Thomson (3300)	
				MK4505M-33	**Thomson (3272)**	
		40	5	**MKB4505M-25 †**		
					Thomson (3300)	
				MK4505M-25	**Thomson (3272)**	100
	9		5	CY7C424C	Cypress	
				CY7C424M †	Cypress	
				IDT7202LA-25 ◊‡	**IDT (2805, 2827)**	
				IDT7202LA-30 ◊‡	**IDT (2805, 2827)**	
				IDT7202SA-25 ◊‡	**IDT (2805, 2827)**	105
					(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—FIFOs, LIFOs (Cont'd)

First-in First-out (Cont'd)

Words	Bits/ Word	Data Rate MHz (max)	Supply Voltage, V	Device	Source
1024	9		5		(Cont'd)
				IDT7202SA-30 ◊‡	**IDT (2805, 2827)**
				IDT72021-25	
				◊‡	IDT
			5	DS2010-12	Dallas
				DS2010-15	Dallas
		7	5	**IDT7202LA-120**	**IDT (2805, 2827)**
				IDT7202LA-120B	**IDT (2805, 2827)**
				IDT7202SA-120	**IDT (2805, 2827)**
				IDT7202SA-120B	**IDT (2805, 2827)**
		10	5	**IDT7202LA-80**	**IDT (2805, 2827)**
				IDT7202LA-80B	**IDT (2805, 2827)**
				IDT7202SA-80	**IDT (2805, 2827)**
				IDT7202SA-80B	**IDT (2805, 2827)**
		12	5	**IDT7202LA-65**	**IDT (2805, 2827)**
				IDT7202LA-65B	**IDT (2805, 2827)**
				IDT7202SA-65	**IDT (2805, 2827)**
				IDT7202SA-65B	**IDT (2805, 2827)**
		15	5	**CY7C414-15**	**Cypress (2567)**
				IDT7202LA-50	**IDT (2805, 2827)**
				IDT7202LA-50B	**IDT (2805, 2827)**
				IDT7202SA-50	**IDT (2805, 2827)**
				IDT7202SA-50B	**IDT (2805, 2827)**
		25	5	**CY7C414-25**	**Cypress (2567)**
				IDT7202LA-40B †	**IDT (2805, 2827)**
				IDT7202SA-40B †	**IDT (2805, 2827)**
		27	5	**IDT7202LA-35**	**IDT (2805, 2827)**
				IDT7202SA-35	**IDT (2805, 2827)**
		30	5	CY7C424-30C	Cypress
				CY7C424-30M	
				†	Cypress
		33	5	**CY7C414-33**	**Cypress (2567)**
		40	5	CY7C424-40C	Cypress
				CY7C424-40M	
				†	Cypress
		65	5	CY7C424-65C	Cypress
				CY7C424-65M	
				†	Cypress
1135	8	17.9	5	μPD41102-1	NEC
		35.7	5	μPD41102-2	NEC
				μPD41102-3	NEC
2048	9		5	CY7C429C	Cypress
				CY7C429M †	Cypress
				IDT7203L-35 ◊‡	**IDT (2805, 2828)**
				IDT7203L-40 ◊‡	**IDT (2805, 2828)**
				IDT7203S-35 ◊‡	**IDT (2805, 2828)**
				IDT7203S-40 ◊‡	**IDT (2805, 2828)**
				IDT72031-35	
				◊‡	IDT
				IDT72103-120 ◊‡	**IDT (2805, 2830)**
				IDT72103-35 ◊‡	**IDT (2805, 2830)**
				IDT72103-40 ◊‡	**IDT (2805, 2830)**
				IDT72103-50 ◊‡	**IDT (2805, 2830)**
				IDT72103-65 ◊‡	**IDT (2805, 2830)**
				IDT72103-80 ◊‡	**IDT (2805, 2830)**
				MK4503-10	**Thomson (3271)**
				MK4503-12	**Thomson (3271)**
				MK4503-15	**Thomson (3271)**
				MK4503-20	**Thomson (3271)**
				MK4503-65	**Thomson (3271)**
				MK4503-80	**Thomson (3271)**

(Continued)

Words	Bits/ Word	Data Rate MHz (max)	Supply Voltage, V	Device	Source
2048	9				(Cont'd)
			5	DS2011-12	Dallas
				DS2011-15	Dallas
		6	5	**IDT7M203S-140**	**IDT (2805)**
				IDT7M203S-140B †	**IDT (2805)**
		7	5	**IDT7203L-120**	**IDT (2805, 2828)**
				IDT7203L-120B †	**IDT (2805, 2828)**
				IDT7203S-120	**IDT (2805, 2828)**
				IDT7203S-120B †	**IDT (2805, 2828)**
		8	5	**IDT7M203S-100**	**IDT (2805)**
				IDT7M203S-100B †	**IDT (2805)**
		10	5	**IDT7203L-80**	**IDT (2805, 2828)**
				IDT7203L-80B †	**IDT (2805, 2828)**
				IDT7203S-80	**IDT (2805, 2828)**
				IDT7203S-80B †	**IDT (2805, 2828)**
		12	5	**IDT7M203S-65**	**IDT (2805)**
				IDT7M203S-65B †	**IDT (2805)**
				IDT7203L-65	**IDT (2805, 2828)**
				IDT7203L-65B †	**IDT (2805, 2828)**
				IDT7203S-65	**IDT (2805, 2828)**
				IDT7203S-65B †	**IDT (2805, 2828)**
		15	5	**CY7C416-15**	**Cypress (2567)**
				IDT7M203S-50	**IDT (2805)**
				IDT7M203S-50B †	**IDT (2805)**
				IDT7203L-50	**IDT (2805, 2828)**
				IDT7203L-50B †	**IDT (2805, 2828)**
				IDT7203S-50	**IDT (2805, 2828)**
				IDT7203S-50B †	**IDT (2805, 2828)**
				VT2KF9	**VLSI Tech (3356)**
		18	5	**IDT7M203S-55**	**IDT (2805)**
				IDT7M203S-55B †	**IDT (2805)**
		25	5	**CY7C416-25**	**Cypress (2567)**
				IDT7M203S-40	**IDT (2805)**
		28.5	5	**DPF2X9**	**Dense-Pac (2585)**
		30	5	CY7C429-30C	Cypress
				CY7C429-30M	
				†	Cypress
		33	5	**CY7C416-33**	**Cypress (2567)**
		40	5	CY7C429-40C	Cypress
		40/20 S/P	5	**IDT72103**	**IDT (2805, 2830)**
				IDT72103B †	**IDT (2805, 2830)**
		65	5	CY7C429-65C	Cypress
				CY7C429-65M	
				†	Cypress
	18	28.5	5	**DPF2X18**	**Dense-Pac (2585)**
	36	28.5	5	**DPF2X36**	**Dense-Pac (2585)**
4096	9		5	**IDT7204L-35 ◊‡**	**IDT (2805, 2829)**
				IDT7204L-40 ◊‡	**IDT (2805, 2829)**
				IDT7204S-35 ◊‡	**IDT (2805, 2829)**
				IDT7204S-40 ◊‡	**IDT (2805, 2829)**
				IDT72041-35	
				◊‡	IDT
				IDT72104-120 ◊‡	**IDT (2805, 2830)**
				IDT72104-35 ◊‡	**IDT (2805, 2830)**
				IDT72104-40 ◊‡	**IDT (2805, 2830)**
				IDT72104-50 ◊‡	**IDT (2805, 2830)**

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

First-in First-out (Cont'd)

Words	Bits/ Word	Data Rate MHz (max)	Supply Voltage, V	Device	Source	Line
4096	9		5			(Cont'd)
				IDT72104-65 ◊‡	IDT (2805, 2830)	
				IDT72104-80 ◊‡	IDT (2805, 2830)	
		7	5	IDT7204L-120	IDT (2805, 2829)	
				IDT7204L-120B †	IDT (2805, 2829)	
				IDT7204S-120	IDT (2805, 2829)	5
				IDT7204S-120B †	IDT (2805, 2829)	
		8	5	IDT7M204S-100	IDT (2805)	
				IDT7M204S-100B †	IDT (2805)	
		10	5	IDT7204L-80	IDT (2805, 2829)	
				IDT7204L-80B †	IDT (2805, 2829)	10
				IDT7204S-80	IDT (2805, 2829)	
				IDT7204S-80B †	IDT (2805, 2829)	
		12	5	IDT7M204S-65	IDT (2805)	
				IDT7M204S-65B †	IDT (2805)	
				IDT7204L-65	IDT (2805, 2829)	15
				IDT7204L-65B †	IDT (2805, 2829)	
				IDT7204S-65	IDT (2805, 2829)	
				IDT7204S-65B †	IDT (2805, 2829)	
		15	5	IDT7M204S-50	IDT (2805)	
				IDT7M204S-50B †	IDT (2805)	20
				IDT7204L-50	IDT (2805, 2829)	
				IDT7204L-50B †	IDT (2805, 2829)	
				IDT7204S-50	IDT (2805, 2829)	
				IDT7204S-50B †	IDT (2805, 2829)	
		18	5	IDT7M204S-55	IDT (2805)	25
				IDT7M204S-55B †	IDT (2805)	
		25	5	IDT7M204S-40	IDT (2805)	
		28.5	5	DPF4X9	Dense-Pac (2585)	
		40/20 S/P	5	IDT72104	IDT (2805, 2830)	
				IDT72104B †	IDT (2805, 2830)	30
	18	28.5	5	DPF4X18	Dense-Pac (2585)	
	36	28.5	5	DPF4X36	Dense-Pac (2585)	
5048	8	13.3	5	μPD42505-75	NEC	
		20.0	5	μPD42505-50	NEC	
8192	9	12.5	5	IDT7M205-80B	IDT (2805)	35
		13	5	IDT7M205-75	IDT (2805)	
		28.5	5	DPF8X9	Dense-Pac (2585)	
	18	28.5	5	DPF8X18	Dense-Pac (2585)	
	26	28.5	5	DPF8X36	Dense-Pac (2585)	
16384	9	12.5	5	IDT7M206-80B	IDT (2805)	40
		13	5	IDT7M206-75	IDT (2805)	
		28.5	5	DPF16X9	Dense-Pac (2585)	
	18	28.5	5	DPF16X18	Dense-Pac (2585)	
	36	28.5	5	DPF16X36	Dense-Pac (2585)	
32768	8	10	5	μPD42532	NEC	45
	9	28.5	5	DPF32X9	Dense-Pac (2585)	
	18	28.5	5	DPF32X18	Dense-Pac (2585)	
	36	28.5	5	DPF32X36	Dense-Pac (2585)	
65536	18	28.5	5	DPF64X18	Dense-Pac (2585)	
	36	28.5	5	DPF64X36	Dense-Pac (2585)	50
131072	9	28.5	5	DPF128X9	Dense-Pac (2585)	

Last-in First-out

Words	Bits/ Word	Data Rate MHz (max)	Supply Voltage	Device	Source	Line
4K words						
	RAM Controller			8X60	◊ Signetics (3188)	
81	4	1.0	5	SR5018	SMC	
132/128						
	9	1.0	5	WD1510-02	Western	
133	4	1.0	5	SR5017	SMC	55

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—E² PROMs

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16x16	—	E²	Serial	8	5	COP494	◊ National	
						NMC9306	◊ National	
						SC22001	Sierra	
						SC22002	Sierra	
		Module	Serial	38	5	COB662256B	GIM	5
	—	NVRAM	Serial	8	5	**X2444**	**Xicor (3388, 3400)**	
						X2444/10	**Xicor (3388, 3400)**	
						X2444M/10 †	**Xicor (3388, 3400)**	
	200 nsF	E²	Serial	8	5	NMC9307	National	
						M9306	SGS	10
	400 nsF	E²	Serial	8	5	ER59256	GIM	
	1000 nsF							
		E²	Serial	14	5,25	MCM2801	Motorola	
		NVRAM	Serial	8	5	**X2444M †**	**Xicor (3388, 3400)**	
20x16	1 µS	E²	TS	14	5,20	LH26003	Sharp	
	20000 nsF							
		EA	Serial	14	5,–30	M58658	Mitsubishi	15
31x16	20000 nsF							
		EA	Serial	14	5,–30	M58659	Mitsubishi	
32x8	450 nsF	E²	TS	18	5	HNVM3300	◊† Hughes	
32x16	—	EA	Serial	18	28,12	U3070	◊ Telefunken	
	1000 nsF							
		EA	TS	28	–28,5	ER2051	GIM	
	2000 nsF							
		EA	TS	28	–28,5	ER2051HR †	GIM	20
32x32	3000 nsF							
		E²	Serial	8	5,25	MCM2802	Motorola	
50x14	1000 nsF							
		EA			–30,5	ER1451	GIM	
	20000 nsF							
		EA	Serial	14	5,–30	M58653	Mitsubishi	
64x4	300 nsF	NVRAM	TS	18	5	**X2210**	**Xicor (3386, 3396)**	
						X2210/10	**Xicor (3386, 3396)**	25
						X2210/5	**Xicor (3386, 3396)**	
						X2210M †	**Xicor (3386, 3396)**	
						X2210M/10 †	**Xicor (3386, 3396)**	
						X2210M/5 †	**Xicor (3386, 3396)**	
64x8	4000 nsF							
		EA	TS	22	–29,5	ER2055	GIM	30
64x16		CMOS,E²						
			Serial	8	5	ER59C11A	GIM	
	—	E²	Serial	8	5	SC22011	Sierra	
						SC22012	Sierra	
	200 nsF	E²	Serial	8	5	NMC9345	National	
	400 nsF	CMOS E²						
			Serial	8	5	**HY93C46M †**	**Hyundai (2770)**	35
						HY9346	**Hyundai (2770)**	
						HY9346M †	**Hyundai (2770)**	
		E²	Serial	8	–0.3 to 6V	**HY93C46**	**Hyundai (2770)**	
					5	**93C46**	**ICT (2865)**	
	450 nsF	E²	TS	16	5	COP495	◊ National	40
						NMC9346	◊ National	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
64x16								(Cont'd)
	4000 nsF							
		E²	Serial	8	5	ER5911	GIM	
	20000 nsF							
	•	EA	Serial	16	5,–30	M58655	Mitsubishi	
82x1	100000 nsF							
		EA	TS	18	–30,5	ER0082	GIM	
100x14	3400 nsF							
		EA	Serial	14	–35	ER1400	GIM	45
	20000 nsF							
		EA	Serial	14	–35	M5G1400	Mitsubishi	
					5,–30	M58657	Mitsubishi	
100x50	3400 nsF							
		EA	Serial	14	30,5	ER1451	GIM	
128x1	-	NV Electronic Key						
			-	5	5	DS1204U	Dallas	
	2000 nsF							
		NVRAM	Serial	8	5	HNMV3069	Hughes	50
128x8		CMOS,E²						
			Serial	8	5	ER59C11	GIM	
						24C01	GIM	
	15 ms	TTL	Serial	8	5	SDA2516	Siemens	
	20 ms	TTL	Serial	8	5	SDA2506	Siemens	
	180 nsF	E²	TS	18	5	SC22101-1	Sierra	55
		E², CMOS						
			TS	18	5	NMC98C10-1	National	
	200 nsF	NVRAM	TS	24	5	**X2001-20**	**Xicor (3387, 3398)**	
	300 nsF	E²	TS	18	5	SC22101	Sierra	
				24	5	ER5901	GIM	
		E², CMOS						
			TS	18	5	NMC98C10	National	60
		NVRAM	TS	24	5	**X2001**	**Xicor (3387, 3398)**	
	400 nsF	E²	Serial	8	5	ER5911	GIM	
	3000 nsF							
		E²	TS	8	5	PCD8582	GIM	
128x8x1	-	NV Tag	-	5	5	DS1201	Dallas	
256x1	200 nsF	E², CMOS						
			OC	8	5	NMC9313B	National	65
256x4	20 nsF	NOVRAM						
			TS		5	MBM2212-20	Fujitsu	
	25 nsF	NOVRAM						
			TS		5	MBM2212-25	Fujitsu	
	300 nsF	NVRAM	TS	18	5	**X2212**	**Xicor (3386, 3397)**	
						X2212/10	**Xicor (3386, 3397)**	
						X2212/5	**Xicor (3386, 3397)**	70
						X2212M †	**Xicor (3386, 3397)**	
						X2212M/10 †	**Xicor (3386, 3397)**	
						X2212M/5 †	**Xicor (3386, 3397)**	
256x8		CMOS,E²						
			Serial	8	5	24C02	GIM	
	—	E²	Serial	8	5	MCM2814	Motorola	75
	15 ms	TTL	Serial	8	5	SDA2526	Siemens	
	180 nsF	E²	TS	18	5	SC22102-1	Sierra	
	200 nsF	NVRAM	TS	28	5	**X2001-25**	**Xicor (3387, 3398)**	
	300 nsF	E²	TS	18	5	SC22102	Sierra	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—E² PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
512x8		CMOS, E²						
			Serial	8	5	**X24C04** ◊	**Xicor (3388, 3403)**	
		CMOS,E²						
			Serial	8	5	24C04	GIM	
		E²	Serial	8	5	**X2404**	**Xicor (3388, 3402)**	
	120 nsF	CMOS, E²						
			TS	24	5	AT28C04-12 ◊	Atmel	
	150 nsF	CMOS, E²						
			TS	24	5	AT28C04-15	Atmel	5
						28C04-15 ◊	GIM	
		CMOS,E²						
			TS	24	5	28C04A-15 ◊	GIM	
	180 nsF	E²	TS	18	5	SC22104-1	Sierra	
		E², CMOS						
			TS	18	5	NMC98C40-1	National	
	200 nsF	CMOS, E²						
			TS	24	5	AT28C04-20	Atmel	10
						28C04-20 ◊†	GIM	
		CMOS,E²						
			TS	24	5	28C04A-20 ◊	GIM	
		NVRAM	TS	28	5	**X2004-20**	**Xicor (3387, 3399)**	
	250 nsF	Module	TS	38	5	COB65404EE	GIM	
		CMOS, E²						
			TS	24	5	AT28C04-25	Atmel	15
						28C04-25 ◊	GIM	
		CMOS,E²						
			TS	24	5	28C04A-25 ◊	GIM	
		E²	TS		5	**2804A**	**SEEQ (2991)**	
			TS	24	5	XL2804A-250	EXEL	
						X2804A-25	**Xicor (3389, 3405)**	20
		NVRAM	TS	28	5	**X2004-25**	**Xicor (3387, 3399)**	
						X2004M-25 †	**Xicor (3387, 3399)**	
	300 nsF	E²	Serial	8	5	**X2404M †**	**Xicor (3388, 3402)**	
			TS	18	5	SC22104	Sierra	
				24	5	XL2804A-300	EXEL	25
						X2804A	**Xicor (3389, 3405)**	
						X2804AM †	**Xicor (3389, 3405)**	
		E², CMOS						
			TS	18	5	NMC98C40	National	
		NVRAM	Parallel					
				24	5	HNMV3104A	Hughes	
			TS	28	5	**X2004** ◊	**Xicor (3387, 3399)**	30
						X2004M †	**Xicor (3387, 3399)**	
	350 nsF	E²	TS	24	5	XL2804A-350	EXEL	
						X2804A-35	**Xicor (3389, 3405)**	
						X2804AM-35 †	**Xicor (3389, 3405)**	
	450 nsF	E²	TS	24	5	XL2804A-450	EXEL	35
						X2804A-45	**Xicor (3389, 3405)**	
						X2804AM-45 †	**Xicor (3389, 3405)**	
1024x1	200 nsF	E², CMOS						
			OC	8	5	NMC9314B	National	
	300 nsF	NVRAM	TS	18	5	**X2201A**	**Xicor (3386)**	
	1000 nsF							
		Floating Gate						
			Push-Pull					
				8	5	SC22056 ◊°†	Sierra	40
1024x4	900 nsF	EA	TS	22	–30,–12	5		
						ER3400	GIM	
1024x8	250 nsF	NVRAM Module						
			TS	28	5	**DPN18**	**Dense-Pac (2580)**	
	650 nsF	E²	TS	24	5	HNVM3108A		
						◊†	Hughes	
2048x4	1600 nsF							
		EA	TS	24	–24,			
					–14,5	ER2810	GIM	
						ER2810HR †	GIM	45
2048x8		CMOS, E²						
			Serial	8	5	**X24C16** ◊	**Xicor (3388, 3404)**	
	25 nsF	E², CMOS						
			TS	24	5	AT28HC191-35	Atmel	
						AT28HC291-35	Atmel	
						36C16-35	**SEEQ (2991)**	
						38C16-35	**SEEQ (2991)**	50
	45 nsF	CMOS, E²						
			TS	24	5	AT28HC16-45		
						◊†	Atmel	
		E²	TS	24	5	**36C16-45**	**SEEQ (2991)**	
						38C16-45	**SEEQ (2991)**	
		E², CMOS						
			TS	24	5	AT28HC191-45	Atmel	
						AT28HC291-45	Atmel	55
	55 nsF	CMOS, E²						
			TS	24	5	AT28HC16-55		
						◊†	Atmel	
						AT28HC16L-55		
						◊†	Atmel	
		CMOS,E²						
			TS	24	5	**IDT78C16A-55 ◊‡**	**IDT (2807, 2838)**	
				28	5	**IDT78C18A-55 ◊‡**	**IDT (2807, 2839)**	
		E²	TS	24	5	XL46C16-55	EXEL	60
						36C16-55 †	**SEEQ (2991)**	
						38C16-55 †	**SEEQ (2991)**	
		E², CMOS						
			TS	24	5	AT28HC191-55	Atmel	
						AT28HC291-55	Atmel	
	60 nsF	E²	TS	24	5	XL46C16-60	EXEL	65
	70 nsF	CMOS, Erasable						
			TS	24	5	AT28HC16-70		
						◊†	Atmel	
						AT28HC16L-70		
						◊†	Atmel	
		CMOS,E²						
			TS	24	5	**IDT78C16A-70 ◊‡**	**IDT (2807, 2838)**	
				28	5	**IDT78C18A-70 ◊‡**	**IDT (2807, 2839)**	
		E²	TS	24	5	XL46C16-70	EXEL	70
		E², CMOS						
			TS	24	5	AT28HC191-70	Atmel	
						AT28HC291-70	Atmel	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—E² PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8								(Cont'd)
	85 nsF	E²	TS	24	5	XL46C16-85 †	EXEL	
	90 nsF	CMOS, Erasable						
			TS	24	5	AT28HC16-90	◊† Atmel	
						AT28HC16L-90	◊† Atmel	
		CMOS,E²						
			TS	24	5	**IDT78C16A-90**	**◊‡ IDT (2807, 2838)**	
				28	5	**IDT78C18A-90**	**◊‡ IDT (2807, 2839)**	5
		E², CMOS						
			TS	24	5	AT28HC291-90	Atmel	
			TS	24	5	AT28HC191-90	Atmel	
	100 nsF	CMOS,E²						
			TS	24	5	**IDT78C16A-100**	**◊‡ IDT (2807, 2838)**	
				28	5	**IDT78C18A-100**	**◊‡ IDT (2807, 2839)**	
	120 nsF	CMOS, E²						
			TS	24	5	AT28C16-12 ◊	Atmel	10
		CMOS E²						
			TS	28	5	AT28C17-12 ◊	Atmel	
		CMOS,E²						
			TS	24	5	**IDT78C16A-120**	**◊‡ IDT (2807, 2838)**	
				28	5	**IDT78C18A-120**	**◊‡ IDT (2807, 2839)**	
	150 ns*	E²	TS	24	5	**X2816B**	**Xicor (3390, 3406)**	
	150 nsF	CMOS, E²						
			TS	24	5	AT28C16-15	Atmel	15
						AT28C17-15	Atmel	
		CMOS,E²						
			TS	24	5	**IDT78C16A-150**	**◊‡ IDT (2807, 2838)**	
				28	5	28C17A-15 ◊	GIM	
		E²	TS	24	5	28C16-15 ◊	GIM	
						28C16A-15 ◊	GIM	20
		NVRAM (Bat.)						
			TS	28	5	DS1220-150	Dallas	
	200 nsF	CMOS, E²						
			TS	24	5	AT28C16-20	Atmel	
						AT28C17-20	Atmel	
						28C16-20 ◊†	GIM	
						28C16A-20 ◊	GIM	25
		E²	TS	24	5	NMC9816A-20	National	
						52B13-200	**SEEQ (2991)**	
						52B13H-200	**SEEQ (2991)**	
				28	5	AM2817A-2	AMD	
						AM2817A-20	AMD	30
						NMC9817-20	National	
						2817A-200	**SEEQ (2991)**	
						2817AH-200	**SEEQ (2991)**	
						5517A	**SEEQ (2991)**	
						5517AH	**SEEQ (2991)**	35
		NMOS	TS	28	5	M2817A-200 †	SEEQ	
		NVRAM (Bat.)						
			TS	24	5	NVR2	LMS	
				28	5	DS1220-200	Dallas	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8								(Cont'd)
	250 nsF	Module	TS	38	5	C0B65416EE ◊	GIM	
		Cartridge						
			TS	30	5	DS1217A-16	Dallas	40
		CMOS, E²						
			TS	24	5	at28c16-25 ◊†	Atmel	
						AT28C16-25	Atmel	
						AT28C17-25	Atmel	
						28C16-25 ◊	GIM	
						28C16A-25 ◊	GIM	45
		CMOS,E²						
			TS	24	5	**IDT78C16A-250**	**◊‡ IDT (2807, 2838)**	
		E²	TS	24	5	XL2816A-250 ◊	EXEL	
						NMC2816-25	National	
						NMC2816E-25	National	
						NMC9816A-25	National	50
						KM2816A-25	Samsung	
						2816A-250	**SEEQ (2991)**	
						52B13-250	**SEEQ (2991)**	
						52B13H-250	**SEEQ (2991)**	
						5516A-250	**SEEQ (2991)**	55
						X2816A-25	**Xicor (3390, 3406)**	
						X2816B-25	**Xicor (3390, 3406)**	
						X2816BM-25 †	**Xicor (3390, 3406)**	
				28	5	AM2817A-25	AMD	
						NMC9817-25	National	60
						MSM2816	OKI	
						KM2817A-25	Samsung	
						5517A-250	**SEEQ (2991)**	
		NMOS	TS	24	5	M2816A-250 †	SEEQ	
						M52B13-250 †	SEEQ	65
						M52B13H-250 †	SEEQ	
						2816AH-250	**SEEQ (2991)**	
				28	5	M2817A-250 †	SEEQ	
						2817A-250	**SEEQ (2991)**	
						2817AH-250	**SEEQ (2991)**	70
						5517AH-250	**SEEQ (2991)**	
		NVRAM Module						
			TS	28	5	**DPN28**	**Dense-Pac (2580)**	
	300 nsF	CMOS, E²						
			Serial	8	5	**X24C16M ◊†**	**Xicor (3388, 3404)**	
			TS	24	5	AT28C16-30 ◊†	Atmel	
				28	5	AT28C17-30 ◊†	Atmel	75
		CMOS,E²						
			TS	24	5	**IDT78C16A-300**	**◊‡ IDT (2807, 2838)**	
		E²	TS	24	5	KM2816A	Samsung	
						M52B13-300 †	SEEQ	
						M52B13H-300 †	SEEQ	
						2816A-300	**SEEQ (2991)**	80
						5516A-300	**SEEQ (2991)**	
						X2816A ◊	**Xicor (3390, 3406)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—E² PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8	300 nsF	E²	TS	24	5			(Cont'd)
						X2816AM	**† Xicor**	**(3390, 3406)**
						X2816BM	**† Xicor**	**(3390, 3406)**
				28	5	KM2817A-30	Samsung	
		NMOS	TS	24	5	**2816AH-300**	**SEEQ**	**(2991)**
				28	5	M2817A-300 †		
							SEEQ	5
						2817A-300	**SEEQ**	**(2991)**
						2817AH-300	**SEEQ**	**(2991)**
						5517A-300	**SEEQ**	**(2991)**
						5517AH-300	**SEEQ**	**(2991)**
	350 nsF	CMOS E²						
			TS	24	5	AT28C16-35		
							◇† Atmel	10
		CMOS, E²						
			TS	28	5	AT28C17-35		
							◇† Atmel	
		CMOS,E²						
			TS	24	5	**IDT78C16A-350**		
							◇‡ IDT	**(2807, 2838)**
		E²	TS	24	5	XL2816A-350 ◇		
							EXEL	
						NMC2816-35	National	
						NMC2816E-35	National	15
						NMC9816A-35	National	
						KM2816A-35	Samsung	
						2816A-350	**SEEQ**	**(2991)**
						52B13-350	**SEEQ**	**(2991)**
						X2816A-35	**Xicor**	**(3390, 3406)** 20
						X2816AM-35 †		
							Xicor	**(3390, 3406)**
					5,21	**52B13H-350**	**SEEQ**	**(2991)**
				28	5	AM2817A-3	AMD	
						AM2817A-35	AMD	
						NMC9817-35	National	25
						KM2817A-35	Samsung	
		NMOS	TS	24	5	M2816A-350 †		
							SEEQ	
						M52B13-350 †	SEEQ	
						M52B13H-350		
							† SEEQ	
	450 nsF	E²	TS	24	5	XL2816A-450 ◇		
							EXEL	30
						NMC2816-45	National	
						NMC2816E-45	National	
						X2816A-45	**Xicor**	**(3390, 3406)**
						X2816AM-45 †		
							Xicor	**(3390, 3406)**
4096x1	1000 nsF	Floating Gate Push-pull						
				8	5	SC22057 ◇°†	Sierra	35
4096x8	35 nsF	E², CMOS						
			TS	24	5	**36C32-35**	**SEEQ**	**(2991)**
						38C32-35	**SEEQ**	**(2991)**
	45 nsF	CMOS E²						
			TS	24	5	**36C32-45**	**SEEQ**	**(2991)**
				28	5	**38C32-45**	**SEEQ**	**(2991)**
	55 nsF	CMOS E²						
			TS	24	5	**36C32-55**	**† SEEQ**	**(2991)** 40
				28	5	**38C32-55**	**† SEEQ**	**(2991)**

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x16	55 nsF	CMOS,E²						
			TS	40	5	28HC416-55 ◇		
							GIM	
	70 nsF	CMOS,E²						
			TS	40	5	28HC416-70		
							◇† GIM	
	90 nsF	CMOS,E²						
			TS	40	5	28HC416-90		
							◇† GIM	
8096x8	250 nsF	E²		28	5	MSM2864A-25	OKI	45
		NVRAM Module						
			TS	56	5	**DPN88**	**Dense-Pac (2580)**	
	300 nsF	E²		28	5	MSM2864A-30	OKI	
	350 nsF	E²		28	5	MSM2864A-35	OKI	
8192x8	35nsF	CMOS	TS	24	5	GM57HC64-35	GoldStar	
	45nsF	CMOS	TS	24	5	GM57HC64-45	GoldStar	50
	55 nsF	CMOS,E²						
			TS	32	5	**IDT78C68A-55 ◇‡ IDT**		**(2807)**
		CMOS,²	TS	28	5	**IDT78C64A-55 ◇‡ IDT**		**(2807)**
		E², CMOS						
			TS	28	5	AT28HC64-55	Atmel	
	55nsF	CMOS	TS	24	5	GM57HC64-55	GoldStar	
	60 nsF	CMOS, E²						
			TS	28	5	M38C64-60 †	SEEQ	55
	70 nsF	CMOS,E²						
			TS	28	5	**IDT78C64A-70 ◇‡ IDT**		**(2807)**
				32	5	**IDT78C68A-70 ◇‡ IDT**		**(2807)**
		E²	TS	24	5	29V864A	† Raytheon	
				28	5	EE64K8-70	Lattice	
						X2864H-70 ◇ Xicor		**(3391, 3408)** 60
						X2864HM-70 ◇† Xicor		**(3391, 3408)**
		E², CMOS						
			TS	28	5	AT28HC64-70	Atmel	
						XL28C64-70 †		
							EXEL	
		Module, VERSAPAC						
			TS	66	5	**DPE8X8V**	**Dense-Pac (2583)**	
	90 nsF	CMOS,E²						
			TS	28	5	**IDT78C64A-90 ◇‡ IDT**		**(2807)** 65
				32	5	**IDT78C68A-90 ◇‡ IDT**		**(2807)**
		E²	TS	28	5	**X2864H-90 ◇ Xicor**		**(3391, 3408)**
						X2864HM-90 ◇† Xicor		**(3391, 3408)**
		E², CMOS						
			TS	28	5	AT28HC64-90	Atmel	
						XL28C64-90 †		
							EXEL	70
	100 nsF	CMOS,E²						
			TS	28	5	28CP64B-10 ◇		
							GIM	
						IDT78C64A-100		
							◇‡ IDT	**(2807)**
				32	5	**IDT78C68A-100**		
							◇‡ IDT	**(2807)**
		E²	TS	24	5	29V864	† Raytheon	
	120 nsF	CMOS	TS	28	5	**DPE2864**	**◇ Dense-Pac (2578)**	75
		CMOS,E²						
			TS	28	5	28CP64B-12		
							◇† GIM	
						IDT78C64A-120		
							◇‡ IDT	**(2807)**

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—E² PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	120 nsF	CMOS,E²						
			TS					(Cont'd)
				32	5	**IDT78C68A-120**		
						◊‡	**IDT**	**(2807)**
		E²	TS	28	5	**X2864B-12**	**◊ Xicor**	**(3391, 3408)**
						X2864BM-12	**◊† Xicor**	**(3391, 3408)**
		E², CMOS						
			TS	28	5	AT28HC64-120	Atmel	
						XL28C64-120 †	EXEL	5
	150 nsF	CMOS, E²						
			TS	28	5	M5M28C64-15	Mitsubishi	
			TS	28	5	AT28C64-15	Atmel	
						AT28PC64-15		
						◊†	Atmel	
						28C64-15 ◊†	GIM	
		CMOS,E²						
			TS	28	5	28CP64A-15		
						◊†	GIM	10
						28CP64B-15		
						◊†	GIM	
						28C64A-15 ◊	GIM	
		E²	TS	28	5	**X2864B-15**	**◊ Xicor**	**(3391, 3408)**
						X2864BM-15	**◊† Xicor**	**(3391, 3408)**
		Module	TS	28	5	DPE4064	Dense-Pac	15
						DPE4164	Dense-Pac	
		NVRAM (Bat.)						
			TS	24	5	DS1225-150	Dallas	
				28	5	NVR8	LMS	
	180 nsF	E²	TS	28	5	**X2864B-18**	**◊†**	
							Xicor	**(3391, 3408)**
						X2864BM-18	**◊† Xicor**	**(3391, 3408)** 20
	200 nsF	CMOS, E²						
			TS	28	5	M5M28C64-20	Mitsubishi	
		CMOS	TS	28	5	CDM27C64-20	GE/RCA	
						NMC98C64-20		
						◊	National	
		CMOS, E²						
			TS	28	5	AT28C64-20	Atmel	
						AT28PC64-20		
						◊†	Atmel	25
						28C64-20 ◊†	GIM	
						28C64A-20 ◊	GIM	
						HN58C65-20	Hitachi	
		CMOS E²						
			TS	28	5	**28C64-200**	**SEEQ**	**(2991)**
						28CP64A-20		
						◊†	GIM	30
		E²	TS	28	5	KM2864A	Samsung	
						KM2865A	Samsung	
						52B33H-200	**SEEQ**	**(2991)**
						X2864AM-25	**◊†**	
							Xicor	**(3391, 3408)**
		Module	TS	38	5	C0B65464EE-20		
							GIM	35
		NMOS	TS	28	5	**52B33-200**	**SEEQ**	**(2991)**
		NVRAM (Bat.)						
			TS	24	5	DS1225-200	Dallas	
								(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8								(Cont'd)
	250 nsF	Cartridge						
			TS	30	5	DS1217A-64	Dallas	
		CMOS	TS	28	5	CDM27C64-25	GE/RCA	
						NMC98C64-25		
						◊	National	40
		CMOS, E²						
			TS	28	5	AT28C64-25	Atmel	
						AT28PC64-25		
						◊†	Atmel	
						28C64-25 ◊†	GIM	
						28C64A-25 ◊	GIM	
						µPD28C64-25	NEC	45
		CMOS E²						
			TS	28	5	M28C64-250 †	SEEQ	
						28CP64A-25		
						◊†	GIM	
		E²	TS	24	5	**X2864A-25**	**◊ Xicor**	**(3391, 3408)**
				28	5	AM9864	AMD	
						AM9864-25	AMD	50
						AM9864-25M †	AMD	
						XL2864A-250	EXEL	
						XL2865A-250	EXEL	
						HN58064-25	Hitachi	
						M2864H-250 †		
							SEEQ	55
						52B33H-250	**SEEQ**	**(2991)**
		E², CMOS						
			TS	28	5	HN58C65-25	Hitachi	
		NMOS	TS	28	5	M2864-250 †	SEEQ	
						2864-250	**SEEQ**	**(2991)**
						2864-350	**SEEQ**	**(2991)** 60
						2864H-250	**SEEQ**	**(2991)**
						52B33-250	**SEEQ**	**(2991)**
						55B33-250 ◊	SEEQ	
						55B33H-250 ◊		
							SEEQ	
	300 nsF	CMOS, E²						
			TS	28	5	AT28PC64-30		
						◊†	Atmel	65
						µPD28C64-30	NEC	
		E²	TS	24	5	M52B33-300	SEEQ	
						X2864AM	**◊† Xicor**	**(3391, 3408)**
				28	5	XL2864A-300	EXEL	
						XL2865A-300	EXEL	70
						HN58064-30	Hitachi	
						28C64-250	**SEEQ**	**(2991)**
						52B33-3	**SEEQ**	**(2991)**
						52B33-300	**SEEQ**	**(2991)**
						52B33H-3	**SEEQ**	**(2991)** 75
						52B33H-300	**SEEQ**	**(2991)**
						X2864A	**◊ Xicor**	**(3391, 3408)**
		NMOS	TS	28	5	M52B33H-300	SEEQ	
						2864-300	**SEEQ**	**(2991)**
						2864H-300	**SEEQ**	**(2991)** 80
	350 nsF	CMOS	TS	28	5	MBM28C65-35	Fujitsu	
						NMC98C64-35		
						◊	National	
								(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—E² PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	350 nsF							(Cont'd)
		CMOS, E²						
			TS	28	5	AT28PC64-35 ◊†	Atmel	
		E²	TS	24	5	**X2864A-35 ◊**	**Xicor (3391, 3408)**	
						X2864AM-35 ◊†	**Xicor (3391, 3408)**	
				28	5	AM9864-3	AMD	
						AM9864-35M †	AMD	5
						XL2864A-350	EXEL	
						XL2865A-350	EXEL	
						HN58064-35	Hitachi	
						X2864AT-35 ◊	**Xicor (3391, 3408)**	
	450 nsF	E²	TS	24	5	**X2864AM-45 ◊†**	**Xicor (3391, 3408)**	10
				28	5	XL2864A-450	EXEL	
						XL2865A-450	EXEL	
						NMH2864 †	National	
						NMH2864C	National	
						X2864A-45 ◊	**Xicor (3391, 3408)**	15
						X2864AT-45 ◊	**Xicor (3391, 3408)**	
8192x16								
	60 nsF	Module	TS	40	5	**DPE8M628**	**Dense-Pac (2582)**	
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE8X16V**	**Dense-Pac (2583)**	
	170 nsF	Module	TS	40	5	**DPZ8M628**	**Dense-Pac (2585)**	
8192x24								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE8X24V**	**Dense-Pac (2583)**	20
8192x32								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE8X32V**	**Dense-Pac (2583)**	
8196x8	300 nsF	NMOS	TS	28	5	M2864H-300 †	SEEQ	
	350 nsF	NMOS	TS	28	5	**52B33-350**	**SEEQ (2991)**	
8192x8	250 nsF	CMOS	TS	28	5	MBM28C64-25	Fujitsu	
						MBM28C65-25	Fujitsu	25
	350 nsF	CMOS	TS	28	5	MBM28C64-35	Fujitsu	
16384x8								
	70 nsF	E²	TS	28	5	**DPE41129**	**Dense-Pac (2582)**	
		Module, VERSAPAC						
			TS	66	5	**DPE16X8V**	**Dense-Pac (2583)**	
	150 nsF	Module	TS	28	5	**DPE40128**	**Dense-Pac (2582)**	
						DPE41128	Dense-Pac	30
	170 nsF	E², CMOS						
			TS	28	5	**48128-170**	**SEEQ (2991)**	
	200 nsF	CMOS	TS	28	5	CDM27C128-20	GE/RCA	
		E²	TS	28	5	**48128-200**	**SEEQ (2991)**	
	250 nsF	Cartridge						
			TS	30	5	DS1217A-128	Dallas	
		CMOS	TS	28	5	CDM27C128-25	GE/RCA	35
		E²	TS	28	5	**48128-250**	**SEEQ (2991)**	
16384x16								
	60 nsF	Module	TS	40	5	**DPE8M656**	**Dense-Pac (2582)**	
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE16X16V**	**Dense-Pac (2583)**	
	170 nsF	Module	TS	40	5	**DPZ8M656**	**Dense-Pac (2585)**	
16384x24								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE16X24V**	**Dense-Pac (2583)**	40
16384x32								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE16X32V**	**Dense-Pac (2583)**	
24576x8								
	70 nsF	E²	TS	28	5	**DPE40192**	**Dense-Pac (2582)**	
						DPE41193	**Dense-Pac (2582)**	
	150 nsF	Module	TS	28	5	DEP40192	Dense-Pac	
						DPE41192	Dense-Pac	45
	250 nsF	Cartridge						
			TS	30	5	DS1217A-192	Dallas	
32768x8								
	55 nsF	CMOS,E²						
			TS	28	5	**IDT78C256A-55 ◊‡**	**IDT (2807)**	
				32	5	**IDT78C258A-55 ◊‡**	**IDT (2807)**	
	70 nsF	CMOS,E²						
			TS	28	5	28HC256-70 ◊	GIM	
						IDT78C256A-70 ◊‡	**IDT (2807)**	50
				32	5	**IDT78C258A-70 ◊‡**	**IDT (2807)**	
		E²	TS	28	5	**DPE41257**	**Dense-Pac (2582)**	
		E², CMOS						
			TS	28	5	AT28HC256-70	Atmel	
		Module, VERSAPAC						
			TS	66	5	**DPE32X8V**	**Dense-Pac (2583)**	
		NVRAM	TS	28	5	DS1230-70	Dallas	55
	90 nsF	CMOS,E²						
			TS	28	5	28HC256-90 ◊†	GIM	
						IDT78C256A-90 ◊‡	**IDT (2807)**	
				32	5	**IDT78C258A-90 ◊‡**	**IDT (2807)**	
		E², CMOS						
			TS	28	5	AT28HC256-90	Atmel	
	100 nsF	CMOS,E²						
			TS	28	5	28CP256B-10 ◊	GIM	60
						IDT78C256A-100 ◊‡	**IDT (2807)**	
				32	5	**IDT78C258A-100 ◊‡**	**IDT (2807)**	
		NVRAM	TS	28	5	DS1230-100	Dallas	
	120 nsF	CMOS	TS	28	5	**DPE28256 ◊**	**Dense-Pac (2578)**	
		CMOS,E²						
			TS	28	5	28CP256B-12 ◊†	GIM	65
						IDT78C256A-120 ◊‡	**IDT (2807)**	
				32	5	**IDT78C258A-120 ◊‡**	**IDT (2807)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—E² PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8								(Cont'd)
	120 nsF							
		E², CMOS						
			TS	28	5	AT28HC256-120	Atmel	
						XL28C256-120 †	EXEL	
		NVRAM	TS	28	5	DS1230-120	Dallas	
	150 ns*	CMOS, E²						
			TS	28	5	**X28C256**	**Xicor (3394, 3413)**	
	150 nsF	CMOS, E²						
			TS	28	5	AT28C256-15 ◇†	Atmel	5
		CMOS,E²						
			TS	28	5	28CP256A-15 ◇†	GIM	
						28CP256B-15 ◇†	GIM	
		E², CMOS						
			TS	28	5	AT28HC256-150	Atmel	
		Module	TS	28	5	**DPE40256**	**Dense-Pac (2582)**	
						DPE41256	Dense-Pac	10
				32	5	DPE4328	Dense-Pac	
		NVRAM	TS	28	5	DS1235-150	Dallas	
		NVRAM (Bat.)						
			TS	28	5	DS1230-150	Dallas	
	200 nsF	CMOS, E²						
			TS	28	5	AT28C256-20 ◇†	Atmel	
		CMOS E²						
			TS	28	5	**28C256-200**	**SEEQ (2991)**	15
		CMOS,E²						
			TS	28	5	28CP256A-20 ◇†	GIM	
		E², CMOS						
			TS	28	5	AT28HC256-200	Atmel	
		NVRAM	TS	28	5	DS1235-200	Dallas	
	250 nsF	Cartridge						
			TS	30	5	DS1217A-256	Dallas	
		CMOS	TS	28	5	CDM27C256-25	GE/RCA	20
						M28C256-250	SEEQ	
						28C256-250	**SEEQ (2991)**	
		CMOS, E²						
			TS	28	5	AT28C256-25 ◇†	Atmel	
		CMOS,E²						
			TS	28	5	28CP256A-25 ◇†	GIM	
		E²	TS	28	5	**X28C256-25**	**Xicor (3394, 3413)**	25
						X28C256M-25 †	**Xicor (3394, 3413)**	
						X28256-25	**Xicor (3393, 3412)**	
						X28256M-25 †	**Xicor (3393, 3412)**	
		E², CMOS						
			TS	28	5	AT28HC256-250	Atmel	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8								(Cont'd)
	300 nsF	CMOS	TS	28	5	CDM27C256-30	GE/RCA	30
		CMOS E²						
			TS	28	5	**28C256-300**	**SEEQ (2991)**	
		E²	TS	28	5	5832-30MHR †	EDI	
						X28C256M †	**Xicor (3394, 3413)**	
						X28256 ◇	**Xicor (3393, 3412)**	
						X28256M †	**Xicor (3393, 3412)**	35
	350 nsF	CMOS, E²						
			TS	28	5	AT28C256-35 ◇†	Atmel	
		E²	TS	28	5	5832-35MHR †	EDI	
						X28C256-35	**Xicor (3394, 3413)**	
						X28C256M-35 †	**Xicor (3394, 3413)**	
						X28256-35	**Xicor (3393, 3412)**	40
						X28256M-35 †	**Xicor (3393, 3412)**	
	450 nsF	CMOS	TS	28	5	CDM27C256-45	GE/RCA	
32768x16								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE32X16V**	**Dense-Pac (2583)**	
	150 nsF	Module	TS	40	5	**DPE8M612**	**Dense-Pac (2582)**	
	170 nsF	Module	TS	40	5	**DPZ8M612**	**Dense-Pac (2585)**	45
	300 nsF	E²	TS	48	5	51664-30MHR †	EDI	
	350 nsF	E²	TS	48	5	51664-35MHR †	EDI	
32768x24								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE32X24V ◇**	**Dense-Pac (2583)**	
32768x32								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE32X32V ◇**	**Dense-Pac (2583)**	
65386x8								
	150	E²	TS	28	5	XL29C512	EXEL	50
65536x8								
	135 nsF	NVRAM, Module (Bat.)						
			TS		5	NVR64	LMS	
	150 nsF	Module	TS	32	5	**DPE4648**	**Dense-Pac (2582)**	
	170 nsF	Module	TS	32	5	**DPZ48C512**	**Dense-Pac (2585)**	
	200 nsF	E²	TS	32	5,12	**48C512-200 ◇**	**SEEQ (2991)**	
	250 nsF	Cartridge						
			TS	30	5	DS1217M-1/2	Dallas	55
		E²	TS	32	5,12	**48C512-250 ◇†**	**SEEQ (2991)**	
	300 nsF	E²	TS	32	5,12	**48C512-300 ◇†**	**SEEQ (2991)**	
65536x16								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE64X16V**	**Dense-Pac (2583)**	
	150 nsF	Module	TS	40	5	**DPE8M624**	**Dense-Pac (2582)**	
				48	5	**DPE1224**	**Dense-Pac (2582)**	60
				56	5	**DPE1124**	**Dense-Pac (2582)**	
	170 nsF	Module	TS	40	5	**DPZ8M624**	**Dense-Pac (2585)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—E² PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x24								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE64X24V**	**Dense-Pac (2583)**	
65536x32								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE64X32V**	**Dense-Pac (2583)**	
98304x8								
	150 nsF	Module	TS	32	5	**DPE4968**	**Dense-Pac (2582)**	
131072x8								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE128X8V**	**Dense-Pac (2583)**	
	150 nsF	Module	TS	32	5	**DPE41288**	**Dense-Pac (2582)**	5
				48	5	**DPE1224**	**Dense-Pac (2582)**	
				56	5	**DPE1124**	**Dense-Pac (2582)**	
	170 nsF	Module	TS	32	5	**DPZ48C1024**	**Dense-Pac (2585)**	
	200 nsF	E²	TS	32	5,12	**48C1024-200** ◊		
							SEEQ (2991)	
	250 nsF	Cartridge						
			TS	30	5	DS1217M-1	Dallas	10
		E²	TS	32	5,12	**48C1024-250** ◊†	**SEEQ (2991)**	
	300 nsF	E²	TS	32	5,12	**48C1024-300** ◊†	**SEEQ (2991)**	
131072x16								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE128X16V**	**Dense-Pac (2583)**	
	150 nsF	Module	TS	64	5	**DPE42568**	**Dense-Pac (2582)**	
131072x24								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE128X24V**	**Dense-Pac (2583)**	15
131072x32								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE128X32V**	**Dense-Pac (2583)**	
262144x8								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE256X8V** ◊		
							Dense-Pac (2583)	
	150 nsF	Module	TS	64	5	**DPE42568**	**Dense-Pac (2582)**	
	170 nsF	Module	TS	32	5	**DPZ48C2048**	**Dense-Pac (2585)**	
	250 nsF	Cartridge						
			TS	30	5	DS1217M-2	Dallas	20
262144x16								
	100 nsF	E²	TS	56	5	**DPE45129**	**Dense-Pac (2582)**	
	150 nsF	Module	TS	56	5	**DPE45128**	**Dense-Pac (2582)**	
524288x8								
	70 nsF	Module, VERSAPAC						
			TS	66	5	**DPE512X8V**	**Dense-Pac (2583)**	
	100 nsF	E²	TS	56	5	**DPE45129**	**Dense-Pac (2582)**	
	150 nsF	Module	TS	56	5	**DPE45128**	**Dense-Pac (2582)**	25
	170 nsF	Module	TS	32	5	**DPZ48C4096**	**Dense-Pac (2585)**	
	250 nsF	Cartridge						
			TS	30	5	DS1217M-4	Dallas	
524288x16								
	100 nsF	E²	TS	56	5	DPE1MBX8	Dense-Pac	
	150 nsF	Module	TS	60	5	DPE1MX8	Dense-Pac	
1048576x8								
	100 nsF	E²	TS	56	5	DPE1MBX8	Dense-Pac	30
	150 nsF	Module	TS	60	5	DPE1MX8	Dense-Pac	
2097152x8								
	170 nsF	Module	TS	32	5	**DPZ20488**	**Dense-Pac (2585)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8								
	65 nsF	CMOS Erasable						
			TS	28	5	**CY7C271-65WM**	◊† **Cypress**	**(2565)**
16x4	25 nsF	TTL	TS	16	5	DM85S47A	National	
	30 nsF	TTL	TS	16	5	DM75S07A	† National	
	35 nsF	TTL	OC	16	5	DM85S06	National	
			TS	16	5	DM85S07	National	5
	50 nsF	TTL	OC	16	5	DM75S06	† National	
			TS	16	5	DM75S07	† National	
32x8	10 nsF	TTL	OC	16, 20				
					5	N82US23	◊ Signetics	
			TS	16, 20				
					5	N82US123	◊ Signetics	
	15 nsF	TTL	OC	16	5	DM87S188	National	
			TS	16	5	63S081A	MMI	
						DM87S288	National	10
	20 nsF	TTL	OC	16	5	DM77S188	◊† National	
			TS	16	5	MB7112Y	Fujitsu	
						DM77S288	† National	
	25 nsF	ECL	OE	16	−5.2	**MCM10139**	**Motorola**	**(2918)**
		TTL	OC	16	5	MB7111H	Fujitsu	
					5	AM27S18AC	AMD	
						63S080	MMI	
						DM74S188A	National	15
				16, 20				
					5	N82S23A	◊ Signetics	
			TS	16	5	MB7112H	Fujitsu	
					5	AM27S19AC	AMD	
						63S081	MMI	
						DM74S288A	National	20
				16, 20				
					5	N82S123A	◊ Signetics	
	30 nsF	TTL	TS	16	5	38S03X-30	† TI	
	35 nsF	TTL	OC	16	5	MB7111E	Fujitsu	
					5	AM27S18AM	† AMD	
						53S080	◊† MMI	
						DM54S188A	◊† National	
						DM74S188	National	25
			TS	16	5	MB7112E	Fujitsu	
						MB7112E-W	† Fujitsu	
					5	AM27S19AM	† AMD	
						53S081	◊† MMI	
						DM54S288A	† National	
						DM74S288	National	30
	40 nsF	TTL	OC	16	5	AM27S18C	AMD	
			TS	16	5	AM27S19C	AMD	
	45 nsF	TTL	OC	16	5	DM54S188	◊† National	
			TS	16	5	DM54S288	† National	35
	50 nsF	TTL	OC	16	5	AM27LS18C	AMD	
						AM27S18M	† AMD	
						MB7111L	Fujitsu	
						N82S23	Signetics	
			TS	16	5	AM27LS19C	AMD	
						AM27S19M	† AMD	
						MB7112L	Fujitsu	
						N82S123	Signetics	40

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32x8							(Cont'd)	
	65 nsF	TTL	OC	16	5	S82S23	† Signetics	
			TS	16	5	AM27LS19M	† AMD	
						S82S123	† Signetics	
64-Bit	—	Erasable	—	—	—	RP5H01	Panatech	
256x4	10 nsF	ECL	OE	16	−5.2	**MCM10149-10**	**Motorola**	**(2918)**
					5	**100149A**	**Signetics**	**(3020)**
						10149A	**Signetics**	**(3021, 3185)**
	15 nsF	ECL	OE	16	−5.2	F100Z416	◊ Fairchild	
						MCM10149A	**Motorola**	**(2918)**
	20 nsR	ECL	OE	16	−5.2	**100149**	**Signetics**	**(3020)**
						10149	**Signetics**	**(3021, 3185)**
	25 nsF	ECL	OE	16	−5.2	**MCM10149**	**Motorola**	**(2918)**
						MCM10149-25	**Motorola**	**(2918)**
	27 nsF	TTL	TS	16, 20				
					5	N82S129A	◊ Signetics	
	30 nsF	TTL	OC	16	5	MB7113H	Fujitsu	
					5	AM27S20AC	AMD	
			TS	16	5	MB7114H	Fujitsu	
					5	AM27S21AC	AMD	
						63S141A	MMI	
	40 nsF	TTL	OC	16	5	MB7113E	Fujitsu	
					5	AM27S20AM	† AMD	
			TS	16	5	MB7114E	Fujitsu	
						MB7114E-W	† Fujitsu	
					5	AM27S21AM	† AMD	
						53S141A	† MMI	
	45 nsF	TTL	OC	16	5	AM27S20C	AMD	
						63S140	◊ MMI	
			TS	16	5	AM27S21C	AMD	
						63S141	◊ MMI	
	50 nsF	TTL	OC	16	5	MB7113L	Fujitsu	
						DM74S387	◊ National	
						N82S126	Signetics	
			TS	16	5	MB7114L	Fujitsu	
						DM74S287	National	
						N82S129	Signetics	
	55 nsF	TTL	OC	16	5	53S140	◊† MMI	
			TS	16	5	53S141	◊† MMI	
	60 nsF	TTL	OC	16	5	AM27S20M	† AMD	
						AM29760AM	AMD	
						DM54S387	† National	
			TS	16	5	AM27S21M	† AMD	
						DM54S287	† National	
	70 nsF	TTL	OC	16	5	S82S126	† Signetics	
			TS	16	5	S82S129	† Signetics	
	30 nsF	TTL	OC	16, 20				
					5	N82S126A	◊ Signetics	
256x8	28 nsF	TTL	TS	20	5	63S281A	◊ MMI	
	35 nsF	TTL	OC	20	5	MB7117H	Fujitsu	
			TS	20	5	MB7118H	Fujitsu	
	40 nsF	TTL	TS	20	5	53S281A	† MMI	
	45 nsF	TTL	OC	20	5	MB7117E	Fujitsu	
						63S280	◊ MMI	
			TS	20	5	MB7118E	Fujitsu	
						63S281	◊ MMI	
						N82S135	◊ Signetics	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
256x8	45 nsF	TTL	TS					(Cont'd)
				24	5	63S285	◊ MMI	
	50 nsF	TTL	OC	20	5	53S280	◊† MMI	
			TS	20	5	53S281	◊† MMI	
	60 nsF	TTL	TS	20	5	DM74LS471	National	
	70 nsF	TTL	TS	20	5	DM54LS471 †	National	5
	100 nsF	TTL	TS	20	5	N82LS135	Signetics	
	2300 nsF	Erasable	TS	24	–9,5	MM8702A-4	National	
512x4	30 nsF	TTL	OC	16	5	AM27S12AC	AMD	
			TS	16	5	AM27S13AC	AMD	
				16, 20	5	N82S131A ◊	Signetics	10
	33 nsF	TTL	OC	16, 20	5	N82S130A ◊	Signetics	
	35 nsF	TTL	OC	16	+5	MB7115H	Fujitsu	
			TS	16	+5	MB7116H	Fujitsu	
					5	63S241A	MMI	
	40 nsF	TTL	OC	16	5	AM27S12AM †	AMD	15
			TS	16	5	AM27S13AM †	AMD	
	45 nsF	TTL	OC	16	+5	MB7115E	Fujitsu	
					5	63S240 ◊	MMI	
			TS	16	+5	MB7116E	Fujitsu	
						MB7116E-W †	Fujitsu	20
					5	53S241A †	MMI	
						63S241 ◊	MMI	
	50 nsF	TTL	OC	16	5	AM27S12C	AMD	
						N82S130	Signetics	
			TS	16	5	AM27S13C	AMD	25
						N82S131	Signetics	
	55 nsF	TTL	OC	16	5	53S240 ◊†	MMI	
						DM74S570	National	
						DM74S570A	National	
			TS	16	5	53S241 ◊†	MMI	30
						DM74S571	National	
						DM74S571A	National	
						DM74S571B	National	
	60 nsF	TTL	OC	16	5	AM27S12M †	AMD	
			TS	16	5	AM27S13M †	AMD	35
	65 nsF	TTL	OC	16	5	DM54S570 †	National	
						DM54S570A †	National	
			TS	16	5	DM54S571 †	National	
						DM54S571A †	National	
						DM54S571B †	National	40
	70 nsF	TTL	OC	16	5	S82S130 †	Signetics	
			TS	16	5	S82S131 †	Signetics	
512x8	15 nsF	TTL	Reg	24	5	63RA481A	MMI	
	20 nsF	Reg	TS	24	5	AM27S25AC	AMD	
		TTL	Reg	24	5	53RA481A †	MMI	45
						63RA481 ◊	MMI	
			TS	24	5	MB7226RA-20	Fujitsu	
						MB7226RS-20	Fujitsu	
	25 nsF	CMOS Reg	TS	24	5	**CY7C225-25C**	**Cypress (2565)**	
						CY7C225-30M †	**Cypress (2565)**	50

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
512x8	25 nsF							(Cont'd)
		Reg	TS	24	5	AM27S25AM †	AMD	
		TTL	Reg	24	5	53RA481 ◊†	MMI	
			TS	20	5	N82S147B ◊	Signetics	
				24	5	MB7226RA-25	Fujitsu	
						MB7226RS-25	Fujitsu	55
	27 nsF	Reg	TS	22	5	AM27S27C	AMD	
				24	5	AM27S25C	AMD	
	30 nsF	Reg	TS	22	5	AM27S27M †	AMD	
				24	5	AM27S25M †	AMD	
						CY7C225-30C	**Cypress (2565)**	60
		TTL	TS	20	5	63S481A	MMI	
	35 nsF	Reg	TS	22	5	DM87SR27B	National	
				24	5	**CY7C225-35M †**	**Cypress (2565)**	
						DM87SR25B	National	
						DM87SR476B	National	65
		TTL	OC	20	5	AM27S28AC	AMD	
						MB7123H	Fujitsu	
				24	5	DM87SR25	National	
						DM87SR474	National	
						DM87SR476	National	70
			TS	20	5	AM27S29AC	AMD	
						MB7124H	Fujitsu	
						DM74S472B	National	
				24	5	AM27S31AC	AMD	
	40 nsF	Reg	TS	22	5	DM77SR27B †	National	75
				24	5	**CY7C225-40C**	**Cypress (2565)**	
						CY7C225-40M †	**Cypress (2565)**	
						DM77SR25B †	National	
						DM77SR474 †	National	
						DM77SR476B †	National	80
		TTL	Reg	24	5	DM77SR25 †	National	
						DM77SR476 †	National	
			TS	20	5	53S481A †	MMI	
	45 nsF	TTL	OC	20	5	AM27S28AM †	AMD	
						MB7123E	Fujitsu	85
						63S480 ◊	MMI	
						DM74S473A	National	
				24	5	DM74S475A	National	
			TS	20	5	AM27S29AM †	AMD	
						MB7124E	Fujitsu	90
						63S481 ◊	MMI	
						DM74S472A	National	
						DM74S472B	National	
						N82S147A	Signetics	
				24	5	AM27S31AM †	AMD	95
						63S485	MMI	
						DM74S474A	National	
	50 nsF	Reg	TS	22	5	DM87SR27	National	
		TTL	OC	20	5	53S480 ◊†	MMI	
			TS	20	5	53S481 ◊†	MMI	100
	55 nsF	Reg	TS	22	5	DM77SR27 †	National	
		TTL	OC	20	5	AM27S28C	AMD	

(Continued)

MEMORY

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
512x8	55 nsF	TTL					(Cont'd)	
			TS	20	5	AM27S29C	AMD	
				24	5	AM27S31C	AMD	
						53S485 †	MMI	
	60 nsF	TTL	OC	20	5	DM54S473A †	National	
						DM74S473	National	5
				24	5	DM54S475A †	National	
			TS	20	5	DM54S472 †	National	
						DM54S472A †	National	
						DM54S472B †	National	
						DM54S474A †	National	10
						DM54S474B †	National	
						DM74S472	National	
				24	5	AM27S15C	AMD	
						N82S115	Signetics	
						N82S141	Signetics	15
	65 nsF	TTL	OC	20	5	AM27S28M †	AMD	
						DM54S473 †	National	
				24	5	DM54S475 †	National	
						DM74S475	National	
			TS	20	5	AM27S29M †	AMD	20
				24	5	AM27S31M †	AMD	
						DM74S474	National	
	70 nsF	TTL	TS	20	5	**29623** ◊	**Raytheon (2985)**	
						TBP28S42M	TI	
				24	5	DM54S474 †	National	25
	90 nsF	TTL	TS	24	5	AM27S15M †	AMD	
						S82S141 †	Signetics	
	200 nsF	CMOS	TS	24	5	**HM6642 †**	**Harris (2705, 2766)**	
	250 nsF	CMOS	TS	24	5	**HM6641-8 †**	**Harris (2768)**	
						HM6641-9	**Harris (2768)**	30
	300 nsF	CMOS Erasable	TS	24	10	IM6654A ◊	GE/Intersil	
	450 nsF	CMOS Erasable	TS	24	5	IM6654-1 ◊	GE/Intersil	
	550 nsF	CMOS Erasable	TS	24	5	IM6654 ◊	GE/Intersil	
	600 nsF	CMOS Erasable	TS	24	5	IM6654M ◊†	GE/Intersil	
1024x4	18 nsF	TTL	DOC	24	5	63DA441 ◊	MMI	35
						63DA442 ◊	MMI	
	25 nsF	Reg	TS	24	5	AM27S65AC	AMD	
		TTL	DOC	24	5	53DA441 ◊†	MMI	
						53DA442 ◊†	MMI	
	30 nsF	NMOS	TS	18	5	M54741A-1	Mitsubishi	40
		Reg	TS	24	5	AM27S65AM †	AMD	
						AM27S65C	AMD	
	35 nsF	Reg	TS	24	5	AM27S65M †	AMD	
		TTL	OC	18	5	AM27S32AC	AMD	
						AM27S33AC	AMD	45
						MB7121H	Fujitsu	
			TS	18	5	AM27S33AC	AMD	
						MB7122H	Fujitsu	
						63S441A	MMI	
						DM74S573B	National	50

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1024x4	35 nsF	TTL	TS	18	5		(Cont'd)	
						μPB426-3	NEC	
						N82S137B	Signetics	
	45 nsF	TTL	OC	18	5	AM27S32AM †	AMD	
						MB7121E	Fujitsu	
						63S440 ◊	MMI	55
						DM74S572A	National	
			TS	18	5	AM27S33AM †	AMD	
						MB7122E	Fujitsu	
						MB7122E-W †	Fujitsu	
						63S441 ◊	MMI	60
						DM74S573A	National	
				18, 20				
					5	N82S137A ◊	Signetics	
				24	5	DM87S181A	National	
						N82S141A ◊	Signetics	
	50 nsF	TTL	TS	18	5	53S441A †	MMI	65
						DM54S573B †	National	
						μPB426-2	NEC	
	55 nsF	TTL	OC	18	5	AM27S32C	AMD	
						53S440 ◊†	MMI	
			TS	18	5	AM27S33C	AMD	70
						53S441 ◊†	MMI	
	60 nsF	TTL	OC	18	5	DM54S572A †	National	
						DM54S573A †	National	
						DM74S572	National	
			TS	18	5	DM74S573	National	75
						μPB426-1	NEC	
						N82S137	Signetics	
	65 nsF	TTL	OC	18	5	AM27S32M †	AMD	
			TS	18	5	AM27S33M †	AMD	
				24	5	DM77S181A †	National	80
	70 nsF	TTL	TS	18	5	μPB426	NEC	
						S82S137A †	Signetics	
	75 nsF	TTL	OC	18	5	DM54S572 †	National	
			TS	18	5	DM54S573 †	National	
	80 nsF	TTL	TS	18	5	S82S137 †	Signetics	85
	550 nsF	CMOS Erasable	TS	24	5	IM6653-1 ◊	GE/Intersil	
	600 nsF	CMOS Erasable	TS	24	5	IM6653M ◊†	GE/Intersil	
1024x8	—	TTL	TS	24	5	AM27PS181	AMD	
						AM27PS281	AMD	
						AM27S35AC	AMD	90
						AM27S35AM †	AMD	
						AM27S35C	AMD	
						AM27S35M †	AMD	
						AM27S37A	AMD	
	15 nsF	TTL	Reg	24	5	63RS881A	MMI	95
	20 nsF	TTL	Reg	24	5	53RS881A †	MMI	
						63RS881 ◊†	MMI	
			TS	24	5	MB7232RA-20	Fujitsu	
						MB7232RS-20	Fujitsu	
	25 nsF	TTL	Reg	24	5	53RS881 ◊†	MMI	100
			TS	24	5	MB7232RA-25	Fujitsu	
						MB7232RS-25	Fujitsu	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1024x8							(Cont'd)	
	30 nsF	CMOS	TS	24	5	**CY7C281-30C** ◊	**Cypress (2565)**	
						CY7C282-30C ◊	**Cypress (2565)**	
		Reg	TS	24	5	**CY7C235-30C**	**Cypress (2565)**	
		TTL	TS	24	5	63S881A	MMI	
	35 nsF	Reg	TS	24	5	DM87SR183B	◊ National	5
		TTL	OC	24	5	AM27S180AC	AMD	
						AM27S280AC	AMD	
						AM27S37	AMD	
						93Z450A	Fairchild	
			TS	24	5	AM27S181AC	AMD	10
						AM27S281AC	AMD	
						93Z451A	Fairchild	
						MB7132Y	Fujitsu	
				24, 28	5	N82S181C	◊ Signetics	
	40 nsF	Reg	TS	24	5	**CY7C235-40C**	**Cypress (2565)**	15
						CY7C235-40M †	**Cypress (2565)**	
						DM77SR181 †	National	
						DM77SR183B	† National	
						DM87SR181 ◊	National	
						DM87SR183 ◊	National	20
		TTL	OC	24	5	93Z450C	Fairchild	
						93Z451C	Fairchild	
	45 nsF	CMOS	TS	24	5	**CY7C281-45C** ◊	**Cypress (2565)**	
						CY7C281-45M ◊†	**Cypress (2565)**	
						CY7C282-45C ◊	**Cypress (2565)**	25
						CY7C282-45M ◊†	**Cypress (2565)**	
		Reg	TS	24	5	DM77SR183 †	National	
		TTL	OC	24	5	93Z341AM ◊	Fairchild	
						93Z450 ◊	Fairchild	
						MB7131H	Fujitsu	30
			TS	24	5	93Z451 ◊	Fairchild	
						MB7132H	Fujitsu	
						53S881A †	MMI	
						63S881 ◊	MMI	
						N82HS187A	**Signetics (3178)**	35
						N82HS189A	**Signetics (3179)**	
						N82S181B	Signetics	
	50 nsF	TTL	OC	24	5	AM27S180AM	† AMD	
						AM27S280AM	† AMD	
			TS	24	5	AM27S181AM	† AMD	40
						AM27S281AM	† AMD	
	55 nsF	TTL	OC	24	5	93Z450M †	Fairchild	
						93Z451M †	Fairchild	
						MB7131E	Fujitsu	
						DM87S180 ◊	National	45
						DM87S280	National	
			TS	24	5	MB7132E	Fujitsu	
						MB7132E-W	Fujitsu	
						53S881 ◊†	MMI	
							(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1024x8	55 nsF	TTL	TS	24	5		(Cont'd)	
						DM87S281	National	50
						N82HS187	**Signetics (3178)**	
						N82HS189	**Signetics (3179)**	
						N82S181A	Signetics	
	60 nsF	TTL	OC	24	5	AM27S180C	AMD	
						AM27S280C	AMD	55
			TS	24	5	AM27S181C	AMD	
						AM27S281C	AMD	
						29631A †	**Raytheon (2985)**	
						29631A	**Raytheon (2985)**	
						29633A †	**Raytheon (2985)**	60
						29633A	**Raytheon (2985)**	
						N82S183	Signetics	
	70 nsF	TTL	TS	24	5	DM87S181	National	
						29633A †	**Raytheon (2985)**	
						29633A	**Raytheon (2985)**	65
						N82S181 ◊	Signetics	
	75 nsF	TTL	OC	24	5	DM77S180 †	National	
						DM77S280 †	National	
			TS	24	5	DM77S181 †	National	
						DM77S281 †	National	70
	80 nsF	TTL	OC	24	5	AM27S180M †	AMD	
						AM27S280M †	AMD	
			TS	24	5	AM27S181M †	AMD	
						AM27S281M †	AMD	
						S82S181A †	Signetics	75
	90 nsF	TTL	TS	24	5	S82S181 †	Signetics	
						S82S183 †	Signetics	
						S82S2708 †	Signetics	
	95 nsF	TTL	TS	24	5	**29633C**	**Raytheon (2985)**	
	100 nsF	TTL	TS	24	5	DM87LS181	National	80
	120 nsF	TTL	TS	24	5	DM77LS181 †	National	
						N82LS181	Signetics	
	175 nsF	TTL	TS	24	5	S82LS181 †	Signetics	
	450 nsF	CMOS Erasable						
			TS	24	5	IM6658 ◊	GE/Intersil	
						IM6658M ◊†	GE/Intersil	85
		Erasable	TS	24	±5,12	INS8708 ◊	National	
						MSM2708A	OKI	
					5	NMC27C58	National	
2048x4	20 nsF	TTL	DOC	24	5	63DA841 ◊	MMI	
	25 nsF	Reg	TS	24	5	AM27S75AC	AMD	90
		TTL	DOC	24	5	53DA841 ◊†	MMI	
	30 nsF	Reg	TS	24	5	AM27S75AM †	AMD	
						AM27S75C	AMD	
	35 nsF	Reg	TS	24	5	AM27S75M †	AMD	
		TTL	OC	18	5	AM27S184AC	AMD	95
			TS	18	5	AM27S185AC	AMD	
						63S841A	MMI	
						DM87S185B	National	
	45 nsF	TTL	OC	18	5	AM27S184AM	† AMD	
						MB7127H	Fujitsu	100
			TS	18	5	AM27S185AM	† AMD	
						MB7128H	Fujitsu	
							(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
							(Cont'd)	
2048x4	45 nsF	TTL	TS	18	5	DM87S185A	National	
						N82S185B	Signetics	
	50 nsF	TTL	OC	18	5	AM27S184C	AMD	
			TS	18	5	AM27S185C	AMD	
						53S841A ◊†	MMI	5
						63S841 ◊	MMI	
						DM77S185B ◊†	National	
						N82S185A	Signetics	
	55 nsF	TTL	OC	18	5	AM27S184M †	AMD	
						MB7127E	Fujitsu	10
						DM87S184	National	
			TS	18	5	AM27S185M †	AMD	
						MB7128E	Fujitsu	
						MB7128E-W †	Fujitsu	
						53S841 ◊†	MMI	15
						DM87S185	National	
	60 nsF	TTL	TS	18	5	AM27LS185C	AMD	
						AM27PS185C	AMD	
						DM77S185A ◊†	National	
						29651A	**Raytheon (2985)**	20
						29653A ◊	**Raytheon (2985)**	
				24	5	N82S191A	Signetics	
	65 nsF	TTL	TS	18	5	AM27LS185M †	AMD	
						AM27PS185M †	AMD	
	70 nsF	TTL	OC	18	5	DM77S184 †	National	25
			TS	18	5	DM77S185 ◊†	National	
						29651C	**Raytheon (2985)**	
	75 nsF	TTL	TS	18	5	**29653C**	**Raytheon (2985)**	
	80 nsF	TTL	TS	18	5	S82S185A	Signetics	
				24	5	S82S191A †	Signetics	30
	90 nsF	TTL	TS	18	5	**29651M †**	**Raytheon (2985)**	
	95 nsF	TTL	TS	18	5	**29653M †**	**Raytheon (2985)**	
	100 nsF	TTL	TS	18	5	N82S185	Signetics	
	115 nsF	TTL	TS	18	5	S82S185 †	Signetics	
2048x8	—	Emulator (RAM w/Bat.)				GR2716	LMS	35
	15 nsF	TTL	Reg	24	5	63RA1681A	MMI	
						63RS1681A	MMI	
	18 nsF	CMOS Reg.	TS	24	5	**CY7C245A-18C**	**Cypress (2565)**	
						CY7C245A-18WC	**Cypress (2565)**	
	20 nsF	CMOS	TS	24	5	**CY7C291-20C**	**Cypress (2565)**	40
		CMOS Reg.	TS	24	5	**CY7C291A-20C**	**Cypress (2565)**	
						CY7C291A-20WC	**Cypress (2565)**	
						CY7C292A-20C	**Cypress (2565)**	
						CY7C292A-20WC	**Cypress (2565)**	
						CY7C293A-20C	**Cypress (2565)**	45
						CY7C293A-20WC	**Cypress (2565)**	
		TTL	Reg	24	5	53RA1681A †	MMI	
						53RS1681A †	MMI	
						63RA1681 ◊	MMI	
						63RS1681 ◊	MMI	50
			TS	24	5	MB7238RA-20	Fujitsu	
						MB7238RS-20	Fujitsu	
							(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
							(Cont'd)	
2048x8	25 nsF	CMOS	TS	24	5	**CY7C291-25C**	**Cypress (2565)**	
		CMOS, Erasable	TS	24	5	**CY7C245-25WC**	**Cypress (2565)**	
						CY7C291-25WC	**Cypress (2565)**	55
		CMOS Reg	TS	24	5	**CY7C245-25C**	**Cypress (2565)**	
		CMOS Reg.	TS	24	5	**CY7C245-25WM †**	**Cypress (2565)**	
						CY7C245A-25C	**Cypress (2565)**	
						CY7C245A-25M †	**Cypress (2565)**	
						CY7C245A-25WC	**Cypress (2565)**	60
		Reg	TS	24	5	DM87SR191 ◊	National	
						DM87SR193 ◊	National	
		TTL	Reg	24	5	53RA1681 ◊†	MMI	
						53RS1681 ◊†	MMI	
			TS	24	5	MB7238RA-25	Fujitsu	65
						MB7238RA-25W †	Fujitsu	
						MB7238RS-25	Fujitsu	
						MB7238RS-25W †	Fujitsu	
						N82HS191 ◊	Signetics	
	30 nsF	CMOS Reg.	TS	24	5	**CY7C291A-30M †**	**Cypress (2565)**	70
						CY7C291A-30WM †	**Cypress (2565)**	
						CY7C292A-30M †	**Cypress (2565)**	
						CY7C292A-30WM †	**Cypress (2565)**	
						CY7C293A-30M †	**Cypress (2565)**	
						CY7C293A-30WM †	**Cypress (2565)**	75
	35 nsF	CMOS	TS	24	5	**CY7C291-35C**	**Cypress (2565)**	
						CY7C291-35M †	**Cypress (2565)**	
						CY7C292-35C	**Cypress (2565)**	
		CMOS, Erasable	TS	24	5	**CY7C245-35WC**	**Cypress (2565)**	
						CY7C245-35WM †	**Cypress (2565)**	80
		CMOS Erasable	TS	24	5	**CY7C291-35WC**	**Cypress (2565)**	
		CMOS, Erasable	TS	24	5	**CY7C291-35WM †**	**Cypress (2565)**	
		CMOS Erasable	TS	24	5	27HC191-35 ◊	GIM	
						27HC291-35 ◊	GIM	
		CMOS, E^2	TS	24	5	AT28HC191-35 ◊†	Atmel	85
						AT28HC291-35 ◊†	Atmel	
							(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
2048x8	35 nsF							(Cont'd)	
		CMOS Reg							
			TS	24	5	**CY7C245-35M †**			
							Cypress	**(2565)**	
		CMOS Reg.							
			TS	24	5	**CY7C245A-35C**	**Cypress**	**(2565)**	
						CY7C245A-35M †			
							Cypress	**(2565)**	
						CY7C245A-35WC	**Cypress**	**(2565)**	
						CY7C245A-35WM			
						†	**Cypress**	**(2565)**	5
						CY7C291A-35C	**Cypress**	**(2565)**	
						CY7C291A-35M †			
							Cypress	**(2565)**	
						CY7C291A-35WC	**Cypress**	**(2565)**	
						CY7C291A-35WM			
						†	**Cypress**	**(2565)**	
						CY7C292A-35C	**Cypress**	**(2565)**	10
						CY7C292A-35M †			
							Cypress	**(2565)**	
						CY7C292A-35WC	**Cypress**	**(2565)**	
						CY7C292A-35WM	**Cypress**	**(2565)**	
						CY7C293A-35C	**Cypress**	**(2565)**	
						CY7C293A-35M †			
							Cypress	**(2565)**	15
						CY7C293A-35WC	**Cypress**	**(2565)**	
						CY7C293A-35WM	**Cypress**	**(2565)**	
		Reg	TS	24	5	**CY7C245-35C**	**Cypress**	**(2565)**	
						DM77SR191			
						◊†	National		
						DM77SR193			
						◊†	National		20
		TTL	OC	24	5	AM27S190AC	AMD		
						AM27S290AC	AMD		
						SFC71190C	Thomson		
			TS	24	5	AM27S191A	AMD		
						AM27S291A	AMD		25
						MB7138Y	Fujitsu		
						63S1681A	MMI		
						DM87S191B	National		
						DM87S291B	National		
						SFC71191C	Thomson		30
	40 nsF	CMOS Erasable							
			TS	24	5	**WS57C191-50M †**	**Waferscale**		
								(3376)	
		Reg	TS	24	5	AM27S45A	AMD		
						AM27S47A	AMD		
	45 nsF	CMOS	TS	24	5	TMS27PC292	TI		
						TMS27PC292-45			
							TI		35
		CMOS Erasable							
			TS	24	5	27HC191-45			
						◊†	GIM		
						27HC291-45			
						◊†	GIM		
						TMS27C292	**TI**	**(3257)**	
						TMS27C292-45	**TI**	**(3257)**	
						WS57C191-45 †			
							Waferscale		
								(3376)	40
						WS57C291-45	**Waferscale**		
								(3376)	
						WS57C291-50M †	**Waferscale**		
								(3376)	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
2048x8	45 nsF							(Cont'd)	
		CMOS, E²							
			TS	24	5	AT27HC291L-45			
						◊†	Atmel		
						AT28HC191-45			
						◊†	Atmel		
						AT28HC191L-45			
						◊†	Atmel		45
						AT28HC291-45			
						◊†	Atmel		
		Reg	TS	24	5	AM27S45	AMD		
						AM27S47	AMD		
						CY7C245-45C	**Cypress**	**(2565)**	
						CY7C245-45M †			
							Cypress	**(2565)**	50
		Reg, Erasable							
			TS	24	5	**CY7C245-45WC**	**Cypress**	**(2565)**	
						CY7C245-45WM †			
							Cypress	**(2565)**	
		TTL	OC	24	5	93Z510C	Fairchild		
						MB7137H	Fujitsu		
						SFC71190B	Thomson		55
			TS	24	5	93Z511C	Fairchild		
						MB7138H	Fujitsu		
						DM87S191A	National		
						DM87S291A	National		
						μPB429-3	NEC		60
						SFC71191B	Thomson		
	50 nsF	CMOS	TS	24	5	**CY7C291-50C**	**Cypress**	**(2565)**	
						CY7C291-50M †			
							Cypress	**(2565)**	
						CY7C292-50C	**Cypress**	**(2565)**	
						CY7C292-50M †			
							Cypress	**(2565)**	65
						TMS27PC292-5			
							TI		
						TMS27PC292-50			
							TI		
		CMOS Erasable							
			TS	24	5	**CY7C291-50WC**	**Cypress**	**(2565)**	
						CY7C291-50WM †			
							Cypress	**(2565)**	
						TMS27C292-5	**TI**	**(3257)**	70
						TMS27C292-50	**TI**	**(3257)**	
		CMOS Reg.							
			TS	24	5	**CY7C291A-50C**	**Cypress**	**(2565)**	
						CY7C291A-50M †			
							Cypress	**(2565)**	
						CY7C291A-50WC	**Cypress**	**(2565)**	
						CY7C291A-50WM	**Cypress**	**(2565)**	75
						CY7C292A-50C	**Cypress**	**(2565)**	
						CY7C292A-50M †			
							Cypress	**(2565)**	
						CY7C292A-50WC	**Cypress**	**(2565)**	
						CY7C292A-50WM	**Cypress**	**(2565)**	
						CY7C293A-50C	**Cypress**	**(2565)**	80
						CY7C293A-50M †			
							Cypress	**(2565)**	
						CY7C293A-50WC	**Cypress**	**(2565)**	
						CY7C293A-50WM	**Cypress**	**(2565)**	
		TTL	OC	24	5	AM27S190C	AMD		
						AM27S290AM			
							† AMD		85
						AM27S290C	AMD		
			TS	24	5	AM27PS191C	AMD		
						AM27PS291C	AMD		
						AM27S191	AMD		

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8	50 nsF	TTL	TS	24	5		(Cont'd)	
						AM27S191AM	† AMD	
						AM27S291	AMD	
						AM27S291AM	† AMD	
						53S1681A	† MMI	
						63S1681	MMI	5
						DM77S191B	◊† National	
						DM77S291B	† National	
						μPB429-2	NEC	
						29681A	**† Raytheon (2985)**	
						29681A	**Raytheon (2985)**	10
						29683A	**† Raytheon (2985)**	
						29683A	**Raytheon (2985)**	
	55 nsF	CMOS Erasable						
			TS	24	5	27HC191-55	◊† GIM	
						27HC291-55	◊† GIM	
						M36C16-55	† SEEQ	15
						WS57C191-50	**Waferscale (3376)**	
						WS57C191-55M	**Waferscale (3376)**	
						WS57C291-50	**Waferscale (3376)**	
						WS57C291-55M	**† Waferscale (3376)**	
		CMOS, E²						
			TS	24	5	AT27HC191L-55	◊† Atmel	20
						AT28HC191-55	◊† Atmel	
						AT28HC291-55	◊† Atmel	
						AT28HC291L-55	◊† Atmel	
		TTL	OC	24	5	93Z510M	† Fairchild	
						MB7137E	Fujitsu	25
			TS	24	5	93Z511M	† Fairchild	
						MB7138E	Fujitsu	
						MB7138E-W	† Fujitsu	
	60 nsF	TTL	TS	24	5	DM77S191A	◊† National	
						DM77S291A	† National	30
						μPB429-1	NEC	
						SFC71191A	† Thomson	
	65 nsF	TTL	OC	24	5	AM27S190M	† AMD	
						DM87S190	National	
						DM87S290	National	35
			TS	24	5	AM27PS191M	† AMD	
						AM27PS291AM	† AMD	
						AM27S291M	† AMD	
						53S1681	◊† MMI	
						DM87S191	National	40
						DM87S291	National	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8							(Cont'd)	
	70 nsF	CMOS, E²						
			TS	24	5	AT28HC191-70	◊† Atmel	
						AT28HC291-70	◊† Atmel	
		TTL	TS	24	5	**29681A**	**† Raytheon (2985)**	
						29681A	**Raytheon (2985)**	45
						29683A	**† Raytheon (2985)**	
						29683A	**Raytheon (2985)**	
	80 nsF	BIP	TS	24	5	HS7616RH	‡ Harris	
		TTL	OC	24	5	DM77S190	◊† National	
						DM77S290	† National	50
						SFC71190A	† Thomson	
			TS	24	5	DM77S191	◊† National	
						DM77S291	† National	
						29681	**Raytheon (2985)**	
						N82S191	Signetics	55
	85 nsF	TTL	TS	24	5	**29683**	**◊ Raytheon (2985)**	
	90 nsF	CMOS	TS	24	5	**HM6616B-2**	**†**	
							Harris (2768)	
						HM6616B-9	**Harris (2768)**	
	100 nsF	TTL	TS	24	5	S82S191	† Signetics	
	120 nsF	CMOS	TS	24	5	**HM6616-2**	**† Harris (2768)**	60
						HM6616-9	**Harris (2768)**	
						HM6617	**† Harris (2705, 2766)**	
	140 nsF	CMOS	TS	24	5	HS6617RH	‡ Harris	
	300 nsF	Erasable	TS	24	5	AM9716	AMD	
	350 nsF	Erasable	TS	24	5	2716-1	Intel	65
						MM2716-1	National	
						M2716-1	SGS	
						ET2716-1	Thomson	
	390 nsF	Erasable	TS	24	5	2716-2	Intel	
						MM2716-2	National	70
	450 nsF	CMOS Erasable						
			TS	24	5	ETC2716	Thomson	
		Erasable	TS	24	5	M2716	◊ Intel	
						2716	Intel	
						MM2716	National	
						NMC27C16-45	National	75
						MSM2716A	OKI	
						M2716	SGS	
						ET2716	Thomson	
	490 nsF	Erasable	TS	24	5	2716-5	Intel	
	550 nsF	CMOS Erasable						
			TS	24	5	ETC2716-5	Thomson	80
	650 nsF	Erasable	TS	24	5	2716-6	Intel	
2048x24								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV2X24V**	**Dense-Pac (2584)**	
2048x32								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV2X32V**	**Dense-Pac (2584)**	
4096x4	20 nsF	TTL	DOC	24	5	63DA1643	◊ MMI	
						63D1641	◊ MMI	85
	25 nsF	Reg	TS	24	5	AM27S85AC	AMD	
		TTL	DOC	24	5	53DA1643	◊† MMI	
						53D1641	◊† MMI	
			TS	20	5	N82HS195B	Signetics	
	30 nsF	Reg	TS	24	5	AM27S85AM	† AMD	90
						AM27S85C	AMD	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4							(Cont'd)	
	35 nsF	Reg	TS	24	5	AM27S85M †	AMD	
		TTL	TS	20	5	AM27S41A	AMD	
						MB7152-Y ◊	Fujitsu	
						63S1641A	MMI	
						DM87S195B	National	5
						N82HS195A	Signetics	
	45 nsF	TTL	OC	20	5	MB7133H	Fujitsu	
						MB7151H ◊	Fujitsu	
			TS	20	5	MB7134H	Fujitsu	
						DM87S195A	National	10
						N82HS195	Signetics	
				20	5	MB7152H ◊	Fujitsu	
	50 nsF	TTL	TS	20	5	AM27PS41	AMD	
						AM27S41	AMD	
						AM27S41AM †	AMD	15
						53S1641A †	MMI	
						63S1641 ◊	MMI	
						DM77S195B ◊†	National	
						S82HS195 †	Signetics	
	55 nsF	TTL	OC	20	5	MB7133E	Fujitsu	20
						MB7151E ◊	Fujitsu	
			TS	20	5	MB7134E	Fujitsu	
						MB7134E-W †	Fujitsu	
						MB7152E ◊	Fujitsu	
	60 nsF	TTL	TS	20	5	DM77S195A ◊†	National	25
	65 nsF	TTL	TS	20	5	AM27S41M †	AMD	
						53S1641 †	MMI	
4096x8	—	Emulator (RAM w/Bat.)				GR2732	LMS	
	30 nsF	TTL	TS	24	5	**N82HS321B**	**Signetics (3180)**	
	35 nsF	CMOS Erasable						
			TS	24	5	27CX321-35	ICT	30
						27CX322-35	ICT	
						WS57C43B-35 ◊	**Waferscale (3376)**	
		TTL	TS	24	5	63S3281A ◊	MMI	
						N82HS321A	**Signetics (3180)**	
	40 nsF	TTL	TS	24	5	AM27S43A	AMD	35
	45 nsF	CMOS Erasable						
			TS	24	5	27CX321-45	ICT	
						27CX322-45	ICT	
						WS57C43B-45 ◊	**Waferscale (3376)**	
						WS57C43B-45M ◊†	**Waferscale (3376)**	
		TTL	TS	24	5	53S3281 ◊†	MMI	40
						N82HS321	**Signetics (3180)**	
	50 nsF	TTL	TS	24	5	AM27S43	AMD	
						53S3281A †	MMI	
						63S3281 ◊	MMI	
	55 nsF	CMOS Erasable						
			TS	24	5	27CX321-55	ICT	45
						27CX322-55	ICT	
						M36C32-55 †	SEEQ	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x8	55 nsF	CMOS Erasable					(Cont'd)	
			TS	24	5	**WS57C43-55** ◊	**Waferscale (3376)**	
						WS57C43B-55M ◊†	**Waferscale (3376)**	
		TTL	OC	24	5	MB7141H	Fujitsu	50
			TS	24	5	MB7142H	Fujitsu	
						DM87S321	National	
						DM87S421 ◊	National	
	65 nsF	TTL	OC	24	5	MB7141E	Fujitsu	
			TS	24	5	MB7142E	Fujitsu	55
						MB7142E-W †	Fujitsu	
						DM77S321 †	National	
						DM77S421 †	National	
	70 nsF	CMOS Erasable						
			TS	24	5	**WS57C43-70** ◊	**Waferscale (3376)**	
						WS57C43-70M ◊†	**Waferscale (3376)**	60
		TTL	TS	24	5	**29671A †**	**Raytheon (2985)**	
						29671A	**Raytheon (2985)**	
	80 nsF	TTL	TS	24	5	**29671 †**	**Raytheon (2985)**	
						29671	**Raytheon (2985)**	
						29671A †	**Raytheon (2985)**	65
						29671A	**Raytheon (2985)**	
	85 nsF	TTL	TS	24	5	**29673** ◊†	**Raytheon (2985)**	
						29673 ◊	**Raytheon (2985)**	
	100 nsF	TTL	TS	24	5	**29671 †**	**Raytheon (2985)**	
						29671	**Raytheon (2985)**	70
	105 nsF	TTL	TS	24	5	**29673 †**	**Raytheon (2985)**	
						29673	**Raytheon (2985)**	
	170 nsF	Erasable	TS	24	5	**TMS2732A-17**	**TI (3257)**	
	200 nsF	CMOS Erasable						
			TS	24	5	NMC27C32B-200	National	
		Erasable	TS	24	5	2732A-20	Intel	75
						M2732A-2 ◊	SGS	
						TMS2732A-20	**TI (3257)**	
		NMOS	TS	24	5	2732A-2	Intel	
	250 nsF	CMOS	TS	28	5	R2716-25	Rockwell	
		CMOS, Erasable						
			TS	24	5	RD27C32-25	Panatech	80
		Erasable	TS	24	5	AM2732A-25M †	AMD	
						2732A-25	Intel	
						M2732A ◊	SGS	
						TMS2732A-25	**TI (3257)**	
				28	5	M2732A-25 †	Intel	85
		NMOS	TS	24	5	2732A	Intel	
	300 nsF	CMOS Erasable						
			TS	24	5	RD27C32-30	Panatech	
		Erasable	TS	24	5	2732A-3	Intel	
						2732A-30	Intel	
						M2732A-3 ◊	SGS	90
	350 nsF	CMOS	TS	28	5	R2716-350	Rockwell	
		CMOS Erasable						
			TS	24	5	NMC27C32B-350	National	
						RD27C32-35	Panatech	
						ETC2732-35	Thomson	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x8	350 nsF						(Cont'd)	
		Erasable	TS	24	5	NMC27C32-35	National	
	450 nsF	CMOS Erasable						
			TS	24	5	ETC2732-45	Thomson	
		Erasable	TS	24	5	AM2732A-45M	† AMD	
						HN462532	Hitachi	
						2732A-4	Intel	5
						NMC27C32-45	National	
						M2732A-4 ◊	SGS	
						TMS2732A-45	**TI (3257)**	
				28	5	M2732A-45 †	Intel	
					5, 12.5	2732A-45	Intel	10
		NMOS	TS	24	5	RO94132	GIM	
	550 nsF	CMOS Erasable						
			TS	24	5	ETC2732-55	Thomson	
4096x16								
	55 nsF	CMOS Erasable						
			TS	40	5	**WS57C65-55**	**Waferscale (3376)**	
	70 nsF	CMOS Erasable						
			TS	40	5	**WS57C65-70**	**Waferscale (3376)**	
						WS57C65-70M ◊†	**Waferscale (3376)**	15
	90 nsF	CMOS Erasable						
			TS	40	5	**WS57C65-90M ◊†**	**Waferscale (3376)**	
4096x24								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV4X24V**	**Dense-Pac (2584)**	
4096x32								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV4X32V**	**Dense-Pac (2584)**	
8192	450	CMOS	TS	28	5	**TMS27PC64-45**	**TI (3258)**	
8192x8	—	Emulator (RAM w/Bat.)				GR2764	LMS	20
	35 nsF	CMOS	TS	24	5	**CY7C261-35C ◊**	**Cypress (2565)**	
						CY7C263-35C ◊	**Cypress (2565)**	
						CY7C264-35C ◊	**Cypress (2565)**	
		CMOS, Erasable						
			TS	24	5	**CY7C261-35WC ◊**	**Cypress (2565)**	
						CY7C263-35WC ◊	**Cypress (2565)**	25
						CY7C264-35WC ◊	**Cypress (2565)**	
						GM57HC64-35	GoldStar	
		CMOS Erasable						
			TS	24	5	27CX641-35 ◊	ICT	
						27CX642-35 ◊	ICT	
				28	5	**WS57C49B-35**	**Waferscale (3376)**	30
		TTL	OC	24	5	93Z665C	Fairchild	
			TS	24	5	**N82HS641B ◊**	**Signetics (3182)**	
	40 nsF	CMOS	TS	24	5	27CX641	ICT	
						27CX642	ICT	
							(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	40 nsF						(Cont'd)	
		CMOS Erasable						
			TS	24	5	**CY7C261-40C ◊**	**Cypress (2565)**	35
						CY7C263-40C ◊	**Cypress (2565)**	
		CMOS, Erasable						
			TS	28	5	AT27HC641-40	◊† Atmel	
						AT27HC642-40	◊† Atmel	
		CMOS Erasable						
			TS	28	5	**CY7C268-40WC ◊**	**Cypress (2565)**	
						CY7C269-40WC ◊	**Cypress (2565)**	40
		Reg	TS	28	5	**CY7C268-40C ◊**	**Cypress (2565)**	
		TTL	TS	24	5	AM27S49AC	AMD	
						93Z667C-40	Fairchild	
	45 nsF	CMOS	TS	24	5	**CY7C261-45C ◊**	**Cypress (2565)**	
						CY7C261-45M ◊†	**Cypress (2565)**	45
						CY7C263-45C ◊	**Cypress (2565)**	
						CY7C263-45M ◊†	**Cypress (2565)**	
						CY7C264-45C ◊	**Cypress (2565)**	
						CY7C264-45M ◊†	**Cypress (2565)**	
		CMOS Erasable						
			TS	24	5	AT27HC641-45	Atmel	50
		CMOS, Erasable						
			TS	24	5	AT27HC641L-45	◊† Atmel	
						AT27HC642L-45	◊† Atmel	
						CY7C261-45WC ◊	**Cypress (2565)**	
						CY7C261-45WM	**◊† Cypress (2565)**	
						CY7C263-45WC ◊	**Cypress (2565)**	55
						CY7C263-45WM	**◊† Cypress (2565)**	
						CY7C264-45WC ◊	**Cypress (2565)**	
						CY7C264-45WM	**◊† Cypress (2565)**	
		CMOS Erasable						
			TS	24	5	27HC641-45	◊† GIM	
		CMOS, Erasable						
			TS	24	5	GM57HC64-45	GoldStar	60
		CMOS Erasable						
			TS	24	5	27CX641-45 ◊	ICT	
						27CX642-45 ◊	ICT	
						WS57C49B-45	**Waferscale (3376)**	
		CMOS, Erasable						
			TS	28	5	AT27HC642-45	◊† Atmel	
		CMOS Erasable						
			TS	28	5	27HC64-45 ◊†	GIM	65
						WS57C49B-45M †	**Waferscale (3376)**	
							(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	45 nsF						(Cont'd)	
		TTL	OC	24	5	93Z564 ◊	Fairchild	
						93Z665M †	Fairchild	
						93Z667M †	Fairchild	
			TS	24	5	93Z565	Fairchild	
						93Z667C-45	Fairchild	5
						MB7144Y	Fujitsu	
						53S6481A †	MMI	
						63S6481A	MMI	
						N82HS641A ◊	**Signetics (3182)**	
	49 nsF	CMOS, Reg						
			TS	28	5	**CY7C269-40C ◊**	**Cypress (2565)**	10
	50 nsF	CMOS Erasable						
			TS	28	5	**CY7C268-50WC ◊**	**Cypress (2565)**	
						CY7C268-50WM ◊† Cypress (2565)		
						CY7C269-50WC ◊	**Cypress (2565)**	
						CY7C269-50WM ◊† Cypress (2565)		
		CMOS, Reg						
			TS	28	5	**CY7C269-50C ◊**	**Cypress (2565)**	15
						CY7C269-50M ◊† Cypress (2565)		
		Reg	TS	28	5	**CY7C268-50C ◊**	**Cypress (2565)**	
						CY7C268-50M ◊† Cypress (2565)		
		TTL	TS	24	5	93Z667C-50	Fairchild	
						93Z667M-50 †	Fairchild	20
	55 nsF	CMOS	TS	24	5	**CY7C261-55C ◊**	**Cypress (2565)**	
						CY7C261-55M ◊† Cypress (2565)		
						CY7C263-55C ◊	**Cypress (2565)**	
						CY7C263-55M ◊† Cypress (2565)		
						CY7C264-55C ◊	**Cypress (2565)**	25
						CY7C264-55M ◊† Cypress (2565)		
		CMOS Erasable						
			TS	24	5	AT27HC641-55	Atmel	
		CMOS, Erasable						
			TS	24	5	AT27HC641L-55 ◊†	Atmel	
						AT27HC642L-55 ◊†	Atmel	
						CY7C261-55WC ◊	**Cypress (2565)**	30
						CY7C261-55WM ◊† Cypress (2565)		
						CY7C263-55WC ◊	**Cypress (2565)**	
						CY7C263-55WM ◊† Cypress (2565)		
						CY7C264-55WC ◊	**Cypress (2565)**	
						CY7C264-55WM ◊† Cypress (2565)		35
		CMOS Erasable						
			TS	24	5	27HC641-55 ◊	GIM	
		CMOS, Erasable						
			TS	24	5	GM57HC64-55	GoldStar	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	55 nsF						(Cont'd)	
		CMOS Erasable						
			TS	24	5	27CX641-55 ◊	ICT	
						27CX642-55 ◊	ICT	
						WS57C49-55	**Waferscale (3376)**	40
				28	5	AT27HC64-55	Atmel	
		CMOS, Erasable						
			TS	28	5	AT27HC64L-55 ◊†	Atmel	
						AT27HC642-55 ◊†	Atmel	
		CMOS Erasable						
			TS	28	5	27HC64-55 ◊	GIM	
						WS57C49-90M	**Waferscale (3376)**	45
						WS57C64F-55	**Waferscale (3376)**	
			TTL	24	5	**LH5749J-55**	**Sharp (2994)**	
		TTL	OC	24	5	93Z564AM †	Fairchild	
						93Z564C	Fairchild	
						93Z565AM †	Fairchild	50
						93Z565C	Fairchild	
						MB7143H	Fujitsu	
			TS	24	5	AM27S49AM †	AMD	
						AM27S49C	AMD	
						93Z667M-55 †	Fairchild	55
						MB7144H	Fujitsu	
						63S6481	MMI	
						39VP864	Raytheon	
						N82HS641 ◊	**Signetics (3182)**	
		TTL/CMOS						
			TS	24, 28	5	27HC641-55 ◊	Signetics	60
	60 nsF	CMOS Erasable						
			TS	28	5	**CY7C268-60WC ◊**	**Cypress (2565)**	
						CY7C268-60WM ◊† Cypress (2565)		
						CY7C269-60WC ◊	**Cypress (2565)**	
						CY7C269-60WM ◊† Cypress (2565)		
		Reg	TS	28	5	**CY7C268-60C ◊**	**Cypress (2565)**	65
						CY7C268-60M ◊† Cypress (2565)		
						CY7C269-60C ◊	**Cypress (2565)**	
						CY7C269-60M ◊† Cypress (2565)		
	65 nsF	TTL	OC	24	5	93Z564M †	Fairchild	
						93Z565M †	Fairchild	70
						MB7143E	Fujitsu	
			TS	24	+5	MB7144E	Fujitsu	
					5	AM27S49M †	AMD	
						MB7144E-W †	Fujitsu	
						53S6481 †	MMI	75
	70 nsF	CMOS	TTL	28	5	**LH5749-70**	**Sharp (2994)**	
						LH5762-70	**Sharp (2994)**	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	70 nsF						(Cont'd)	
		CMOS Erasable						
			TS	24	5	AT27HC64-70	Atmel	
						AT27HC641-70	Atmel	
		CMOS, Erasable						
			TS	24	5	AT27HC641L-70		
						◊†	Atmel	
						AT27HC642L-70		
						◊†	Atmel	
		CMOS Erasable						
			TS	24	5	27HC641-70		
						◊†	GIM	5
						WS57C49-70M	**Waferscale (3376)**	
		CMOS, Erasable						
			TS	28	5	AT27HC64L-70		
						◊†	Atmel	
						AT27HC642-70		
						◊†	Atmel	
		CMOS Erasable						
			TS	28	5	27HC64-70 ◊	GIM	
						WS57C64F-70	**Waferscale (3376)**	10
						WS57C64F-70M †	**Waferscale (3376)**	
			TTL	24	5	**LH5749J-70**	**Sharp (2994)**	
				28	5	**LH5762J-70**	**Sharp (2994)**	
						LH5763J-70	**Sharp (2994)**	
		Erasable	TS	24		**WS57C49-70M †**	**Waferscale (3376)**	15
					5	**WS57C49-70**	**Waferscale (3376)**	
	75 nsF	TTL	TS	24	5	29VP864	† Raytheon	
						29VS864	◊† Raytheon	
	90 nsF	CMOS TTL		28	5	**LH5763-90**	**Sharp (2994)**	
		CMOS Erasable						
			TS	24	5	AT27HC64-90	Atmel	20
						WS57C49-90 †	**Waferscale (3376)**	
						WS57C49-90M	**Waferscale (3376)**	
		CMOS, Erasable						
			TS	28	5	AT27HC64L-90		
						◊†	Atmel	
						AT27HC641-90		
						◊†	Atmel	
						AT27HC642-90		
						◊†	Atmel	25
		CMOS Erasable						
			TS	28	5	**WS27C64F-90M †**	**Waferscale (3376)**	
			TTL	28	5	**LH5763J-90**	**Sharp (2994)**	
		Erasable	TS	24		**WS57C49-90**	**Waferscale (3376)**	
	120 nsF	CMOS Erasable						
			TS	24	5	AT27HC64-12	Atmel	
				28	5	**WS27C64F-120M**		
						†	**Waferscale (3376)**	30
	125 nsF	CMOS Erasable						
			TS	28	5	27C64-12 ◊	GIM	
	150 nsF	CMOS	TS	28	5	**TMS27PC64-1**	**TI (3258)**	
						TMS27PC64-15	**TI (3258)**	
							(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	150 nsF						(Cont'd)	
		CMOS Erasable						
			TS	28	5	27C64-15 ◊†	GIM	
						HN27C64G-15	Hitachi	35
						HY27C64-15	**Hyundai (2770)**	
						HY2764-15	Hyundai	
						27C64A-15	ICT	
						NMC27C64-E150	National	
						NMC27C64-150	National	40
						SPM27C64-15	S-MOS	
						TMS27C64-1	**TI (3257)**	
						TMS27C64-15	**TI (3257)**	
						WS27C64F-150M †	**Waferscale (3376)**	
					5, 12.5	27C64-1	Intel	45
						27C64-15	Intel	
						87C64-1	Intel	
						87C64-15	Intel	
		Erasable	TS	28	5	AM2764A-15	AMD	
		NMOS Erasable						
			TS	28	5	TMM2764A-150	Toshiba	50
	160 nsF	Erasable	TS	28	5	**2764-160**	**SEEQ (2991)**	
	170 nsF	CMOS	TS	28	5	VT27C64-15 †	VLSI Tech	
		CMOS Erasable						
			TS	28	5	27C64-17 ◊	GIM	
		Erasable	TS	28	5	AM2764A-1	AMD	
						M2764A-1	SGS	55
						TMS2764-17	**TI (3257)**	
	175 nsF	CMOS	TS	28	5	VT27C64-17	VLSI Tech	
	180 nsF	Erasable	TS	28	5, 12.5	2764A-1	Intel	
	200 nsF	CMOS	TS	28	5	MBM27C64-20	Fujitsu	
						TMS27PC64-2	**TI (3258)**	60
						TMS27PC64-20	**TI (3258)**	
						TMM2464A	Toshiba	
						VT27C64-20 †	VLSI Tech	
		CMOS Erasable						
			TS	28	5	27C64-20 ◊	GIM	
						HN27C64-20	Hitachi	65
						HN27C64FP-20	Hitachi	
						HY27C64-20	**Hyundai (2770)**	
						HY2764-20	Hyundai	
						MNC27C64-200	National	
						NMC27C64-E200	National	70
						NMC27C64-M200 †	National	
						SPM27C64-20	S-MOS	
						27C64-20	Signetics	
						TMS27C64-2	**TI (3257)**	
						TMS27C64-20	**TI (3257)**	75
		CMOS, Erasable						
			TS	28	5	TS27C64-20	Thomson	
		CMOS Erasable						
			TS	28	5	VT27C64 †	VLSI Tech	
					5, 12.5	27C64 ◊	Intel	
						27C64-2	Intel	
						27C64-20	Intel	80
						87C64 ◊	Intel	
							(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
8192x8	200 nsF	CMOS Erasable						(Cont'd)	
			TS	28	5, 12.5	87C64-2	Intel		
						87C64-20	Intel		
			TTL	28	5	**LH5764J-20**	**Sharp**	**(2994)**	
		CMOS OTP							
			TTL	28	5	**LH5764-20**	**Sharp**	**(2994)**	
		Erasable	TS	28	5	AM2764A-2	AMD		5
						AM2764A-20 †	AMD		
						AM2764A-20M †	AMD		
						MBM2764-20	Fujitsu		
						2764-2	**SEEQ**	**(2991)**	
						2764-20	**SEEQ**	**(2991)**	10
						M2764A-2	SGS		
						TMS2764-20	**TI**	**(3257)**	
					5, 12.5	2764A-2	Intel		
						2764A-20	Intel		
		Module	TS	38	5	COB65464E	GIM		15
		NMOS Erasable							
			TS	28	5	TMM2764A-200	Toshiba		
		TTL	TS	28	5	AM2764-20M †	AMD		
	250	CMOS	TS	28	5	**TMS27PC64**	**TI**	**(3258)**	
	250 nsF	CMOS	TS	28	5	MBM27C64-25W †	Fujitsu		
						MBM27C64-25X	Fujitsu		20
						R27C64-25	Rockwell		
						TMS27PC64-25	**TI**	**(3258)**	
						VT27C64-25 †	VLSI Tech		
		CMOS Erasable							
			TS	28	5	MBM27C64-25	Fujitsu		
						27C64-25 ◊	GIM		25
						NMC27C64-M250 †	National		
						NMC27C64-250	National		
						RD27C64-28	Panatech		
						27C64A25	Signetics		
						TMS27C64	**TI**	**(3257)**	30
						TMS27C64-25	**TI**	**(3257)**	
		CMOS, Erasable							
			TS	28	5	TS27C64-25	Thomson		
		CMOS Erasable							
			TS	28	5, 12.5	27C64-25	Intel		
						27C64-250	Intel		
						87C64-25	Intel		35
			TTL	28	5	**LH5764J-25**	**Sharp**	**(2994)**	
		CMOS OTP							
			TTL	28	5	**LH5764-25**	**Sharp**	**(2994)**	
		Erasable	TS	28	5	AM2764A	AMD		
						AM2764A-25 †	AMD		
						AM2764A-25M †	AMD		40
						MBM2764-25	Fujitsu		
						M2764-25 ◊†	SEEQ		
						2764-25	**SEEQ**	**(2991)**	
						M2764A	SGS		
						TMS2764-25	**TI**	**(3257)**	45
					5, 12.5	2764A	Intel		
						2764A-25	Intel		

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
8192x8	250 nsF							(Cont'd)	
		NMOS Erasable							
			TS	28	5	M5L2764	Mitsubishi		
		TTL	TS	28	5	AM2764-25M †	AMD		
	300	CMOS	TS	28	5	**TMS27PC64-3**	**TI**	**(3258)**	50
	300 nsF	CMOS	TS	28	5	MBM27C64-30X	Fujitsu		
						TMS27PC64-30	**TI**	**(3258)**	
		CMOS Erasable							
			TS	28	5	MBM27C64-30	Fujitsu		
						MBM27C64-30W †	Fujitsu		
						HY27C64-30	**Hyundai**	**(2770)**	55
						HY2764-30	Hyundai		
						MNC27C64-300	National		
						RD27C64-30	Panatech		
						27C64A30	Signetics		
						TMS27C64-3	**TI**	**(3257)**	60
						TMS27C64-30	**TI**	**(3257)**	
		CMOS, Erasable							
			TS	28	5	TS27C64-30	Thomson		
		CMOS Erasable							
			TS	28	5, 12.5	27C64-3	Intel		
						27C64-30	Intel		
						87C64-3	Intel		65
						87C64-30	Intel		
			TTL	28	5	**LH5764J-30**	**Sharp**	**(2994)**	
		CMOS OTP							
			TTL	28	5	**LH5764-30**	**Sharp**	**(2994)**	
		Erasable	TS	28	5	AM2764A-3	AMD		
						AM2764A-30	AMD		70
						MBM2764-30	Fujitsu		
						MBM2764-30X	Fujitsu		
						2764-3	**SEEQ**	**(2991)**	
						2764-30	**SEEQ**	**(2991)**	
						M2764A-3	SGS		75
					5, 12.5	2764A-3	Intel		
						2764A-30	Intel		
	350 nsF	CMOS	TS	28	5	R27C64-35	Rockwell		
	400 nsF	Erasable	TS	28	5	**2764-4**	**SEEQ**	**(2991)**	
	450 nsF	CMOS	TS	28	5	**TMS27PC64-4**	**TI**	**(3258)**	80
		CMOS Erasable							
			TS	28	5	**TMS27C64-4**	**TI**	**(3257)**	
						TMS27C64-45	**TI**	**(3257)**	
			TTL	28	5	**LH5764J-45**	**Sharp**	**(2994)**	
		CMOS OTP							
			TTL	28	5	**LH5764-45**	**Sharp**	**(2994)**	
		Erasable	TS	28	5	AM2764A-4	AMD		
						AM2764A-45M †	AMD		85
						MSM2764A	OKI		
						M2764-45 ◊†	SEEQ		
						2764-45	**SEEQ**	**(2991)**	
						M2764A-4	SGS		
						TMS2764-45	**TI**	**(3257)**	90
					5, 12.5	2764A-4	Intel		
						2764A-45	Intel		
		TTL	TS	28	5	AM2764-45M †	AMD		
8192x16									
	70 nsF	Module, Erasable, VERSAPAC							
			TS	66	5	**DPV8X16V**	**Dense-Pac (2582, 2584)**		95
	150 nsF	Module, Erasable							
			TS	40	5	**DPV8X16**	**Dense-Pac (2582)**		

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x24								
	70 nsF	Module, Erasable, VERSAPAC	TS	66	5	**DPV8X24V**	**Dense-Pac (2582, 2584)**	
	150 nsF	Module, Erasable	TS	48	5	**DPV8X24**	**Dense-Pac (2582)**	
8192x32								
	70 nsF	Module, Erasable, VERSAPAC	TS	66	5	**DPV8X32V**	**Dense-Pac (2582, 2584)**	
	150 nsF	Module, Erasable	TS	56	5	**DPV8X32**	**Dense-Pac (2582)**	
16384x8								
	—	Emulator (RAM w/Bat.)				GR27128	LMS	5
	40 nsF	CMOS Erasable	TS	28	5	**WS57C51B-40**	**Waferscale (3376)**	
	45 ns*	TTL	TS	24	5	N82HS1281	Signetics	
	45 nsF	CMOS	TS	28	5	**CY7C251-45C**	**Cypress (2565)**	
						CY7C254-45C	**Cypress (2565)**	
		CMOS Erasable	TS	28	5	**CY7C251-45WC**	**Cypress (2565)**	10
						WS57C51B-45	**Waferscale (3376)**	
						WS57C51B-45M ◊†	**Waferscale (3376)**	
	55 nsF	CMOS	TS	28	5	**CY7C251-55C**	**Cypress (2565)**	
						CY7C251-55M †	**Cypress (2565)**	
						CY7C254-55C	**Cypress (2565)**	15
						CY7C254-55M	**Cypress (2565)**	
		CMOS Erasable	TS	28	5	**CY7C251-55WC**	**Cypress (2565)**	
						CY7C251-55WM †	**Cypress (2565)**	
						WS57C51B-55	**Waferscale (3376)**	
						WS57C51B-70M ◊†	**Waferscale (3376)**	20
				40	5	**WS57C257-55**	**Waferscale (3376)**	
	60 nsF	CMOS Erasable	TS	28	5	**WS57C128F-55**	**Waferscale (3376)**	
	65 nsF	CMOS	TS	28	5	**CY7C251-65C**	**Cypress (2565)**	
						CY7C251-65M	**Cypress (2565)**	
						CY7C254-65C	**Cypress (2565)**	25
						CY7C254-65M	**Cypress (2565)**	
		CMOS Erasable	TS	28	5	**CY7C251-65WC**	**Cypress (2565)**	
						CY7C251-65WM	**Cypress (2565)**	
	70 nsF	CMOS Erasable	TS	28	5	**WS57C128F-70**	**Waferscale (3376)**	
						WS57C128F-70M †	**Waferscale (3376)**	30
						WS57C51-70	**Waferscale (3376)**	
						WS57C51-70M ◊†	**Waferscale (3376)**	
			TTL	28	5	**LH57126J-70**	**Sharp (2994)**	
		Module, Erasable, VERSAPAC	TS	66	5	**DPV16X8V**	**Dense-Pac (2584)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x8							(Cont'd)	
	90 nsF	CMOS	TTL	28	5	**LH57126-90**	**Sharp (2994)**	35
		CMOS Erasable	TTL	28	5	**LH57126J-90**	**Sharp (2994)**	
	100 nsF	CMOS Erasable	TS	28	5	**WS27C128F-90M** †	**Waferscale (3376)**	
			TTL	28	5	**LH57127J-10**	**Sharp (2994)**	
	110 nsF	Erasable	TS	28	5, 12.5	27128B-110V05	Intel	
	120 nsF	CMOS	TTL	28	5	**LH57127-12**	**Sharp (2994)**	40
		CMOS Erasable	TS	28	5	AT27C513-12	Atmel	
						WS27C128F-120M †	**Waferscale (3376)**	
	125 nsF	CMOS Erasable	TS	28	5	27C128-12 ◊	GIM	
	135 nsF	Erasable	TS	28	5, 12.5	27128B-135V05	Intel	
	150 nsF	CMOS	TS	28	5	**TMS27PC128-1**	**TI (3258)**	45
						TMS27PC128-15	**TI (3258)**	
		CMOS Erasable	TS	28	5	AT27C513-15	Atmel	
						27C128-15 ◊	GIM	
						M5M27C128-15	Mitsubishi	
						TMS27C128-1	**TI (3257)**	50
						TMS27C128-15	**TI (3257)**	
						WS27C128F-150M †	**Waferscale (3376)**	
		Erasable	TS	28	5	AM27128A-1	AMD	
						AM27128A-15	AMD	
						27128B-150V05	Intel	55
					5, 12.5	27128A-1	Intel	
		NMOS Erasable	TS	28	5	27128B-150V10	Intel	
		NMOS Erasable	TS	28	5	TMM27128A-150	Toshiba	
	170 nsF	CMOS Erasable	TS	28	5	AT27C513-17	Atmel	
						27C128-17 ◊	GIM	60
		NMOS Erasable	TS	28	5	HN27128A-17	Hitachi	
	175 nsF	CMOS	TS	28	5	VT27C128-17	VLSI Tech	
	200 nsF	CMOS	TS	28	5	MBM27C128-20 ◊	Fujitsu	
						TMX27PC128-2	Panatech	
						TMS27PC128-2	**TI (3258)**	65
						TMS27PC128-20	**TI (3258)**	
						TMM24128A	Toshiba	
						VT27C128-20 †	VLSI Tech	
			TTL	28	5	**LH57128-20**	**Sharp (2994)**	
		CMOS Erasable	TS	28	5	AT27C513-20	Atmel	70
						27C128-20 ◊	GIM	
						M5M27C128-2	Mitsubishi	
						NMC27CP128-200 ◊	National	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
16384x8									
	200 nsF	CMOS Erasable							
			TS	28	5			(Cont'd)	
						MSM27C128-20	OKI		
						SMJ27C128-20 †	**TI**	**(3220)**	
						TMS27C128-2	**TI**	**(3257)**	
						TMS27C128-20	**TI**	**(3257)**	
						VT27C128 †	VLSI Tech		5
			TTL	28	5	**LH57128J-20**	**Sharp**	**(2994)**	
		Erasable	TS	28	5	AM27128A-2	AMD		
						AM27128A-20	AMD		
						AM27128A-20M	† AMD		
						HN27128A-20	Hitachi		10
						M27128 †	Intel		
						27128-2	**SEEQ**	**(2991)**	
						27128-20	**SEEQ**	**(2991)**	
						M27128A-2	SGS		
					5, 12.5	27128A-2	Intel		15
						27128A-20	Intel		
		Module	TS	38	5	COB654128E	GIM		
		NMOS	TS	28	5	MBM27128-20	Fujitsu		
		NMOS Erasable							
			TS	28	5	TMM27128A-200	Toshiba		
	250 nsF	CMOS	TS	28	5	MBM27128-25	◊ Fujitsu		20
						TMX27PC128	Panatech		
						TMS27PC128	**TI**	**(3258)**	
						TMS27PC128-25	**TI**	**(3258)**	
						VT27C128-25 †	VLSI Tech		
			TTL	28	5	**LH57128-25**	**Sharp**	**(2994)**	25
		CMOS Erasable							
			TS	28	5	AT27C513-25	Atmel		
						27C128-25 ◊	GIM		
						M5M27C128	Mitsubishi		
						NMC27CP128-250	◊ National		
						MSM27C128-25	OKI		30
						SPM27129C-25	S-MOS		
						TMS27C128	**TI**	**(3257)**	
						TMS27C128-25	**TI**	**(3257)**	
			TTL	28	5	**LH57128J-25**	**Sharp**	**(2994)**	
		Erasable	TS	28	5	AM27128A	AMD		35
						AM27128A-25	AMD		
						AM27128A-25M	† AMD		
						AM27128AM †	AMD		
						MBM27128-25	Fujitsu		
						MBM27128-25X	Fujitsu		40
						HN27128A-25	Hitachi		
						MSM27128A ◊	OKI		
						M27128-25 †	SEEQ		
						27128-25	**SEEQ**	**(2991)**	
						M27128A	SGS		45
					5, 12.5	27128A	Intel		
						27128A-25	Intel		
					5, 21	27128-25	Intel		
								(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
16384x8									
	250 nsF							(Cont'd)	
		NMOS Erasable							
			TS	28	5	M5L27128-2	Mitsubishi		
	300 nsF	*CMOS	TS	28	5	MBM27C128-30	◊ Fujitsu		50
						TMX27PC128-3	Panatech		
						TMS27PC128-3	**TI**	**(3258)**	
						TMS27PC128-30	**TI**	**(3258)**	
						VT27C128-30 †	VLSI Tech		
		CMOS Erasable							
			TS	28	5	NMC27CP128-300	◊ National		55
						MSM27C128-30	OKI		
						SPM27129C-30	S-MOS		
						SMJ27C128-30 †	**TI**	**(3220)**	
						TMS27C128-3	**TI**	**(3257)**	
						TMS27C128-30	**TI**	**(3257)**	60
		Erasable	TS	28	5	AM27128A-3	AMD		
						AM27128A-30	AMD		
						AM27128A-30M	† AMD		
						MBM27128-30	Fujitsu		
						27128-3	Intel		65
						27128-3	**SEEQ**	**(2991)**	
						27128-30	**SEEQ**	**(2991)**	
						M27128A-3	SGS		
					5, 12.5	27128A-3	Intel		
						27128A-30	Intel		70
					5, 21	27128-30	Intel		
		FLASH Erasable							
			TS	28	5	**48128-300**	**SEEQ**	**(2991)**	
		NMOS	TS	28	5	MBM27128-30W	† Fujitsu		
						MBM27128-30X	Fujitsu		
	350 nsF	CMOS	TS	28	5	TMX27PC128-4	Panatech		75
	450 nsF	CMOS	TS	28	5	**TMS27PC128-4**	**TI**	**(3258)**	
						TMS27PC128-45	**TI**	**(3258)**	
						VT27C128-45	VLSI Tech		
		CMOS Erasable							
			TS	28	5	**TMS27C128-4**	**TI**	**(3257)**	
						TMS27C128-45	**TI**	**(3257)**	80
		Erasable	TS	28	5	AM27128A-4	AMD		
						M27128-45 †	Intel		
						M27128-45 †	SEEQ		
						27128-4	**SEEQ**	**(2991)**	
						27128-450	**SEEQ**	**(2991)**	85
						M27128A-4	SGS		
					5, 21	27128-4	Intel		
						27128-45	Intel		
16384x8x4									
	170 nsF	Erasable	TS	28	5, 12.5	**27513-170V05**	**Intel**	**(2863)**	
						27513-170V10	**Intel**	**(2863)**	90
	200 nsF	Erasable	TS	28	5, 12.5	**27513-2**	**Intel**	**(2863)**	
						27513-20	**Intel**	**(2863)**	
						27513-200V05	**Intel**	**(2863)**	
						27513-200V10	**Intel**	**(2863)**	
		Erasable, Emulator with Battery							
			TS	28	5	GR27513	LMS		95
								(Continued)	

MEMORY

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x8x4								(Cont'd)
	250 nsF	Erasable	TS	28	5	**27513**	**Intel (2863)**	
					5, 12.5	**27513-25**	**Intel (2863)**	
	300 nsF	Erasable	TS	28	5, 12.5	**27513-3**	**Intel (2863)**	
						27513-30	**Intel (2863)**	
16384x8x8								
	200 nsF	Erasable	TS	28	5	**27011-200V05**	**Intel (2860)**	5
	250 nsF	Erasable	TS	28	5	**27011-250V05**	**Intel (2860)**	
						27011-250V10	**Intel (2860)**	
				32	5	**27010-250V05**	**Intel (2859)**	
						27010-250V10	**Intel (2859)**	
	300 nsF	Erasable	TS	28	5	**27011-300V05**	**Intel (2860)**	10
						27011-300V10	**Intel (2860)**	
				32	5	**27010-300V05**	**Intel (2859)**	
						27010-300V10	**Intel (2859)**	
16384x16								
	70 nsF	CMOS Erasable						
			TS	40	5	**WS57C257-70**	**Waferscale (3376)**	
						WS57C257-70M †	**Waferscale (3376)**	15
		Module, Erasable, VERSAPAC						
			TS	66	5	**DPV16X16V**	**Dense-Pac (2584)**	
16384x24								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV16X24V**	**Dense-Pac (2584)**	
16384x32								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV16X32V**	**Dense-Pac (2584)**	
32768x8								
	—	Emulator (RAM w/Bat.)				GR27256	LMS	
	55 nsF	CMOS	TS	28	5	AT27HC256-55 ◊†	Atmel	20
						CY7C271-55C ◊	**Cypress (2565)**	
		CMOS Erasable						
			TS	28	5	**CY7C271-55WC ◊**	**Cypress (2565)**	
						27HC256-55 ◊	GIM	
						WS57C256F-55	**Waferscale (3376)**	
	65 nsF	CMOS	TS	28	5	**CY7C271-65C ◊**	**Cypress (2565)**	25
						CY7C271-65M ◊†	**Cypress (2565)**	
		CMOS Erasable						
			TS	28	5	**CY7C271-65WC ◊**	**Cypress (2565)**	
	70 nsF	CMOS	TS	28	5	AT27HC256-70 ◊†	Atmel	
		CMOS, Erasable						
			TS	28	5	AT27HC256L-70 ◊†	Atmel	
		CMOS Erasable						
			TS	28	5	27HC256-70 ◊†	GIM	30
						HN27C256H-7	Hitachi	
						MSM27C256-07	OKI	
						WS57C256-70	**Waferscale (3376)**	
						WS57C256-70M †	**Waferscale (3376)**	
		Module, Erasable, VERSAPAC						
			TS	66	5	**DPV32X8V**	**Dense-Pac (2584)**	35
							(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8								(Cont'd)
	75 nsF	CMOS	TS	28	5	**CY7C271-75C ◊**	**Cypress (2565)**	
						CY7C271-75M ◊†	**Cypress (2565)**	
		CMOS Erasable						
			TS	28	5	**CY7C271-75WC ◊**	**Cypress (2565)**	
						CY7C271-75WM ◊†	**Cypress (2565)**	
	85 nsF	CMOS Erasable						
			TS	28	5	HN27C256H-8	Hitachi	40
	90 nsF	CMOS	TS	28	5	AT27HC256-90 ◊†	Atmel	
		CMOS, Erasable						
			TS	28	5	AT27HC256L-90 ◊†	Atmel	
		CMOS Erasable						
			TS	28	5	27HC256-90 ◊†	GIM	
	100 nsF	CMOS	TS	28	5	**MBM27C256-10**	**Fujitsu (2619)**	
		CMOS Erasable						
			TS	28	5	MSM27C256-10	OKI	45
						WS27C256F-90M †	**Waferscale (3376)**	
	120 nsF	CMOS	TS	28	5	AT27HC256-120 ◊†	Atmel	
						MBM27C256-12	**Fujitsu (2619)**	
		CMOS Erasable						
			TS	28	5	AT27C515-12	Atmel	
		CMOS, Erasable						
			TS	28	5	AT27HC256L-120 ◊†	Atmel	50
		CMOS Erasable						
			TS	28	5	**DPV27C256 ◊**	**Dense-Pac (2578)**	
						M5M27C256-12	Mitsubishi	
						μPD27C256A-12	NEC	
						MSM27C256-12	OKI	
						WS27C256F-120M †	**Waferscale (3376)**	55
	150 nsF	CMOS Erasable						
			TS	28	5	AT27C256-15	Atmel	
						AT27C515-15	Atmel	
						27C256-15 ◊	GIM	
						HN27C256	Hitachi	
						M5M27C256-15	Mitsubishi	60
						μPD27C256-15	NEC	
						μPD27C256A-15	NEC	
		CMOS, Erasable						
			TS	28	5	RD27C256-15	Panatech	
		CMOS Erasable						
			TS	28	5	TC57256A-150	Toshiba	
						TMM27256A-150	Toshiba	65
						WS27C256F-150M †	**Waferscale (3376)**	
							(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8								
	150 nsF						(Cont'd)	
		Module, Erasable						
			TS	48	5	**DPV32X24**	**Dense-Pac (2582)**	
		NMOS Erasable						
			TS	28	5	27256-15	◊ GIM	
						M5L27256-15	Mitsubishi	
						TMM27256A-150	Toshiba	
	170 nsF	CMOS	TS	28	5	**TMS27PC256-1**	**TI (3258)**	5
						TMS27PC256-17	**TI (3258)**	
						VT27C256-17	VLSI Tech	
		CMOS Erasable						
			TS	28	5	AT27C256-17	Atmel	
						AT27C515-17	Atmel	
						27C256-17 ◊	GIM	10
						HN27C256-17	Hitachi	
						NMC27C256-17	◊ National	
						TMS27C256-1	**TI (3257)**	
						TMS27C256-17	**TI (3257)**	
					5, 12.5	**27C256-1**	**Intel (2861)**	15
						27C256-17	**Intel (2861)**	
		Erasable	TS	28	5	AM27256-1 ◊	AMD	
						AM27256-17 ◊	AMD	
						27256L-1	Intel	
					5, 12.5	27256-1	Intel	20
		NMOS	TS	28	5	MBM27256-17	◊ Fujitsu	
		NMOS Erasable						
			TS	28	5	27256-17 ◊	GIM	
		TTL/CMOS						
			TS	28, 32	5	27C256-17 ◊†	Signetics	
	200 nsF	CMOS	TS	28	5	**MBM27C256-20**	**Fujitsu (2619)**	
						MBM27C256A-20X	**Fujitsu (2619)**	25
						TMS27PC256-2	**TI (3258)**	
						TMS27PC256-20	**TI (3258)**	
						TMM24256A	Toshiba	
			TTL	28	5	**LH57256-20**	**Sharp (2994)**	
		CMOS Erasable						
			TS	20	5	TC57256A-200	Toshiba	30
				28	5	AT27C256-20	Atmel	
						AT27C515-20	Atmel	
						27C256-20 ◊	GIM	
						HN27C256-20	Hitachi	
						NMC27C256-20	◊ National	35
						µPD27C256-20	NEC	
						µPD27C256A-20	NEC	
						RD27C256-20	Panatech	
						SPM27C256C-20	S-MOS	
						SMJ27C256-20 †	**TI (3220)**	40
						TMS27C256-2	**TI (3257)**	
						TMS27C256-20	**TI (3257)**	
		CMOS, Erasable						
			TS	28	5	TS27C256-20	Thomson	
		CMOS Erasable						
			TS	28	5	TC54245A	Toshiba	
						TC57256-20	Toshiba	45
						VM27C256-20	† VLSI Tech	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8								
	200 nsF	CMOS Erasable						
			TS	28	5		(Cont'd)	
						VT27C256 †	VLSI Tech	
						VT27C256-20	VLSI Tech	
					5, 12.5	**MBM27C256A-20**	**Fujitsu (2619)**	
						MBM27C256A-20W	**† Fujitsu (2619)**	50
						27C256-2	**Intel (2861)**	
						27C256-20	**Intel (2861)**	
						87C256-2	**Intel (2861)**	
						87C256-20	**Intel (2861)**	
			28	5		LH56256J-20	Sharp	55
		Erasable	TS	28	5	AM27256-2 ◊	AMD	
						AM27256-20 ◊	AMD	
						AM27256-20M	◊† AMD	
						27256-2	Intel	
						27256L-2	Intel	60
						27256L-20	Intel	
						MSM27256-20	OKI	
						M27256-2	SGS	
					5, 12.5	27256-20	Intel	
		Module	TS	38	5	COB654C256E	GIM	65
		NMOS	TS	28	5	MBM27256-20	◊ Fujitsu	
						27256-20	SEEQ	
		NMOS Erasable						
			TS	28	5	27256-20 ◊	GIM	
						M5L27256-2	Mitsubishi	
						TMM27256A-200	Toshiba	70
		TTL/CMOS						
			TS	28, 32	5	27C256-20 ◊†	Signetics	
	250 nsF	CMOS	TS	28	5	**MBM27C256-25**	**Fujitsu (2619)**	
						MBM27C256-25X	**Fujitsu (2619)**	
						HN27C256FP-25	Hitachi	
						M27C256-25 †	SEEQ	75
						TMS27PC256	**TI (3258)**	
						TMS27PC256-25	**TI (3258)**	
			TTL	28	5	**LH57256-25**	**Sharp (2994)**	
		CMOS Erasable						
			TS	28	5	AT27C256-25	Atmel	
						AT27C515-25	Atmel	80
						27C256-25 ◊	GIM	
						HN27C256-25	Hitachi	
						M5M27C256	Mitsubishi	
						NMC27C256-E250	◊ National	
						NMC27C256-M250	◊† National	85
						NMC27C256-25	◊ National	
						µPD27C256-25	NEC	
						RD27C256-25	Panatech	
						SPM27C64C-15	S-MOS	
						TMS27C256	**TI (3257)**	90
						TMS27C256-25	**TI (3257)**	
						TS27C256-25	Thomson	
						TC57256-25	Toshiba	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
32768x8									
	250 nsF	CMOS Erasable							
			TS	28	5			(Cont'd)	
						VM27C256-25			
							† VLSI Tech		
						VT27C256-25	VLSI Tech		
					5, 12.5	**MBM27C256A-25**	**Fujitsu**	**(2619)**	
						MBM27C256A-25W			
							† Fujitsu	**(2619)**	
						27C256	**◊ Intel**	**(2861)**	5
						27C256-25	**Intel**	**(2861)**	
						87C256	**◊ Intel**	**(2861)**	
						87C256-25	**Intel**	**(2861)**	
			TTL	28	5	**LH57256J-25**	**Sharp**	**(2994)**	
		Erasable	TS	28	5	AM27256	◊ AMD		10
						AM27256-25	◊		
							AMD		
						AM27256-25M			
							◊† AMD		
						HN27256-25	Hitachi		
						27256	◊ Intel		
						MSM27256-25	OKI		15
						27C256-25	**SEEQ**	**(2991)**	
						M27256	SGS		
					5, 12.5	27256-25	Intel		
						27256-5	Intel		
		NMOS	TS	28	5	MBM27256-25			
							◊ Fujitsu		20
						MBM27256-25X			
							◊ Fujitsu		
						M27256-25	◊† SEEQ		
						27256-25	SEEQ		
		NMOS Erasable							
			TS	28	5	27256-25	† GIM		
						M5L27256	Mitsubishi		25
						µPD27256	NEC		
		TTL/CMOS							
			TS	28, 32					
					5	27C256-25	◊† Signetics		
	300 nsF	CMOS	TS	28	5	**MBM27C256-30**	**Fujitsu**	**(2619)**	
						MBM27C256-30W			
							† Fujitsu	**(2619)**	
						MBM27C256-30X	**Fujitsu**	**(2619)**	30
						M27C256-30	† SEEQ		
						TMS27PC256-3	**TI**	**(3258)**	
						TMS27PC256-30	**TI**	**(3258)**	
			TTL	28	5	**LH57256-30**	**Sharp**	**(2994)**	
		CMOS Erasable							
			TS	28	5	HN27C256-30	Hitachi		35
						NMC27C256-30			
							◊ National		
						RD27C256-30	Panatech		
						SMJ27C256-30 †			
							TI	**(3220)**	
						TMS27C256-3	**TI**	**(3257)**	
						TMS27C256-30	**TI**	**(3257)**	40
						TS27C256-30	Thomson		
						VT27C256-30	VLSI Tech		
					5, 12.5	**27C256-3**	**Intel**	**(2861)**	
						27C256-30	**Intel**	**(2861)**	
						87C256-3	**Intel**	**(2861)**	45
						87C256-30	**Intel**	**(2861)**	
			TTL	28	5	**LH57256J-30**	**Sharp**	**(2994)**	
		Erasable	TS	24	5	M27256-3	SGS		
				28	5	AM27256-3	◊ AMD		
								(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
32768x8									
	300 nsF	Erasable	TS	28	5			(Cont'd)	
						AM27256-30	◊		
							AMD		50
						HN27256-30	Hitachi		
						MSM27256-30	OKI		
						27C256-3	**SEEQ**	**(2991)**	
					5, 12.5	27256-3	Intel		
						27256-30	Intel		55
		NMOS	TS	28	5	MBM27256-30			
							◊ Fujitsu		
						MBM27256-30W			
							◊† Fujitsu		
						MBM27256-30X			
							◊ Fujitsu		
						M27256-30	◊† SEEQ		
						27256-30	SEEQ		60
		NMOS Erasable							
			TS	28	5	µPD27256-3	NEC		
		350 nsF	CMOS Erasable						
			TS	28	5	NMC27C256-M350			
							◊† National		
						VM27C256-35			
							† VLSI Tech		
		NMOS	TS	28	5	RO9256CS	GIM		
		450 nsF	CMOS	TS	28	**TMS27PC256-4**	**TI**	**(3258)**	65
						VT27C256-45	VLSI Tech		
			CMOS Erasable						
			TS	28	5	NMC27C256-45			
							◊ National		
						TMS27C256-4	**TI**	**(3257)**	
						TMS27C256-45	**TI**	**(3257)**	
		Erasable	TS	28	5	AM27256-4	◊ AMD		70
32768x16									
	70 nsF	Module, Erasable, VERSAPAC							
			TS	66	5	**DPV32X16V**	**Dense-Pac (2582, 2584)**		
	150 nsF	Module, Erasable							
			TS	40	5	**DPV32X16**	**Dense-Pac (2582)**		
	250 nsF	Module	TS	38	5	COB657C256A2E	GIM		
32768x24									
	70 nsF	Module, erasable,EVERSAPAC							
			TS	66	5	**DPV32X24V**	**Dense-Pac (2582, 2584)**		
32768x32									
	70 nsF	Module, Erasable, VERSAPAC							
			TS	66	5	**DPV32X32V**	**Dense-Pac (2582, 2584)**		75
	150 nsF	Module, Erasable							
			TS	56	5	**DPV32X32**	**Dense-Pac (2582)**		
36288x1									
	400 nsF	CMOS Erasable							
			CMOS						
				8	5	XC1736	† Xilinx		
65536	250	CMOS	TS	40	5	TMX27PC210-250			
							TI		
65536x8									
	20 nsF	Erasable	TS	28	5	TMS27C512-2	Panatech		
	120 nsF	CMOS Erasable							
			TS	28	5	AT27C512-12	Atmel		80
						DPV27C512	◊		
							Dense-Pac (2578)		
								(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
65536x8								(Cont'd)	
	125 nsF	CMOS Erasable							
			TS	28	5	27C512-12 ◊	GIM		
	150 nsF	CMOS Erasable							
			TS	28	5	AT27C512-15	Atmel		
						27C512-15 ◊	GIM		
						μPD27C512-15	NEC		
	170 nsF	CMOS Erasable							
			TS	28	5	AT27C512-17	Atmel		
						27C512-17 ◊	GIM		5
		Erasable	TS	28	5, 12.5	**27512-170V05**	**Intel**	**(2862)**	
						27512-170V10	**Intel**	**(2862)**	
		NMOS Erasable							
			TS	28	5	M5L271512-17	Mitsubishi		
	200 nsF	CMOS	TS	28	5	MBM27C512-20			
							Fujitsu		10
						TMS27PC512-2	**TI**	**(3258)**	
						TMS27PC512-20	**TI**	**(3258)**	
						VT27C512-20 †			
							VLSI Tech		
		CMOS Erasable							
			TS	28	5	AT27C512-20	Atmel		
						27C512-20 ◊	GIM		15
						μPD27C512-20	NEC		
						SMJ27C512-20 †			
							TI	**(3220)**	
						TMS27C512-2	**TI**	**(3257)**	
						TMS27C512-20	**TI**	**(3257)**	
						TMM27512-20	Toshiba		20
		Erasable	TS	28	5	M27512-2	SGS		
					5, 12.5	**27512-2**	**Intel**	**(2862)**	
						27512-20	**Intel**	**(2862)**	
						27512-200V05	**Intel**	**(2862)**	
						27512-200V10	**Intel**	**(2862)**	25
		Erasable, Emulator with Battery							
			TS	28	5	GR27512	LMS		
		Module	TS	38	5	COB654512E	GIM		
		NMOS Erasable							
			TS	28	5	M5L27512-2	Mitsubishi		
	250 nsF	CMOS	TS	28	5	MBM27C512-25			
							Fujitsu		
						TMS27PC512	**TI**	**(3258)**	30
						TMS27PC512-25	**TI**	**(3258)**	
						VT27C512-25 †			
							VLSI Tech		
		CMOS Erasable							
			TS	28	5	AT27C512-25	Atmel		
						27C512-25 ◊	GIM		
						NMC27C512-250			
							◊ National		35
						μPD27C512-25	NEC		
						SMJ27C512-25 †			
							TI	**(3220)**	
						TMS27C512	**TI**	**(3257)**	
						TMS27C512-25	**TI**	**(3257)**	
						TMM27512-25	Toshiba		40
						VT27C512 †	VLSI Tech		
		Erasable	TS	28	5	AM27512 ◊	AMD		
						AM27512-25 ◊			
							AMD		
						27512	**Intel**	**(2862)**	
						TMS27C512	Panatech		45
						M27512	SGS		
					5, 12.5	**27512-25**	**Intel**	**(2862)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
65536x8								(Cont'd)	
	250 nsF								
		Module, Erasable							
			TS	28	5	DPV27512	Dense-Pac		
		NMOS Erasable							
			TS	28	5	M5L27512	Mitsubishi		
						TMM24512	Toshiba		50
	300 nsF	CMOS	TS	28	5	**TMS27PC512-3**	**TI**	**(3258)**	
						TMS27PC512-30	**TI**	**(3258)**	
						VT27C512-30 †			
							VLSI Tech		
		CMOS Erasable							
			TS	28	5	NMC27C512-300			
							◊ National		
						SMJ27C512-30 †			
							TI	**(3220)**	55
						TMS27C512-3	**TI**	**(3257)**	
						TMS27C512-30	**TI**	**(3257)**	
		Erasable	TS	28	5	AM27512-3 ◊	AMD		
						AM27512-30 ◊			
							AMD		
						AM27512-30M			
						◊†	AMD		60
						TMS27C512-3	Panatech		
						M27512-3	SGS		
					5, 12.5	**27512-3**	**Intel**	**(2862)**	
						27512-30	**Intel**	**(2862)**	
		NMOS Erasable							
			TS	28	5	HN27512-25	Hitachi		65
	350 nsF	CMOS	TS	28	5	VT27C512-35	VLSI Tech		
		CMOS Erasable							
			TS	28	5	NMC27C512-350			
							◊ National		
		Erasable	TS	28	5	TMS27C512-4	Panatech		
	450 nsF	CMOS	TS	28	5	**TMS27PC512-4**	**TI**	**(3258)**	
						TMS27PC512-45	**TI**	**(3258)**	70
		CMOS Erasable							
			TS	28	5	**TMS27C512-4**	**TI**	**(3257)**	
						TMS27C512-45	**TI**	**(3257)**	
		Erasable	TS	28	5	AM27512-45 ◊			
							AMD		
						AM27512-45M			
						◊†	AMD		
						M27512-4	SGS		75
65536x16									
	70 nsF	Module, Erasable, VERSAPAC							
			TS	66	5	**DPV64X16V**	**Dense-Pac**	**(2584)**	
	90 nsF	CMOS	TS	40	5	AT27C1024-90			
							† Atmel		
		CMOS Erasable							
			TS	40	5	NMC27C102-90			
							National		
	120 nsF	CMOS	TS	40	5	AT27C1024-120			
							† Atmel		
		CMOS Erasable							
			TS	40		**DPV27C1024B** ◊			
							Dense-Pac	**(2578)**	80
			TS	28	5	MBM27C1028			
							◊ Fujitsu		
				40	5	NMC27C1024-120			
							◊ National		

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
65536x16								(Cont'd)	
	150 nsF	CMOS	TS	28	5	MBM27C1028-15	Fujitsu		
				40	5	AT27C1024-150	† Atmel		
		CMOS Erasable							
			TS	40	5	MBM27C1024	Fujitsu		
						M5M27C102-15	Mitsubishi		
						NMC27C1024-150	◊ National		5
						μPD27C1024-15	NEC		
		Erasable	TS	40	5	**27210-150V05**	**Intel**	**(2858)**	
	170 nsF	Erasable	TS	40	5	**27210-170V05**	**Intel**	**(2858)**	
						27210-170V10	**Intel**	**(2858)**	
	200 nsF	CMOS	TS	28	5	MBM27C1028-20	Fujitsu		10
				40	5	AT27C1024-200	† Atmel		
						MBM27C1024-20	Fujitsu		
						TMX27PC210-20	TI		
						TMX27PC210-200	TI		
		CMOS Erasable							
			TS	40	5	M5M27C102-20	Mitsubishi		15
						NMC27C1024-200	◊ National		
						μPD27C1024-20	NEC		
						SMJ27C210-20	† TI		
						TMS27C210-20	**TI**	**(3258)**	
						TMS27C210-200	**TI**	**(3258)**	20
						TC571024-200	Toshiba		
		Erasable	TS	40	5	**27210-200**	**Intel**	**(2858)**	
						27210-200V05	**Intel**	**(2858)**	
			TTL	40	5	AM27C1024-2	AMD		
						AM27C1024-20	AMD		25
	250	CMOS	TS	40	5	TMX27PC210-25	TI		
	250 nsF	CMOS	TS	28	5	MBM27C1028-25	Fujitsu		
				40	5	AT27C1024-250	† Atmel		
						MBM27C1024-25	Fujitsu		
		CMOS Erasable							
			TS	40	5	M5M27C102-25	Mitsubishi		30
						μPD27C1024-25	NEC		
						SMJ27C210-25	† TI		
						TMS27C210-250	**TI**	**(3258)**	
						TC571024-250	Toshiba		
		CMOS Etasable							
			TS	40	5	**TMS27C210-25**	**TI**	**(3258)**	35
		Erasable	TS	40	5	**27210-250**	**Intel**	**(2858)**	
						27210-250V05	**Intel**	**(2858)**	
			TTL	40	5	AM27C1024	AMD		
						AM27C1024-25	AMD		
								(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
65536x16								(Cont'd)	
	300 nsF	CMOS	TS	40	5	TMX27PC210-30	TI		40
						TMX27PC210-300	TI		
		CMOS Erasable							
			TS	40	5	**TMS27C210-30**	**TI**	**(3258)**	
						TMS27C210-300	**TI**	**(3258)**	
		Erasable	TS	40	5	**27210-300V05**	**Intel**	**(2858)**	
						27210-300V10	**Intel**	**(2858)**	45
65536x24									
	70 nsF	Module, Erasable, VERSAPAC							
			TS	66	5	**DPV64X24V**	**Dense-Pac (2582, 2584)**		
	150 nsF	Module, Erasable							
			TS	48	5	**DPV64X24**	**Dense-Pac (2582)**		
65536x32									
	70 nsF	Module, Erasable, VERSAPAC							
			TS	66	5	**DPV64X32V**	**Dense-Pac (2582, 2584)**		
	150 nsF	Module, Erasable							
			TS	64	5	**DPV64X32B**	**Dense-Pac (2582)**		
	250 nsF	Module, Erasable							
			TS	68	5	DPV6432	Dense-Pac		50
131072	200 nsF	CMOS	TS	32	5	TMX27PC010-200	‡ TI		
131072x8									
	70 nsF	Module, Erasable, VERSAPAC							
			TS	66	5	**DPV128X8V** ◊	**Dense-Pac (2584)**		
	120 nsF	CMOS	TS	28	5	AT27C010-120	† Atmel		
		CMOS Erasable							
			TS	32	5	**DPV27C1024A** ◊	**Dense-Pac (2578)**		
	150 nsF	CMOS	TS	28	5	AT27C010-150	† Atmel		55
		CMOS Erasable							
			TS	32	5	**MBM27C1001**	**Fujitsu**	**(2620)**	
						M5M27C100-15	Mitsubishi		
						M5M27C101-15	Mitsubishi		
						μPD27C1000-15	◊ NEC		
						μPD27C1001-15	◊ NEC		60
	200	CMOS Erasable							
			TS	32	5	**TMS27C010-20**	**TI**	**(3258)**	
	200 nsF	CMOS	TS	28	5	AT27C010-200	† Atmel		
						MBM27C1028-20	Fujitsu		
				32	5	MBM27C1000-20	Fujitsu		
						MBM27C1001-20	**Fujitsu**	**(2620)**	65
						TMX27PC010-20	TI		
		CMOS Erasable							
			TS	32	5	HN27C101-20	Hitachi		
						HN27C301-20	Hitachi		
						M5M27C100-2	Mitsubishi		
						M5M27C101-2	Mitsubishi		70
						μPD27C1000-20	◊ NEC		
						μPD27C1001-20	◊ NEC		
								(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
131072x8								
	200 nsF	CMOS Erasable						
			TS	32	5			(Cont'd)
						SMJ27C010-20		
							† TI	
						TMS27C010-200	**TI**	**(3258)**
						TC571000-200	**Toshiba**	**(3304)**
						TC571001-200	Toshiba	
		Erasable	TS	32	5	**27010-200V05**	**Intel**	**(2859)**
	250 nsF	CMOS	TS	28	5	AT27C010-250		
							† Atmel	
						MBM27C1028-25		
							Fujitsu	
				32	5	MBM27C1000-25		
							Fujitsu	
						MBM27C1001-25	**Fujitsu**	**(2620)**
						TMX27PC010-25		
							TI	
						TMX27PC010-250		
							TI	
		CMOS Erasable						
			TS	32	5	HN27C101-25	Hitachi	
						HN27C301-25	Hitachi	
						M5M27C100	Mitsubishi	
						M5M27C101	Mitsubishi	
						μPD27C1000-25		
							◊ NEC	
						μPD27C1001-25		
							◊ NEC	
						SMJ27C010-25		
							† TI	
						TMS27C010-25	**TI**	**(3258)**
						TMS27C010-250	**TI**	**(3258)**
						TC571000-250	**Toshiba**	**(3304)**
						TC571001-250	Toshiba	
		Module	TS	38	5	COB654512X2E		
							GIM	
		Module, Erasable						
			TS	30	5	DPV1288	Dense-Pac	
	300 nsF	CMOS	TS	32	5	TMX27PC010-30		
							TI	
						TMX27PC010-300		
							TI	
		CMOS Erasable						
			TS	32	5	**TMS27C010-30**	**TI**	**(3258)**
						TMS27C010-300	**TI**	**(3258)**
	90 nsF	CMOS	TS	28	5	AT27C010-90 †		
							Atmel	
131072x16								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV128X16V**	**Dense-Pac (2582, 2584)**	
	150 nsF	Module, Erasable						
			TS	48	5	**DPV128X16B**	**Dense-Pac (2582)**	
				56	5	**DPV128X16**	**Dense-Pac (2582)**	
	200 nsF	Module, Erasable						
			TS	64	5	DPV6432	Dense-Pac	
	250 nsF	Module, Erasable						
			TS	40	5	DPV12816	Dense-Pac	
131072x24								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV128X24V**	**Dense-Pac (2584)**	
	150 nsF	Module, Erasable						
			TS	56	5	DPV128X24B	Dense-Pac	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
131072x32								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV128X32V**	**Dense-Pac (2582, 2584)**	
	150 nsF	Module, Erasable						
			TS	64	5	**DPV128X32**	**Dense-Pac (2582)**	
						DPV128X32B	**Dense-Pac (2582)**	
	250 nsF	Module, Erasable						
			TS	68	5	DPV12832	Dense-Pac	
262144x1								
	120 nsF	CMOS Erasable						
			TS	16	5	**SMJ4256-12** †		
							TI	**(3220)**
262144x8								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV256X8V**	**Dense-Pac (2584)**	
	250 nsF	Module, Erasable						
			TS	32	5	DPV2568	Dense-Pac	
				56	5	DPV1256	Dense-Pac	
262144x16								
	250 nsF	Module, Erasable						
			TS	40	5	DPV25616	Dense-Pac	
262144x32								
	150 nsF	Module, Erasable						
			TS	64	5	**DPV256X32**	**Dense-Pac (2582)**	
						DPV256X32B	**Dense-Pac (2582)**	
	250 nsF	Module, Erasable						
			TS	68	5	DPV25632	Dense-Pac	
524288x8								
	70 nsF	Module, Erasable, VERSAPAC						
			TS	66	5	**DPV512X8V**	**Dense-Pac (2582, 2584)**	
	150 nsF	Module, Erasable						
			TS	56	5	**DPV512X8**	**Dense-Pac (2582)**	
	250 nsF	Module, Erasable						
			TS	56	5	DPV5128	Dense-Pac	
524288x16								
	150 nsF	Module, Erasable						
			TS	48	5	**DPV512X16B**	**Dense-Pac (2582)**	
	250 nsF	Module, Erasable						
			TS	60	5	DPV51216	Dense-Pac	
524288x32								
	200 nsF	Module, Erasable						
			TS	64	5	DPV12832	Dense-Pac	
1024x8	35 nsF	TTL	TS	24	5	**N82S191C**	**◊ Signetics**	**(3184)**
1048576x8								
	250 nsF	Module, Erasable						
			TS	56	5	DPV10248	Dense-Pac	
1048576x16								
	200 nsF	Module, Erasable						
			TS	64	5	DPV12832	Dense-Pac	
1048576x8								
	150 nsF	Module, Erasable						
			TS	44	5	**DPV1048X8**	**Dense-Pac (2582)**	
1073152x8								
	200 nsF	Module, Erasable						
			TS	32	5	DPV10488	Dense-Pac	
1073152x32								
	200 nsF	Module, Erasable						
			TS	64	5	DPV25632	Dense-Pac	
2097152x8								
	200 nsF	Module, Erasable						
			TS	64	5	DPV12832	Dense-Pac	
2097152x16								
	200 nsF	Module, Erasable						
			TS	64	5	DPV25632	Dense-Pac	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—PROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4194204x8								
	200 nsF	Module, Erasable						
			TS	64	5	DPV25632	Dense-Pac	
65536x32								
	150 nsF	Module, Erasable						
			TS	56	5	**DPV64X32**	**Dense-Pac (2582)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
Bubble								
74032-Bits Serial								
	370 ms	NMOS	—	18		FBM31DB	FujitsuA	
83354-Bits Serial								
	4.5 ms	NMOS	—	18		FBM32DA	FujitsuA	
262144 (1024x256)						MBM2256	Motorola	
273745-Bits Serial								
	6.0 ms		—	20		FBM43DA	FujitsuA	
283026-Bits Serial								
	8.5 ms	NMOS	—	16		FBM42DA	FujitsuA	5
Dynamic								
						MT4264	MicronTech	
4096x1	200 nsF	NMOS	TS	16	±5, 12			
						STC4027-3	Stantel-STC	
						STC4027M-3 †	Stantel-STC	
					±5,12	MKB4027-83	Thomson	
	250 nsF	NMOS	TS	16	±5,12	STC4027M-4 †	Stantel-STC	10
						MKB4027-84	Thomson	
	350 nsF	NMOS	TS	16	±5, 12	STC4027-4	Stantel-STC	
13072x1								
	120 nsF	NMOS	TS	16	5	MT1128-12	MicronTech	
	150 nsF	NMOS	TS	16	5	MT1128-15	MicronTech	
16384x1								
	120 nsF	NMOS	TS	16	±5,12	MM5290-1	National	15
	150 nsF	NMOS	TS	16	±5, 12			
						STC4116-2	Stantel-STC	
					±5,12	AM9016F	AMD	
						ITT4116-2	ITT	
						MM5290-2	National	
						MKB4116-82 †	Thomson	20
						MK4116-2	Thomson	
	200 nsF	NMOS	TS	16	±5, 12			
						STC4116-3	Stantel-STC	
						STC4116M-3 †	Stantel-STC	
					±5,12	AM9016E	AMD	
						F4116-3	Fairchild	25
						MM5290-3	National	
						MSM3716-3	OKI	
						MKB4116-83 †	Thomson	
						MKJ4116-93 †	Thomson	
						MK4116-3	Thomson	30
	235 nsF	NMOS	TS	16	5	MKB4516-80 †	Thomson	
	250 nsF	NMOS	TS	16	±5, 12			
						STC4116-4	Stantel-STC	
						STC4116M-4 †	Stantel-STC	
					±5,12	AM9016D	AMD	
						F4116-4	Fairchild	35
						MM5290-4	National	
						MKB4116-84 †	Thomson	
						MKJ4116-94 †	Thomson	
						MK4116-4	Thomson	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x1							(Cont'd)	
	270 nsF	NMOS	TS	16	5	MKB4516-81 †	Thomson	40
	300 nsF	NMOS	TS	16	±5,12	AM9016C	AMD	
	320 nsF	NMOS	TS	16	5	MKB4516-82 †	Thomson	
16384x4								
	120 nsF	NMOS	TS	18	5	μPD41416-12	NEC	
						SMJ4416-12 †	**TI (3220)**	
	150 nsF	NMOS	TS	18	5	μPD41416-15	NEC	45
						SMJ4416-15 †	**TI (3220)**	
	200 nsF	NMOS	TS	18	5	μPD41416-20	NEC	
						SMJ4416-20 †	**TI (3220)**	
32768x1								
	150 nsF	NMOS	TS	16	±5, 12			
						MSM3732-15	OKI	
	200 nsF	NMOS	TS	16	±5, 12			
						MSM3732-20	OKI	50
32768x8								
	150 nsF	CMOS	TS	28	5	**LH2833-15**	**Sharp (2993)**	
32768x8 Video								
	100 nsF	CMOS 3-Port						
			TS	40	5	μPD42232-10	NEC	
	120 nsF	CMOS 3-Port						
			TS	40	5	μPD42232-12	NEC	
	150 nsF	CMOS 3-Port						
			TS	40	5	μPD42232-15	NEC	
64436x4								
	100 nsF	CMOS	TS	18	5	**DPD91644 ◇**	**Dense-Pac (2578)**	55
64436x16 Video								
	100 nsF	Module	TS	52	5	**DPO10V24**	**Dense-Pac (2581)**	
65534x4								
	120 nsF	NMOS Multiport						
			TS	24	5	SMJ4461-12	◇† TI	
65536x1								
	80 nsF	NMOS	TS	16	5	MT4264	MicronTech	
	100 nsF	CMOS	TS	16	5	**HY51C64-10**	**Hyundai (2770)**	
						HY51C64L-10	**Hyundai (2770)**	60
						V51C64-10	Vitelic	
						V51C64L-10	Vitelic	
		NMOS	TS	16	5	IMS2600-10M	† Inmos	
						MT4264-10	◇ MicronTech	
	120 nsF	CMOS	TS	16	5	**HY51C64-12**	**Hyundai (2770)**	65
						HY51C64L-12	**Hyundai (2770)**	
						V51C64-12	Vitelic	
						V51C64L-12	Vitelic	
				18	5	**LH2164-12**	**Sharp (2993)**	
		NMOS	TS	16	5	F64K-12	Fairchild	70
						MB8264A-12W	Fujitsu	
						IMS2600-12M	† Inmos	
						MT4264-12	◇ MicronTech	
						NMC4164-12	National	
						μPD4164-12	NEC	75
						MSM3764-12	OKI	
						KM4164A-12	Samsung	
						KM4164B-12	Samsung	
						SMJ4164-12 †	**TI (3220)**	
						MKB45H64-81 †	**Thomson (3299)**	80

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Dynamic (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x1							(Cont'd)	
	120 nsF	NMOS	TS	16	5	TMM4164-2	Toshiba	
						TMM4164A-12	Toshiba	
	150 nsF	CMOS	TS	16	5	**HY51C64-15**	**Hyundai (2770)**	
						HY51C64L-15	**Hyundai (2770)**	
						V51C64-15	Vitelic	5
						V51C64L-15	Vitelic	
		Module	TS	22	5	MB85101A-15	Fujitsu	
		NMOS	TS	16	5	F64K-15	Fairchild	
						IMS2600-15M †	Inmos	
						MT4264-15	MicronTech	10
						NMC4164-15	National	
						μPD4164-15	NEC	
						MSM3764-15	OKI	
						MN4164-15 ◊	Panasonic	
						KM4164A-15	Samsung	15
						KM4164B-15	Samsung	
						SMJ4164-15 †	**TI (3220)**	
						MKB45H64-82 †	**Thomson (3299)**	
						MKB4564-82 †	**Thomson (3297)**	
						MKJ4564-92 †	Thomson	20
						TS4164-15	Thomson	
						TMM4164-3	Toshiba	
						TMM4164A-15	Toshiba	
	200 nsF	NMOS	TS	16	5	F4164-20	Fairchild	
						F64K-20	Fairchild	25
						MB8264A-20W †	Fujitsu	
						NMC4164-20	National	
						μPD4164-20	NEC	
						MSM3764-20	OKI	
						MN4164-20 ◊	Panasonic	30
						KM4164A-20	Samsung	
						SMJ4164-20 †	**TI (3220)**	
						MKB45H64-83 †	**Thomson (3299)**	
						MKB4564-83 †	**Thomson (3297)**	
						TS4164-20	Thomson	35
						TMM4164-4	Toshiba	
						TMM4164A-20	Toshiba	
	250 nsF	NMOS	TS	16	5	**MKB4564-84 †**	**Thomson (3297)**	
65536x1 Random/Sequential								
	150 nsF	NMOS	TS	20	5	**SMJ4161-15 †**	**TI (3220)**	
						TMS4161-15 ◊	TI	40
	200 nsF	NMOS	TS	20	5	**SMJ4161-20 †**	**TI (3220)**	
						TMS4161-20 ◊	TI	
65536x4								
	70 nsF	CMOS	TS	18	5	V53C464-70	Vitelic	
						V53C466-70	Vitelic	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x4							(Cont'd)	
	80 nsF	CMOS	TS	18	5	V53C464-80	Vitelic	45
						V53C466-80	Vitelic	
		NMOS	TS	18	5	MT4067	MicronTech	
						MT4067-8 ◊	MicronTech	
	100 nsF	CMOS	TS	18	5	V53C464-10	Vitelic	
						V53C466-10	Vitelic	50
		CMOS, 2-Port	TS	24	5	MT42C4064-10	MicronTech	
		Module	TS	22	5	**DPD4464**	**Dense-Pac (2581)**	
		NMOS	TS	18	5	MT4067-10 ◊	MicronTech	
						M5M4464-10	Mitsubishi	
						MCM41464-10	Motorola	55
						μPD41464-10	NEC	
						MSM41464-10	OKI	
						TMS4464-10 ◊	**TI (3259)**	
		TTL	OC	18	5	MB81C466 ◊	Fujitsu	
	120 nsF	CMOS	TS	18	5	HY51C464-12	Hyundai	60
						HY51464-12	Hyundai	
						LH2464-12	**Sharp (2993)**	
						LH2465-12	**Sharp (2993)**	
						V51C259HL-12	Vitelic	
						V53C464-12	Vitelic	65
						V53C466-12	Vitelic	
				24	5	M5M44C264-12	Mitsubishi	
						V51C264A	Vitelic	
		CMOS 2-Port	TS	24	5	μPD41264-12	NEC	
						MT42C4064-12	MicronTech	70
		Module	TS	22	5	**PEP4064EC4-120**	**Performance (2962)**	
		NMOS	TS	16	5	KM4164-12	Samsung	
				18	5	HM50464-12 ◊	Hitachi	
						HM50464-15 ◊	Hitachi	
						HM50465-12 ◊	Hitachi	75
						MT4067-12 ◊	MicronTech	
						M5M4464-12 †	Mitsubishi	
						MCM41464-12	Motorola	
						μPD41464-12	NEC	
						MSM41464-12	OKI	80
						TMS4464-12	**TI (3259)**	
						TMM41464-12	Toshiba	
	150 nsF	CMOS	TS	18	5	HY51C464-15	Hyundai	
						HY51464-15	Hyundai	
						MCM41464-15	Motorola	85
						MCM41464A-15	Motorola	
						LH2464-15	**Sharp (2993)**	
						LH2465-15	**Sharp (2993)**	
						V51C259HL-15	Vitelic	
				24	5	M5M44C264-15	Mitsubishi	90
						V51C264	Vitelic	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Dynamic (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x4								
	150 nsF						(Cont'd)	
		CMOS Erasable						
			TS	18	5	**SMJ4464-15 ◊†**	**TI (3220)**	
		CMOS, 2-Part						
			TS	24	5	MT42C4064-15	MicronTech	
		Module	TS	22	5	**PEP4064EC4-150**	**Performance (2962)**	
		NMOS	TS	16	5	KM4164-15	Samsung	
				18	5	HM50465-15 ◊	Hitachi	5
						MT4067-15 ◊	MicronTech	
						M5M4464-15 †	Mitsubishi	
						TMS4464-15	**TI (3259)**	
						TMM41464-15	Toshiba	
		NMOS Multiport						
			TS	24	5	SMJ4461-15 ◊†	TI	10
		2-Port	TS	18	5	μPD41464-15	NEC	
		2-Port Module						
			TS	24	5	μPD41264-15	NEC	
	200 nsF	CMOS	TS	18	5	V51C259HL-20	Vitelic	
		CMOS Erasable						
			TS	18	5	**SMJ4464-20 ◊†**	**TI (3220)**	
		Module	TS	22	5	**PEP4064EC4-200**	**Performance (2962)**	15
		NMOS	TS	18	5	HM50464-20 ◊	Hitachi	
						HM50465-20 ◊	Hitachi	
65536x4 Video								
	100 nsF	CMOS 2-Port						
			TS	24	5	μPD42264-10	NEC	
		2-port	TS	24	5	**HY51C264-10 ◊**	**Hyundai (2770)**	
		2-Port Module						
			—	31	5	HM53461-10	Hitachi	20
	120 nsF	CMOS 2-Port						
			TS	24	5	μPD42264-12	NEC	
		Module	TS	31	5	DPD2V56	Dense-Pac	
		2-port	TS	24	5	**HY51C264-12 ◊**	**Hyundai (2770)**	
		2-Port Module						
			—	31	5	HM53461-12	Hitachi	
	150 nsF	CMOS 2-Port						
			TS	24	5	μPD42264-15	NEC	25
		2-port	TS	24	5	**HY51C264-15 ◊**	**Hyundai (2770)**	
		2-Port Module						
			—	31	5	HM53461-15	Hitachi	
65536x4, VRAM (Random/Sequential)								
	120 nsF	NMOS Multiport						
			TS	24	5	**TMS4461-12**	**TI (3259)**	
	150 nsF	NMOS Multiport						
			TS	24	5	**TMS4461-15**	**TI (3259)**	
65536x5								
	120 nsF	Module	TS	24	5	**PEP4064EC5-120**	**Performance (2962)**	30
	150 nsF	Module	TS	24	5	PEP064EC5-150	Performance	
	200 nsF	Module	TS	24	5	**PEP4064EC5-200**	**Performance (2962)**	
65536x5 Video								
	120 nsF	Module	TS	35	5	DPD3V20	Dense-Pac	
65536x8								
	100 nsF	Module	TS	30	5	**DPD4848**	**Dense-Pac (2581)**	
						MT8068-10 ◊	MicronTech	35
	120 nsF	Module	TS	30	5	MT8068-12 ◊	MicronTech	
						PEP4064EL8-120	**◊ Performance (2962)**	
	150 nsF	Module	TS	30	5	MT8068-15 ◊	MicronTech	
						PEP4064EL8-150	**◊ Performance (2962)**	
	4200 nsF							
		Module	TS	30	5	**PEP4064EL8-200**	**◊ Performance (2962)**	40
65536x9								
	100 nsF	Module	TS	30	5	**DPD4849**	**Dense-Pac (2581)**	
						MT9068-10 ◊	MicronTech	
		NMOS Module						
			TS	30	5	MT9069	MicronTech	
	120 nsF	Module	TS	30	5	MT9068-12 ◊	MicronTech	
						PEP4064EL9-120	**◊ Performance (2962)**	45
	150 nsF	Module	TS	30	5	MT9068-15 ◊	MicronTech	
						PEP064EL9-150	◊ Performance	
	200 nsF	Module	TS	30	5	HS2649 ◊	National	
						PEP4064EL9-200	**◊ Performance (2962)**	
65536x16 Video								
	120 nsF	Module	TS	52	5	DPD10V24	Dense-Pac	50
104857x8								
	150 nsF	CMOS	TS	18	5	SMJ4C1027-15	† TI	
131072x1								
	150 nsF	NMOS	TS	16	5	KM4128-15 ◊	Samsung	
		NMOS Stack						
			TS	16	5	MSM37S64A-15	OKI	
131072x4								
	150 nsF	NMOS Module		24	5	MB85102A-15	Fujitsu	
224000x1								
	55 nsF	NMOS	TS	14	5	μPD41221-70	NEC	55
	75 nsF	NMOS	TS	14	5	μPD41221-90	NEC	
262144x1								
	70 nsF	CMOS	TS	16	5	V53C256-70 ◊	Vitelic	
						V53C256L-70 ◊	Vitelic	
						V53C258-70 ◊	Vitelic	
	80 nsF	CMOS	TS	16	5	V53C256-80 ◊	Vitelic	60
						V53C256L-80 ◊	Vitelic	
						V53C258-80 ◊	Vitelic	
		MMOS	TS	18	5	M5M4464A-8 ◊	Mitsubishi	
		NMOS	TS	16	5	MT1259-8 ◊	MicronTech	
				18	5	M5MM4464A-8 ◊	Mitsubishi	65

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Dynamic (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
262144x1							(Cont'd)	
	85 nsF	NMOS	TS	16	5	M5M4256A-85 ◊	Mitsubishi	
						M5M4257A-85 ◊	Mitsubishi	
	100 nsF	CMOS	TS	16	5	AM90C255-10	AMD	
						AM90C256-10	AMD	
						AM90C257-10	AMD	5
						HM51256L-10	Hitachi	
						HM51268-10	Hitachi	
						HY51C256-10 ◊	**Hyundai (2770)**	
						HY51C256L-10 ◊	**Hyundai (2770)**	
						HY51256-10	**Hyundai (2770)**	10
						V51C256L-10	Vitelic	
						V53C256-10 ◊	Vitelic	
						V53C256L-10 ◊	Vitelic	
						V53C258-10 ◊	Vitelic	
		MMOS	TS	18	5	M5M4464A-10 ◊	Mitsubishi	15
		Module	TS	22	5	**DPD4256**	**Dense-Pac (2581)**	
		NMOS	TS	16	5	MT1259-10 ◊	MicronTech	
						MT1259-12 ◊	MicronTech	
						M5M4256-10	Mitsubishi	
						M5M4256A-10 ◊	Mitsubishi	20
						M5M4257A-10 ◊	Mitsubishi	
						MCM6256B-10	Motorola	
						MCM6257B-10	Motorola	
						μPD41256-10	NEC	
						μPD41257-10	NEC	25
						MSM41256-10	OKI	
	100 NSF							
		NMOS	TS	16	5	MSM41257A-10 ◊	OKI	
	100 nsF	NMOS	TS	16	5	KM41256-10	Samsung	
						KM41257-10	Samsung	
						MKB45F56-80 †	**Thomson (3295)**	30
						TMM41256A-10	Toshiba	
						TMM41257A-10	Toshiba	
		NMOS Module		22	5	MB85108A-10	Fujitsu	
	120 nsF	CMOS	TS	16	5	AM90C255-12	AMD	
						AM90C256-12	AMD	35
						AM90C257-12	AMD	
						HM51256L-12	Hitachi	
						HM51258-12	Hitachi	
						HY51C256-12 ◊	**Hyundai (2770)**	
						HY51C256L-12 ◊	**Hyundai (2770)**	40
						HY51256-12	**Hyundai (2770)**	
						LH21256-12	**Sharp (2993)**	
						LH21257-12	**Sharp (2993)**	
						LH21258-12	**Sharp (2993)**	
						V51C256l-12	Vitelic	45
						V53C256-12 ◊	Vitelic	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
262144x1							(Cont'd)	
	120 nsF	CMOS	TS	16	5	V53C256L-12 ◊	Vitelic	
						V53C258-12 ◊	Vitelic	
		MMOS	TS	18	5	M5M4464A-12 ◊	Mitsubishi	
		NMOS	TS	16	5	MB81256-12W	Fujitsu	50
						MB81257-12W	Fujitsu	
						HM50256-12	Hitachi	
						HM50257-12	Hitachi	
						M5M257A-12 ◊	Mitsubishi	
						M5M4256-12	Mitsubishi	55
						M5M4256A-12 ◊	Mitsubishi	
						M5M4257A-12 ◊	Mitsubishi	
						MCM6256B-12	Motorola	
						MCM6257B-12	Motorola	
						μPD41256-12	NEC	60
						μPD41257-12	NEC	
						MSM41256-12	OKI	
						MSM41257A-12 ◊	OKI	
						MN41256-12	Panasonic	
						KM41256-12	Samsung	65
						KM41257-12	Samsung	
						MKB45F56-81 †	**Thomson (3295)**	
						TMM41256-12	Toshiba	
						TMM41256A-12	Toshiba	
						TMM41257-12	Toshiba	70
						TMM41257A-12	Toshiba	
		TTL	TS	16	5	HYB41256-12 ◊	Siemens	
	150 nsF	CMOS	TS	16	5	AM90C255-15	AMD	
						AM90C256-15	AMD	
						AM90C257-15	AMD	75
						M41256XX-15B	AT&T	
						HM51256L-15	Hitachi	
						HM51258-15	Hitachi	
						HY51C256-15 ◊	**Hyundai (2770)**	
						HY51C256L-15 ◊	**Hyundai (2770)**	80
						HY51256-15	**Hyundai (2770)**	
						LH21256-15	**Sharp (2993)**	
						LH21257-15	**Sharp (2993)**	
						LH21258-15	**Sharp (2993)**	
						V51C256L-15	Vitelic	85
		Module	TS	22	5	MB85108A-15	Fujitsu	
		NMOS	TS	16	5	MB81256-15W	Fujitsu	
						MB81257-15W	Fujitsu	
						HM50256-15	Hitachi	
						HM50257-15	Hitachi	90
						MT1259-15 ◊	MicronTech	
						M5M4256-15	Mitsubishi	
						MCM6256B-15	Motorola	
						MCM6257B-15	Motorola	
						μPD41256-15	NEC	95
						μPD41257-15	NEC	
						MSM37256-15	OKI	
						MSM41256-15	OKI	
						MSM41257A-15 ◊	OKI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Dynamic (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
262144x1								
	150 nsF	NMOS	TS	16	5		(Cont'd)	
						MN41256-15	Panasonic	
						KM41256-15	Samsung	
						KM41257-15	Samsung	
						SMJ4256-15 †	**TI (3220)**	
						MKB45F56-82 †	**Thomson (3295)**	5
						TMM41256-15	Toshiba	
						TMM41256A-15	Toshiba	
						TMM41257-15	Toshiba	
						TMM41257A-15	Toshiba	
		TTL	TS	16	5	HYB41256-15	◊ Siemens	10
	200 nsF	CMOS	TS	16	5	**HY51C256-20 ◊**	**Hyundai (2770)**	
						HY51C256L-20 ◊	**Hyundai (2770)**	
						HY51256-20	**Hyundai (2770)**	
						LH21256-20	**Sharp (2993)**	
						LH21257-20	**Sharp (2993)**	15
						LH21258-20	**Sharp (2993)**	
						V51C256L-20	Vitelic	
		NMOS	TS	16	5	HM50256-20	Hitachi	
						HM50257-20	Hitachi	
						μPD41256-20	NEC	20
						μPD41257-20	NEC	
						MSM37256-20	OKI	
						SMJ4256-20 †	**TI (3220)**	
		TTL	TS	16	5	HYB41256-20	◊ Siemens	
	100 nsF	CMOS	TS	16	5	**DPD91256 ◊**	**Dense-Pac (2578)**	25
262144x1, Nibble Mode								
	100 nsF	NMOS	TS	16	5	**TMS4257-10**	**TI (3259)**	
	120 nsF	NMOS	TS	16	5	**TMS4257-12**	**TI (3259)**	
	150 nsF	NMOS	TS	16	5	**TMS4257-15**	**TI (3259)**	
262144x1, Page Mode								
	100 nsF	NMOS	TS	16	5	**TMS4256-10**	**TI (3259)**	
	120 nsF	NMOS	TS	16	5	**TMS4256-12**	**TI (3259)**	30
	150 nsF	NMOS	TS	16	5	**TMS4256-15**	**TI (3259)**	
262144x1 VRAM								
	120 nsF	CMOS	TS		5	SMJ44C251-12	† TI	
262144x2								
	120 nsF	CMOS	TS	18	5	42256-12C ◊	EDI	
262144x4								
	60 nsF	Module	TS	22	5	**PEP4256EC4-60**	**Performance (2962)**	
	70 nsF	Module	TS	22	5	**PEP4256EC4-70**	**Performance (2962)**	35
	80 nsF	CMOS	TS	20	5	MT4C4256-8 ◊	MicronTech	
						M5M44256A-8	◊ Mitsubishi	
						M5M44258A-8	◊ Mitsubishi	
						μPD424256-8	NEC	
						μPD424258-8	NEC	40
						MSM41005-8 ◊	OKI	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
262144x4								
	80 nsF						(Cont'd)	
		Module	TS	22	5	MT4259-8	MicronTech	
						PEP4256EC4-80	**Performance (2962)**	
		NMOS	TS	20	5	MSM41004-8 ◊	OKI	
	85 nsF	CMOS	TTL	20	5	TC514256-85	Toshiba	45
	100 nsF	CMOS	TS	18	5	**DPD92564 ◊**	**Dense-Pac (2578)**	
				20	5	HM514256-10	Hitachi	
						MT4C4256-10	◊ MicronTech	
						M5M44C256-10	Mitsubishi	
						M5M44C258-10	Mitsubishi	50
						M5M44256A-10	◊ Mitsubishi	
						M5M44258A-10	◊ Mitsubishi	
						MCM514256-10	◊ Motorola	
						MCM51428-10	◊ Motorola	
						μPD424256-10	NEC	55
						μPD424258-10	NEC	
						MSM41005-10	◊ OKI	
						LH64256-10	Sharp	
						LH64258-10	**Sharp (2993, 2996)**	
						LH65257-10	Sharp	60
						TC514258-10	Toshiba	
		TTL	TS	20	5	TC514256-10	Toshiba	
		Module	TS	22	5	MT4259-10	MicronTech	
						PEP4256EC4-100	**Performance (2962)**	
						TM4256EC4-10	**TI (3260)**	65
				24	5	**DPD44256**	**Dense-Pac (2581)**	
						MB85203-10	Fujitsu	
				24	5	MB85204-10	Fujitsu	
				52	5	DPV2564	Dense-Pac	
				76	5	DPV5124	Dense-Pac	70
		NMOS	TS	20	5	MSM41004-10	◊ OKI	
		NMOS Erasable						
			TS	22	5	MT4259	MicronTech	
		TTL	OC	20	5	MB81C4256-10	Fujitsu	
						MB81C4257-10	Fujitsu	
						MB81C4258-10	Fujitsu	75
						MB81C4259-10	Fujitsu	
	120 nsF	CMOS	TS	20	5	HM514256-12	Hitachi	
						MT4C4256-12	◊ MicronTech	
						M5M44C256-12	Mitsubishi	
						M5M44C256-15	Mitsubishi	80
						M5M44C258-12	Mitsubishi	
						M5M44256A-12	◊ Mitsubishi	

(Continued)

MEMORY

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Dynamic (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
262144x4								
	120 nsF	CMOS	TS	20	5		(Cont'd)	
						M5M44258A-12	◊ Mitsubishi	
						MCM51426-12	◊ Motorola	
						MCM51428-12	◊ Motorola	
						μPD424256-12	NEC	
						μPD424258-12	NEC	5
						LH64256-12	Sharp	
						LH64257-12	Sharp	
						LH64258-12	**Sharp (2993, 2996)**	
						SMJ44C256-12	† TI	
						TC514258-12	Toshiba	10
				22	5	44256-12C	EDI	
			TTL	20	5	TC514256-12	Toshiba	
		Module	TS	22	5	HB561004A-12	Hitachi	
						MT4259-12	MicronTech	
						MC41256A4-12	◊ NEC	15
						PEP4256EC4-120	**Performance (2962)**	
						TM4256EC4-12	**TI (3260)**	
				24	5	MB85203-12	Fujitsu	
						MB85204-12	Fujitsu	
	120 snF	CMOS	TS	20	5	SMJ44C257-12	† TI	20
	150 nsF	CMOS	TS	20	5	HM514256-15	Hitachi	
						MT4C4256-15	◊ MicronTech	
						M5M44C258-15	Mitsubishi	
						LH64256-15	Sharp	
						LH64257-15	Sharp	25
						LH64258-15	**Sharp (2993, 2996)**	
						SMJ44C256-15	† TI	
						SMJ44C257-15	† TI	
		Module	TS	22	5	HB561004A-15	Hitachi	
						MT4259-15	MicronTech	30
						MC41256A4-15	◊ NEC	
						PEP4256EC4-150	**Performance (2962)**	
						TM4256EC4-15	**TI (3260)**	
				24	5	MB85203-15	Fujitsu	
						MB85204-15	Fujitsu	35
	200 nsF	Module	TS	22	5	HB561004A-20	Hitachi	
262144x4, Field RAM								
	25 nsF	Pseudo-Static, CMOS	TS	16	5	TMS4C1050-3	TI	
	50 nsF	Pseudo-Static, CMOS	TS	16	5	TMS1050-6	TI	
262144x4, Page Mode								
	100 nsF	CMOS	TS	20	5	**TMS44C256-10**	**TI (3259)**	
	120 nsF	CMOS	TS	20	5	**TMS44C256-12**	**TI (3259)**	40
	150 nsF	CMOS	TS	20	5	**TMS44C256-15**	**TI (3259)**	
262144x4, SCD								
	100 nsF	CMOS	TS	20	5	**TMS44C257-10**	**TI (3259)**	
	120 nsF	CMOS	TS	20	5	**TMS44C257-12**	**TI (3259)**	
	150 nsF	CMOS	TS	20	5	**TMS44C257-15**	**TI (3259)**	
262144x4 Video								
	40 nsF	Module	TS	52	5	**DPO2564**	**Dense-Pac (2581)**	45
262144x4, VRAM								
	100 nsF	CMOS	TS	28	5	TMX44C251-10	◊ TI	
	120 nsF	CMOS	TS	28	5	TMX44C251-12	◊ TI	
262144x4 VRAM								
	150 nsF	CMOS	TS		5	SMJ44C251-15	† TI	
262144x4, VRAM								
	150 nsF	CMOS	TS	28	5	TMX44C251-15	TI	
262144x5								
	60 nsF	Module	TS	24	5	**PEP4256EC5-60**	**Performance (2962)**	50
	70 nsF	Module	TS	24	5	**PEP4256EC5-70**	**Performance (2962)**	
	80 nsF	Module	TS	24	5	MT85259-8	MicronTech	
						PEP4256EC5-80	**Performance (2962)**	
	100 nsF	Module	TS	24	5	MT85259-10	MicronTech	
						PEP4256EC5-100	**Performance (2962)**	55
				26	5	**DPD45256**	**Dense-Pac (2581)**	
	120 nsF	Module	TS	24	5	HB561005A-12	Hitachi	
						MT85259-12 ◊	MicronTech	
						MC41256A5-12	◊ NEC	
						PEP4256EC5-120	**Performance (2962)**	60
	150 nsF	Module	TS	24	5	HB561005A-15	Hitachi	
						MT85259-15 ◊	MicronTech	
						MC41256A5-15	◊ NEC	
						PEP4256EC5-150	**Performance (2962)**	
	200 nsF	Module	TS	24	5	HB561005A-20	Hitachi	65
262144x8								
	60 nsF	Module	TS	30	5	**DPD42568LP**	**Dense-Pac (2581)**	
						PEP4256EL8-60 ◊	**Performance (2962)**	
	70 nsF	Module	TS	30	5	**PEP4256EL8-70** ◊	**Performance (2962)**	
	80 nsF	Module	TS	30	5	**DPD42568LL**	**Dense-Pac (2581)**	
						DPD42569LL	**Dense-Pac (2581)**	70
						MT8259-8 ◊	MicronTech	
						PEP4256EL8-80 ◊	**Performance (2962)**	
	100 nsF	Module	TS	30	5	**DPD42568**	**Dense-Pac (2581)**	
						MT8259-10 ◊	MicronTech	
						PEP4256EL8-100 ◊	**Performance (2962)**	75
						TM4256FL8-10	**TI (3260)**	
						TM4256GU8-10 ◊	**TI (3260)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Dynamic (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
262144x8								
	100 nsF						(Cont'd)	
		NMOS Module						
			TS	30	5	MT8259	MicronTech	
	120 nsF	Module	TS	24	5	MB85213-12	Fujitsu	
						MB85214-12	Fujitsu	
				30	5	HB561008B-12	Hitachi	
						MT8259-12 ◊	MicronTech	5
						MC41256A8-12 ◊	NEC	
						PEP4256EL8-120 ◊	**Performance (2962)**	
						TM4256FL8-12	**TI (3260)**	
		NMOS	TS	30	5	MH25609-12	Mitsubishi	
		NMOS Module						
			TS	30	5	**TM4256GU8-12 ◊**	**TI (3260)**	10
	140 nsF	Module	TS	24	5	MB85214-15	Fujitsu	
	150 nsF	Module	TS	30	5	HB561008B-15	Hitachi	
						MT8259-15 ◊	MicronTech	
						MC41256A8-15 ◊	NEC	
						PEP4256EL8-150 ◊	**Performance (2962)**	15
						TM4256FL8-15	**TI (3260)**	
		Module	TS					
				24	5	MB85213-15	Fujitsu	
		NMOS Module						
			TS	30	5	**TM4256GU8-15 ◊**	**TI (3260)**	
	200 nsF	Module	TS	30	5	HB561008B-20	Hitachi	
262144x9								
	60	Module	TS	30	5	**DPD45269**	**Dense-Pac (2581)**	20
	60 nsF	Module	TS	30	5	**DPD42569LP**	**Dense-Pac (2581)**	
						PEP4256EL9-60 ◊	**Performance (2962)**	
	70 nsF	Module	TS	30	5	**PEP4256EL9-70 ◊**	**Performance (2962)**	
	80 nsF	Module	TS	30	5	MT9259-8 ◊	MicronTech	
						PEP4256EL9-80 ◊	**Performance (2962)**	25
	100 nsF	Module	TS	30	5	DPD42569	Dense-Pac	
						MT9259-10 ◊	MicronTech	
						PEP4256EL9-100 ◊	**Performance (2962)**	
						TM4256EL9-10	**TI (3260)**	
						TM4256GU9-10 ◊	**TI (3260)**	30
		NMOS Module						
			5	30	5	MT9259	MicronTech	
		TTL	OC	30	5	MB85226-10	Fujitsu	
						MB85227-10	Fujitsu	
	120 nsF	Module	TS	30	5	MB85227-12	Fujitsu	
						HB561003A-12	Hitachi	35
						HB561003B-12	Hitachi	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
262144x9								
	120 nsF	Module	TS	30	5		(Cont'd)	
						HB561009A-12	Hitachi	
						HB561009B-12	Hitachi	
						MT9259-12 ◊	MicronTech	
						MC41256A9-12 ◊	NEC	40
						PEP4256EL9-120 ◊	**Performance (2962)**	
						TM4256EL9-12	**TI (3260)**	
		NMOS Module						
			TS	30	5	**TM4256GU9-12 ◊**	**TI (3260)**	
	150 ns	NMOS	TS	30	5	HM561003-15	Hitachi	
	150 nsF	Module	TS	30	5	MB85227-15	Fujitsu	45
						HB561003A-15	Hitachi	
						HB561003B-15	Hitachi	
						HB561009A-15	Hitachi	
						HB561009B-15	Hitachi	
						MT9259-15 ◊	MicronTech	50
						MC41256A9-15 ◊	NEC	
						PEP4256EL9-150 ◊	**Performance (2962)**	
						TM4256EL9-15	**TI (3260)**	
		NMOS	TS	30	5	MH25609-15	Mitsubishi	
		NMOS Module						
			TS	30	5	**TM4256GU9-15 ◊**	**TI (3260)**	55
	200 ns	NMOS	TS	30	5	HM561003-20	Hitachi	
	200 nsF	Module	TS	30	5	HB561003A-20	Hitachi	
						HB561003B-20	Hitachi	
						HB561009A-20	Hitachi	
						HB561009B-20	Hitachi	60
393216x8 Video								
	40 nsF	Module	TS	56	5	**DPO3848**	**Dense-Pac (2581)**	
524288x1								
	120 nsF	CMOS	TS	18	5	41512-12C	EDI	
524288x4								
	100 nsF	Module	TS	24	5	**DPD5124**	**Dense-Pac (2581)**	
	120 nsF	Module	TS	24	5	MB85211-12	Fujitsu	
		NMOS Module						
			TS	24	5	TM4256HE4-12	TI	65
	150 nsF	Module	TS	24	5	MB85210-15	Fujitsu	
						MB85211-15	Fujitsu	
		NMOS Module						
			TS	24	5	TM4256HE4-15	TI	
	200 nsF	NMOS	TS	24	5	TM4256HE4-20	TI	
524288x4 Video								
	40 nsF	Module	TS	76	5	**DPO5124**	**Dense-Pac (2581)**	70
524288x8								
	80 nsF	Module	TS	30	5	MT88512-8 ◊	MicronTech	
	100 nsF	Module	TS	30	5	MT88512-10 ◊	MicronTech	
		NMOS Module						
			TS	30	5	MT88512	MicronTech	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY–RAMs (Cont'd)

Dynamic (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
524288x8							(Cont'd)	
	120 nsF	Module	TS	30	5	MT88512-12 ◊	MicronTech	
	150 nsF	Module	TS	30	5	MT88512-15 ◊	MicronTech	
524288x9								
	80 nsF	CMOS, Module	TS	30	5	MT89512-8 ◊	MicronTech	
	100 nsF	CMOS, Module	TS	30	5	MT89512-10 ◊	MicronTech	
		NMOS Module	TS	30	5	MT89512	MicronTech	5
	120 nsF	CMOS, Module	TS	30	5	MT89512-12 ◊	MicronTech	
	150 nsF	CMOS, Module	TS	30	5	MT89512-15 ◊	MicronTech	
524288x40								
	80 nsF	Module	TS	60	5	**DPD51240**	**Dense-Pac (2581)**	
1048576x1								
	80 nsF	CMOS	TS	18	5	μPD421000-8	NEC	
						μPD421001-8	NEC	10
						μPD421002-8	NEC	
						MSM41001-8 ◊	OKI	
		NMOS	TS	18	5	MSM41000-8 ◊	OKI	
	100 nsF	CMOS	TS	18	5	HM511000-10	Hitachi	
						HM511001-10	Hitachi	15
						HM511002-10	Hitachi	
						HY51C100-10	Hyundai	
						M5M4C1000-10 ◊†	Mitsubishi	
						M5M4C1001-10 ◊	Mitsubishi	
						M5M4C1002-10 ◊	Mitsubishi	20
						μPD421000-10	NEC	
						μPD421001-10	NEC	
						μPD421002-10	NEC	
						MSM41001-10 ◊	OKI	
						TC511000-10	**Toshiba (3302)**	25
						TC511001-10	Toshiba	
						TC511002-10 ◊	Toshiba	
		Module	TS	24	5	**DPD411M**	**Dense-Pac (2581)**	
		NMOS	TS	18	5	MSM41000-10 ◊	OKI	
	120 nsF	CMOS	TS	18	5	HM511000-12	Hitachi	30
						HM511001-12	Hitachi	
						HM511002-12	Hitachi	
						HY51C100-12	Hyundai	
						M5M4C1000-12 ◊†	Mitsubishi	
						M5M4C1001-12 ◊	Mitsubishi	35
						M5M4C1002-12 ◊	Mitsubishi	
						μPD421000-12	NEC	
						μPD421001-12	NEC	
						μPD421002-12	NEC	
						TC511000-12	**Toshiba (3302)**	40

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1048576x1							(Cont'd)	
	120 nsF	CMOS	TS	18	5	TC511001-12	Toshiba	
						TC511002-12 ◊	Toshiba	
				22	5	411M-12C	EDI	
		Module	TS	22	5	MC411000A1-12	NEC	
						TM4256FC1-12	**TI (3260)**	45
		NMOS	TS	18	5	μPD411000-12	NEC	
						μPD411001-12	NEC	
	150 nsF	CMOS	TS	18	5	HM511000-15	Hitachi	
						HM511001-15	Hitachi	
						HM511002-15	Hitachi	50
						HY51C100-15	Hyundai	
						M5M4C1001-15 ◊	Mitsubishi	
						M5M4C1002-15 ◊	Mitsubishi	
				20	5	M5M4C1000-15 ◊	Mitsubishi	
		Module	TS	22	5	MC411000A1-15	NEC	55
						TM4256FC1-15	**TI (3260)**	
		NMOS	TS	18	5	μPD411000-15	NEC	
						μPD411001-15	NEC	
1048576x4								
	80 nsF	Module	TS	30	5	**DPD441M**	**Dense-Pac (2581)**	
1048576x1								
	60 nsF	NMOS	TS	18	5	**GM7C1024-60**	**GoldStar (2692)**	60
	80 nsF	CMOS	TS	18	5	MT4C1024-8 ◊	MicronTech	
						M5M41000A-8 ◊	Mitsubishi	
						M5M41001-8 ◊	Mitsubishi	
						M5M41002-8 ◊	Mitsubishi	
		NMOS	TS	18	5	**GM7C1024-80**	**GoldStar (2692)**	65
	85 nsF	CMOS	TS	18	5	MCM511000-85 ◊	Motorola	
						MCM511001-85 ◊	Motorola	
			TTL	18	5	**TC511000-85**	**Toshiba (3302)**	
						TC511001-85	Toshiba	
						TC511002-85 ◊	Toshiba	70
	100 nsF	CMOS	TS	18	5	**DPD9001** ◊	**Dense-Pac (2578)**	
						MT4C1024-10 ◊	MicronTech	
						M5M41000-10 ◊	Mitsubishi	
						M5M41001-10 ◊	Mitsubishi	
						M5M41002-10 ◊	Mitsubishi	75
						MCM511000-10 ◊	Motorola	
						MCM511001-10 ◊	Motorola	
						MCM511002-10 ◊	Motorola	
						HYB511000-10 ◊	Siemens	
						HYB511002-10 ◊	Siemens	80
						V51C100-10	Vitelic	
			TTL	18	5	MB81C1003	Fujitsu	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Dynamic (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1048576x1								
	100 nsF							(Cont'd)
		Module	TS	22	5	**TM4256FC1-10**	**TI**	**(3260)**
		TTL	OC	18	5	**MB81C1000-10**	**Fujitsu**	**(2621)**
						MB81C1001-10	Fujitsu	
	120 nsF	CMOS	TS	18	5	MT4C1024-12	◊ MicronTech	
						M5M41000A-12	◊ Mitsubishi	5
						M5M41001-12	◊ Mitsubishi	
						M5M41002-12	◊ Mitsubishi	
						MCM511000-12	◊ Motorola	
						MCM511001-12	◊ Motorola	
						MCM511002-12	◊ Motorola	10
						HYB511000-12	◊ Siemens	
						HYB511002-12	◊ Siemens	
						SMJ4C1024-12	† TI	
						SMJ4C1027-12	† TI	
						V51C100-12	Vitelic	15
		Module	TS	22	5	MB85201-12	Fujitsu	
				522	5	MB85208-12	Fujitsu	
	140 nsF	Module	TS	22	5	MB85201-15	Fujitsu	
	150 nsF	CMOS	TS	18	5	MT4C1024-15	◊ MicronTech	
						SMJ4C1024-15	† TI	20
						V51C100-15	Vitelic	
		Module	TS	22	5	MB85208-15	Fujitsu	
1048576x1, Nibble Mode								
	100 nsF	CMOS	TS	18	5	**TMS4C1025-10**	**TI**	**(3259)**
	120 nsF	CMOS	TS	18	5	**TMS4C1025-12**	**TI**	**(3259)**
	150 nsF	CMOS	TS	18	5	**TMS4C1025-15**	**TI**	**(3259)** 25
1048576x1, Page Mode								
	100 nsF	CMOS	TS	18	5	**TMS4C1024-10**	**TI**	**(3259)**
	120 nsF	CMOS Page Mode						
			TS	18	5	**TMS4C1024-12**	**TI**	**(3259)**
	150 nsF	CMOS	TS	18	5	**TMS4C1024-15**	**TI**	**(3259)**
1048576x1, SCD								
	100 nsF	CMOS	TS	18	5	**TMS4C1027-10**	**TI**	**(3259)**
	120 nsF	CMOS	TS	18	5	**TMS4C1027-12**	**TI**	**(3259)** 30
	150 nsF	CMOS	TS	18	5	**TMS4C1027-15**	**TI**	**(3259)**
1048576x2								
	100 nsF	CMOS	TTL	18	5	MB81C1002	Fujitsu	
1048576x4								
	80 nsF	Module	TS	24	5	**PEP1MX4-80**	**Performance (2962)**	
				26	5	PEPMX4Z-80	Performance	
	100 nsF	Module	TS	24	5	**PEP1MX4-100**	**Performance (2962)**	35
						TM024HAC4-10	**TI**	**(3260)**
				26	5	**PEP1MX4Z**	**Performance (2962)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1048576x4								(Cont'd)
	120 nsF	Module	TS	24	5	**PEP1MX4-120**	**Performance (2962)**	
						TM024HAC4-12	**TI**	**(3260)**
				26	5	**PEP1MX4Z-120**	**Performance (2962)**	40
	150 nsF	Module	TS	24	5	**TM024HAC4-15**	**TI**	**(3260)**
1048576x5								
	80 nsF	Module	TS	26	5	**PEP1MX5-80**	**Performance (2962)**	
	100 nsF	Module	TS	26	5	**PEP1MX5-100**	**Performance (2962)**	
	120 nsF	Module	TS	26	5	**PEP1MX5-120**	**Performance (2962)**	
1048576x8								
	80	Module	TS	30	5	**DPD1M8**	**Dense-Pac (2581)**	45
	80 nsF	CMOS	TS	30	5	MC421000A8-8	NEC	
						MC421000B8-8	NEC	
						MC421000C8-8	NEC	
		CMOS, Module	TS	30	5	MT8C8024-8 ◊	MicronTech	
		Module	TS	30	5	MH1M08A-80	◊ Mitsubishi	50
						MH1M08A1-8	◊ Mitsubishi	
						MH1M08A2-8	◊ Mitsubishi	
						MH1M09A-80	◊ Mitsubishi	
						PEP1MX8-80 ◊	**Performance (2962)**	
	100 nsF	CMOS	TS	30	5	MC421000A8-10	NEC	55
						MC421000B8-10	NEC	
				30	5	MC421000C8-10	NEC	
		CMOS, Module	TS	30	5	MT8C8024-10	◊ MicronTech	
		CMOS Module	TS	30	5	**TM024GAD8-10**	**TI**	**(3260)**
						TM024GAL8-10	TI	60
		Module	TS	30	5	MH1M08A-100	◊ Mitsubishi	
						MH1M08A1-10	◊ Mitsubishi	
						MH1M08A2-10	◊ Mitsubishi	
						MH1M09A-10	◊ Mitsubishi	
						PEP1MX8-100 ◊	**Performance (2962)**	65
	120 nsF	CMOS	TS	30	5	MC421000A8-12	NEC	
						MC421000B8-12	NEC	
						MC421000C8-12	NEC	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Dynamic (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1048576x8								
	120 nsF						(Cont'd)	
		CMOS, Module						
			TS	30	5	MT8C8024-12	◊ MicronTech	
		CMOS Module						
			TS	30	5	MH1M08-12	Mitsubishi	
						MH1M08A-12	Mitsubishi	
						TM024GAD8-12	**TI (3260)**	
		Module	TS	30	5	MH1M08A1-12	◊ Mitsubishi	5
						MH1M08A2-12	◊ Mitsubishi	
						PEP1MX8-120 ◊	**Performance (2962)**	
	150 nsF	CMOS, Module						
			TS	30	5	MT8C8024-15	◊ MicronTech	
		CMOS Module						
			TS	30	5	MH1M08-15	Mitsubishi	
						MH1M08A-15	Mitsubishi	10
						TM024GAD8-15	**TI (3260)**	
1048576x9								
	80 nsF	CMOS	TS	30	5	MC421000A9-8	NEC	
						MC421000B9-8	NEC	
						MC421000C9-8	NEC	
		CMOS, Module						
			TS	30	5	MT8C9024-8 ◊	MicronTech	15
		Module	TS	30	5	DPD1M9	Dense-Pac	
						MH1M09A1-8	◊ Mitsubishi	
						MH1M09A2-8	◊ Mitsubishi	
						PEP1MX9-80 ◊	**Performance (2962)**	
	100 nsF	CMOS	TS	30	5	MC421000A9-10	NEC	20
						MC421000B9-10	NEC	
						MC421000C9-10	NEC	
		CMOS, Module						
			TS	30	5	MT8C9024-10	◊ MicronTech	
		CMOS Module						
			TS	30	5	**TM024EAD9-10**	**TI (3260)**	
		Module	TS	30	5	MH1M09A1-10	◊ Mitsubishi	25
						MH1M09A2-10	◊ Mitsubishi	
						PEP1MX9-100 ◊	**Performance (2962)**	
						THM91000-10	◊ Toshiba	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1048576x9							(Cont'd)	
	120 nsF	CMOS	TS	30	5	MC421000A9-12	NEC	
						MC421000B9-12	NEC	30
						MC421000C9-12	NEC	
		CMOS, Module						
			TS	30	5	MT8C9024-12	◊ MicronTech	
		CMOS Module						
			TS	30	5	MH1M09-12	Mitsubishi	
						MH1M09A-12	Mitsubishi	
		Module	TS	30	5	MH1M09A1-12	◊ Mitsubishi	35
						MH1M09A2-12	◊ Mitsubishi	
						PEP1MX9-120 ◊	**Performance (2962)**	
						THM91000-12	◊ Toshiba	
	150 nsF	CMOS, Module						
			TS	30	5	MT8C9024-15	◊ MicronTech	
		CMOS Module						
			TS	30	5	MH1M09-15	Mitsubishi	40
						MH1M09A-15	Mitsubishi	
						TM024EAD9-15	**TI (3260)**	
1048576x16								
	80 nsF	Module	TS	64	5	**PEP1MX16-80**	**Performance (2962)**	
	100 nsF	Module	TS	64	5	**PEP1MX16-100**	**Performance (2962)**	
	120 nsF	Module	TS	24	5	**PEP1MX16-120**	**Performance (2962)**	45
2097152x8								
	80 nsF	Module	TS	64	5	**PEP2MX8** ◊	**Performance (2962)**	
	100 nsF	Module	TS	64	5	**PEP2MX8-100** ◊	**Performance (2962)**	
	120 nsF	Module	TS	64	5	**PEP2MX8-120** ◊	**Performance (2962)**	
4194204x8								
	80 nsF	Module	TS	60	5	**DPD4M8**	**Dense-Pac (2581)**	
4194204x1								
	80 nsF	Module	TS	30	5	**DPD414M**	**Dense-Pac (2581)**	50
4194304x1								
	80 nsF	Module	TS	23	5	**PEP4MX1Z-80**	**Performance (2962)**	
				26	5	**PEP4MX1-80**	**Performance (2962)**	
	100 nsF	Module	TS	23	5	**PEP4MX1Z-100**	**Performance (2962)**	
				26	5	**PEP4MX1-100**	**Performance (2962)**	
	120 nsF	Module	TS	23	5	**PEP4MX1Z-120**	**Performance (2962)**	55
				26	5	**PEP4MX1-120**	**Performance (2962)**	

Static

*192x98								
	35 nsF	CMOS	TTL	28	5	M5M5179P-35	Mitsubishi	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4x4	40 nsR	TTL	OC	16	5	ZN54170	† Fairchild	
						54LS170	† Fairchild	
						54170	† Fairchild	
						74LS170	◊ Fairchild	
						74170	Fairchild	5
						SN74LS170	Motorola	
						DM54LS170	◊† National	
						DM54170	† National	
						DM74LS170	National	
						DM74170	National	10
						74LS170	SGS	
						54LS170	◊† Signetics	
						74LS170	**Signetics (3003)**	
						SN54LS170	◊† TI	
						SN54170	† TI	15
						SN74LS170	TI	
						SN74170	TI	
			TS	16	5	54LS670	† Fairchild	
						74LS670	◊ Fairchild	
						HD74LS670	Hitachi	20
						SN54LS670	† Motorola	
						SN74LS670	Motorola	
						DM54LS670	† National	
						DM74LS670	National	
						74LS670	SGS	25
						54LS670	◊† Signetics	
						74LS670	**Signetics (3003)**	
						SN54LS670	◊† TI	
						SN74LS670	TI	
	1000 nsR							
		CMOS	—	24	4.5–15	MC14580BA	† Motorola	30
	1500 nsR							
		CMOS	—	24	3–15	MC14580BC	Motorola	
8x2	12 nsF	ECL	OE	18	−5.2	10155	Signetics	
	15 nsF	ECL	—	24	−5.2	**MCM10143**	**Motorola (2918)**	
	50 nsR	TTL	TS	24	5	**74S172**	**Signetics (3003)**	
						SN74172	TI	35
16x1	35 nsR	TTL	OC	14	5	MC4004	Motorola	
						MC4005	Motorola	
						MC4304	† Motorola	
						MC4305	† Motorola	
16x4	—	2-port	TS	28	5	**IDT39C705A**	**IDT (2801)**	40
						IDT39C705B	**IDT (2801)**	
						IDT39C707	**IDT (2801)**	
						IDT39C707A	**IDT (2801)**	
	5 nsF	ECL	OE	16	−4.5	F100402	◊ Fairchild	
	6 nsF	ECL	OE	16	−5.2	**MC10H145**	**Motorola (2918)**	45
	7 nsF	ECL	OE	24	−4.5	F100145	◊ Fairchild	
						100145	**Signetics (3020)**	
	10 ns *	ECL	OE	16	−5.2	HD10145	Hitachi	
	15 nsF	CMOS	TS	16	5	**CY7C189-15C**	**Cypress (2562, 2564)**	
		ECL	OE	16	−5.2	**MCM10145**	**Motorola (2918)**	50
	15 nsR	ECL	OE	16	−5.2	10145	Signetics	
	25 nsF	CMOS	TS	16	5	CY27S03AC	† Cypress	
						CY27S03AM	† Cypress	
						CY27S07AC	† Cypress	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16x4	25 nsF	CMOS	TS	16	5			(Cont'd)
						CY7C189-25C	**Cypress (2562, 2564)**	55
						CY7C189-25M †	**Cypress (2562, 2564)**	
						CY7C190-25C	**Cypress (2562, 2564)**	
						CY7C190-25M †	**Cypress (2562, 2564)**	
		TTL	OC	16	5	AM27S02AC	AMD	
						AM27S06AC	AMD	60
						AM27S06C	AMD	
			TS	16	5	AM27S03AC	AMD	
						AM27S07AC	AMD	
						AM27S07C	AMD	
						DM74S189A	National	65
	30 nsF	TTL	OC	16	5	AM27S02AM	† AMD	
						AM27S06AM	† AMD	
						AM27S06M	† AMD	
			TS	16	5	AM27S03AM	† AMD	
						AM27S07AM	† AMD	
						AM27S07M	† AMD	70
						DM54S189A	◊ National	
	35 nsF	CMOS	TS	16	5	CY27S03C	Cypress	
						CY27S03M	† Cypress	
						CY27S07C	Cypress	75
						CY27S07M	† Cypress	
						CY74S189	Cypress	
		TTL	OC	16	5	AM27S02C	AMD	
						AM3101-1C	AMD	
						AM3101AC	AMD	80
						SN74S289	AMD	
						SN7489-1	AMD	
						DM74S289	National	
						N3101A	Signetics	
			TS	16	5	AM27S03C	AMD	85
						SN74S189	AMD	
						DM74S189	National	
						74S189	**Signetics (3003)**	
	40 nsF	TTL	TS	18	5	DM85S68	National	
	45 nsF	TTL	OC	16	5	AM27S02M	† AMD	90
			TS	16	5	AM27S03M	† AMD	
	50 nsF	TTL	OC	16	5	AM3101-1M	† AMD	
						AM3101AM	† AMD	
						SN54S289	◊† AMD	
						SN5489-1	† AMD	95
						SN7489	AMD	
						DM54S289	† National	
						N82S25	Signetics	
						S3101A	† Signetics	
				28	5	IDM29705C	National	100
			TS	16	5	SN54S189	† AMD	
						DM54S189	◊† National	
						DM8599	National	
						54S189	† Signetics	
				28	5	IDM2970C	National	105

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16x4							(Cont'd)	
	53 nsF	TTL	TS	28	5	AM29705C	AMD	
						F29705M	† National	
						IDM29705	† National	
	55 nsF	CMOS	TS	16	5	**CY27LS03C**	**Cypress (2564)**	
		TTL	OC	16	5	AM27LS02C	AMD	5
						AM27LS06C	AMD	
			TS	16	5	AM27LS03C	AMD	
						AM27LS07C	AMD	
	58 nsF	TTL	TS	28	5	AM29705M †	AMD	
	60 nsF	TTL	OC	16	5	AM27LS06M †	AMD	10
						AM3101	AMD	
						AM5489	† AMD	
						DM8589	National	
						S82S25	† Signetics	
						SN54LS289A	◊† TI	15
						SN54LS319A	◊† TI	
			TS	16	5	AM27LS07M †	AMD	
						SN54LS189A †	TI	
						SN54LS219A	◊† TI	
						SN74LS189A	TI	20
						SN74LS219A	TI	
	65 nsF	CMOS	TS	16	5	**CY27LS03M †**	**Cypress (2564)**	
						CY27S07AM †	Cypress	
	70 nsF	TTL	OC	16	5	AM27LS02C	AMD	
			TS	16	5	AM27LS03C	AMD	25
	80 nsF	TTL	OC	16	5	DM7589	† National	
	85 nsF	TTL	OC	16	5	AM27LS02M †	AMD	
			TS	16	5	AM27LS03M †	AMD	
	110 nsR	TTL	OC	16	5	AM31L01C	AMD	
						AM31L01M †	AMD	30
	120 nsR	CMOS	TS	18	4.5–12.5			
						F4710BC	◊ Fairchild	
						F4710BM	◊† Fairchild	
	650 nsR	CMOS	TS	16	5	**CD4011BE**	**GE/RCA (2633)**	
						CD40114B	† GE/RCA	
						MM74C89	◊ National	35
32x8	300 ns *							
		CMOS	TS	18	10	**CDP1824**	**† GE/RCA (2643)**	
						HCMP1824	◊ Hughes	
						HMMP1824	◊† Hughes	
	600 ns *							
		CMOS	TS	18	5	**CDP1824C**	**† GE/RCA (2643)**	
					10	HCMP1824C	Hughes	40
						HMMP1824C	◊† Hughes	
64x1	15 nsF	ECL	OE	16	–5.2	**MCM10148**	**Motorola (2918)**	
	15 nsR	ECL	OE	16	–5.2	HD10148	Hitachi	
	270 nsR	CMOS	—	14	3–18	MCM14505A †	Motorola	
						HEF4505	◊† Signetics	45

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
64x1							(Cont'd)	
	350 nsR	CMOS	—	14	4.5–16	MCM14505C	Motorola	
	1050 nsR	CMOS	TS	24	5–15	MCM14552A †	Motorola	
	2100 nsR	CMOS	TS	24	5–15	MCM14552C	Motorola	
64x8	800 nsF	CMOS	TS	22	5	**CDP1826C**	**GE/RCA (2643)**	
64x9	35 nsF	TTL	OC	28	5	N82S19	Signetics	50
	45 nsF	TTL	OC	28	5	MBM93419	Fujitsu	
	60 nsF	TTL	OC	28	5	S82S19	† Signetics	
	80 nsF	TTL	OC	28	5	S82S09	† Signetics	
128x1	12 nsR	ECL	OE	16	–5.2	HD10147	Hitachi	
						MCM10147	**Motorola (2918)**	55
128x8	—	CMOS	—	8	5	PCF8571	◊ Signetics	
	250 ns *	NMOS	TS	24	5	F68B10	Fairchild	
						MCM68B10	Motorola	
	250 nsF	CMOS	TS	24	10	**CDP1823**	**GE/RCA (2643)**	
		NMOS	TS	24	5	EF68B10	Thomson	60
	360 nsF	NMOS	TS	24	5	F68A10	Fairchild	
						HM468A10	◊ Hitachi	
						MCM68A10	Motorola	
						EF68A10	Thomson	
	450 nsF	CMOS	TS	24	5	**CDP1823C**	**GE/RCA (2643)**	65
		NMOS	TS	24	5	F6810	Fairchild	
						HM46810	Hitachi	
						MCM6810	**Motorola (2902)**	
						EF6810	Thomson	
256x1	8 nsF	ECL	OE	16	–5.2	HM10414-1	Hitachi	70
	10 nsF	ECL	OE	16	–5.2	HM10414	Hitachi	
						DM10414A	National	
	15 nsF	ECL	OE	16	–5.2	MCM10152	Motorola	
	26 nsF	ECL	OE	16	–5.2	**MCM10144**	**Motorola (2918)**	
						DM10414	National	75
	35 nsF	TTL	TS	16	5	AM27LS00AC	AMD	
	40 nsF	TTL	OC	16	5	N82LS17	Signetics	
						74LS301	**Signetics (3003)**	
			TS	16	5	N82LS16	Signetics	
	45 nsF	TTL	OC	16	5	AM27LS01AC	AMD	80
						AM27LS01AM	† AMD	
						AM29720C	AMD	
			TS	16	5	AM27LS00AM	† AMD	
						AM27LS00C	AMD	
						AM29721C	AMD	85
	50 nsF	TTL	OC	16	5	N82S17	Signetics	
						74S301	**Signetics (3003)**	
			TS	16	5	DM74S200	National	
						N82S16	Signetics	
	55 nsF	TTL	OC	16	5	AM27LS01M †	AMD	90
						AM29720M †	AMD	
			TS	16	5	AM27LS00M †	AMD	
						AM29721M †	AMD	
	60 nsF	TTL	OC	16	5	DM74S206	National	
			TS	16	5	S82LS16	† Signetics	95
	70 nsF	TTL	OC	16	5	54LS301	† Signetics	
						54S301	◊† Signetics	
	80 nsF	TTL	OC	16	5	AM27LS01LC	AMD	
			TS	16	5	AM27LS00LC	AMD	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
256x1							(Cont'd)	
	95 nsF	TTL	OC	16	5	AM27LS01LM	† AMD	
			TS	16	5	AM27LS00LM	† AMD	
	200 ns *							
		CMOS	TS	16	3–15 4.5–12.5	F4720AC	◊ Fairchild	
						F4720C	◊ Fairchild	
						F4720M	◊† Fairchild	5
	345 nsF	CMOS	TS	16	10	CD40061A	† GE/RCA	
	400 nsR	CMOS	TS	16	3–15	MM54C200	‡ Micrel	
						MM54C200	† National	
						MM74C200	National	
	1000 nsF							
		PMOS	TS	16	5,–9	NCM1101Z	NCM	10
	1400 nsR							
		CMOS	—	16	3–15	MCM14537A †	Motorola	
	2000 nsR							
		CMOS	—	16	3–15	MCM14537C †	Motorola	
256x4	2 nsF	GaAs	ECL	36	–5.2	**12G014**	**GigaBit (2690)**	
	2.5 nsF	GaAs	Reg.		5	**12G014-2**	**GigaBit (2690)**	
	3.5 nsF	GaAs	Reg.		5	**12G014-3**	**GigaBit (2690)**	15
	5 nsF	ECL	OE	24	–4.5	MBM100422A-5	Fujitsu	
					–5.2	MBM10422A-5	Fujitsu	
	7 nsF	CMOS	TS	24	5	**CY7C123-7C**	**Cypress (2561, 2564)**	
		ECL	OE	24	–4.5	MBM100422A-7	Fujitsu	
						μPB100422-7	NEC	20
					–5.2	MBM10422A-7	Fujitsu	
						HM10422-7	Hitachi	
						μPB10422-7	NEC	
	8 nsF	CMOS	TS	22	5	P4C422-8C ◊	Performance	
	10 nsF	CMOS	TS	22	5	P4C422-10C ◊	Performance	25
		ECL	OE	24	–4.5	F100422 ◊	Fairchild	
						HM100422	Hitachi	
						μPB100422-10	NEC	
					–5.2	MCM10422-10	Motorola	
						DM10422A	National	30
						μPB10422-10	NEC	
						10422B	Signetics	
	12 nsF	CMOS	TS	22	5	P4C422-12C ◊	Performance	
				24	5	**CY7C123-12C**	**Cypress (2561, 2564)**	
						CY7C123-12M †	**Cypress (2561, 2564)**	35
		ECL	OE	24	–5.2	HM10422	Hitachi	
	15 nsF	CMOS	TS	22	5	**CY7C122-15C**	**Cypress (2561, 2564)**	
						P4C422-15C ◊	Performance	
						P4C422-15M ◊†	Performance	
						VT7C122	VLSI Tech	40
						VT7C122-15	VLSI Tech	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
256x4	15 nsF	CMOS	TS				(Cont'd)	
				24	5	**CY7C123-15M †**	**Cypress (2561, 2564)**	
		ECL	OE	22	–5.2	MB7072N	Fujitsu	
				24	–4.5	DM100422	National	
					–5.2	MCM10422-15	Motorola	45
						DM10422	National	
						10422A	Signetics	
	20 nsF	CMOS	TS	22	5	P4C422-20M ◊†	Performance	
				24	5	**CY7C123-20M †**	**Cypress (2561, 2564)**	
		ECL	OE	24	–5.2	10422	Signetics	50
	25 nsF	CMOS	TS	22	5	**CY7C122-25C**	**Cypress (2561, 2564)**	
						CY7C122-25M †	**Cypress (2561, 2564)**	
						CY9122-25C	Cypress	
						GM76C422-25	GoldStar	
						P4C422-25C ◊	Performance	55
						P4C422-25M ◊†	Performance	
						VT7C122-25	VLSI Tech	
		NMOS	TS	24	5	AM9122-25 ◊	AMD	
	35 nsF	CMOS	TS	16	5	CY91L22-35C	Cypress	
				22	5	**CY7C122-35C**	**Cypress (2561, 2564)**	60
						CY7C122-35M †	**Cypress (2561, 2564)**	
						CY9122-35C	Cypress	
						CY93422AC	Cypress	
						P4C422-35M ◊†	Performance	
						P93U422-35C	Performance	65
						VT7C122-35	VLSI Tech	
		NMOS	TS	24	5	AM91L22-35 ◊	AMD	
						AM9122-35 ◊	AMD	
						AM9122-35M ◊†	AMD	
		TTL	OC	22	5	AM93412AC	AMD	70
			TS	22	5	AM93422AC	AMD	
						93422AC	Fairchild	
	40 nsF	TTL	OC	22	5	AM93412	AMD	
			TS	22	5	AM93422	AMD	
	45 nsF	CMOS	TS	16	5	CY93L422AC	Cypress	75
						CY93422C	Cypress	
				22	5	CY91L22-45C	Cypress	
						CY9122-45C	Cypress	
						CY93422AM †	Cypress	
		ECL	OE	24	–5.2	93L422AC	Fairchild	80
						93422AM	† Fairchild	
		NMOS	TS	24	5	AM91L22-45 ◊	AMD	
						AM91L22-45M ◊†	AMD	
		TTL	OC	22	5	AM93L412AC	AMD	
						AM93412AM †	AMD	85

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
256x4	45 nsF	TTL				(Cont'd)		
			TS	22	5	AM93L422AC	AMD	
						AM93422AM †	AMD	
						93422C	Fairchild	
	55 nsF	CMOS	TS	22	5	CY93L422AM †	Cypress	
		TTL	OC	22	5	AM93L412AM †	AMD	5
			TS	22	5	AM93L422AM †	AMD	
						93L422AM	Fairchild	
	60 nsF	CMOS	TS	16	5	CY93L422C	Cypress	
						CY93422M †	Cypress	
		CMOS/SOS						
			TS	22	5	**MA5101SOS**	**Marconi (2883)**	10
		NMOS	TS	24	5	AM91L22-60 ◊	AMD	
		TTL	OC	22	5	AM93L412	AMD	
						AM93412M †	AMD	
			TS	22	5	AM93L422	AMD	
						AM93422M †	AMD	15
						93L422C	Fairchild	
						93422M †	Fairchild	
	75 nsF	CMOS	TS	22	5	CY93L422M †	Cypress	
		TTL	OC	22	5	AM93L412M †	AMD	
			TS	22	5	AM93L422M †	AMD	20
						93L422M †	Fairchild	
	220 nsF	CMOS	TS	18	5	**HM6561B-8 †**	**Harris (2704, 2763)**	
						HM6561B-9	**Harris (2704, 2763)**	
						IM65X61-1	Intel	
						HM6561 †	Matra-Harris	25
				22	5	**HM6551B-8 †**	**Harris (2704, 2763)**	
						HM6551B-9	**Harris (2704, 2763)**	
	240 nsF	CMOS	TS	22	5	**HS6551RH ‡**	**Harris (2714)**	
	250 nsF	CMOS	TS	22	5	MWS5101EL2	GE/RCA	
					10	**CDP1822**	**GE/RCA (2643)**	30
						TCC244	GE/RCA	
		NMOS	TS	16	5	AM9101D	AMD	
						AM9111D	AMD	
						AM9112D	AMD	
	300 nsF	CMOS	TS	18	5	**HM6561-2 †**	**Harris (2704, 2763)**	35
						HM6561-8 †	**Harris (2704, 2763)**	
						HM6561-9	**Harris (2704, 2763)**	
				22	5	**HM6551-8 †**	**Harris (2704, 2763)**	
						HM6551-9	**Harris (2704, 2763)**	
						LH5101-30 †	**Sharp (2993)**	40
		NMOS	TS	16	5	AM91L01C	AMD	
						AM91L01CM †	AMD	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
256x4	300 nsF	NMOS	TS	16	5	(Cont'd)		
						AM91L11CM ◊†	AMD	
						AM91L12C ◊	AMD	
						AM91L12CM ◊†	AMD	45
						AM9101C	AMD	
						AM9101CM †	AMD	
						AM9111C	AMD	
						AM9111CM †	AMD	
						AM9112C	AMD	50
						AM9112CM †	AMD	
	350 nsF	CMOS	TS	18	5	**HM6561-5**	**Harris (2704, 2763)**	
				22	5	MWS5101DL3 †	GE/RCA	
						MWS5101EL3	GE/RCA	
						HM6551-5	**Harris (2704, 2763)**	55
	400 nsF	CMOS	TS	22	5	**CDP1822C †**	**GE/RCA (2643)**	
						HMMP1822C ◊†	Hughes	
		NMOS	TS	16	5	AM91L01B	AMD	
						AM91L01BM †	AMD	
						AM91L11B ◊	AMD	60
						AM91L11BM ◊†	AMD	
						AM91L12B ◊	AMD	
						AM91L12BM ◊†	AMD	
						AM9101B	AMD	
						AM9101BM †	AMD	65
						AM9111B	AMD	
						AM9111BM †	AMD	
						AM9112B	AMD	
						AM9112BM †	AMD	
	450 nsF	CMOS	TS	22	5	HM435101-1	Hitachi	70
						LH5101-45	**Sharp (2993)**	
	500 nsF	NMOS	TS	16	5	AM91L12A ◊	AMD	
						AM91L12AM ◊†	AMD	
						AM9112A	AMD	
						AM9112AM †	AMD	75
				18	5	AM91L01A	AMD	
						AM91L01AM	AMD	
						AM91L11A ◊	AMD	
						AM9101A	AMD	
						AM9101AM	AMD	80
						AM9111A	AMD	
						AM9111AM	AMD	
	650 nsF	CMOS	TS	22	5	**LH5101-L3**	**Sharp (2993)**	
	800 nsF	CMOS	TS	22	5	**LH5101**	**Sharp (2993)**	
						LH5101W	**Sharp (2993)**	85
	3000 nsF	CMOS	TS	22	3	ITT5101S	ITT	
						LH5101S	**Sharp (2993)**	
				36	3	**LH5101SM**	**Sharp (2993)**	
256x8	4 nsF	ECL		24	−4.5	BT404	Brooktree	
					−5.2	BT403	Brooktree	90
	40 nsF	TTL	TS	22	5	N8X350	Signetics	
						S8X350 †	Signetics	
	240 nsF	2-port	TS	40	5	MCM68HC34 ◊	Motorola	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
256x8 w/3x8								
	4 nsF	ECL		28	−4.5	BT402	Brooktree	
					−5.2	BT401	Brooktree	
256x9	35 nsF	TTL	TS	22	5	93479AC	Fairchild	
						N82S212A	Signetics	
	45 nsF	TTL	TS	22	5	93479AM	Fairchild	5
						93479C	Fairchild	
						N82S212	Signetics	
	60 nsF	TTL	TS	22	5	93479M	Fairchild	
	70 nsF	TTL	TS	22	5	S82S212 †	Signetics	
	90 nsF	TTL	TS	24	5	S82S210 †	Signetics	10
256x16	5 nsF	ECL	OE	60	−5.2	MB770H-5	Fujitsu	
512x4	650 nsF	CMOS	TS	22	5	**LH5102-6**	**Sharp (2993)**	
	800 nsF	CMOS	TS	22	5	**LH5102-8**	**Sharp (2993)**	
	1200 nsF							
		CMOS	TS	22	5	**LH5102W**	**Sharp (2993)**	
				24	5	**LH5102**	**Sharp (2993)**	15
512x9	15 nsF	ECL	OE	32	−5.2	MB70801-15 ◊	Fujitsu	
	20 nsF	ECL	OE	24	−5.2	MB70802-20 ◊	Fujitsu	
	45 nsF	NMOS	TS	24	5	**TMS2150-4**	**TI (3227)**	
	120 nsF	Dual-Port						
			TS	28	5	**MK4511-12**	**Thomson (3269)**	
	150 nsF	Dual-Port						
			TS	28	5	**MK4511-15**	**Thomson (3269)**	20
	200 nsF	Dual-Port						
			TS	28	5	**MK4511-20**	**Thomson (3269)**	
1024x1	8 nsF	ECL	OE	16	−5.2	HM2112-1	Hitachi	
	10 nsF	ECL	OE	16	−4.5	HM100415	Hitachi	
					−5.2	HM2112	Hitachi	
						10415B	Signetics	25
					5	AM10415-10	AMD	
				24	−4.5	F100415C	Fairchild	
	15 nsF	ECL	OE	16	−4.5	AM100415A	AMD	
					−5.2	AM10415SA †	AMD	
						MCM10415-15	**Motorola (2918)**	30
	20 nsF	ECL	OE	16	−5.2	AM10415A †	AMD	
						AM10415SA †	AMD	
						MBM10415AH	Fujitsu	
						DM10415A	National	
						10415A	Signetics	35
		NMOS	TS	16	5	2125H-1	Intel	
	25 nsF	ECL	OE	16	−5.2	AM10415A †	AMD	
		NMOS	TS	16	5	2125H-2	Intel	
	29 nsF	ECL	OE	16	−5.2	**MCM10146**	**Motorola (2918)**	
	30 nsF	NMOS	TS	16	5	2125H-3	Intel	40
		TTL	OC	16	5	AM93415AC	AMD	
						AM93425AC	AMD	
						93415AC	Fairchild	
			TS	16	5	93425AC	Fairchild	
	35 nsF	ECL	OE	16	−5.2	DM10415	National	45
		NMOS	TS	16	5	2125H-4	Intel	
	40 nsF	ECL	OE	16	−5.2	AM10415M †	AMD	
		TTL	OC	16	5	AM93415AM †	AMD	
			TS	16	5	AM93425AM †	AMD	
	45 nsF	NMOS	OC	16	5	2115A	Intel	50
						2115AL	Intel	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1024x1	45 nsF	NMOS					(Cont'd)	
			TS	16	5	2125A	Intel	
						2125AL	Intel	
		TTL	OC	16	5	AM93L415A	AMD	
						AM93415C	AMD	55
						93415C	Fairchild	
			TS	16	5	AM93L425A	AMD	
						AM93425C	AMD	
						93425C	Fairchild	
	50 nsF	TTL	TS	16	5	93425AM †	Fairchild	60
	60 nsF	TTL	OC	16	5	AM93L415C	AMD	
						93L415 ◊	Fairchild	
						93L415C	Fairchild	
						93415M †	Fairchild	
						MCM93415M †	Motorola	65
			TS	16	5	93L425C	Fairchild	
						93425M †	Fairchild	
	65 nsF	TTL	OC	16	5	AM93415M †	AMD	
			TS	16	5	AM93425M †	AMD	
	70 nsF	NMOS	OC	16	5	2115A-2	Intel	70
						2115AL-2	Intel	
			TS	16	5	2125A-2	Intel	
						2125AL-2	Intel	
		TTL	OC	16	5	AM93L415M †	AMD	
						93L415M	Fairchild	75
			TS	16	5	AM93L425M †	AMD	
						93L425M †	Fairchild	
	180 nsF	CMOS	TS	16	5	**HM6508B-8 ◊†**	**Harris (2704, 2762)**	
						HM6508B-9 ◊	**Harris (2704, 2762)**	
				18	5	**HM6518B-8 †**	**Harris (2704, 2762)**	80
						HM6518B-9	**Harris (2704, 2762)**	
	250 nsF	CMOS	TS	16	5	**HM6508-8 ◊†**	**Harris (2704, 2762)**	
						HM6508-9 ◊	**Harris (2704, 2762)**	
				18	5	**HM6518-2 †**	**Harris (2704, 2762)**	
						HM6518-8 †	**Harris (2704, 2762)**	85
						HM6518-9	**Harris (2704, 2762)**	
		NOVRAM, Module						
			TS	28	5	**DPN18**	**Dense-Pac (2580)**	
	260 nsF	CMOS	TS	16	5	**HS6508RH ‡**	**Harris (2714)**	
	300 nsF	CMOS	TS	16	5	**HM6508-5 ◊**	**Harris (2704, 2762)**	
				18	5	**HM6518-5**	**Harris (2704, 2762)**	90
1024x4	4.5 nsF	ECL	OE	24	−4.5	μPB100474-4	NEC	
	5 nsF	ECL	OE	24	−4.5	MBM100474A-5 ◊	Fujitsu	
					−5.2	**MBM10474A-5**	**Fujitsu (2616)**	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1024x4							(Cont'd)	
	6 nsF	ECL	OE	24	–4.5	µPB100474-6	NEC	
	7 nsF	ECL	OE	24	–4.5	MBM100474A-7	◊ Fujitsu	
					–5.2	**MBM10474A-7**	**Fujitsu (2616)**	
	8 nsF	ECL	OE	24	–4.5	µPB100474-8	NEC	
					–5.2	µPB10474-8	NEC	5
					5.2	MBM10474A-15	Fujitsu	
	10 nsF	ECL		24	–4.5	HM10474-10	Hitachi	
			OE	24	–4.5	MBM100474A-10	◊ Fujitsu	
						HM100474-10	Hitachi	
						µPB100474-10	NEC	10
					–5.2	MBM10474A-10	Fujitsu	
						µPB10474-10	NEC	
	15 nsF	CMOS	TS	24	5	**CY7C150-15C**	**Cypress (2562, 2564)**	
		ECL	OE	24	–4.5	AM100474A	AMD	
						MBM100474A-15	◊ Fujitsu	15
						µPB100474-15	NEC	
					–5.2	AM10474AC	AMD	
						MB10474A-15	Fujitsu	
						HM10474	Hitachi	
						DM10474A	National	20
						µPB10474-15	NEC	
	20 nsF	ECL	OE	24	–5.2	AM10474AM †	AMD	
		NMOS	TS	24	5	AM9150-20	AMD	
	25 nsF	CMOS	TS	18	5	**CY7C148-25C**	**Cypress (2562, 2564)**	
						CY7C149-25C	**Cypress (2564)**	25
						IMS1223-25	**Inmos (2781)**	
						IMS1223-25M †	**Inmos (2781)**	
						HM65748-25 †	Matra-Harris	
				24	5	**CY7C150-25C**	**Cypress (2562, 2564)**	
						CY7C150-25M †	**Cypress (2562, 2564)**	30
		ECL	OE	24	–4.5	AM100474	AMD	
						HM100474	◊ Hitachi	
					–5.2	AM10474C	AMD	
						DM10474	National	
		NMOS	TS	24	5	AM9150-25	AMD	35
	30 nsF	ECL	OE	24	–4.5	F100474	◊ Fairchild	
					–5.2	AM10474M †	AMD	
	35 nsF	CMOS	TS	18	5	CY21L48-35C	Cypress	
						CY21L49-35C	Cypress	
						CY2148-35C	Cypress	40
						CY2149-35C	Cypress	
						CY7C148-35C	**Cypress (2562, 2564)**	
						CY7C148-35M †	**Cypress (2562, 2564)**	
						CY7C149-35C	**Cypress (2564)**	
						CY7C149-35M †	**Cypress (2564)**	45
						HM6148H-35	Hitachi	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1024x4	35 nsF	CMOS	TS	18	5		(Cont'd)	
						IMS1223-35	**Inmos (2781)**	
						IMS1223-35M †	**Inmos (2781)**	
				24	5	**CY7C150-35C**	**Cypress (2562, 2564)**	
						CY7C150-35M †	**Cypress (2562, 2564)**	50
			TSS	28	5	HM65748-35 †	Matra-Harris	
		NMOS	TS	18	5	AM2148-35	AMD	
						AM2149-35	AMD	
						2149H-1	Intel	
				24	5	AM9150-35	AMD	55
						AM9150-35M †	AMD	
	40 nsF	NMOS	TTL	24	5	AM9151-40	AMD	
	45 nsF	CMOS	TS	18	5	CY21L48-45C	Cypress	
						CY21L49-45C	Cypress	
						CY2148-45C	Cypress	60
						CY2148-45M †	Cypress	
						CY2149-45C	Cypress	
						CY2149-45M †	Cypress	
						CY7C148-45C	**Cypress (2562, 2564)**	
						CY7C148-45M †	**Cypress (2562, 2564)**	65
						CY7C149-45C	**Cypress (2564)**	
						CY7C149-45M †	**Cypress (2564)**	
						HM6148H-45	Hitachi	
						IMS1223-45M †	**Inmos (2781)**	
						HM65748-45 †	Matra-Harris	70
		NMOS	TS	18	5	AM21L48-45	AMD	
						AM21L49-45	AMD	
						AM2148-45	AMD	
						AM2148-45M †	AMD	
						AM2149-45	AMD	75
						AM2149-45M †	AMD	
						2148H-2	Intel	
						2149H-2	Intel	
						UM2148-2	UMC	
						UM2149-2	UMC	80
				24	5	AM9150-45	AMD	
						AM9150-45M †	AMD	
	50 nsF	NMOS	TTL	24	5	AM9151-50	AMD	
						AM9151-50M †	AMD	
	55 nsF	CMOS	TS	18	5	CY21L48-55C	Cypress	85
						CY21L49-55C	Cypress	
						CY2148-55C	Cypress	
						CY2148-55M †	Cypress	
						CY2149-55C	Cypress	
						CY2149-55M †	Cypress	90
						HM6148H-55	Hitachi	
		NMOS	TS	18	5	AM21L48-55	AMD	
						AM21L49-55	AMD	
						AM2148-55	AMD	
						AM2148-55M †	AMD	95
						AM2149-55	AMD	
						AM2149-55M †	AMD	
						2148H-3	Intel	
						2148HL-3	Intel	
						2149H-3	Intel	100

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1024x4	55 nsF	NMOS	TS	18	5		(Cont'd)	
						UM2148-1	UMC	
						UM2148L-1	UMC	
						UM2149-1	UMC	
						UM2149L-1	UMC	
	60 nsF	NMOS	TTL	24	5	AM9151-60	AMD	5
						AM9151-60M †	AMD	
	70 nsF	CMOS/SOS						
			TS	18	5	**MA5114SOS**	**Marconi (2885)**	
		NMOS	TS	18	5	AM21L48-70	AMD	
						AM21L49-70	AMD	
						AM2148-70	AMD	10
						AM2148-70M †	AMD	
						AM2149-70	AMD	
						AM2149-70M †	AMD	
						M2148H †	Intel	
						2148H ◊	Intel	15
						2148HL	Intel	
						2149H	Intel	
						2149HL	Intel	
						NMC2148H	National	
						UM2148	UMC	20
						UM2148L	UMC	
						UM2149	UMC	
						UM2149L	UMC	
	75 nsF	CMOS	TS	18	5	**HS65142RH ◊‡**	**Harris (2715)**	
	100 nsF	NMOS	TS	18	5	2114AL-1	Intel	25
	120 nsF	CMOS	TS	18	5	**HM6514S-8 ◊†**	**Harris (2704, 2762, 2768)**	
						HM6514S-9 ◊	**Harris (2704, 2762, 2768)**	
		NMOS	TS	18	5	2114AL-2	Intel	
	150 nsF	CMOS	TS	18	5	**LH5114H-15**	**Sharp (2993)**	
		NMOS	TS	18	5	M2114AL-3 †	Intel	30
						2114AL-3	Intel	
	200 nsF	CMOS	TS	18	5	**MWS5114-3 †**	**GE/RCA (2643)**	
						HM6514B-8 ◊†	**Harris (2704, 2762, 2768)**	
						HM6514B-9 ◊	**Harris (2704, 2762, 2768)**	
						MSM5114-2	OKI	35
						LH2114L-20 ◊	**Sharp (2993)**	
		NMOS	TS	18	5	AM91L14E ◊	AMD	
						AM91L14EM ◊†	AMD	
						AM9114E	AMD	
						AM9114EM †	AMD	40
						M2114A-4 †	Intel	
						M2114AL-4 †	Intel	
						2114AL-4	Intel	
						MSM2114-2 ◊	OKI	
						LH2114-L2 ◊	**Sharp (2993)**	45
				22	5	AM9130E ◊	AMD	
	220 nsF	CMOS	TS	18	5	**HS6514RH ‡**	**Harris (2702, 2715)**	
						HM6514 †	Matra-Harris	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
1024x4							(Cont'd)	
	250 nsF	CMOS	TS	18	5	**MWS5114-2 †**	**GE/RCA (2643)**	
						SRM2114C-5	**S-MOS (3201)**	50
						UM6104 ◊	UMC	
		NMOS	TS	18	5	M2114A-5 †	Intel	
				22	5	AM9130D ◊	AMD	
	300 nsF	CMOS	TS	18	5	**CMM5114/1RZ ‡**	**GE/RCA (2658)**	
						MWS5114-1 †	**GE/RCA (2643)**	55
						HM6514-5 ◊	**Harris (2704, 2762, 2768)**	
						HM6514-9 ◊	**Harris (2704, 2762, 2768)**	
						HM6514C-9 ◊	**Harris (2704, 2762, 2768)**	
						MSM5114-3	OKI	
		NMOS	TS	18	5	AM91L14C ◊	AMD	60
						AM91L14CM ◊†	AMD	
						AM91L24C ◊	AMD	
						AM91L24CM ◊†	AMD	
						AM9114C	AMD	
						AM9114CM †	AMD	65
						AM9124C ◊	AMD	
						AM9124CM ◊†	AMD	
						MSM2114-3 ◊	OKI	
				22	5	AM91L30C ◊	AMD	
						AM91L30CM ◊†	AMD	70
						AM9130C ◊	AMD	
						AM9130CM ◊†	AMD	
	400 nsF	NMOS	TS	22	5	AM91L30B ◊	AMD	
						AM91L30BM ◊†	AMD	
						AM9130B ◊	AMD	75
						AM9130BM ◊†	AMD	
	450 nsF	CMOS	TS	18	5	MSM5114	OKI	
						LH5114-4	**Sharp (2993)**	
		NMOS	TS	18	5	AM91L14B ◊	AMD	
						AM91L14BM ◊†	AMD	80
						AM91L24B ◊	AMD	
						AM91L24BM ◊†	AMD	
						AM9114B	AMD	
						AM9114BM †	AMD	
						AM9124B ◊	AMD	85
						AM9124BM ◊†	AMD	
						MSM2114 ◊	OKI	
	500 nsF	NMOS	TS	22	5	AM91L30A ◊	AMD	
						AM91L30AM ◊†	AMD	
						AM9130A ◊	AMD	90
						AM9130AM ◊†	AMD	
	650 nsF 1000 nsF	TS		18	5	CDP1825	GE/RCA	
		CMOS	TS	18	5	**LH5114L**	**Sharp (2993)**	
1024x8	35 nsF	CMOS	TS	48	5	**IDT7130S-35 ◊‡**	**IDT (2804)**	
						IDT7140S-35 ◊‡	**IDT (2804)**	95

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
1024x8	35 nsF							(Cont'd)	
		CMOS, 2-port							
			TS	48	5	**CY7C140-35C** ◊	**Cypress**	**(2564)**	
		2-Port	TS	48	5	**CY7C130-35C**	**Cypress**	**(2561, 2564)**	
	45 nsF	CMOS	TS	48	5	**IDT7130L-45** ◊‡	**IDT**	**(2804)**	
						IDT7140L-45 ◊‡	**IDT**	**(2804)**	
		CMOS, 2-port							
			TS	48	5	**CY7C140-45C**	**Cypress**	**(2564)**	5
		CMOS, 2-port							
			TS	48	5	**CY7C140-45M** ◊†	**Cypress**	**(2564)**	
		2-Port	TS	48	5	**CY7C130-45C**	**Cypress**	**(2561, 2564)**	
						CY7C130-45M †	**Cypress**	**(2561, 2564)**	
	55 nsF	CMOS, 2-port							
			TS	48	5	**CY7C140-55C**	**Cypress**	**(2564)**	
						CY7C140-55M ◊†	**Cypress**	**(2564)**	10
		CMOS, 2-port							
			TS	48	5	**CY7C130-55C**	**Cypress**	**(2561, 2564)**	
		NMOS	TS	24	5	MK4801A-55	Thomson		
		2-Port	TS	48	5	**CY7C130-55M**	**Cypress**	**(2561, 2564)**	
		2-port	TS	48	5	**IDT7130L-55**	**IDT**	**(2804)**	
						IDT7130S-55	**IDT**	**(2804)**	15
		2-port slave							
			TS	48	5	**IDT7140L-55**	**IDT**	**(2804)**	
						IDT7140S-55	**IDT**	**(2804)**	
	70 nsF	NMOS	TS	24	5	MKB4801-87 †	Thomson		
						MK4801A-70	Thomson		
		2-port	TS	48	5	**IDT7130L-70**	**IDT**	**(2804)**	20
						IDT7130L-70B †	**IDT**	**(2804)**	
						IDT7130S-70	**IDT**	**(2804)**	
						IDT7130S-70B †	**IDT**	**(2804)**	
		2-port slave							
			TS	48	5	**IDT7140L-70**	**IDT**	**(2804)**	
						IDT7140L-70B †	**IDT**	**(2804)**	25
						IDT7140S-70	**IDT**	**(2804)**	
						IDT7140S-70B †	**IDT**	**(2804)**	
	90 nsF	NMOS	TS	24	5	MKB4801-89 †	Thomson		
						MK4801A-90	Thomson		
		2-Port	TS	48	5	**IDT7130L-90**	**IDT**	**(2804)**	30
		2-port	TS	48	5	**IDT7130L-90B** †	**IDT**	**(2804)**	
		2-Port	TS	48	5	**IDT7130S-90**	**IDT**	**(2804)**	
		2-port	TS	48	5	**IDT7130S-90B** †	**IDT**	**(2804)**	
		2-port slave							
			TS	48	5	**IDT7140L-90**	**IDT**	**(2804)**	
						IDT7140L-90B †	**IDT**	**(2804)**	35
						IDT7140S-90	**IDT**	**(2804)**	
						IDT7140S-90B †	**IDT**	**(2804)**	
	100 nsF	2-Port	TS	48	5	**IDT7130L-100**	**IDT**	**(2804)**	
						IDT7130L-100B †	**IDT**	**(2804)**	
								(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source		Line
1024x8	100 nsF	2-Port	TS	48	5			(Cont'd)	
						IDT7130S-100B †	**IDT**	**(2804)**	40
						VT2130 †	VLSI Tech		
						VT2131 †	VLSI Tech		
			TTL	48	5	AM2130-10	AMD		
						AM2131-10	AMD		
		2-port slave							
			TS	48	5	**IDT7140L-100B** †	**IDT**	**(2804)**	45
						IDT7140S-100	**IDT**	**(2804)**	
						IDT7140S-100B †	**IDT**	**(2804)**	
		2-Port	TS	48	5	VT2130-10 †	VLSI Tech		
						VT2131-10 †	VLSI Tech		
	120 nsF	NMOS	TS	24	5	MKB4801A-81 †	Thomson		50
						MK4801A-1	Thomson		
		2-Port	TS	48	5	**IDT7130L-120B** †	**IDT**	**(2804)**	
						IDT7130S-120B †	**IDT**	**(2804)**	
		2-port slave							
			TS	48	5	**IDT7140L-120B** †	**IDT**	**(2804)**	
						IDT7140S-120B †	**IDT**	**(2804)**	55
		2-Port	TS	48	5	VT2130-12 †	VLSI Tech		
						VT2131-12 †	VLSI Tech		
	150 nsF	Dual-Port CMOS							
			TS	48	5	**VM2130-15**	**VLSI Tech**	**(3358)**	
						VM2131-15	VLSI Tech		
		NMOS	TS	24	5	MK4801A-2	Thomson		60
		2-Port	TS	48	5	VT2130-15 †	VLSI Tech		
						VT2131-15 †	VLSI Tech		
	175 nsF	Dual-Port CMOS							
			TS	48	5	**VM2130-17**	**VLSI Tech**	**(3358)**	
						VM2131-17	VLSI Tech		
	200 nsF	Dual-Port CMOS							
			TS	48	5	**VM2130-20**	**VLSI Tech**	**(3358)**	65
						VM2131-20	VLSI Tech		
		NMOS	TS	24	5	MK4801A-3	Thomson		
		2-Port	TS	48	5	VT2130-20 †	VLSI Tech		
						VT2131-20 †	VLSI Tech		
	250 nsF	NMOS	TS	24	5	MK4801A-4	Thomson		70
1024x16									
	10 nsF	ECL	OE	60	−5.2	MB7750-10	Fujitsu		
	60 nsF	CMOS, 2-Port							
			TS	52	5	**VT16AM8-60**	**VLSI Tech**	**(3354)**	
				64	5	VT160P8-60 ◊	VLSI Tech		
		CMOS,2-Port							
			TS	52	5	**MK45AM8-60** ◊	**Thomson**	**(3278)**	
				68	5	**MK45DP8-60** ◊	**Thomson**	**(3277)**	75
	70 nsF	CMOS	TS	48	5	**VT16AM8** †	**VLSI Tech**	**(3354)**	
		CMOS, 2-Port							
			TS	52	5	**VT16AM8-70**	**VLSI Tech**	**(3354)**	
				64	5	VT160P8-70 ◊	VLSI Tech		
		CMOS,2-Port							
			TS	52	5	**MK45AM8-70** ◊	**Thomson**	**(3278)**	
				68	5	**MK45DP8-70** ◊	**Thomson**	**(3277)**	80
		2-Port 8/16							
			TS	64	5	**VT16DP8** †	**VLSI Tech**	**(3355)**	
2038x84									
	45 nsF	CMOS, 2-port							
			TS	48	5	**CY7C142-45C** ◊	**Cypress**	**(2564)**	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048	75 nsF	CMOS, 2-Port	TS	68	5	**M79018Dx-15**	**AT&T (2528)**	
2048x8	15 nsF	CMOS	TS	24	5	**IDT6116LA ◇‡**	**IDT (2802)**	
						IDT6116LA-15 ◇‡	**IDT (2802)**	
						IDT6116SA-15 ◇‡	**IDT (2802)**	
						IDT6120SA-15 ◇‡	**IDT (2802)**	5
						P4C116-15C	Performance	
						P4C116L-15C	Performance	
	17 nsF	CMOS	TS	24	5	P4C116-17M †	Performance	
						P4C116L-17M	† Performance	
	20 nsF	CMOS	TS	24	5	**IDT6116LA-20 ◇‡**	**IDT (2802)**	10
						IDT6116SA-20 ◇‡	**IDT (2802)**	
						IDT6120SA-20 ◇‡	**IDT (2802)**	
						P4C116-20C	Performance	
						P4C116-20M †	Performance	
						P4C116L-20C	Performance	15
						P4C116L-20M	† Performance	
						VT20C18	**VLSI Tech (3347)**	
						VT20C18-20	**VLSI Tech (3347)**	
						VT20C19	**VLSI Tech (3347)**	
						VT20C19-20	**VLSI Tech (3347)**	20
	25 nsF	CMOS	TS	24	5	**CY7C128-25C**	**Cypress (2561, 2564)**	
						HY61C16-25	**Hyundai (2770)**	
						HY61C16L-25	**Hyundai (2770)**	
						IDT6116LA-25 ◇‡	**IDT (2802)**	
						IDT6116SA-25 ◇‡	**IDT (2802)**	25
						IDT6120SA-25 ◇‡	**IDT (2802)**	
						P4C116-25C	Performance	
						P4C116-25M †	Performance	
						P4C116L-25C	Performance	
						P4C116L-25M	† Performance	30
						VT20C18-25	**VLSI Tech (3347)**	
						VT20C19-25	**VLSI Tech (3347)**	
				28	5	CA16C08	† Calmos	
		NMOS	TS	24	5	TMM2018A-25	Toshiba	
		TTL	TS	24	5	MT5C1608-25	◇ MicronTech	35
	30 nsF	CMOS	TS	24	5	**IDT6116LA-30**	**IDT (2802)**	
						IDT6116SA-30	**IDT (2802)**	
						IDT6120SA-30 ◇‡	**IDT (2802)**	
						P4C116-30C	Performance	
						P4C116-30M †	Performance	40
						P4C116L-30C	Performance	
						P4C116L-30M	† Performance	
						SMJ68CE16-30	◇† TI	
		CMOS, 2-Port	TS	48	5	**VT7132A-30 ◇**	**VLSI Tech (3359)**	
						VT7142A-30 ◇	**VLSI Tech (3359)**	45
	35 nsF	CMOS	TS	20	5	V61C16P35L	Vitelic	
				24	5	**CY6116-35C**	**Cypress (2564)**	
						CY7C128-35C	**Cypress (2561, 2564)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8	35 nsF	CMOS	TS	24	5		(Cont'd)	
						DPS9116 ◇	**Dense-Pac (2578)**	
						GM76C28-35	**GoldStar (2692)**	50
						HY61C16-35	**Hyundai (2770)**	
						HY61C16L-35	**Hyundai (2770)**	
						IMS1433-35 ◇	**Inmos (2784)**	
						IDT6116LA-35	**IDT (2802)**	
						IDT6116LA-35B †	**IDT (2802)**	55
						IDT6116SA-35	**IDT (2802)**	
						IDT6116SA-35B †	**IDT (2802)**	
						IDT6120SA-35 ◇‡	**IDT (2802)**	
						HM65728-35 †	Matra-Harris	
						P4C116-35M †	Performance	60
						P4C116L-35M	† Performance	
						VT20C18-35	**VLSI Tech (3347)**	
						VT20C19-35	**VLSI Tech (3347)**	
				48	5	**IDT7132L-35 ◇‡**	**IDT (2804)**	
						IDT7132S-35 ◇‡	**IDT (2804)**	65
						IDT7142L-35 ◇‡	**IDT (2804)**	
						IDT7142S-35 ◇‡	**IDT (2804)**	
				52	5	**IDT71321LA-35 ◇‡**	**IDT (2804)**	
						IDT71321SA-35 ◇‡	**IDT (2804)**	
		CMOS, 2-port	TS	48	5	**CY7C142-35C ◇**	**Cypress (2564)**	70
		CMOS, 2-Port	TS	48	5	**VT7132A-35 ◇**	**VLSI Tech (3359)**	
						VT7142A-35 ◇	**VLSI Tech (3359)**	
		Module, 2-port	TS	58	5	**DPP2X8**	**Dense-Pac (2584)**	
		NMOS	TS	24	5	MCM2018-35	Motorola	75
						TMM2018-35	Toshiba	
						TMM2018A-35	Toshiba	
		TTL	TS	24	5	MT5C1608-35	◇ MicronTech	
		2-Port	TS	48	5	**CY7C132-35C**	**Cypress (2562, 2564)**	
	40 nsF	CMOS	TS	24	5	SMJ68CE16-40	◇† TI	
	45 nsF	CMOS	TS	24	5	**CY6116-45C**	**Cypress (2564)**	80
						CY6116-45M	**Cypress (2564)**	
						CY7C128-45C	**Cypress (2561, 2564)**	
						CY7C128-45M †	**Cypress (2561, 2564)**	
						GM76C28-45	**GoldStar (2692)**	
						HY61C16-45	**Hyundai (2770)**	85
						HY61C16L-45	**Hyundai (2770)**	
						IMS1433-45 ◇	**Inmos (2784)**	
						IMS1433-45M ◇†	**Inmos (2784)**	
						IDT6116LA-45B †	**IDT (2802)**	
						IDT6116SA-45	**IDT (2802)**	90
						IDT6116SA-45B †	**IDT (2802)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8	45 nsF	CMOS	TS	24	5		(Cont'd)	
						IDT6120SA-45 ◇‡	**IDT (2802)**	
						HM65728-45 †	Matra-Harris	
				48	5	**IDT7132L-45 ◇‡**	**IDT (2804)**	
						IDT7132S-45 ◇‡	**IDT (2804)**	
						IDT71322L-45 ◇‡	**IDT (2804, 2820)**	5
						IDT71322S-45 ◇‡	**IDT (2804, 2820)**	
						IDT7142L-45 ◇‡	**IDT (2804)**	
						IDT7142S-45 ◇‡	**IDT (2804)**	
				52	5	**IDT71321LA-45**		
						◇‡	**IDT (2804)**	
						IDT71321SA-45		
						◇‡	**IDT (2804)**	10
		CMOS, 2-port						
			TS	48	5	**CY7C142-45M ◇†**	**Cypress (2564)**	
		CMOS, 2-Port						
			TS	48	5	**VT7132A-45 ◇**		
							VLSI Tech (3359)	
						VT7142A-45 ◇		
							VLSI Tech (3359)	
		NMOS	TS	24	5	MCM2016H-45	Motorola	
						MCM2018-45	Motorola	15
						TMM2018-45	Toshiba	
						TMM2018A-45	Toshiba	
		TTL	TS	24	5	MT5C1608-45		
						◇	MicronTech	
		2-Port	TS	48	5	**CY7C132-45C**	**Cypress (2562, 2564)**	
						CY7C132-45M †		
							Cypress (2562, 2564)	20
	55 nsF	CMOS	TS	20	5	V61C16P55L	Vitelic	
				24	5	**CY6116-55C**	**Cypress (2564)**	
						CY6116-55M	**Cypress (2564)**	
						CY7C128-55C	**Cypress (2561, 2564)**	
						CY7C128-55M †		
							Cypress (2561, 2564)	25
						GM76C28-55	**GoldStar (2692)**	
						HM65162S-9	**Harris (2704, 2761, 2768)**	
						HY61C16-55	**Hyundai (2770)**	
						HY61C16L-55	**Hyundai (2770)**	
						IMS1433-55 ◇		
							Inmos (2784)	30
						IMS1433-55M ◇†	**Inmos (2784)**	
						IDT6116L-55	**IDT (2802)**	
						IDT6116L-55B †		
							IDT (2802)	
						IDT6116SA-55	**IDT (2802)**	
						IDT6116SA-55B †	**IDT (2802)**	35
						IDT6120SA-55 ◇‡	**IDT (2802)**	
						HM65162 †	Matra-Harris	
						HM65728-55 †		
							Matra-Harris	
						LH5115-55	**Sharp (2993)**	
						STC2147-55	Stantel-STC	40
						STC6116-55	Stantel-STC	
						STC6116L-55	Stantel-STC	
						SMJ68CE16-55		
						◇†	TI	
						UM6116-5 ◇	UMC	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8	55 nsF	CMOS	TS				(Cont'd)	
				48	5	**IDT7132L-55 ◇‡**	**IDT (2804)**	45
						IDT7132S-55 ◇‡	**IDT (2804)**	
						IDT7142L-55 ◇‡	**IDT (2804)**	
						IDT7142S-55 ◇‡	**IDT (2804)**	
				52	5	**IDT71321LA-55**		
						◇‡	**IDT (2804)**	
						IDT71321SA-55		
						◇‡	**IDT (2804)**	50
		CMOS, 2-port						
			TS	48	5	**CY7C142-55C ◇**		
							Cypress (2564)	
						CY7C142-55M ◇†	**Cypress (2564)**	
		CMOS, 2-Port						
			TS	48	5	HM65231-2 †		
							Matra-Harris	
						HM65231-5	Matra-Harris	
						HM65231-8 †		
							Matra-Harris	55
						HM65231-9	Matra-Harris	
						VT7132-55 ◇	**VLSI Tech (3359)**	
						VT7142-55 ◇	**VLSI Tech (3359)**	
		CMOS,2-Port						
			TS	48	5	**MK4532-55**	**Thomson (3270)**	
		NMOS	TS	24	5	MCM2016H-55	Motorola	60
						TMM2018-55	Toshiba	
		2-Port	TS	48	5	**CY7C132-55C**	**Cypress (2562, 2564)**	
						CY7C132-55M †		
							Cypress (2562, 2564)	
		2-port	TS	48	5	**IDT71322L-55**	**IDT (2804, 2820)**	
						IDT71322L-55B †	**IDT (2804, 2820)**	65
						IDT71322S-55	**IDT (2804, 2820)**	
						IDT71322S-55B †	**IDT (2804, 2820)**	
	70 nsF	CMOS	TS	20	5	V61C16P70L	Vitelic	
				24	5	**HM65162B-8 †**		
							Harris (2704, 2761, 2768)	
						HM65162B-9	**Harris (2704, 2761, 2768)**	70
						HY61C16-70	**Hyundai (2770)**	
						HY61C16L-70	**Hyundai (2770)**	
						IMS1433-70 ◇		
							Inmos (2784)	
						IMS1433-70M ◇†	**Inmos (2784)**	
						IDT6116L-70	**IDT (2802)**	75
						IDT6116L-70B †		
							IDT (2802)	
						IDT6116SA-70	**IDT (2802)**	
						IDT6116SA-70B †	**IDT (2802)**	
						IDT6120SA-70 ◇‡	**IDT (2802)**	
						HM65161 †	Matra-Harris	80
						LH5115-70	**Sharp (2993)**	
						STC2147-70	Stantel-STC	
						STC2147L-70	Stantel-STC	
						STC6116M-70		
							† Stantel-STC	
						UM6116-4 ◇	UMC	85
				52	5	**IDT71321LA-70**		
						◇‡	**IDT (2804)**	
						IDT71321SA-70		
						◇‡	**IDT (2804)**	
		CMOS, 2-Port						
			TS	48	5	V61C32-70	Vitelic	
						V61C32-70L	Vitelic	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8	70 nsF	CMOS, 2-Port						
			TS	48	5		(Cont'd)	
						VT7132-70 ◊	**VLSI Tech (3359)**	
						VT7142-70 ◊	**VLSI Tech (3359)**	
		CMOS,2-Port						
			TS	48	5	**MK4532-70**	**Thomson (3270)**	
		NMOS	TS	24	5	AM9128-70 ◊	AMD	
						MCM2016H-70	Motorola	5
		2-port	TS	48	5	**IDT7132L-70**	**IDT (2804)**	
						IDT7132L-70B †	**IDT (2804)**	
						IDT7132S-70	**IDT (2804)**	
						IDT7132S-70B †	**IDT (2804)**	
						IDT71322L-70	**IDT (2804, 2820)**	10
						IDT71322L-70B †	**IDT (2804, 2820)**	
						IDT71322S-70	**IDT (2804, 2820)**	
						IDT71322S-70B †	**IDT (2804, 2820)**	
						STC6116-70	Stantel-STC	
						STC6116L-70	Stantel-STC	15
		2-port slave						
			TS	48	5	**IDT7142L-70**	**IDT (2804)**	
						IDT7142L-70B †	**IDT (2804)**	
						IDT7142S-70	**IDT (2804)**	
						IDT7142S-70B †	**IDT (2804)**	
	80 nsF	CMOS	TS	24	5	**HS65C162RH** ‡	**Harris (2715)**	20
	90 nsF	CMOS	TS	24	5	**HM65162-8** †	**Harris (2704, 2761, 2768)**	
						HM65162-9	**Harris (2704, 2761, 2768)**	
						HM65162C-9	**Harris (2704, 2761, 2768)**	
						IDT6116L-90	**IDT (2802)**	
						IDT6116L-90B †	**IDT (2802)**	25
						IDT6116SA-90	**IDT (2802)**	
						IDT6116SA-90B †	**IDT (2802)**	
						STC2147-90	Stantel-STC	
						STC6116-90	Stantel-STC	
						STC6116L-90	Stantel-STC	30
						STC6116M-90	† Stantel-STC	
						UM6116-3 ◊	UMC	
				48	5	MB8422-90	Fujitsu	
				52	5	MB8421-90	Fujitsu	
		CMOS, 2-Port						
			TS	48	5	V61C32-90	Vitelic	35
						V61C32-90L	Vitelic	
						V61C33-90	Vitelic	
						V61C34-90	Vitelic	
						VT7132-90 ◊	**VLSI Tech (3359)**	
						VT7142-90 ◊	**VLSI Tech (3359)**	40
		CMOS,2-Port						
			TS	48	5	**MK4532-90**	**Thomson (3270)**	
		TTL	OC	48	5	MB8422	Fujitsu	
				52	5	MB8421	Fujitsu	
		2 port	TS	48	5	**IDT7132L-90**	**IDT (2804)**	
						IDT7132S-90	**IDT (2804)**	45

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8	90 nsF						(Cont'd)	
		2-port	TS	48	5	**IDT7132L-90B** †	**IDT (2804)**	
						IDT7132S-90B †	**IDT (2804)**	
		2-port slave						
			TS	48	5	**IDT7142L-90**	**IDT (2804)**	
						IDT7142L-90B †	**IDT (2804)**	
						IDT7142S-90	**IDT (2804)**	50
						IDT7142S-90B †	**IDT (2804)**	
	100 nsF	CMOS	TS	24	5	**HS65T162RH** ‡	**Harris (2715)**	
						HY6116-10	**Hyundai (2770)**	
						HY6116L-10	**Hyundai (2770)**	
						SRM2016C-10	**S-MOS (3201)**	55
		NMOS	TS	24	5	AM9128-10 ◊	AMD	
		2 port	TS	48	5	**IDT7132L-100**	**IDT (2804)**	
						IDT7132L-100B †	**IDT (2804)**	
						IDT7132S-100B †	**IDT (2804)**	
		2-port slave						
			TS	48	5	**IDT7142L-100B** †	**IDT (2804)**	60
						IDT7142S-100	**IDT (2804)**	
						IDT7142S-100B †	**IDT (2804)**	
	120 nsF	CMOS	TS	20	5	MB8418A-12L	Fujitsu	
				24	5	MB8418A-12	Fujitsu	
						HM6516B-8 ◊†	**Harris (2704, 2761, 2768)**	65
						HM6516B-9 ◊	**Harris (2704, 2761, 2768)**	
						HM65162C-8 †	**Harris (2704, 2761, 2768)**	
						HM6116-2	Hitachi	
						HY6116-12	**Hyundai (2770)**	
						HY6116L-12	**Hyundai (2770)**	70
						IDT6116LA-120B †	**IDT (2802)**	
						IDT6116SA-120B †	**IDT (2802)**	
						HM6116 †	Matra-Harris	
						SRM2016C-12	**S-MOS (3201)**	
						SRM2017C-12	**S-MOS (3201)**	75
						SRM2018C-12	**S-MOS (3201)**	
						STC6116M-12	† Stantel-STC	
						MK48T02B-12	**Thomson (3262)**	
						MK48T12B-12	◊ Thomson	
						MK48Z02B-12	**Thomson (3261)**	80
						MK48Z12B-12	Thomson	
				48	5	MB8422-120	Fujitsu	
				52	5	MB8421-120	Fujitsu	
		CMOS/SOS						
			TS	24	5	**MA6116SOS**	**Marconi (2886)**	
		CMOS, 2-Port						
			TS	48	5	HM65321-2 †	Matra-Harris	85
						HM65321-9	Matra-Harris	
		MIXMOS						
			TS	24	5	MSM5128-12	OKI	
		NMOS	TS	24	5	AM9128-12M	◊† AMD	
						MSM2128	OKI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8	120 nsF					(Cont'd)		
		2 port	TS	48	5	**IDT7132L-120B † IDT (2804)**		
						IDT7132S-120B † IDT (2804)		
		2-port slave						
			TS	48	5	**IDT7142L-120B † IDT (2804)**		
						IDT7142S-120B † IDT (2804)		
	150 nsF	CMOS	TS	24	5	MB8418A-15	Fujitsu	5
						MB8418A-15L	Fujitsu	
						CDM6116A-3	**GE/RCA (2643)**	
						CDM6117A-3	GE/RCA	
						CDM6118A-3	GE/RCA	
						HM6116-3	Hitachi	10
						HY6116-15	**Hyundai (2770)**	
						HY6116L-15	**Hyundai (2770)**	
						IDT6116LA-150B † IDT (2802)		
						IDT6116SA-150B † IDT (2802)		
						μPD446-3	NEC	15
						μPD449-3	NEC	
						MSM5129-15	OKI	
						SRM2016C-15	**S-MOS (3201)**	
						KM6816-15	Samsung	
						LH5116-15	**Sharp (2993)**	20
						LH5117-15	**Sharp (2993)**	
						LH5118-15	**Sharp (2993)**	
						STC6116M-15 †	Stantel-STC	
						MKB4817-82 †	Thomson	
						MKB4817-83 †	Thomson	25
						MKB4817-84 †	Thomson	
						MKB6116-82 †	Thomson	
						MKB6116L-82 †	Thomson	
						MK48T02B-15	**Thomson (3262)**	
						MK48T12B-15 ◊	Thomson	30
						MK48Z02-15	**Thomson (3261)**	
						MK48Z12B-15	Thomson	
		MIXMOS						
			TS	24	5	MSM5128-15	OKI	
		NMOS	TS	24	5	AM9128-15M ◊†	AMD	
						MSM2128-15	OKI	35
						ETL2128-3	Thomson	
	200 nsF	CMOS	TS	24	5	MB8416 ◊	Fujitsu	
						MB8416-20	Fujitsu	
						MB8416-20L	Fujitsu	
						MB8417 ◊	Fujitsu	40
						MB8417-20	Fujitsu	
						MB8417-20L	Fujitsu	
						MB8418-20	Fujitsu	
						MB8418-20L	Fujitsu	
						CDM6116A-2	**GE/RCA (2643)**	45
						HM6516-2 ◊† Harris (2704, 2761, 2768)		
						HM6516-5 ◊ Harris (2704, 2761, 2768)		
						HM6516-8 ◊† Harris (2704, 2761, 2768)		
						(Continued)		

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x8	200 nsF	CMOS	TS	24	5	(Cont'd)		
						HM6516-9 ◊ Harris (2704, 2761, 2768)		
						HM6116-4	Hitachi	50
						μPD446-2	NEC	
						μPD449-2	NEC	
						MSM5126-20	OKI	
						MSM5128 ◊	OKI	
						MSM5128-20	OKI	55
						MSM5129-20	OKI	
						KM6816-20	Samsung	
						LH5116-20	**Sharp (2993)**	
						LH5117-20	**Sharp (2993)**	
						LH5118-20	**Sharp (2993)**	60
						MKB6116-83 †	Thomson	
						MKB6116L-83 †	Thomson	
						MK48T02B-20	**Thomson (3262)**	
						MK48T12B-20 ◊	Thomson	
						MK48Z02-20	**Thomson (3261)**	65
						MK48Z12B-20	Thomson	
						TC5517C-20	Toshiba	
				28	5	MK48C02-20	Thomson	
						MK48C02L-20	Thomson	
		NMOS	TS	24	5	AM9128-20 ◊	AMD	70
						AM9128-20M ◊†	AMD	
						MSM2128-20	OKI	
						ETL2128-4	Thomson	
						TMM2016-2	Toshiba	
		NVRAM, Battery						
			TS	24	5	GR281	LMS	75
						NVR2	LMS	
	250 nsF	CMOS	TS	24	5	**CDM6116A-9**	**GE/RCA (2643)**	
						μPD446-1	NEC	
						μPD449-1	NEC	
						MSM5126-25	OKI	80
						MKB6116-84 †	Thomson	
						MKB6116L-84 †	Thomson	
						MK48T02B-25	**Thomson (3262)**	
						MK48T12B-25 ◊	Thomson	
						MK48Z02-25	**Thomson (3261)**	85
						MK48Z12B-25	Thomson	
				28	5	MK48C02-25	Thomson	
						MK48C02L-25	Thomson	
		NMOS	TS	24	5	ETL2128-5	Thomson	
		NOVRAM, Module						
			TS	28	5	**DPN28**	**Dense-Pac (2580)**	90
2048x9	25 nsF	CMOS	TS	28	5	CA16C09	Calmos	
2048x16								
	25 nsF	Module	TS	40	5	DPS2H16	Dense-Pac	
	35 nsF	Module, 2-port						
			TS	64	5	**DPP2X16**	**Dense-Pac (2584)**	
	50 nsF	Module	TS	40	5	**DPS2X16**	**Dense-Pac (2579)**	
	55 nsF	CMOS	TS	68	5	**IDT7133L-55 ◊‡**	**IDT (2804, 2821)**	95
						IDT7133S-55 ◊‡	**IDT (2804, 2821)**	
						IDT7143L-55 ◊‡	**IDT (2804)**	
						IDT7143S-55 ◊‡	**IDT (2804)**	
	70 nsF	CMOS	TS	68	5	**IDT7133L-70 ◊‡**	**IDT (2804, 2821)**	
						IDT7133S-70 ◊‡	**IDT (2804, 2821)**	100
						(Continued)		

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
2048x16							(Cont'd)	
	70 nsF	CMOS	TS	68	5	**IDT7143L-70 ◊‡**	**IDT (2804)**	
						IDT7143S-70 ◊‡	**IDT (2804)**	
	90 nsF	2-port	TS	68	5	**IDT7133L-90**	**IDT (2804, 2821)**	
						IDT7133L-90B †	**IDT (2804, 2821)**	
		2-port slave						
			TS	68	5	**IDT7143L-90**	**IDT (2804)**	5
						IDT7143L-90B †	**IDT (2804)**	
	100 nsF	2-port slave						
			TS	68	5	**IDT7143L-100**	**IDT (2804)**	
						IDT7143L-100B †	**IDT (2804)**	
	120 nsF	2-port slave						
			TS	68	5	**IDT7143L-120B †**	**IDT (2804)**	
2048x32								
	35 nsF	Module	TS	28	5	**DPS2X32**	**Dense-Pac (2579)**	10
		Module, 2-port						
			TS	84	5	**DPP2X32**	**Dense-Pac (2584)**	
	85 nsF	CMOS Module						
			TS	32	5	μPD43608 ◊	NEC	
2048x40								
	125 nsF	Module	TS	40	5	DPS2X40	Dense-Pac	
2048x80								
	250 nsF	Module	TS	40	5	DPS2X80	Dense-Pac	
4096x1	10 nsF	ECL	OE	18	−4.5	μPB100470-10	NEC	15
					−5.2	MBM100470A-10	Fujitsu	
						MBM10470A-10	Fujitsu	
						μPB10470-10	NEC	
				20	−5.2	HM2142 ◊	Hitachi	
	15 nsF	ECL	OE	18	−4.5	AM100470SA	AMD	20
						MBM100470A-15	Fujitsu	
						μPB100470-15	NEC	
					−5.2	AM10470SAC	AMD	
						MBM10470A-15	Fujitsu	
						HM10470-1	Hitachi	25
						DM10470A	National	
						μPB10470-15	NEC	
	20 nsF	ECL	OE	18	−5.2	AM10470SAM †	AMD	
						MBM10470A-20	Fujitsu	
	25 nsF	CMOS	TS	18	5	**CY7C147-25C**	**Cypress (2562, 2564)**	30
						IMS1203-25	**Inmos (2780)**	
						IMS1203-25M †	**Inmos (2780)**	
						HM65747-25 †	Matra-Harris	
		ECL	OE	18	−4.5	AM100470A	AMD	
						HM100470	Hitachi	35
					−5.2	AM10470AC	AMD	
						HM10470	Hitachi	
						DM10470	National	
						10470A	Signetics	
	30 nsF	ECL	OE	18	−5.2	AM10470AM †	AMD	40
	35 nsF	CMOS	TS	18	5	CY2147-35C	Cypress	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x1	35 nsF	CMOS	TS	18	5		(Cont'd)	
						CY7C147-35C	**Cypress (2562, 2564)**	
						CY7C147-35M †	**Cypress (2562, 2564)**	
						HM6147H-35	Hitachi	
						IMS1203-35	**Inmos (2780)**	45
						IMS1203-35M †	**Inmos (2780)**	
						HM65747-35 †	Matra-Harris	
		ECL	OE	18	−4.5	AM100470	AMD	
					−5.2	AM10470C	AMD	
						10470	Signetics	50
		NMOS	TS	18	5	AM2147-35	AMD	
						2147H-1	Intel	
						ET2147H-1 ◊	Thomson	
	40 nsF	ECL	OE	18	−5.2	AM10470M †	AMD	
	45 nsF	CMOS	TS	18	5	CY2147-45C	Cypress	55
						CY2147-45M †	Cypress	
						CY7C147-45C	**Cypress (2562, 2564)**	
						CY7C147-45M †	**Cypress (2562, 2564)**	
						HM6147H-45	Hitachi	
						IMS1203-45M †	**Inmos (2780)**	60
						HM65747-45 †	Matra-Harris	
		NMOS	TS	18	5	AM21L47-45	AMD	
						AM2147-45	AMD	
						AM2147-45M †	AMD	
						M2147H-2 †	Intel	65
						2147H-2	Intel	
						MM2148H-2	National	
						ET2147H-2 ◊	Thomson	
						UM2147-2	UMC	
	55 nsF	CMOS	TS	18	5	CY2147-55C	Cypress	70
						CY2147-55M †	Cypress	
						HM6147H-55	Hitachi	
						MCM61L47A-55	Motorola	
						MCM6147A-55	Motorola	
		NMOS	TS	18	5	AM21L47-55	AMD	75
						AM2147-55	AMD	
						AM2147-55M †	AMD	
						M2147H-3 †	Intel	
						2147H-3	Intel	
						2147HL-3	Intel	80
						MM2147-3	National	
						MM2148H-3	National	
						MM2148H-3L	National	
						NMC2147H-4	National	
						ETL2147H-3	Thomson	85
						ET2147H-3 ◊	Thomson	
						UM2147	UMC	
						UM2147-1	UMC	
						UM2147L-1	UMC	
	70 nsF	CMOS	TS	18	5	HM6147H	Hitachi	90
						MCM61L47A-70	Motorola	
						MCM6147A-70	Motorola	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
						(Cont'd)		
4096x1	70 nsF							
		CMOS/SOS						
			TS	18	5	**MA5104SOS ‡**	**Marconi (2884)**	
		NMOS	TS	18	5	AM21L47-70	AMD	
						AM2147-70	AMD	
						AM2147-70M †	AMD	
						2147 ◊	GE/Intersil	5
						M2147H †	Intel	
						2147H ◊	Intel	
						2147HL	Intel	
						MM2147	National	
						MM2147L	National	10
						MM2148H	National	
						MM2148H-L	National	
						STC2147M-70	Stantel-STC	
						ETL2147	Thomson	
						UM2147L	UMC	15
	85 nsF	NMOS	TS	18	5	MM2147M †	National	
	120 nsF	CMOS	TS	18	5	**HM6504S-8 ◊†**	**Harris (2704, 2762, 2768)**	
						HM6504S-9 ◊	**Harris (2704, 2762, 2768)**	
		NMOS	TS	18	5	AM21L41-12	AMD	
	150 nsF	NMOS	TS	18	5	AM21L41-15	AMD	20
	180 nsF	CMOS	TS	18	5	**HS6504RH ‡**	**Harris (2702, 2714)**	
	200 nsF	CMOS	TS	18	5	**HM6504B-8 ◊†**	**Harris (2704, 2762, 2768)**	
						HM6504B-9 ◊	**Harris (2704, 2762, 2768)**	
						MSM5104-2	OKI	
		NMOS	TS	18	5	AM21L41-20	AMD	25
						AM9044E	AMD	
				22	5	AM9140E	AMD	
	220 nsF	CMOS	TS	18	5	HM6504 †	Matra-Harris	
	250 nsF	NMOS	TS	18	5	AM21L41-25	AMD	
						AM90L44D	AMD	30
						AM9044D	AMD	
						AM9044DM †	AMD	
						AM92L44D ◊	AMD	
						MM5257-25	National	
						MM5257-25L	National	35
						MKB4104-84 †	Thomson	
						MK4104-4	Thomson	
				22	5	AM9140D	AMD	
	300 nsF	CMOS	TS	18	5	**CMM5104/1RZ ‡**	**GE/RCA (2658)**	
						HM6504-2 ◊†	**Harris (2704, 2762, 2768)**	40
						HM6504-5 ◊	**Harris (2704, 2762, 2768)**	
						HM6504-8 ◊†	**Harris (2704, 2762, 2768)**	
						HM6504-9 ◊	**Harris (2704, 2762, 2768)**	
						(Continued)		

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
						(Cont'd)		
4096x1	300 nsF	CMOS	TS	18	5	**HM6504C-9 ◊**	**Harris (2704, 2762, 2768)**	
						NMC6504-9 ◊	National	45
						MSM5104-3	OKI	
		NMOS	TS	18	5	AM4044C	AMD	
						AM4244C ◊	AMD	
						AM90L44C	AMD	
						AM90L44CM †	AMD	50
						AM9044CM †	AMD	
						AM92L44C ◊	AMD	
						AM92L44CM ◊†	AMD	
						MM5257-3	National	
						MM5257-3L	National	55
						MK4104-5	Thomson	
				22	5	AM91L40C	AMD	
						AM91L40CM †	AMD	
						AM9140C	AMD	
						AM9140CM †	AMD	60
	400 nsF	NMOS	TS	22	5	AM91L40B	AMD	
						AM91L40BM †	AMD	
						AM9140B	AMD	
						AM9140BM †	AMD	
	450 nsF	CMOS	TS	18	5	**LH5104-4**	**Sharp (2993)**	65
		NMOS	TS	18	5	AM90L44B	AMD	
						AM90L44BM †	AMD	
						AM9044B	AMD	
						AM9044BM †	AMD	
						AM92L44B ◊	AMD	70
						AM92L44BM ◊†	AMD	
						MM5257	National	
						MM5257L	National	
	500 nsF	NMOS	TS	22	5	AM91L40A	AMD	
						AM91L40AM †	AMD	75
						AM9140A	AMD	
						AM9140AM †	AMD	
4096x4	10 nsF	CMOS	TS	24	5	IDT1682SA-10 ◊‡	IDT	
						IDT71681LA-10 ◊‡	**IDT (2802)**	
						IDT71681SA-10 ◊‡	**IDT (2802)**	80
						IDT71682LA-10 ◊‡	**IDT (2802)**	
		ECL	OE	28	–4.5	MBM100484A-10 ◊	Fujitsu	
						μPB100484-10	NEC	
					–5.2	**MBM10484A-10**	**Fujitsu (2617)**	
						μPB10484-10	NEC	85
	12 nsF	CMOS	TS	20	5	p4c169-12c	Performance	
						P4C168-12C ◊	Performance	
						P4C168L-12C ◊	Performance	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4	12 nsF	CMOS	TS				(Cont'd)	
				22	5	IDT7178S-12	◇‡ IDT	
						P4C170-12C ◇	Performance	
				24	5	IDT7168LA-12	◇‡ IDT	
						IDT7168SA-12	**◇‡ IDT (2802)**	
						IDT7168LA-12	**◇‡ IDT (2802)**	5
						IDT7168SA-12	**◇‡ IDT (2802)**	
	15 nsF	CMOS	TS	20	5	**CY7C168-15C**	**Cypress (2562)**	
						CY7C169-15C	**Cypress (2562)**	
						IDT6168LA-15	**◇‡ IDT (2802)**	
						IDT6168SA-15	**◇‡ IDT (2802)**	10
						IDT6169SA-15	**◇‡ IDT (2802)**	
						P4C168-15C ◇	Performance	
						P4C168-20C ◇	Performance	
						P4C168L-15C ◇	Performance	
						P4C169-15C ◇	Performance	15
				22	5	IDT7178S-15	◇‡ IDT	
						P4C170-15C ◇	Performance	
				24	5	**CY7C172-15**	**Cypress (2562, 2564)**	
						IDT1681LA-15	◇‡ IDT	
						IDT71681SA-15	**◇‡ IDT (2802)**	20
						IDT71682LA-15	**◇‡ IDT (2802)**	
						IDT71682SA-15	**◇‡ IDT (2802)**	
						P4C1681-15C	Performance	
						P4C1681L-15C	Performance	
						P4C1682-15C	Performance	25
						P4C1682L-15C	Performance	
		ECL	OE	28	−4.5	MBM100484-15	◇ Fujitsu	
						μPB100484-15	NEC	
					−5.2	MBM10484-15	Fujitsu	
						μPB10484-15	NEC	30
	20 nsF	CMOS	TS	20	5	**IDT6168LA-20**	**IDT (2802)**	
						IDT6168SA-20	**IDT (2802)**	
						IDT6169SA-20	**◇‡ IDT (2802)**	
						P4C168-20M	◇† Performance	
						P4C168L-20C ◇	Performance	35
						P4C168L-20M	◇† Performance	
						P4C169-20C ◇	Performance	
						P4C169-20M	◇† Performance	
						MK41H68-20 †	**Thomson (3265)**	
						MK41H69-20 †	**Thomson (3265)**	40

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4	20 nsF	CMOS	TS	20	5		(Cont'd)	
						VT20C68	**◇ VLSI Tech (3349)**	
						VT20C68-20	**◇ VLSI Tech (3349)**	
						VT20C69	**◇ VLSI Tech (3349)**	
						VT20C69-20	**◇ VLSI Tech (3349)**	
				22	5	P4C170-20C ◇	Performance	45
						P4C170-20M	◇† Performance	
						MK41H78-20	Thomson	
						MK41H79-20	**Thomson (3267)**	
						MK41H80-20	**Thomson (3273)**	
						VT20C78	**◇ VLSI Tech (3351)**	50
						VT20C78-20	**◇ VLSI Tech (3351)**	
						VT20C79	**◇ VLSI Tech (3351)**	
						VT20C79-20	**◇ VLSI Tech (3351)**	
				24	5	IDT1681LA-20	◇‡ IDT	
						IDT71681SA-20	**◇‡ IDT (2802)**	55
						IDT71682LA-20	**◇‡ IDT (2802)**	
						IDT71682SA-20	**◇‡ IDT (2802)**	
						P4C1681-20C	Performance	
						P4C1681-20M	† Performance	
						P4C1681L-20C	Performance	60
						P4C1681L-20M	† Performance	
						P4C1682-20C	Performance	
						P4C1682-20M	† Performance	
						P4C1682L-20C	Performance	
						P4C1682L-20M	† Performance	65
	25 nsF	CMOS	TS	20	3.3	MK41L68-25	Thomson	
					5	**CY7C168-25C**	**Cypress (2562)**	
						CY7C168-25M †	**Cypress (2562)**	
						CY7C168L-25C	**Cypress (2562)**	
						CY7C169-25C	**Cypress (2562)**	70
						CY7C169-25M †	**Cypress (2562)**	
						CY7C169L-25C	**Cypress (2562)**	
						CY7C171L-25C	**Cypress (2562)**	
						CY7C172L-25C	**Cypress (2562, 2564)**	
						DPS9168	**◇ Dense-Pac (2578)**	75
						HM6268-25	Hitachi	
						IMS1423-25	**◇ Inmos (2783)**	
						IDT6168LA-25	**IDT (2802)**	
						IDT6168LA-25B †	**IDT (2802)**	
						IDT6168SA-25	**IDT (2802)**	80
						IDT6168SA-25B †	**IDT (2802)**	
						IDT6169SA-25	**◇‡ IDT (2802)**	
						HM65768-25 †	Matra-Harris	
						MCM6268-25	Motorola	
						MCM6269-25	Motorola	85
						P4C168-25C ◇	Performance	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4	25 nsF	CMOS	TS	20	5	(Cont'd)		
						P4C168-25M	◊† Performance	
						P4C168L-25C ◊	Performance	
						P4C168L-25M	◊† Performance	
						P4C169-25C ◊	Performance	
						P4C169-25M	◊† Performance	5
						SMJ64C16-25	◊† TI	
						MK41H68-25 †	**Thomson (3265)**	
						MK41H69-25 †	**Thomson (3265)**	
						MK41L69-25	Thomson	
						VT20C68-25 ◊	**VLSI Tech (3349)**	10
						VT20C69-25 ◊	**VLSI Tech (3349)**	
				22	3.3 5	MK41L78-25	Thomson	
						CY7C170-25C	**Cypress (2562)**	
						MCM4180-25 ◊	Motorola	
						P4C170-25C ◊	Performance	15
						P4C170-25M	◊† Performance	
						MK41H78-25	Thomson	
						MK41H79-25	**Thomson (3267)**	
						MK41H80-25	**Thomson (3273)**	
						VT20C78-25 ◊	**VLSI Tech (3351)**	20
						VT20C79-25 ◊	**VLSI Tech (3351)**	
				24	5	**CY7C171-25C**	**Cypress (2562)**	
						CY7C171-25M †	**Cypress (2562)**	
						CY7C172-25C	**Cypress (2562, 2564)**	
						CY7C172-25M †	**Cypress (2562, 2564)**	25
						IDT71681LA-25	**IDT (2802)**	
						IDT71681SA-25	**IDT (2802)**	
						IDT71682LA-25	**IDT (2802)**	
						IDT71682SA-25	**IDT (2802)**	
						MCM62350-25	◊ Motorola	30
						MCM62351-25	◊ Motorola	
						P4C1681-25C	Performance	
						P4C1681-25M	† Performance	
						P4C1681L-25C	Performance	
						P4C1681L-25M	† Performance	35
						P4C1682-25C	Performance	
						P4C1682-25M	† Performance	
						P4C1682L-25C	Performance	
						P4C1682L-25M	† Performance	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4	25 nsF					(Cont'd)		
		NMOS	TS	22	5	TMM2078A-25	Toshiba	40
		TTL	OC	20	5	MB81C68A ◊	Fujitsu	
			TS	20	5	MT5C1604-25	◊ MicronTech	
				22	5	MT5C1605-25	◊ MicronTech	
				24	5	MT5C1606-25	◊ MicronTech	
	30 nsF	CMOS	TS	20	5	MB81C69A-30	Fujitsu	45
						P4C168-30C ◊	Performance	
						P4C168-30M	◊† Performance	
						P4C168L-30C ◊	Performance	
						P4C168L-30M	◊† Performance	
						P4C169-30C ◊	Performance	50
						P4C169-30M	◊† Performance	
				22	5	MCM4180-30 ◊	Motorola	
						P4C170-30C ◊	Performance	
						P4C170-30M	◊† Performance	
				24	5	MCM62350-30	◊ Motorola	55
						MCM62351-30	◊ Motorola	
						P4C1681-30C	Performance	
						P4C1681-30M	† Performance	
						P4C1681L-30C	Performance	
						P4C1681L-30M	† Performance	60
						P4C1682-30C	Performance	
						P4C1682-30M	† Performance	
						P4C1682L-30C	Performance	
						P4C1682L-30M	† Performance	
	35 nsF	CMOS	TS	20	3.3 5	MK41L68-35	Thomson	65
						AM99C68-35	AMD	
						CY7C168-35C	**Cypress (2562)**	
						CY7C168-35M †	**Cypress (2562)**	
						CY7C168L-35C	**Cypress (2562)**	
						CY7C169-35C	**Cypress (2562)**	70
						CY7C169-35M †	**Cypress (2562)**	
						CY7C169L-35C	**Cypress (2562)**	
						CY7C171L-35C	**Cypress (2562)**	
						CY7C172L-35C	**Cypress (2562, 2564)**	
						HM6268-35	Hitachi	75
						HY61C68-35 ◊	**Hyundai (2770)**	
						HY61C68L-35 ◊	**Hyundai (2770)**	
						IMS1423-35 ◊	**Inmos (2783)**	
						IMS1423-35M ◊†	**Inmos (2783)**	
						IDT6168LA-35	**IDT (2802)**	80
						IDT6168LA-35B †	**IDT (2802)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4	35 nsF	CMOS	TS	20	5		(Cont'd)	
						IDT6168SA-35	**IDT (2802)**	
						IDT6168SA-35B †	**IDT (2802)**	
						IDT6169SA-35 ◇‡	**IDT (2802)**	
						HM65768-35 †	Matra-Harris	
						M5M21C68-35	Mitsubishi	5
						MCM6268-35	Motorola	
						MCM6269-35	Motorola	
						μPD4314-35	NEC	
						P4C168-35C ◇	Performance	
						P4C168-35M ◇†	Performance	10
						P4C168L-35C ◇	Performance	
						P4C168L-35M ◇†	Performance	
						P4C169-35M ◇†	Performance	
						SMJ64C16-35 ◇†	TI	
						MK41H68-35 †	**Thomson (3265)**	15
						MK41H69-35 †	**Thomson (3265)**	
						MK41L69-35	Thomson	
						V61C68P35L	Vitelic	
						VT20C68-35 ◇	**VLSI Tech (3349)**	
						VT20C69-35 ◇	**VLSI Tech (3349)**	20
				22	3.3 5	MK41L78-35	Thomson	
						CY7C170-35C	**Cypress (2562)**	
						CY7C170-35M †	**Cypress (2562)**	
						HY61C69-35 ◇	Hyundai	
						HY61C69L-35 ◇	Hyundai	25
						MCM4180-35 ◇	Motorola	
						P4C170-35C ◇	Performance	
						P4C170-35M ◇†	Performance	
						MK41H78-35	Thomson	
						MK41H79-35	**Thomson (3267)**	30
						MK41H80-35	**Thomson (3273)**	
						VT20C78-35 ◇	**VLSI Tech (3351)**	
						VT20C79-35 ◇	**VLSI Tech (3351)**	
				24	5	**CY7C171-35C**	**Cypress (2562)**	
						CY7C171-35M †	**Cypress (2562)**	35
						CY7C172-35C	**Cypress (2562, 2564)**	
						CY7C172-35M †	**Cypress (2562, 2564)**	
						IDT71681LA-35	**IDT (2802)**	
						**IDT71681LA-35B † **	**IDT (2802)**	
						IDT71681SA-35	**IDT (2802)**	40
						**IDT71681SA-35B † **	**IDT (2802)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4	35 nsF	CMOS	TS	24	5		(Cont'd)	
						IDT71682LA-35	**IDT (2802)**	
						**IDT71682LA-35B † **	**IDT (2802)**	
						IDT71682SA-35	**IDT (2802)**	
						**IDT71682SA-35B † **	**IDT (2802)**	45
						MCM62350-35 ◇	Motorola	
						MCM62351-35 ◇	Motorola	
						P4C1681-35C	Performance	
						P4C1681-35M †	Performance	
						P4C1681L-35C	Performance	50
						P4C1681L-35M †	Performance	
						P4C1682-35C	Performance	
						P4C1682-35M †	Performance	
						P4C1682L-35C	Performance	
						P4C1682L-35M †	Performance	55
						AM2168-35	AMD	
						AM2169-35	AMD	
						STC2168-35	Stantel-STC	
						TMM2068-35	Toshiba	
				22	5	TC2078-35	Toshiba	60
						TMM2078A-35	Toshiba	
						MB81C68 ◇	Fujitsu	
						MT5C1604-35 ◇	MicronTech	
						MT5C1605-35 ◇	MicronTech	
						MT5C1606-35 ◇	MicronTech	65
	35nsF	CMOS	TS	20	5	P4C169-35C ◇	Performance	
	40 nsF	CMOS	TS	20	5	**CY7C169-40C**	**Cypress (2562)**	
						CY7C169-40M †	**Cypress (2562)**	
	45 nsF	CMOS	TS	20	5	AM99C68-45	AMD	
						AM99C68-45M †	AMD	70
						CY7C168-45C	**Cypress (2562)**	
						CY7C168-45M †	**Cypress (2562)**	
						CY7C168L-45C	**Cypress (2562)**	
						CY7C169L-45C	**Cypress (2562)**	
						CY7C171L-45C	**Cypress (2562)**	75
						CY7C172L-45C	**Cypress (2562, 2564)**	
						MB81C68-45W	Fujitsu	
						HM6168H-45	Hitachi	
						HY61C68-45 ◇	**Hyundai (2770)**	
						HY61C68L-45 ◇	**Hyundai (2770)**	80
						IMS1423-45 ◇	**Inmos (2783)**	
						IMS1423-45M ◇†	**Inmos (2783)**	
						IDT6116LA-45	**IDT (2802)**	
						IDT6168LA-45	**IDT (2802)**	
						IDT6168LA-45B †	**IDT (2802)**	85
						IDT6168SA-45	**IDT (2802)**	
						IDT6168SA-45B †	**IDT (2802)**	
						IDT6169SA-45 ◇‡	**IDT (2802)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4	45 nsF	CMOS	TS	20	5	(Cont'd)		
						HM65768-45 †	Matra-Harris	
						M5M21C68-45	Mitsubishi	
						MCM1423-45	Motorola	
						MCM6168-45	Motorola	
						μPD4314-45	NEC	5
						P4C168-45M	◊† Performance	
						P4C168L-45M	◊† Performance	
						P4C169-45M	◊† Performance	
						SRM2268C-45 ◊	**S-MOS (3201)**	
						SMJ64C16-45	◊† TI	10
						UM6168-2	**UMC (3312)**	
						UM6168L-2	**UMC (3312)**	
						VT20C68-45 ◊	**VLSI Tech (3349)**	
						VT20C69-45 ◊	**VLSI Tech (3349)**	
				22	5	**CY7C170-45C**	**Cypress (2562)**	15
						CY7C170-45M †	**Cypress (2562)**	
						HY61C69-45 ◊	Hyundai	
						HY61C69L-45	◊ Hyundai	
						P4C170-45M	◊† Performance	
						V61C69-45	Vitelic	20
						V61C69-45L	Vitelic	
						VT20C78-45 ◊	**VLSI Tech (3351)**	
						VT20C79-45 ◊	**VLSI Tech (3351)**	
				24	5	**CY7C171-45C**	**Cypress (2562)**	
						CY7C171-45M †	**Cypress (2562)**	25
						CY7C172-45C	**Cypress (2562, 2564)**	
						CY7C172-45M †	**Cypress (2562, 2564)**	
						IDT71681LA-45	**IDT (2802)**	
						IDT71681LA-45B	**† IDT (2802)**	
						IDT71681S-45	**IDT (2802)**	30
						IDT71681SA-45	**IDT (2802)**	
						IDT71681SA-45B	**† IDT (2802)**	
						IDT71682LA-45	**IDT (2802)**	
						IDT71682LA-45B	**† IDT (2802)**	
						IDT71682SA-45	**IDT (2802)**	35
						IDT71682SA-45B	**† IDT (2802)**	
						P4C1681-45M	† Performance	
						P4C1681L-45M	† Performance	
						P4C1682-45M	† Performance	
						P4C1682L-45M	† Performance	40

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4	45 nsF					(Cont'd)		
		NMOS	TS	20	5	AM2168-45	AMD	
						AM2169-45	AMD	
						STC2168-45	Stantel-STC	
				22	5	TMM2078-45	Toshiba	
						TMM2078A-45	Toshiba	45
		TTL	TS	20	5	MT5C1604-45	◊ MicronTech	
				22	5	MT5C1605-45	◊ MicronTech	
				24	5	MT5C1606-45	◊ MicronTech	
	55 nsF	CMOS	TS	20	5	AM99C68-55	AMD	
						AM99C68-55M	† AMD	50
						MB81C68-55W	Fujitsu	
						HM6168H-55	Hitachi	
						HY61C68-55 ◊	**Hyundai (2770)**	
						HY61C68L-55 ◊	**Hyundai (2770)**	
						IMS1423-55M ◊†	**Inmos (2783)**	55
						IDT6168L-55	**IDT (2802)**	
						IDT6168L-55B †	**IDT (2802)**	
						IDT6168LA-55	**IDT (2802)**	
						IDT6168LA-55B †	**IDT (2802)**	
						IDT6168SA-55	**IDT (2802)**	60
						IDT6168SA-55B †	**IDT (2802)**	
						IDT6169SA-55 ◊‡	**IDT (2802)**	
						HM65681-55 †	Matra-Harris	
						M5M21C68-55	Mitsubishi	
						MCM6168-55	Motorola	65
						μPD4314-55	NEC	
						SRM2268C-55 ◊	**S-MOS (3201)**	
						UM6168-1	**UMC (3312)**	
						UM6168L-1	**UMC (3312)**	
				22	5	HY61C69-55 ◊	Hyundai	70
						HY61C69L-55	◊ Hyundai	
						V61C69-55	Vitelic	
						V61C69-55L	Vitelic	
				24	5	**IDT71681LA-55**	**IDT (2802)**	
						IDT71681LA-55B	**† IDT (2802)**	75
						IDT71681S-55	**IDT (2802)**	
						IDT71681S-55B †	**IDT (2802)**	
						IDT71681SA-55	**IDT (2802)**	
						IDT71681SA-55B	**† IDT (2802)**	
						IDT71682LA-55	**IDT (2802)**	80
						IDT71682LA-55B	**† IDT (2802)**	
						IDT71682SA-55	**IDT (2802)**	
						IDT71682SA-55B	**† IDT (2802)**	
		NMOS	TS	20	5	AM2168-55	AMD	
						AM2168-55M †	AMD	85
						AM2169-55	AMD	
						AM2169-55M †	AMD	
						MB8168-55	Fujitsu	
						IMS1420-55M	◊† Inmos	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4	55 nsF	NMOS	TS	20	5		(Cont'd)	
						STC2168-55	Stantel-STC	
						STC2168L-55	Stantel-STC	
						STC2168M-55	† Stantel-STC	
				22	5	TMM2078-55	Toshiba	
				24	5	TMM2068-55	Toshiba	5
	70 nsF	CMOS	TS	20	5	AM99C68-70	AMD	
						AM99C68-70M	† AMD	
						HM6168H-70	Hitachi	
						IDT6168L-70	**IDT (2802)**	
						IDT6168L-70B †	**IDT (2802)**	10
						IDT6168LA-70B †	**IDT (2802)**	
						IDT6168SA-70B †	**IDT (2802)**	
						MCM6168-70	Motorola	
						SRM2268C-70 ◇	**S-MOS (3201)**	
						UM6168	**UMC (3312)**	15
				24	5	**IDT71681LA-70B**	**† IDT (2802)**	
						IDT71681S-70B †	**IDT (2802)**	
						IDT71681SA-70B	**† IDT (2802)**	
						IDT71682LA-70B	**† IDT (2802)**	
						IDT71682SA-70B	**† IDT (2802)**	20
		NMOS	TS	20	5	AM2168-70	AMD	
						AM2168-70M †	AMD	
						AM2169-70	AMD	
						AM2169-70M †	AMD	
						MB8168-70W †	Fujitsu	25
						IMS1420-70M	◇† Inmos	
						STC2168-70	Stantel-STC	
						STC2168L-70	Stantel-STC	
						STC2168M-70	† Stantel-STC	
	85 nsF	CMOS	TS	20	5	**IDT6168LA-85B †**	**IDT (2802)**	30
						IDT6168S-85	**IDT (2802)**	
				24	5	**IDT71681LA-85B**	**† IDT (2802)**	
						IDT71681SA-85B	**† IDT (2802)**	
						IDT71682LA-85B	**† IDT (2802)**	
						IDT71682SA-85B	**† IDT (2802)**	35
		NMOS	TS	20	5	MBM8168-85W	† Fujitsu	
	100 nsF	CMOS	TS	20	5	**IDT6168LA-100B**	**† IDT (2802)**	
						IDT6168SA-100B	**† IDT (2802)**	
				24	5	**IDT71681LA-100B**	**† IDT (2802)**	
						IDT71681SA-100B	**† IDT (2802)**	40
							(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x4	100 nsF	CMOS	TS	24	5		(Cont'd)	
						IDT71682LA-100B	**† IDT (2802)**	
						IDT71682SA-100B	**† IDT (2802)**	
4096x8	25 nsF	CMOS	TS	24	5	88H04C-25C	EDI	
						88H04C-25MHR	† EDI	
		NMOS	TS	20	5	TMM2068A-25	Toshiba	45
	35 nsF	CMOS	TS	24	5	88H04C-35C	EDI	
						88H04C-35MHR	† EDI	
		Module	TS	24	5	**DPS88H04**	**◇ Dense-Pac (2578)**	
		Module, VERSAPAC	TS	66	5	**DPS4X8V**	**Dense-Pac (2583)**	
		Module, 2-port	TS	58	5	**DPP4X8**	**◇ Dense-Pac (2584)**	50
		NMOS	TS	20	5	TMM2068A-35	Toshiba	
	45 nsF	CMOS	TS	24	5	88H04C-45C	EDI	
						88H04C-45MHR	† EDI	
				52	5	**IDT71342L-45 ◇‡**	**IDT (2804, 2822)**	
						IDT71342S-45 ◇‡	**IDT (2804, 2822)**	55
		NMOS	TS	20	5	TMM2068A-45	Toshiba	
		2-port	TS	68	5	**IDT7134L-45**	**IDT (2804, 2821)**	
		2-port slave	TS	68	5	**IDT7134S-45**	**IDT (2804, 2821)**	
	55 nsF	CMOS	TS	24	5	88H04C-55MHR	† EDI	
				52	5	**IDT71342L-55 ◇‡**	**IDT (2804, 2822)**	60
						IDT71342S-55 ◇‡	**IDT (2804, 2822)**	
		2-port	TS	68	5	**IDT7134L-55**	**IDT (2804, 2821)**	
						IDT7134L-55B †	**IDT (2804, 2821)**	
		2-port slave	TS	68	5	**IDT7134S-55**	**IDT (2804, 2821)**	
						IDT7134S-55B †	**IDT (2804, 2821)**	65
	70 nsF	CMOS	TS	52	5	**IDT71342L-70 ◇‡**	**IDT (2804, 2822)**	
						IDT71342S-70 ◇‡	**IDT (2804, 2822)**	
	90 nsF	2-port	TS	68	5	**IDT7134L-90**	**IDT (2804, 2821)**	
						IDT7134L-90B †	**IDT (2804, 2821)**	
		2-port slave	TS	68	5	**IDT7134S-90**	**IDT (2804, 2821)**	70
						IDT7134S-90B †	**IDT (2804, 2821)**	
	100 nsF	2-port	TS	68	5	**IDT7134L-100B †**	**IDT (2804, 2821)**	
		2-port slave	TS	68	5	**IDT7134S-100B †**	**IDT (2804, 2821)**	
4096x16								
	25 nsF	Module	TS	40	5	**DPS4H16**	**Dense-Pac (2578)**	
						DPS4X16	**Dense-Pac (2578)**	75
	30 nsF	CMOS	TS	48	5	**IDT71502L-30 ◇‡**	**IDT (2802, 2824)**	
						IDT71502S-30 ◇‡	**IDT (2802, 2824)**	
	35 nsF	CMOS	TS	48	5	**IDT71502L-35 ◇‡**	**IDT (2802, 2824)**	
						IDT71502S-35 ◇‡	**IDT (2802, 2824)**	
		Module, VERSAPAC	TS	66	5	**DPS4X16V**	**Dense-Pac (2578, 2583)**	80
		Module, 2-port	TS	64	5	**DPP4X16**	**Dense-Pac (2584)**	
	45 nsF	CMOS	TS	40	5	**IDT7186L-45 ◇‡**	**IDT (2802)**	
						IDT7186S-45 ◇‡	**IDT (2802)**	
							(Continued)	

MEMORY

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x16								
	45 nsF	CMOS	TS				(Cont'd)	
				48	5	**IDT71502L-45 ◇‡**	**IDT (2802, 2824)**	
						IDT71502S-45 ◇‡	**IDT (2802, 2824)**	
	55 nsF	CMOS	TS	40	5	**IDT7186L-55 ◇‡**	**IDT (2802)**	
						IDT7186S-55 ◇‡	**IDT (2802)**	
				48	5	**IDT71502L-55 ◇‡**	**IDT (2802, 2824)**	5
						IDT71502S-55 ◇‡	**IDT (2802, 2824)**	
	70 nsF	CMOS	TS	40	5	**IDT7186L-70 ◇‡**	**IDT (2802)**	
						IDT7186S-70 ◇‡	**IDT (2802)**	
				48	5	**IDT71502L-70 ◇‡**	**IDT (2802, 2824)**	
						IDT71502S-70 ◇‡	**IDT (2802, 2824)**	10
	85 nsF	CMOS	TS	40	5	**IDT7186L-85 ◇‡**	**IDT (2802)**	
						IDT7186S-85 ◇‡	**IDT (2802)**	
4096x24								
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS4X24V**	**Dense-Pac (2583)**	
4096x32								
	25 nsF	Module	TS	56	5	DPS4X32	Dense-Pac	
						DP4X32	**Dense-Pac (2578)**	15
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS4X32V**	**Dense-Pac (2583)**	
		Module, 2-port						
			TS	84	5	**DPP4X32**	**Dense-Pac (2584)**	
8192x4	35 nsF	Module	TS	22	5	**DPS84H08**	**Dense-Pac (2578)**	
8192x8	20 nsF	CMOS	TS	28	5	P4C164-20C	Performance	
						P4C164L-20C	Performance	20
	25 nsF	CMOS	TS	28	5	P4C164-25C	Performance	
						P4C164-25M †	Performance	
						P4C164L-25C	Performance	
						P4C164L-25M †	Performance	
						VT20C98-25	**VLSI Tech (3352)**	25
						VT20C99-25	**VLSI Tech (3352)**	
		TTL	TS	32	5	MT5C6408-25 ◇	MicronTech	
	30 nsF	CMOS	TS	28	5	**IDT71C65L-30 ◇‡**	**IDT (2802)**	
						IDT71C65S-30 ◇‡	**IDT (2802)**	
						IDT7164L-30 ◇‡	**IDT (2802)**	30
						IDT7164S-30 ◇‡	**IDT (2802)**	
						IDT7165L-30 ◇‡	**IDT (2802, 2825)**	
						IDT7165S-30 ◇‡	**IDT (2802, 2825)**	
						P4C164-30C	Performance	
						P4C164-30M †	Performance	35
						P4C164L-30C	Performance	
						P4C164L-30M †	Performance	
8192X8	30 nsF	CMOS	TS	28	5	SMJ68CE64-30 ◇†	TI	
8192x8	35 nsF	CMOS	TS	28	5	CA64C08 †	Calmos	
						CY7C185-35C	**Cypress (2562)**	40
						CY7C186-35C	**Cypress (2562)**	
						DPS9264 ◇	**Dense-Pac (2578)**	
						MB81C78A-35	Fujitsu	
						MB81C79A-35	Fujitsu	
						IDT71C65L-35 ◇‡	**IDT (2802)**	45
						IDT71C65S-35 ◇‡	**IDT (2802)**	
						IDT7164L-35 ◇‡	**IDT (2802)**	
						IDT7164L-35B †	**IDT (2802)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	35 nsF	CMOS	TS	28	5		(Cont'd)	
						IDT7164S-35B †	**IDT (2802)**	
						IDT7165L-35	**IDT (2802, 2825)**	50
						IDT7165L-35B †	**IDT (2802, 2825)**	
						IDT7165S-35	**IDT (2802, 2825)**	
						IDT7165S-35B †	**IDT (2802, 2825)**	
						IDT7174L-35	**IDT (2802)**	
						IDT7174L-35B †	**IDT (2802)**	55
						IDT7174S-35	**IDT (2802)**	
						IDT7174S-35B †	**IDT (2802)**	
						SR64K8-35C	Lattice	
						MCM6264-35 ◇	Motorola	
						P4C164-35C	Performance	60
						P4C164-35M †	Performance	
						P4C164L-35C	Performance	
						P4C164L-35M †	Performance	
						MK48H64-35	**Thomson (3275)**	
						MK48H74-35	**Thomson (3274)**	65
						VT20C98-35	**VLSI Tech (3352)**	
						VT20C99-35	**VLSI Tech (3352)**	
					5V	**IDT7164S-35 ◇‡**	**IDT (2802)**	
			TTL	28	5	M5M5178P-35	Mitsubishi	
		Module	TS	22	5	**DPS88H08**	**Dense-Pac (2578)**	70
		Module, VERSAPAC						
			TS	66	5	**DPS8X8V**	**Dense-Pac (2583)**	
		Module, 2-port						
			TS	58	5	**DPP8X8**	**Dense-Pac (2584)**	
		NMOS	TS	28	5	TMM2088-35	Toshiba	
		TTL	OC	28	5	MB81C78A	Fujitsu	
			TS	32	5	MT5C6408-35 ◇	MicronTech	75
	40 nsF	CMOS	TS	28	5	SR64K8-40	Lattice	
	45 nsF	CMOS	TS	28	5	**CY7C185-45C**	**Cypress (2562)**	
						CY7C185-45M †	**Cypress (2562)**	
						CY7C186-45C	**Cypress (2562)**	
						CY7C186-45M †	**Cypress (2562)**	80
						8808HC-45C	EDI	
						8808HC-45MHR †	EDI	
						MB81C78A-45	Fujitsu	
						MB81C79A-45	Fujitsu	
						HY62C64-45	**Hyundai (2770)**	85
						IMS1630-45	**Inmos (2789)**	
						IDT71C65L-45 ◇‡	**IDT (2802)**	
						IDT71C65S-45 ◇‡	**IDT (2802)**	
						IDT7164L-45 ◇‡	**IDT (2802)**	
						IDT7164L-45B †	**IDT (2802)**	90
						IDT7164S-45 ◇‡	**IDT (2802)**	
						IDT7164S-45B †	**IDT (2802)**	
						IDT7165L-45	**IDT (2802, 2825)**	
						IDT7165L-45B †	**IDT (2802, 2825)**	
						IDT7165S-45	**IDT (2802, 2825)**	95
						IDT7165S-45B †	**IDT (2802, 2825)**	
						IDT7174L-45	**IDT (2802)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	45 nsF	CMOS	TS	28	5		(Cont'd)	
						IDT7174L-45B †	**IDT (2802)**	
						IDT7174S-45	**IDT (2802)**	
						IDT7174S-45B †	**IDT (2802)**	
						SR64K8-45	Lattice	
						SR64K8-45/883C	† Lattice	5
						SR64K8-45C	Lattice	
						MCM61L64-45	Motorola	
						MCM6264-45 ◊	Motorola	
						P4C164-45M †	Performance	
						P4C164L-45M	† Performance	10
						STC6264-45	Stantel-STC	
						MK48H64-45	**Thomson (3275)**	
						MK48H74-45	**Thomson (3274)**	
						V61C64-45	Vitelic	
						V61C64-45L	Vitelic	15
						VT20C98-45	**VLSI Tech (3352)**	
						VT20C99-45	**VLSI Tech (3352)**	
				58	5	**IDT7M134S-45**	**◊‡ IDT (2804)**	
						IDT7M144S-45	**◊‡ IDT (2804)**	
			TTL	28	2–5.5	UM6164-2	UMC	20
					5	M5M5178P-45	Mitsubishi	
		Module	TS	28	5	**DPS8808**	**Dense-Pac (2579)**	
		NMOS	TS	28	5	TMM2088-45	Toshiba	
		TTL	TS	32	5	MT5C6408-45	◊ MicronTech	
	55 nsF	CMOS	TS		5	**IMS1630-55LM †**	**Inmos (2789)**	25
				28	5	**CY7C185-55C**	**Cypress (2562)**	
						CY7C185-55M †	**Cypress (2562)**	
						CY7C186-55C	**Cypress (2562)**	
						CY7C186-55M †	**Cypress (2562)**	
						8808HC-55C	EDI	30
						8808HC-55MHR	† EDI	
						HY62C64-55	**Hyundai (2770)**	
						IMS1630-55	**Inmos (2789)**	
						IDT71C65L-55 ◊‡	**IDT (2802)**	
						IDT71C65S-55 ◊‡	**IDT (2802)**	35
						IDT7164L-55 ◊‡	**IDT (2802)**	
						IDT7164L-55B †	**IDT (2802)**	
						IDT7164S-55 ◊‡	**IDT (2802)**	
						IDT7164S-55B †	**IDT (2802)**	
						IDT7165L-55	**IDT (2802, 2825)**	40
						IDT7165L-55B †	**IDT (2802, 2825)**	
						IDT7165S-55	**IDT (2802, 2825)**	
						IDT7165S-55B †	**IDT (2802, 2825)**	
						IDT7174L-55B †	**IDT (2802)**	
						IDT7174S-55B †	**IDT (2802)**	45
						SR64K8-55	Lattice	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	55 nsF	CMOS	TS	28	5		(Cont'd)	
						SR64K8-55/883C	† Lattice	
						SR64K8-55C	Lattice	
						HM6561-55 †	Matra-Harris	
						MCM61L64-55	Motorola	50
						MCM6164C-55	Motorola	
						STC6264-55 †	Stantel-STC	
						STC6264L-55 †	Stantel-STC	
						SMJ68CE64-40	◊† TI	
						SMJ68CE64-55	◊† TI	55
						MK48H64-55	**Thomson (3275)**	
						MK48H74-55	**Thomson (3274)**	
						V61C64-55	Vitelic	
						V61C64-55L	Vitelic	
			TTL	28	2–5.5	UM6164-1	UMC	60
					5	M5M5178P-55	Mitsubishi	
	60 nsF	CMOS	TS	28	5	**GM76C88-60 ◊**	**GoldStar (2692)**	
				58	5	**IDT7M144S-60**	**◊‡ IDT (2804)**	
	65 nsF	CMOS Module						
			TTL	28	5	IDT7M864L-65	IDT	
						IDT8M864L-65	IDT	65
	70 nsF	CMOS	TS		5	**IMS1630-70LM † Inmos (2789)**		
				28	5	AM99C88-70	AMD	
						8808HC-70C	EDI	
						8808HC-70MHR	† EDI	
						MB8464A-70	Fujitsu	70
						MB8464A-70L	Fujitsu	
						MB8464A-70LL	Fujitsu	
						HY62C64-70	**Hyundai (2770)**	
						IMS1630-70	**Inmos (2789)**	
						IDT7164L-70 ◊‡	**IDT (2802)**	75
						IDT7164L-70B †	**IDT (2802)**	
						IDT7164S-70 ◊‡	**IDT (2802)**	
						IDT7164S-70B †	**IDT (2802)**	
						HM65641-70 †	Matra-Harris	
						MCM6164C-70	Motorola	80
						STC6264-70 †	Stantel-STC	
						STC6264L-70 †	Stantel-STC	
						STC6264M-70	† Stantel-STC	
						MK48H64-70	**Thomson (3275)**	
						V61C64-70	Vitelic	85
						V61C64-70L	Vitelic	
			TS	28	5	**GM76C88-70 ◊**	**GoldStar (2692)**	
			TTL	28	2–5.5	UM6164	UMC	
		Module, 2-port						
			TS	58	5	**IDT7M134S-70**	**IDT (2804)**	
		Module, 2-port slave						
			TS	58	5	**IDT7M144S-70**	**IDT (2804)**	90
		NMOS	TS	28	5	TC2063-70	Toshiba	
						TC2063A-70	Toshiba	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	70 nsF	NMOS	TS	28	5	(Cont'd)		
						TC2064-70	Toshiba	
						TC2064A-70	Toshiba	
	75 nsF	CMOS Module						
			TTL	28	5	IDT7M864L-75	IDT	
						IDT7M864L-75B †	IDT	
						IDT8M864L-75	IDT	5
						IDT8M864L-75B †	IDT	
	80 nsF	CMOS	TS	28	5	MB8464A-80	Fujitsu	
	85 nsF	CMOS	TS	28	5	**GM76C88-85** ◊	**GoldStar (2692)**	
		CMOS	TS	28	5	8808CL-85MHR †	EDI	
						IDT7164L-85 ◊‡	**IDT (2802)**	10
						IDT7164L-85B †	**IDT (2802)**	
						IDT7164S-85 ◊‡	**IDT (2802)**	
						IDT7164S-85B †	**IDT (2802)**	
		CMOS Module						
			TS	28	5	IDT7M864L-85	IDT	
						IDT8M864L-85	IDT	15
			TTL	28	5	IDT7M864L-85B †	IDT	
						IDT8M864L-85B †	IDT	
	90 nsF	CMOS	TS	24	5	HS65162RH ‡	Harris	
				28	5	HM65641-90 †	Matra-Harris	
						SRM2264C-90 ◊	**S-MOS (3201)**	20
						STC6264-90 †	Stantel-STC	
						STC6264L-90 †	Stantel-STC	
						STC6264M-90 †	Stantel-STC	
		Module, 2-port						
			TS	58	5	**IDT7M134S-90**	**IDT (2804)**	
						IDT7M134S-90B †	**IDT (2804)**	25
		Module, 2-port slave						
			TS	58	5	**IDT7M144S-90**	**IDT (2804)**	
						IDT7M144S-90B †	**IDT (2804)**	
	100 nsF	CMOS	TS	28	5	AM99C88-10	AMD	
						AM99C88-10M †	AMD	
						8808CL-10MHR †	EDI	30
						MB8464A-10	Fujitsu	
						MB8464A-10L	Fujitsu	
						MB8464A-10LL	Fujitsu	
						MB8464A-10W	Fujitsu	
						MB8464A-100	Fujitsu	35
						HM6264-10 ◊	Hitachi	
						HM6264L-10 ◊	Hitachi	
						IDT7164L-100B †	**IDT (2802)**	
						IDT7164S-100B †	**IDT (2802)**	
						M5M5165-10	Mitsubishi	40
						MCM60L64-10 ◊	Motorola	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	100 nsF	CMOS	TS	28	5	(Cont'd)		
						MCM6064-10 ◊	Motorola	
						µPD4364-10	NEC	
						µPD4364-10L	NEC	
						µPD4364-10LL	NEC	45
						MSM5165-10	OKI	
						SRM2264C-10 ◊	**S-MOS (3201)**	
						KM6264-10	Samsung	
						TC5565A-10	Toshiba	
						V65C64-10	Vitelic	50
						V65C64L-10	Vitelic	
				32	5	8808AC-10LMHR †	EDI	
		CMOS Module						
			TS	28	5	**HM8808AS** ◊	**Harris (2705, 2764)**	
						HM8808S ◊	**Harris (2705, 2764)**	
		Module	TS	28	5	DPS4064 ◊	Dense-Pac	55
						DPS4164	Dense-Pac	
		Module, 2-port						
			TS	58	5	**IDT7M134S-100**	**IDT (2804)**	
						IDT7M134S-100B †	**IDT (2804)**	
						IDT7M135S-100B †	**IDT (2804)**	
		Module, 2-port slave						
			TS	58	5	**IDT7M144S-100**	**IDT (2804)**	60
						IDT7M144S-100B †	**IDT (2804)**	
		NMOS	TS	28	5	TC2063-10	Toshiba	
						TC2063A-10	Toshiba	
						TC2064-10	Toshiba	
						TC2064A-10	Toshiba	65
						TMM2063-10	Toshiba	
						TMM2064-10	Toshiba	
	120 nsF	CMOS	TS	28	5	AM99C88-12	AMD	
						AM99C88-12M †	AMD	
						8808CL-12MHR †	EDI	70
						MB8464-12	Fujitsu	
						MB8464-12L	Fujitsu	
						MB8464-12LL	Fujitsu	
						CDM6264-4	**GE/RCA (2643)**	
						HM6264A-12 ◊	Hitachi	75
						HM6264AL-12 ◊	Hitachi	
						IDT7164L-120B †	**IDT (2802)**	
						IDT7164S-120B †	**IDT (2802)**	
						IDT8M864L-120	IDT	
						M5M5165-12	Mitsubishi	80
						MCM60L64-12 ◊	Motorola	
						MCM6064-12 ◊	Motorola	
						µPD4364-12	NEC	
						µPD4364-12L	NEC	
						µPD4364-12LL	NEC	85
						µPD4464-12 ◊	NEC	
						µPD4464-12L ◊	NEC	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	120 nsF	CMOS	TS	28	5	(Cont'd)		
						SRM2264C-12 ◊	**S-MOS (3201)**	
						KM6264-12	Samsung	
						STC6264M-12	† Stantel-STC	
						TC5564A-12	Toshiba	
						TC5565A-12	Toshiba	5
						V62C64-12	Vitelic	
						V62C64-12L	Vitelic	
						V65C64-12	Vitelic	
						V65C64L-12	Vitelic	
				32	5	8808AC-12LMHR	† EDI	10
		CMOS Module						
			TS	28	5	**HM8808AB** ◊	**Harris (2705, 2764)**	
						HM8808B ◊	**Harris (2705, 2764)**	
						IDT7M864L-120	IDT	
						IDT7M864L-120B	† IDT	
						IDT8M864L-120B	† IDT	15
		Module	TS	28	5	DPS2864	Dense-Pac	
		Module, 2-port						
			TS	58	5	**IDT7M134S-120**	**IDT (2804)**	
						IDT7M134S-120B	**† IDT (2804)**	
		Module, 2-port slave						
			TS	58	5	**IDT7M144S-120**	**IDT (2804)**	
						IDT7M144S-120B	**† IDT (2804)**	20
		NMOS	TS	28	5	TC2063-12	Toshiba	
						TC2063A-12	Toshiba	
						TC2064-12	Toshiba	
						TC2064A-12	Toshiba	
						TMM2063-12	Toshiba	
						TMM2064-12	Toshiba	25
	140 nsF	Module, 2-port						
			TS	58	5	**IDT7M134S-140B**	**† IDT (2804)**	
		Module, 2-port slave						
			TS	58	5	**IDT7M144S-140B**	**† IDT (2804)**	
	150 nsF	CMOS	TS	28	5	AM99C88-15	AMD	
						AM99C88-15M	† AMD	30
						8808ACL-15MHR	† EDI	
						MB8464-15W	Fujitsu	
						MB8464-15X	Fujitsu	
						MB8464A-15	Fujitsu	
						MB8464A-15L	Fujitsu	35
						MB8464A-15LL	Fujitsu	
						MB8464A-15W	Fujitsu	
						CDM6264-3	**GE/RCA (2643)**	
						HM65642	**† Harris (2704, 2761)**	
						HM6264A-15 ◊	Hitachi	40
						HM6264AL-15 ◊	Hitachi	
						IDT7164L-150B	**† IDT (2802)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
8192x8	150 nsF	CMOS	TS	28	5	(Cont'd)		
						IDT7164S-150B	**† IDT (2802)**	
						IDT8M864L-150	IDT	
						IDT8M864L-150B	† IDT	45
						HM2064 ◊	† Matra-Harris	
						M5M5165-15	Mitsubishi	
						M5M5165-15L	Mitsubishi	
						MCM60L64-15	◊ Motorola	
						MCM6064-15 ◊	Motorola	50
						μPD4364-15	NEC	
						μPD4364-15L	NEC	
						μPD4364-15LL	NEC	
						μPD4464-15 ◊	NEC	
						μPD4464-15L ◊	NEC	55
						MSM5165-15	OKI	
						SRM2064C-15	**S-MOS (3201)**	
						KM6264-15	Samsung	
						STC6264M-15	† Stantel-STC	
						TC5563A-15	Toshiba	60
						TC5564A-15	Toshiba	
						TC5565A-15	Toshiba	
						V62C64-15	Vitelic	
						V62C64-15L	Vitelic	
						V65C64-15	Vitelic	65
						V65C64L-15	Vitelic	
				32	5	8808AC-15LMHR	† EDI	
		CMOS Module						
			TS	28	5	**HM8808** ◊	**Harris (2705, 2764)**	
						HM8808A ◊	**Harris (2705, 2764)**	
						IDT7M864L-150	IDT	70
						IDT7M864L-150B	† IDT	
		Module	TS	28	5	DPX2864	‡ Dense-Pac	
		NMOS	TS	28	5	μPD4168-15	NEC	
						TC2063-15	Toshiba	
						TC2064-15	Toshiba	75
						TMM2063-15	Toshiba	
						TMM2064-15	Toshiba	
		NVRAM, Battery						
			TS	28	5	GR881	LMS	
	200 nsF	CMOS	TS	28	5	AM99C88-20M	† AMD	
						8808ACL-20MHR	† EDI	80
						MB8464-20W	Fujitsu	
						HM6264A-20 ◊	Hitachi	
						HM6264AL-20	◊ Hitachi	
						IDT7164L-200B	**† IDT (2802)**	
						IDT7164S-200B	**† IDT (2802)**	85
						IDT8M864L-200	IDT	
						IDT8M864L-200B	† IDT	
						MK48Z08B-20	**Thomson (3263)**	
						MK48Z09B-20	Thomson	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
						(Cont'd)		
8192x8	200 nsF	CMOS	TS	28	5	MK48Z18B-20	Thomson	
						MK48Z19B-20	Thomson	
		CMOS Module						
			TS	28	5	IDT7M864L-200	IDT	
						IDT7M864L-200B †	IDT	
		NMOS	TS	28	5	μPD4168-20	NEC	5
	250 nsF	CMOS	TS	28	5	**MK48Z08B-25**	**Thomson (3263)**	
						MK48Z09B-25	Thomson	
						MK48Z18B-25	Thomson	
						MK48Z19B-25	Thomson	
		NOVRAM, Module						
			TS	48	5	**DPN88**	**Dense-Pac (2580)**	10
	260 nsF*							
		CMOS	TS	40	5	HS6564RH ‡	Harris	
	350 nsF	CMOS	TS	40	5	**HM6564 ◊**	**Harris (2705, 2765)**	
		CMOS Module						
			TS	40	5	HM5-6564	Harris	
	400 nsF	CMOS Module						
			TS	40	5	**HM6564-2 †**	**Harris (2705, 2765)**	
						HM6564-9	**Harris (2705, 2765)**	15
	450 nsF	CMOS Module						
			TS	40	5	**HM6564-5**	**Harris (2705, 2765)**	
8192x9	30 nsF	CMOS	TS	28	5	SMJ69CE72-30 ◊†	TI	
	35 nsF	CMOS	TS	28	5	CA64C09	Calmos	
						TMM2089-35	Toshiba	
						VT8K9	VLSI Tech	20
						VT8K9-35	VLSI Tech	
		TTL	OC	28	5	MB81C79A	Fujitsu	
	40 nsF	CMOS	TS	28	5	SMJ69CE72-40 ◊†	TI	
						VT8K9-40	VLSI Tech	
	45 nsF	CMOS	TL	28	5	M5M5179P-45	Mitsubishi	25
			TS	28	5	TMM2089-45	Toshiba	
						VT8K9-45	VLSI Tech	
	55 nsF	CMOS	TS	28	5	TMM2089-55	Toshiba	
						VT8K9-55	VLSI Tech	
			TTL	28	5	M5M5179P-55	Mitsubishi	30
		CMS	TS	28	5	SMJ69CE72-55 ◊†	TI	
8192x16								
	25 nsF	Module	TS	40	5	DPS8X16	Dense-Pac	
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS8X16V**	**Dense-Pac (2583)**	
		Module, 2-port						
			TS	64	5	**DPP8X16**	**Dense-Pac (2584)**	
	45 nsF	Module	TS	40	5	**DPS8M628**	**Dense-Pac (2579)**	35
	50 nsF	Module	TS	40	5	**IDT8MP628-50**	**IDT (2803, 2849)**	
						IDT8M628S-50	**IDT (2803, 2850)**	
	60 nsF	Module	TS	40	5	**IDT8M628S-60**	**IDT (2803, 2850)**	
						IDT8M628S-60B †	**IDT (2803, 2850)**	
	70 nsF	Module	TS	40	5	**IDT8M628S-70**	**IDT (2803, 2850)**	40
						IDT8M628S-70B †	**IDT (2803, 2850)**	
	85 nsF	Module	TS	40	5	**IDT8M628S-85**	**IDT (2803, 2850)**	
						IDT8M628S-85B †	**IDT (2803, 2850)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
						(Cont'd)		
8192x16	100 nsF	Module	TS	40	5	**IDT8M628S-100B † IDT (2803, 2850)**		
8192x32	35 nsF	Module, 2-port	TS	84	5	**DPP8X32**	**Dense-Pac (2584)**	45
16384x1	10 nsF	ECL	OE	20	–4.5	MBM100480A-10 ◊	Fujitsu	
					–5.2	MBM10480A-10	Fujitsu	
	12 nsF	CMOS	TS	20	5	**IDT6167LA-12 ◊‡**	**IDT (2802)**	
						IDT6167SA-12 ◊‡	**IDT (2802)**	
	15 nsF	CMOS	TS	20	5	**IDT6167LA-15 ◊‡**	**IDT (2802)**	50
						IDT6167SA-15 ◊‡	**IDT (2802)**	
		ECL		20		HM10480-15	Hitachi	
					–4.5	MBM100480-15 ◊	Fujitsu	
					–5.2	MBM10480-15	Fujitsu	
			OE	20	–4.5	AM100480A	AMD	55
						HM100480-15	Hitachi	
					–5.2	AM10480A	AMD	
	20 nsF	CMOS	TS	20	5	**IDT6167LA-20**	**IDT (2802)**	
						IDT6167SA-20	**IDT (2802)**	
						MK41H66-20 †	**Thomson (3264)**	60
						MK41H67-20 †	**Thomson (3264)**	
	25 nsF	CMOS	TS	20	3.3	MK41L66-25	Thomson	
						MK41L67-25	Thomson	
					5	**CY7C167-25C**	**Cypress (2562)**	
						CY7C167L-25C	**Cypress (2562)**	65
						HY61C67-25 ◊	**Hyundai (2770)**	
						HY61C67L-25 ◊	**Hyundai (2770)**	
						IMS1403-25	**Inmos (2782)**	
						IMS1403-25L	**Inmos (2782)**	
						IDT6167LA-25	**IDT (2802)**	70
						IDT6167LA-25B †	**IDT (2802)**	
						IDT6167SA-25	**IDT (2802)**	
						IDT6167SA-25B †	**IDT (2802)**	
						HM65767-25 †	Matra-Harris	
						SMJ61CD16-25 ◊†	TI	75
						MK41H66-25 †	**Thomson (3264)**	
						MK41H67-25 †	**Thomson (3264)**	
		ECL		28	–5.2	HM10494L	Hitachi	
			OE	20	–4.5	AM100480	AMD	
						MBM100480-25 ◊	Fujitsu	80
						HM100480 ◊	Hitachi	
					–5.2	AM10480	AMD	
						MBM10480-25	Fujitsu	
						HM10480	Hitachi	
		TTL	TS	20	5	MT5C1601-25 ◊	MicronTech	85
	35 nsF	CMOS	TS		5	**IMS1403-35L**	**Inmos (2782)**	
						IMS1403-35LM †	**Inmos (2782)**	
				20	3.3	MK41L66-35	Thomson	
						MK41L67-35	Thomson	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x1								
	35 nsF	CMOS	TS	20	5		(Cont'd)	
						CY7C167-35C	**Cypress (2562)**	
						CY7C167-35M †	**Cypress (2562)**	
						CY7C167L-35C	**Cypress (2562)**	
						DPS9167 ◊	**Dense-Pac (2578)**	
						HM6267-35	Hitachi	5
						HY61C67-35 ◊	**Hyundai (2770)**	
						HY61C67L-35 ◊	**Hyundai (2770)**	
						IMS1403-35	**Inmos (2782)**	
						IDT6167LA-35	**IDT (2802)**	
						IDT6167LA-35B †	**IDT (2802)**	10
						IDT6167SA-35	**IDT (2802)**	
						IDT6167SA-35B †	**IDT (2802)**	
						HM65767-35 †	Matra-Harris	
						M5M21C67-35	Mitsubishi	
						μPD4311-35	NEC	15
						SRM2367C-35	**S-MOS (3201)**	
						SMJ61CD16-35 ◊†	TI	
						MK41H66-35 †	**Thomson (3264)**	
						MK41H67-35 †	**Thomson (3264)**	
						V61C67P35L	Vitelic	20
		NMOS	TS	20	5	AM2167-35	AMD	
		TTL	TS	20	5	MT5C1601-35 ◊	MicronTech	
	45 nsF	CMOS	TS		5	**IMS1403-45L**	**Inmos (2782)**	
						IMS1403-45LM †	**Inmos (2782)**	
				20	5	**CY7C167-45C**	**Cypress (2562)**	25
						CY7C167-45M †	**Cypress (2562)**	
						CY7C167L-45C	**Cypress (2562)**	
				20	5	MB81C67-45W	Fujitsu	
				20	5	HM6167H-45	Hitachi	
						HM6267-45	Hitachi	30
						HY61C67-45 ◊	**Hyundai (2770)**	
						HY61C67L-45 ◊	**Hyundai (2770)**	
						IMS1403-45	**Inmos (2782)**	
						IDT6167LA-45	**IDT (2802)**	
						IDT6167LA-45B †	**IDT (2802)**	35
						IDT6167SA-45	**IDT (2802)**	
						IDT6167SA-45B †	**IDT (2802)**	
						HM65767-45 †	Matra-Harris	
						M5M21C67-45	Mitsubishi	
						μPD4311-45	NEC	40
						SRM2367C-45	**S-MOS (3201)**	
						SMJ61CD16-45 °†	TI	
						UM6167-2	**UMC (3312)**	
						V61C67-45	Vitelic	
						V61C67-45L	Vitelic	45
			TTL	20	2–5.5	**UM6167L-2**	**UMC (3312)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x1								
	45 nsF	NMOS	TS	20	5		(Cont'd)	
						AM2167-45	AMD	
						AM2167-45M †	AMD	
						STC2167-45	Stantel-STC	
		TTL	TS	20	5	MT5C1601-45 ◊	MicronTech	50
	55 nsF	CMOS	TS	18	5	**LH5167-55**	**Sharp (2993)**	
				20	5	MB81C67-55W	Fujitsu	
						CDM5167-55	GE/RCA	
						HM65262S	**Harris (2704, 2761, 2768)**	
						HM6167H-55	Hitachi	55
						HY61C67-55 ◊	**Hyundai (2770)**	
						HY61C67L-55 ◊	**Hyundai (2770)**	
						IMS1403-55LM †	**Inmos (2782)**	
						IDT6167LA-55	**IDT (2802)**	
						IDT6167LA-55B †	**IDT (2802)**	60
						IDT6167SA-55	**IDT (2802)**	
						IDT6167SA-55B †	**IDT (2802)**	
						HM65262 †	Matra-Harris	
						M5M21C67-55	Mitsubishi	
						μPD4311-55	NEC	65
						STC6167-55	Stantel-STC	
						STC6167L-55	Stantel-STC	
						STC6167M-55 †	Stantel-STC	
						UM6167-1	**UMC (3312)**	
						V61C67-55	Vitelic	70
						V61C67-55L	Vitelic	
			TTL	20	2–5.5	**UM6167L-1**	**UMC (3312)**	
		NMOS	TS	20	5	AM2167-55	AMD	
						AM2167-55M †	AMD	
						IMS1400-55M †	Inmos	75
						STC2167-55	Stantel-STC	
						STC2167M-55 †	Stantel-STC	
	60 nsF	CMOS	TS	20	5	HM65261 †	Matra-Harris	
	70 nsF	CMOS	TS	20	5	CDM5167-70	GE/RCA	
						HM65262B	**Harris (2704, 2761, 2768)**	80
						HM6167H	Hitachi	
						HY61C67-70 ◊	**Hyundai (2770)**	
						HY61C67L-70 ◊	**Hyundai (2770)**	
						IDT6167LA-70B †	**IDT (2802)**	
						IDT6167SA-70B †	**IDT (2802)**	85
						LH5167-70	**Sharp (2993)**	
						STC6167-70 †	Stantel-STC	
						STC6167L-70 †	Stantel-STC	
						STC6167M-70 †	Stantel-STC	
						UM6167	**UMC (3312)**	90
			TTL	20	2–5.5	**UM6167L**	**UMC (3312)**	
		NMOS	TS	20	5	AM2167-70	AMD	
						AM2167-70M †	AMD	
						MB8167A-70W	Fujitsu	
						IMS1400-70M †	Inmos	95

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x1								
	70 nsF	NMOS	TS	20	5		(Cont'd)	
						STC2167-70 †	Stantel-STC	
						STC2167L-70 †	Stantel-STC	
						STC2167M-70	† Stantel-STC	
	85 nsF	CMOS	TS	20	5	**HM65262** ◊	**Harris (2704, 2761, 2768)**	
						HS65T262RH ‡	Harris	5
						IDT6167LA-85B †	**IDT (2802)**	
						IDT6167SA-85B †	**IDT (2802)**	
		NMOS	TS	20	5	MBM8167A-85W	† Fujitsu	
	100 nsF	CMOS	TS	20	5	**IDT6167LA-100B**	**† IDT (2802)**	
						IDT6167SA-100B	**† IDT (2802)**	10
						STC6167M-100	† Stantel-STC	
	110 nsF	CMOS	TS	20	5	HC6167R †	Honeywell	
	120 nsF	CMOS/SOS						
			TS	24	5	**MA6167SOS ‡**	**Marconi (2887)**	
	150 nsF	CMOS-RH						
			TS	20	5	HS65262RH ‡	Harris	
16384x4								
	15 nsF	CMOS	TS	22	5	**IDT7188L-15 ◊‡**	**IDT (2802)**	15
						IDT7188S-15 ◊‡	**IDT (2802)**	
				24	5	**IDT6198L-15 ◊‡**	**IDT (2802)**	
						IDT6198S-15 ◊‡	**IDT (2802)**	
						IDT7198L-15 ◊‡	**IDT (2802)**	
						IDT7198S-15 ◊‡	**IDT (2802)**	20
				28	5	**IDT71981L-15 ◊‡**	**IDT (2802)**	
						IDT71981S-15 ◊‡	**IDT (2802)**	
						IDT71982L-15 ◊‡	**IDT (2803)**	
						IDT71982S-15 ◊‡	**IDT (2803)**	
			TTL	22	5	M5M5188B-15	◊ Mitsubishi	25
	17 nsF	CMOS	TS	22	5	P4C188-17C	Performance	
						P4C188L-17C	Performance	
	20 nsF	CMOS	TS	22	5	84H16CP-20C	EDI	
						IDT7188L-20 ◊‡	**IDT (2802)**	
						IDT7188S-20 ◊‡	**IDT (2802)**	30
						P4C188-20C	Performance	
						P4C188L-20C	Performance	
				24	5	**IDT6198L-20 ◊‡**	**IDT (2802)**	
						IDT6198S-20 ◊‡	**IDT (2802)**	
						IDT7198L-20 ◊‡	**IDT (2802)**	35
						IDT7198S-20 ◊‡	**IDT (2802)**	
						P4C198-20C	Performance	
						P4C198A-20C	Performance	
						P4C198AL-20C	Performance	
						P4C198L-20C	Performance	40
						P4C1981-20C	Performance	
						P4C1981L-20C	Performance	
						P4C1982-20C	Performance	
						P4C1982L-20C	Performance	
				28	5	**IDT71981L-20 ◊‡**	**IDT (2802)**	45
						IDT71981S-20 ◊‡	**IDT (2802)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x4								
	20 nsF	CMOS	TS	28	5		(Cont'd)	
						IDT71982L-20 ◊‡	**IDT (2803)**	
						IDT71982S-20 ◊‡	**IDT (2803)**	
			TTL	22	5	M5M5188B-20	◊ Mitsubishi	
	25 nsF	CMOS	TS	22	5	**CY7C164-25C**	**Cypress (2562)**	50
						DPS9788 ◊	**Dense-Pac (2578)**	
						84H16C-25C	EDI	
						F1620	Fairchild	
						F1620-25	Fairchild	
						F1621	Fairchild	55
						GM76C164-25	**GoldStar (2692)**	
						IMS1620A-25 ◊	**Inmos (2787)**	
						IDT7188L-25 ◊‡	**IDT (2802)**	
						IDT7188S-25 ◊‡	**IDT (2802)**	
						SR64K4-25C	Lattice	60
						HM65788-25 †	Matra-Harris	
						MCM6288-25	Motorola	
						P4C188-25C	Performance	
						P4C188-25M †	Performance	
						P4C188L-25C	Performance	65
						P4C188L-25M	† Performance	
						VT62KS4-25	VLSI Tech	
						VT64KS4-25	VLSI Tech	
				24	5	**CY7C166-25C**	**Cypress (2562)**	
						F1621-25	Fairchild	70
						F1624	Fairchild	
						F1624-25	Fairchild	
						IDT6198L-25 ◊‡	**IDT (2802)**	
						IDT6198S-25 ◊‡	**IDT (2802)**	
						IDT7198L-25 ◊‡	**IDT (2802)**	75
						IDT7198S-25	**IDT (2802)**	
						SR64E4-25C	Lattice	
						M5M5189A-25	◊ Mitsubishi	
						MCM6290-25	Motorola	
						P4C198-25C	Performance	80
						P4C198-25M †	Performance	
						P4C198A-25C	Performance	
						P4C198A-25M	† Performance	
						P4C198AL-25C	Performance	
						P4C198AL-25M	† Performance	85
						P4C198L-25C	Performance	
						P4C198L-25M	† Performance	
						P4C1981-25C	Performance	
						P4C1981-25M	† Performance	
						P4C1981L-25C	Performance	90
						P4C1981L-25M	† Performance	
						P4C1982-25C	Performance	
						P4C1982-25M	† Performance	
						P4C1982L-25C	Performance	
						P4C1982L-25M	† Performance	95
						VT63KS4-25	VLSI Tech	
						VT65KS4-25	VLSI Tech	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x4								
	25 nsF	CMOS	TS				(Cont'd)	
				28	5	**CY7C161-25C**	**Cypress (2562)**	
						CY7C162-25C	**Cypress (2562)**	
						IDT70981S-25 ◊‡	IDT	
						IDT71981L-25 ◊‡	**IDT (2802)**	
						IDT71981S-25	**IDT (2802)**	5
						IDT71982L-25 ◊‡	**IDT (2803)**	
						IDT71982S-25 ◊‡	**IDT (2803)**	
						MCM6292-25 ◊	Motorola	
						MCM6293-25 ◊	Motorola	
						MCM6294-25 ◊	Motorola	10
						MCM6295-25 ◊	Motorola	
			TTL	22	5	HM6788	Hitachi	
						M5M5188A-25 ◊	Mitsubishi	
		TTL	OC	22	5	MB81C74	Fujitsu	
				24	5	MB81C75	Fujitsu	15
			TS	22	5	MT5C6404-25 ◊	MicronTech	
				24	5	MT5C6405-25 ◊	MicronTech	
				28	5	MT5C6406-25 ◊	MicronTech	
	30 nsF	CMOS	TS	22	5	84H16CP-30C	EDI	
						84H16CP-30MHR †	EDI	20
						HM6788-30	Hitachi	
						IDT7188L-30	**IDT (2802)**	
						IDT7188L-30B †	**IDT (2802)**	
						IDT7188S-30	**IDT (2802)**	
						IDT7188S-30B †	**IDT (2802)**	25
						MCM6288-30	Motorola	
						P4C188-30C	Performance	
						P4C188-30M †	Performance	
						P4C188L-30C	Performance	
						P4C188L-30M †	Performance	30
						SMJ64C64-30 ◊†	TI	
				24	5	**IDT6198L-30** ◊‡	**IDT (2802)**	
						IDT6198S-30 ◊‡	**IDT (2802)**	
						IDT7198L-30	**IDT (2802)**	
						IDT7198L-30B †	**IDT (2802)**	35
						IDT7198S-30	**IDT (2802)**	
						IDT7198S-30B †	**IDT (2802)**	
						MCM6290-30 ◊	Motorola	
						P4C198-30C	Performance	
						P4C198-30M †	Performance	40
						P4C198A-30C	Performance	
						P4C198A-30M †	Performance	
						P4C198AL-30C	Performance	
							(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x4							(Cont'd)	
	30 nsF	CMOS	TS	24	5	P4C198AL-30M †	Performance	
						P4C198L-30C	Performance	45
						P4C198L-30M †	Performance	
				28	5	**IDT71981L-30**	**IDT (2802)**	
						IDT71981L-30B †	**IDT (2802)**	
						IDT71981S-30	**IDT (2802)**	
						IDT71981S-30B †	**IDT (2802)**	50
						IDT71982L-30	**IDT (2803)**	
						IDT71982L-30B †	**IDT (2803)**	
						IDT71982S-30	**IDT (2803)**	
						IDT71982S-30B †	**IDT (2803)**	
						MCM6292-30 ◊	Motorola	55
						MCM6293-30 ◊	Motorola	
						MCM6294-30 ◊	Motorola	
						MCM6295-30 ◊	Motorola	
						P4C1981-30C	Performance	
						P4C1981-30M †	Performance	60
						P4C1981L-30C	Performance	
						P4C1981L-30M †	Performance	
						P4C1982-30C	Performance	
						P4C1982-30M †	Performance	
						P4C1982L-30C	Performance	65
						P4C1982L-30M †	Performance	
	35 nsF	CMOS	TS	22	5	MCM 62I88-35	Motorola	
						CY7C164-35C	**Cypress (2562)**	
						CY7C164-35M †	**Cypress (2562)**	
						84H16C-35C	EDI	70
						84H16C-35MHR †	EDI	
						F1620-35 †	Fairchild	
						F1620M †	Fairchild	
						F1621M †	Fairchild	
						GM76C164-35	**GoldStar (2692)**	75
						HY62C88-35 ◊	**Hyundai (2770)**	
						IMS1620A-35 ◊	**Inmos (2787)**	
						IMS1620A-35M ◊†	**Inmos (2787)**	
						IDT7188L-35	**IDT (280°)**	
						IDT7188L-35B †	**IDT (2802)**	80
						IDT7188S-35	**IDT (2802)**	
						IDT7188S-35B †	**IDT (2802)**	
						SR64K4-35	Lattice	
						SR64K4-35C	Lattice	
						HM65788-35 †	Matra-Harris	85
						MCM6295-35 ◊	Motorola	
						P4C188-35C †	Performance	
						P4C188-35M †	Performance	
							(Continued)	

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x4								
	35 nsF	CMOS	TS	22	5		(Cont'd)	
						P4C188L-35C	Performance	
						P4C188L-35M †	Performance	
						SRM2274C-35	S-MOS	
						TC55416-35	Toshiba	
						VT62KS4-35	VLSI Tech	5
						VT64KS4 †	VLSI Tech	
						VT65KS4-35	VLSI Tech	
				24	5	**CY7C166-35C**	**Cypress (2562)**	
						CY7C166-35M †	**Cypress (2562)**	
						84H64C-35C ◊	EDI	10
						F1621-35	Fairchild	
						F1624-35	Fairchild	
						F1624M †	Fairchild	
						MB81C75-35	Fujitsu	
						IDT6198L-35 ◊‡	**IDT (2802)**	15
						IDT6198S-35 ◊‡	**IDT (2802)**	
						IDT7198L-35	**IDT (2802)**	
						IDT7198L-35B †	**IDT (2802)**	
						IDT7198S-35	**IDT (2802)**	
						IDT7198S-35B †	**IDT (2802)**	20
						SR64E4-35C	Lattice	
						M5M5189A-35 ◊	Mitsubishi	
						MCM6290-35	Motorola	
						P4C198-35C	Performance	
						P4C198-35M †	Performance	25
						P4C198A-35C	Performance	
						P4C198A-35M †	Performance	
						P4C198AL-35C	Performance	
						P4C198AL-35M †	Performance	
						P4C198L-35C	Performance	30
						P4C198L-35M †	Performance	
						SRM2275C-35	S-MOS	
						TC55417-35	Toshiba	
						VT16H4	VLSI Tech	
						VT16H4-35 †	VLSI Tech	35
						VT63KS4-35	VLSI Tech	
						VT65KS4 †	VLSI Tech	
				24, 28	5	SR64E4-35	Lattice	
				28	5	**CY7C161-35C**	**Cypress (2562)**	
						CY7C161-35M †	**Cypress (2562)**	40
						CY7C162-35C	**Cypress (2562)**	
						CY7C162-35M †	**Cypress (2562)**	
						IDT71981L-35	**IDT (2802)**	
						IDT71981L-35B †	**IDT (2802)**	
						IDT71981S-35	**IDT (2802)**	45
						IDT71981S-35B †	**IDT (2802)**	
						IDT71982L-35	**IDT (2803)**	
						IDT71982L-35B †	**IDT (2803)**	
						IDT71982S-35	**IDT (2803)**	
						IDT71982S-35B †	**IDT (2803)**	50

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x4								
	35 nsF	CMOS	TS	28	5		(Cont'd)	
						MCM6292-35 ◊	Motorola	
						MCM6294-35 ◊	Motorola	
						P4C1981-35C	Performance	
						P4C1981-35M †	Performance	
						P4C1981L-35C	Performance	55
						P4C1981L-35M †	Performance	
						P4C1982-35C	Performance	
						P4C1982-35M †	Performance	
						P4C1982L-35C	Performance	
						P4C1982L-35M †	Performance	60
			TTL	22	5	M5M5188A-35 ◊	Mitsubishi	
		Module	TS	22	5	**DPS7M464**	**Dense-Pac (2578)**	
						DPS8M464	**Dense-Pac (2578)**	
				28	5	**DPS16X4 ◊**	**Dense-Pac (2578)**	
						DPS16X5 ◊	**Dense-Pac (2578)**	65
		TTL	TS	22	5	MT5C6404-35 ◊	MicronTech	
				24	5	MT5C6405-35 ◊	MicronTech	
				28	5	MT5C6406-35 ◊	MicronTech	
	40 nsF	CMOS	TS	22	5	84H16CP-40MHR †	EDI	
						SR64K4-40/883C †	Lattice	70
						SMJ64C64-40 ◊†	TI	
				24	5	SR64E4-40/883C †	Lattice	
	45 nsF	CMOS	TS	22	5	**CY7C164-45C**	**Cypress (2562)**	
						CY7C164-45M †	**Cypress (2562)**	
						84H16C-45MHR †	EDI	75
						84H16CL-45C	EDI	
						F1620-45	Fairchild	
						MB81C74-45	Fujitsu	
						GM76C164-45	**GoldStar (2692)**	
						HY62C88-45 ◊	**Hyundai (2770)**	80
						IMS1620-45M ◊†	**Inmos (2787)**	
						IDT7188L-45	**IDT (2802)**	
						IDT7188L-45B †	**IDT (2802)**	
						IDT7188S-45	**IDT (2802)**	
						IDT7188S-45B †	**IDT (2802)**	85
						SR64K4-45	Lattice	
						SR64K4-45/883C †	Lattice	
						SR64K4-45C	Lattice	
						HM65788-45 †	Matra-Harris	
						M5M5188-45	Mitsubishi	90
						μPD4362-45	NEC	
						P4C188-45C	Performance	
						P4C188L-45C	Performance	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x4								
	45 nsF	CMOS	TS	22	5		(Cont'd)	
						P4C188L-45M		
							† Performance	
						SRM2274C-45	S-MOS	
						TC55416-45	Toshiba	
						V61C62-45	Vitelic	
						V61C62-45L	Vitelic	5
						VM64KS4 ◊	VLSI Tech	
						VT62KS4-45	VLSI Tech	
						VT64KS4-45	VLSI Tech	
				24	5	**CY7C166-45C**	**Cypress (2562)**	
						CY7C166-45M †		
							Cypress (2562)	10
						84H64C-45C ◊		
							EDI	
						F1621-45	Fairchild	
						F1624-45	Fairchild	
						MB81C75-45	Fujitsu	
						IDT6198L-45 ◊‡	**IDT (2802)**	15
						IDT6198S-45 ◊‡	**IDT (2802)**	
						SR64E4-45/883C		
							† Lattice	
						SR64E4-45C	Lattice	
						μPD4363-45	NEC	
						P4C198-45C	Performance	20
						P4C198-45M †		
							Performance	
						P4C198A-45C	Performance	
						P4C198A-45M		
							† Performance	
						P4C198AL-45C	Performance	
						P4C198AL-45M		
							† Performance	25
						P4C198L-45C	Performance	
						P4C198L-45M		
							† Performance	
						SRM2275C-45	S-MOS	
						TC55417-45	Toshiba	
						VM65KS4	VLSI Tech	30
						VT16H4-45 †	VLSI Tech	
						VT63KS4-45	VLSI Tech	
						VT65KS4-45	VLSI Tech	
				24, 28				
					5	SR64E4-45	Lattice	
				28	5	**CY7C161-45C**	**Cypress (2562)**	35
						CY7C161-45M †		
							Cypress (2562)	
						CY7C162-45C	**Cypress (2562)**	
						CY7C162-45M †		
							Cypress (2562)	
						IMS1624-45M ◊†	**Inmos (2788)**	
						IDT7198L-45	**IDT (2802)**	40
						IDT7198L-45B †		
							IDT (2802)	
						IDT7198S-45	**IDT (2802)**	
						IDT7198S-45B †		
							IDT (2802)	
						IDT71981L-45	**IDT (2802)**	
						IDT71981L-45B †	**IDT (2802)**	45
						IDT71981S-45	**IDT (2802)**	
						IDT71981S-45B †	**IDT (2802)**	
						IDT71982L-45	**IDT (2803)**	
						IDT71982L-45B †	**IDT (2803)**	
						IDT71982S-45	**IDT (2803)**	50
						IDT71982S-45B †	**IDT (2803)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x4								
	45 nsF	CMOS	TS	28	5		(Cont'd)	
						P4C1981-45C	Performance	
						P4C1981-45M		
							† Performance	
						P4C1981L-45C	Performance	
						P4C1981L-45M		
							† Performance	55
						P4C1982-45C	Performance	
						P4C1982-45M		
							† Performance	
						P4C1982L-45C	Performance	
						P4C1982L-45M		
							† Performance	
			TTL	22	5	**IMS1620-45**	**Inmos (2787)**	60
				24	5	**IMS1624-45**	**Inmos (2788)**	
		TTL	TS	22	5	MT5C6404-45		
							◊ MicronTech	
				24	5	MT5C6405-45		
							◊ MicronTech	
				28	5	MT5C6406-45		
							◊ MicronTech	
	55 nsF	CMOS	TS	22	5	84H16CL-55C	EDI	65
						84H16CL-55MHR		
							† EDI	
						HY62C88-55 ◊		
							Hyundai (2770)	
						IMS1620-55	**Inmos (2787)**	
						IMS1620-55M ◊†	**Inmos (2787)**	
						IDT7188L-55	**IDT (2802)**	70
						IDT7188L-55B †		
							IDT (2802)	
						IDT7188S-55	**IDT (2802)**	
						IDT7188S-55B †		
							IDT (2802)	
						SR64K4-55	Lattice	
						SR64K4-55/883C		
							† Lattice	75
						SR64K4-55C	Lattice	
						M5M5188-55	Mitsubishi	
						μPD4362-55	NEC	
						P4C188-55M †		
							Performance	
						P4C188L-55M		
							† Performance	80
						SRM2274C-55	S-MOS	
						SMJ64C64-55		
							◊† TI	
						V61C62-55	Vitelic	
						V61C62-55L	Vitelic	
				24	5	84H64C-55C ◊		
							EDI	85
						IMS1624-55	**Inmos (2788)**	
						IDT6198L-55 ◊‡	**IDT (2802)**	
						IDT6198S-55 ◊‡	**IDT (2802)**	
						SR64E4-55C	Lattice	
						SR64E4-883C		
							† Lattice	90
						μPD4363-55	NEC	
						P4C198-55M †		
							Performance	
						P4C198A-55M		
							† Performance	
						P4C198AL-55M		
							† Performance	
						P4C198L-55M		
							† Performance	95

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x4							(Cont'd)	
	55 nsF	CMOS	TS	24	5	SRM2275C-55	S-MOS	
						VT16H4-55 †	VLSI Tech	
				24, 28				
					5	SR64E4-55	Lattice	
				28	5	**IMS1624-55M ◇†**	**Inmos (2788)**	
						IDT7198L-55	**IDT (2802)**	5
						IDT7198L-55B †	**IDT (2802)**	
						IDT7198S-55	**IDT (2802)**	
						IDT7198S-55B †	**IDT (2802)**	
						IDT71981L-55	**IDT (2802)**	
						IDT71981L-55B †	**IDT (2802)**	10
						IDT71981S-55	**IDT (2802)**	
						IDT71981S-55B †	**IDT (2802)**	
						IDT71982L-55	**IDT (2803)**	
						IDT71982L-55B †	**IDT (2803)**	
						IDT71982S-55	**IDT (2803)**	15
						IDT71982S-55B †	**IDT (2803)**	
						P4C1981-55M		
							† Performance	
						P4C1981L-55M		
							† Performance	
						P4C1982-55M		
							† Performance	
						P4C1982L-55M		
							† Performance	20
		CMOS Module						
			TS	22	5	IDT8M464S-55	IDT	
	65 nsF	CMOS Module						
			TS	22	5	IDT8M464S-65	IDT	
						IDT8M464S-65B		
							† IDT	
	70 nsF	CMOS	TS	22	5	84H16CL-70MHR		
							† EDI	
						IMS1620-70M ◇†	**Inmos (2787)**	25
						IDT7188L-70	**IDT (2802)**	
						IDT7188L-70B †	**IDT (2802)**	
						IDT7188S-70	**IDT (2802)**	
						IDT7188S-70B †	**IDT (2802)**	
						SR64K4-70/883C		
							† Lattice	30
						μPD4362-70	NEC	
						V61C62-70	Vitelic	
						V61C62-70L	Vitelic	
				24	5	**IDT6198L-70 ◇‡**	**IDT (2802)**	
						IDT6198S-70 ◇‡	**IDT (2802)**	35
						SR64E4-70/883C		
							† Lattice	
						μPD4363-70	NEC	
				28	5	**IMS1624-70M ◇†**	**Inmos (2788)**	
						IDT7198L-70	**IDT (2802)**	
						IDT7198L-70B †	**IDT (2802)**	40
						IDT7198S-70	**IDT (2802)**	
						IDT7198S-70B †	**IDT (2802)**	
						IDT71981L-70	**IDT (2802)**	
						IDT71981L-70B †	**IDT (2802)**	
						IDT71981S-70	**IDT (2802)**	45
						IDT71981S-70B †	**IDT (2802)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x4							(Cont'd)	
	70 nsF	CMOS	TS	28	5	**IDT71982L-70**	**IDT (2803)**	
						IDT71982L-70B †	**IDT (2803)**	
						IDT71982S-70	**IDT (2803)**	
						IDT71982S-70B †	**IDT (2803)**	50
			TTL	22	5	**IMS1620-70**	**Inmos (2787)**	
				24	5	**IMS1624-70**	**Inmos (2788)**	
	85 nsF	CMOS	TS	22	5	**IDT7188L-85B †**	**IDT (2802)**	
						IDT7188S-85B †	**IDT (2802)**	
				24	5	**IDT6198L-85 ◇‡**	**IDT (2802)**	55
						IDT6198S-85 ◇‡	**IDT (2802)**	
				28	5	**IDT7198L-85B †**	**IDT (2802)**	
						IDT7198S-85B †	**IDT (2802)**	
						IDT71981L-85B †	**IDT (2802)**	
						IDT71981S-85B †	**IDT (2802)**	60
						IDT71982L-85B †	**IDT (2803)**	
						IDT71982S-85B †	**IDT (2803)**	
		CMOS Module						
			TS	22	5	IDT8M464S-85	IDT	
						IDT8M464S-85B		
							† IDT	
	100 nsF	CMOS Module						
			TS	22	5	IDT8M464S-100B		
							† IDT	65
	120 nsF	Module	TS	22	5	DPX7M464	Dense-Pac	
				28	5	DPX16X4	Dense-Pac	
		NMOS	TS	18	5	LH2416-12	Sharp	
	350 nsF	CMOS	TS	40	5	**HM6564 ◇**	**Harris (2705, 2765)**	
						HM6564-2 †	**Harris (2705, 2765)**	70
						HM6564-9	**Harris (2705, 2765)**	
		CMOS Module						
			TS	40	5	HM5-6564	Harris	
	450 nsF	CMOS	TS	40	5	**HM6564-5**	**Harris (2705, 2765)**	
16384x5								
	20 nsF	CMOS	TS	28	5	IDT7M564-20		
							◇‡ IDT	
	35 nsF	CMOS	TS	28	5	IDT7M564-35		
							◇‡ IDT	75
		Module	TS	28	5	DPS16X6	◇ Dense-Pac	
	120 nsF	Module	TS	28	5	DPX16X5	Dense-Pac	
16384x8								
	35 nsF	CMOS	TS	28	5	8816HC-35C	EDI	
		Module	TS	22	5	**DPS88H16**	**Dense-Pac (2578)**	
				36	5	DPS128KU	Dense-Pac	80
						DPS129	**Dense-Pac (2578)**	
						DPX129	‡ Dense-Pac	
		Module, VERSAPAC						
			TS	66	5	**DPS16X8V ◇**	**Dense-Pac (2583)**	
		Module, 2-port						
			TS	58	5	**DPP16X8**	**Dense-Pac (2584)**	
	45 nsF	CMOS	TS	28	5	8816HC-45C	EDI	85
						8816HC-45MHR		
							† EDI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x8								
	45 nsF	CMOS	TS					(Cont'd)
				58	5	**IDT7M135S-45**		
							◇‡ **IDT**	**(2804)**
						IDT7M145S-45		
							◇‡ **IDT**	**(2804)**
	55 nsF	CMOS	TS	28	5	8816HC-55MHR		
							† EDI	
						8816HCL-55C	EDI	
						8816HCL-55MHR		
							† EDI	5
	60 nsF	CMOS	TS	58	5	**IDT7M145S-60**		
							◇‡ **IDT**	**(2804)**
	70 nsF	CMOS	TS	28	5	8816HCL-70C	EDI	
						8816HCL-70MHR		
							† EDI	
						HM8816H	◇†	
							Harris	**(2705, 2764)**
		Module, 2-port						
			TS	58	5	**IDT7M135S-70**	**IDT**	**(2804)** 10
		Module, 2-port slave						
			TS	58	5	**IDT7M145S-70**	**IDT**	**(2804)**
	85 nsF	CMOS	TS	28	5	8816C-85C	EDI	
	90 nsF	Module, 2-port						
			TS	58	5	**IDT7M135S-90**	**IDT**	**(2804)**
						IDT7M135S-90B †	**IDT**	**(2804)**
		Module, 2-port slave						
			TS	58	5	**IDT7M145S-90**	**IDT**	**(2804)** 15
						IDT7M145S-90B †	**IDT**	**(2804)**
	100 nsF	CMOS	TS	28	5	8816C-10C	EDI	
						8816C-10MHR		
							† EDI	
		Module	TS	28	5	DPS40128	Dense-Pac	
						DPS41128	Dense-Pac	20
						DPS41129	**Dense-Pac (2579)**	
						DPS41256	Dense-Pac	
		Module, 2-port						
			TS	58	5	**IDT7M135S-100**	**IDT**	**(2804)**
		Module, 2-port slave						
			TS	58	5	**IDT7M145S-100**	**IDT**	**(2804)**
						IDT7M145S-100B		
							† **IDT**	**(2804)** 25
	120 nsF	CMOS	TS	28	5	8816C-12C	EDI	
						8816C-12MHR		
							† EDI	
		Module	TS	36	5	DPX128KU	Dense-Pac	
		Module, 2-port						
			TS	58	5	**IDT7M135S-120**	**IDT**	**(2804)**
						IDT7M135S-120B		
							† **IDT**	**(2804)** 30
		Module, 2-port slave						
			TS	58	5	**IDT7M145S-120**	**IDT**	**(2804)**
						IDT7M145S-120B		
							† **IDT**	**(2804)**
	140 nsF	Module, 2-port						
			TS	58	5	**IDT7M135S-140B**		
							† **IDT**	**(2804)**
		Module, 2-port slave						
			TS	58	5	**IDT7M145S-140B**		
							† **IDT**	**(2804)**
								(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x8								(Cont'd)
	150 nsF	CMOS	TS	28	5	8816C-15C	EDI	35
						8816C-15MHR		
							† EDI	
						HM8816	◇ **Harris**	**(2705, 2764)**
	200 nsF	CMOS	TS	28	5	8816C-20MHR		
							† EDI	
16384x16								
	25 nsF	Module	TS	36	5	**DPS16X17**	**Dense-Pac (2579)**	
				38	5	**DPS16X16**	**Dense-Pac (2579)**	40
				40	5	**IDT7M656L-25**	**IDT (2803)**	
	35 nsF	Module	TS	40	5	**DPS257**	**Dense-Pac (2578)**	
						DPX257	◇‡ Dense-Pac	
						IDT7M656L-35	**IDT (2803)**	
						IDT7M656L-35B †	**IDT (2803)**	45
		Module, VERSAPAC						
			TS	66	5	**DPS16X16V**	**Dense-Pac (2579, 2583)**	
		Module, 2-port						
			TS	64	5	**DPP16X16**	**Dense-Pac (2584)**	
	45 nsF	Module	TS	40	5	DPS256KU	Dense-Pac	
						DPS266	**Dense-Pac (2578)**	
						DPS8M656	**Dense-Pac (2579)**	50
				42	5	DPS1616	Dense-Pac	
	50 nsF	Module	TS	40	5	**IDT8MP656-50**	**IDT (2803, 2849)**	
						IDT8M656S-50	**IDT (2803, 2850)**	
	55 nsF	CMOS Module						
			TTL	40	5	**IDT7M656L-55**	**IDT (2803)**	
						IDT7M656L-55B †	**IDT (2803)**	55
	60 nsF	Module	TS	40	5	**IDT8M656S-60**	**IDT (2803, 2850)**	
						IDT8M656S-60B †	**IDT (2803, 2850)**	
	70 nsF	Module	TS	40	5	**IDT8M656S-70**	**IDT (2803, 2850)**	
						IDT8M656S-70B †	**IDT (2803, 2850)**	
	85 nsF	CMOS Module						
			TTL	40	5	**IDT7M656L-85**	**IDT (2803)**	60
						IDT7M656L-85B †	**IDT (2803)**	
		Module	TS	40	5	**IDT8M656S-85**	**IDT (2803, 2850)**	
						IDT8M656S-85B †	**IDT (2803, 2850)**	
	100 nsF	CMOS Module						
			TTL	40	5	**IDT7M656L-100B**		
							† **IDT**	**(2803)**
		Module	TS	40	5	**IDT8M656S-100B**		
							† **IDT**	**(2803, 2850)** 65
	120 nsF	Module	TS	40	5	DPX256KU	◇ Dense-Pac	
				48	5	DPS256KB	Dense-Pac	
	150 nsF	CMOS Module						
			TS	48	5	**HM92560**	**Harris (2705, 2765)**	
						HM92560-8 †	**Harris (2705, 2765)**	
						HM92560-9	**Harris (2705, 2765)**	70
						HM66202-15	Hitachi	
						HM66202L-15	Hitachi	
		Module	TS	48	5	DPX256KB-2	◇‡ Dense-Pac	
	250 nsF	CMOS Module						
			TS	48	5	**HM92560-5**	**Harris (2705, 2765)**	
						HM92570-8 †	**Harris (2705, 2765)**	75
								(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x16								
	250 nsF	CMOS Module						
			TS	48	5			(Cont'd)
						HM92570-9	**Harris (2705, 2765)**	
						HM66202-20	Hitachi	
						HM66202L-20	Hitachi	
	270 nsF	CMOS Module						
			TS	48	5	**HM92560-8 †**	**Harris (2705, 2765)**	
						HM92560-9	**Harris (2705, 2765)**	5
						HM92570-8 †	**Harris (2705, 2765)**	
						HM92570-9	**Harris (2705, 2765)**	
						HM66202-15	Hitachi	
						HM66202L-15	Hitachi	
	300 nsF	CMOS Module						
			TS	48	5	**HM92570-5 †**	**Harris (2705, 2765)**	10
16384x18								
	45 nsF	Module	TS	50	5	**DPS288**	**Dense-Pac (2578)**	
						DPS288KU	**Dense-Pac (2578)**	
	120 nsF	Module	TS	50	5	DPX288KU	Dense-Pac	
16384x20								
	40 nsF	CMOS	TS	92	5	**IDT7M6001-40**	**◊‡ IDT (2803)**	
	60 nsF	CMOS	TS	92	5	**IDT7M6001-60**	**◊‡ IDT (2803)**	15
16384x24								
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS16X24V**	**Dense-Pac (2583)**	
16384x32								
	30 nsF	CMOS	TS	88	5	**IDT7MC4032-30**	**◊‡ IDT (2803)**	
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS16X32V**	**Dense-Pac (2583)**	
		Module, 2-port						
			TS	84	5	**DPP16X32**	**Dense-Pac (2584)**	
16834x4								
	35	CMOS	TS	28	5	MCM6293-35 ◊	Motorola	20
24576x8								
	100 nsF	Module	TS	28	5	DPS40192	Dense-Pac	
						DPS41192	Dense-Pac	
						DPS41193	**Dense-Pac (2579)**	
32768x1								
	35 nsF	Module	TS	22	5	**DPS8132**	**Dense-Pac (2578)**	
32768x8								
	25 nsF	CMOS	TS	32	5	**IMS1830-25 ◊**	**Inmos (2779)**	25
		Module	TS	40	5	**IDT7M656L-25**	**IDT (2803)**	
	35 nsF	CMOS	TS	28	5	CY7C198-35C	◊ Cypress	
						CY7C199-35C	◊ Cypress	
						IDT71256L-35	**◊‡ IDT (2802, 2818)**	
						IDT71256S-35	**◊‡ IDT (2802, 2818)**	30
						SR256K8-35C	Lattice	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8								
	35 nsF	CMOS	TS					(Cont'd)
				32	5	**IMS1830-35 ◊**	**Inmos (2779)**	
						IMS1830-35M ◊†	**Inmos (2779)**	
		Module	TS	40	5	**DPS129**	**Dense-Pac (2578)**	
						DPS256KU	Dense-Pac	35
						DPS257	**Dense-Pac (2578)**	
						DPX257	◊‡ Dense-Pac	
						IDT7M656L-35	**IDT (2803)**	
						IDT7M656L-35B †	**IDT (2803)**	
		Module, VERSAPAC						
			TS	66	5	**DPS32X8V**	**Dense-Pac (2583)**	40
		Module, 2-port						
			TS	58	5	**DPP32X8**	**Dense-Pac (2584)**	
		NMOS	TS	28	5	MT5C2568	MicronTech	
		TTL	TS	32	5	MT5C2568-35	◊ MicronTech	
	40 nsF	Module	TS	28	5	**IDT7M856S-40**	**IDT (2803)**	
	45 nsF	CMOS	TS	28	5	CY7C198-45C	◊ Cypress	45
						CY7C198-45M	◊† Cypress	
						CY7C199-45C	◊ Cypress	
						CY7C199-45M	◊† Cypress	
						8832HC-45C	EDI	
						S32K8-45CC	**Inova (2798)**	50
						S32K8-45IC	**Inova (2798)**	
						IDT71256L-45	**IDT (2802, 2818)**	
						IDT71256S-45	**IDT (2802, 2818)**	
						SR256K8-45C	Lattice	
						MCM6200-45 ◊	Motorola	55
						MCM6206-45 ◊	Motorola	
				32	5	**IMS1830-45 ◊**	**Inmos (2779)**	
						IMS1830-45M ◊†	**Inmos (2779)**	
		Module	TS	28	5	**IMSM830-45 †**	**Inmos (2794)**	
						IDT8M856L-45	**IDT (2803, 2851)**	60
		TTL	TS	32	5	MT5C2568-45	◊ MicronTech	
	50 nsF	Module	TS	28	5	**IDT7M856S-50**	**IDT (2803)**	
						IDT8M856L-50	**IDT (2803, 2851)**	
	55 nsF	CMOS	TS	28	5	CY7C198-55C	◊ Cypress	
						CY7C198-55M	◊† Cypress	65
						CY7C199-55C	◊ Cypress	
						CY7C199-55M	◊† Cypress	
						8832HC-55C	EDI	
						8832HC-55MHR	† EDI	
						S32K8-55CC	**Inova (2798)**	70
						S32K8-55IC	**Inova (2798)**	
						S32K8-55MC †	**Inova (2798)**	
						IDT71256L-55	**IDT (2802, 2818)**	
						IDT71256L-55B †	**IDT (2802, 2818)**	
						IDT71256S-55	**IDT (2802, 2818)**	75
						IDT71256S-55B †	**IDT (2802, 2818)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8								
	55 nsF	CMOS	TS	28	5		(Cont'd)	
						SR256K8-55C	Lattice	
						MCM6206-55 ◊	Motorola	
				58	5	**IDT7M137S-55 ◊‡**	**IDT (2804)**	
		Module	TS	28	5	**IMSM830-55 †**	**Inmos (2794)**	
						IDT7M856S-55B †	**IDT (2803)**	5
						IDT8M856L-55B †	**IDT (2803, 2851)**	
		TTL	TS	28	5	**LH52256-55**	**Sharp (2993, 2995)**	
				32	5	MT5C2568-55 ◊	MicronTech	
	60 nsF	CMOS	TS	58	5	**IDT7M137S-60 ◊‡**	**IDT (2804)**	
		CMOS Module						
			TTL	28	5	**IDT7M856S-60**	**IDT (2803)**	10
		Module	TS	28	5	**IDT8M856L-60**	**IDT (2803, 2851)**	
		Module, 2 port						
			TS	58	5	**IDT7M137-60**	**IDT (2804)**	
	65 nsF	Module	TS	28	5	**IDT7M856S-65B †**	**IDT (2803)**	
						IDT8M856L-65B †	**IDT (2803, 2851)**	
	70 nsF	CMOS	TS	28	5	8832C-70C	EDI	15
						8832HC-70C	EDI	
						8832HC-70MHR †	EDI	
						S32K8-70CC	**Inova (2798)**	
						S32K8-70IC	**Inova (2798)**	
						S32K8-70MC †	**Inova (2798)**	20
						IDT71256L-70	**IDT (2802, 2818)**	
						IDT71256L-70B †	**IDT (2802, 2818)**	
						IDT71256S-70	**IDT (2802, 2818)**	
						IDT71256S-70B †	**IDT (2802, 2818)**	
						M5M5256A-70 ◊	Mitsubishi	25
						M5M5256A-70L ◊	Mitsubishi	
						M5M5256A-70LL ◊	Mitsubishi	
						MCM6206-70 ◊	Motorola	
		CMOS Module						
			TTL	28	5	**IDT7M856S-70**	**IDT (2803)**	
		Module	TS	28	5	**IMSM830-70 †**	**Inmos (2794)**	30
						IDT8M856L-70	**IDT (2803, 2851)**	
		TTL	TS	28	5	**LH52256-70**	**Sharp (2993, 2995)**	
	75 nsF	CMOS Module						
			TTL	28	5	**IDT7M856S-75B †**	**IDT (2803)**	
		Module	TS	28	5	**IDT8M856L-75B †**	**IDT (2803, 2851)**	
	85 nsF	CMOS	TS	28	5	8832C-85C	EDI	35
						HM62256-8	Hitachi	
						HM62256L-8	Hitachi	
						HM62256SL-8	Hitachi	
						IDT71256L-85B †	**IDT (2802, 2818)**	
						IDT71256S-85B †	**IDT (2802, 2818)**	40
						M5M5256A-85 ◊	Mitsubishi	
						M5M5256A-85L ◊	Mitsubishi	
							(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8								
	85 nsF	CMOS	TS	28	5		(Cont'd)	
						M5M5256A-85LL ◊	Mitsubishi	
						MCM60L256-85 ◊	Motorola	
						MCM60256-85 ◊	Motorola	45
						μPD43256-85	NEC	
						μPD43256-85L	NEC	
						μPD43256-85LL	NEC	
						TC55257A-85	**Toshiba (3303)**	
		CMOS Module						
			TTL	28	5	**IDT7M856S-85**	**IDT (2803)**	50
		Module	TS	28	5	**IMSM830-85 †**	**Inmos (2794)**	
						IDT8M856L-85	**IDT (2803, 2851)**	
	90 nsF	CMOS Module						
			TTL	28	5	**IDT7M856S-90B †**	**IDT (2803)**	
		Module	TS	28	5	**IDT8M856L-90B †**	**IDT (2803, 2851)**	
		TTL	TS	28	5	**LH52256-90**	**Sharp (2993, 2995)**	55
	100 nsF	CMOS	TS	28	5	**DPS92256 ◊**	**Dense-Pac (2578)**	
						8832C-10C	EDI	
						8832C-10MHR †	EDI	
						MB84256-10L	**Fujitsu (2623)**	
						MB84256-100	**Fujitsu (2623)**	60
						CDM62256	GE/RCA	
						HM62256-10	Hitachi	
						HM62256L-10	Hitachi	
						HM62256SL-10	Hitachi	
						S32K8-100CC	**Inova (2798)**	65
						S32K8-100IC	**Inova (2798)**	
						S32K8-100MC †	**Inova (2798)**	
						M5M5256-10	Mitsubishi	
						M5M5256-10L	Mitsubishi	
						M5M5256A-10L ◊	Mitsubishi	70
						M5M5256A-10LL ◊	Mitsubishi	
						MCM60L256-10 ◊	Motorola	
						MCM60256-10 ◊	Motorola	
						μPD43256-10	NEC	
						μPD43256-10L	NEC	75
						μPD43256-10LL	NEC	
						μPD43257-10L	NEC	
						μPD43257-10LL	NEC	
						SRM20256C-10	**S-MOS (3201)**	
		CMOS Module						
			TS	28	5	**IDT7M856S-100B †**	**IDT (2803)**	80
		Module	TS	28	5	**DPS32H8**	**Dense-Pac (2579)**	
						DPS40256	Dense-Pac	
						DPS41257	**Dense-Pac (2579)**	
						IDT8M856L-100B †	**IDT (2803, 2851)**	
		NMOS	TS	28	5	**TC55257A-10**	**Toshiba (3303)**	85
		TS	28	5	**CDM62256-10**	**GE/RCA (2643)**		
							(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8							(Cont'd)	
	120 nsF	CMOS	TS	28	5	8832C-12C	EDI	
						8832C-12L	EDI	
						8832C-12MHR †	EDI	
						MB84256-12	**Fujitsu (2623)**	
						HM62256-12	Hitachi	5
						HM62256L-12	Hitachi	
						HM62256SL-12	Hitachi	
						M5M5256-12L	Mitsubishi	
						M5M5256A-12L ◊	Mitsubishi	
						M5M5256A-12LL ◊	Mitsubishi	10
						MCM60L256-12 ◊	Motorola	
						MCM60256-12 ◊	Motorola	
						µPD42832-12 ◊	NEC	
						µPD43256-12	NEC	
						µPD43256-12L	NEC	15
						µPD43256-12LL	NEC	
						µPD43257-12L	NEC	
						µPD43257-12LL	NEC	
						SRM20256C-12	**S-MOS (3201)**	
						TC55257A-12	**Toshiba (3303)**	20
		Module	TS	40	5	DPX256KU ◊	Dense-Pac	
				50	5	DPX288KU	Dense-Pac	
		Pseudo	TS	28	5	HM65256A-12	Hitachi	
						HM65256B-12	Hitachi	
						TC51832-12	Toshiba	25
		TS		28	5	CDM62256-12	GE/RCA	
	125 nsF	Module	TS	32	5	DPS4328 ◊	Dense-Pac	
	150 nsF	CMOS	TS	28	5	8832C-15C	EDI	
						8832C-15MHR †	EDI	
						8832CL-15C	EDI	30
						8832CL-15MHR †	EDI	
						MB84256-15L	**Fujitsu (2623)**	
						MB84256-150	**Fujitsu (2623)**	
						HM8832 †	**Harris (2705, 2764)**	
						HM62256-15	Hitachi	35
						HM62256L-15	Hitachi	
						M5M5256-15	Mitsubishi	
						M5M5256-15L	Mitsubishi	
						M5M5256A-15L ◊	Mitsubishi	
						M5M5256A-15LL ◊	Mitsubishi	40
						MCM60L256-15	Motorola	
						MCM60256-15	Motorola	
						µPD42832-15 ◊	NEC	
						µPD43256-15	NEC	
						µPD43256-15L	NEC	45
						µPD43256-15LL	NEC	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8							(Cont'd)	
	150 nsF	CMOS	TS	28	5	µPD43257-15L	NEC	
						µPD43257-15LL	NEC	
		CMOS Module	TS	28	5	CMOS32X8-01	ICI	
				48	5	**HM92560**	**Harris (2705, 2765)**	50
						HM92560-8 †	**Harris (2705, 2765)**	
						HM92560-9	**Harris (2705, 2765)**	
						HM66202-15	Hitachi	
						HM66202L-15	Hitachi	
		CMOS with Battery, NVRAM	TS	28	5	GR3281	LMS	55
		Pseudo	TS	28	5	HM65256A-15	Hitachi	
						HM65256B-15	Hitachi	
						TC51832-15	Toshiba	
	170 nsF	CMOS Module	TS	28	5	CMOS256-03M ◊†	ICI	
	200 nsF	CMOS	TS	28	5	8832C-20MHR †	EDI	60
						8832CL-20C	EDI	
						8832CL-20MHR †	EDI	
						HM65256A-20	Hitachi	
						TC53256	Toshiba	
		CMOS Module	TS	28	5	CMOS256-03 ◊	ICI	65
		Pseudo	TS	28	5	HM65256B-20	Hitachi	
	250 nsF	CMOS Module	TS	48	5	**HM92560-5**	**Harris (2705, 2765)**	
						HM92570-8 †	**Harris (2705, 2765)**	
						HM92570-9	**Harris (2705, 2765)**	
						HM66202-20	Hitachi	70
						HM66202L-20	Hitachi	
	270 nsF	CMOS Module	TS	48	5	**HM92560-8 †**	**Harris (2705, 2765)**	
						HM92560-9	**Harris (2705, 2765)**	
						HM92570-8 †	**Harris (2705, 2765)**	
						HM92570-9	**Harris (2705, 2765)**	75
						HM66202-15	Hitachi	
						HM66202L-15	Hitachi	
	300 nsF	CMOS Module	TS	48	5	**HM92570-5 †**	**Harris (2705, 2765)**	
32768x9	45 nsF	Module	TS	50	5	**DPS288KU**	**Dense-Pac (2578)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x16								
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS32X16V**	**Dense-Pac (2583)**	
		Module, 2-port						
			TS	64	5	**DPP32X16**	**Dense-Pac (2584)**	
	45 nsF	Module	TS	40	5	**DPS8M612**	**Dense-Pac (2580)**	
				44	5	**DPS3216**	**Dense-Pac (2579)**	
	60 nsF	Module	TS	40	5	**IDT8MP612**	**IDT (2803, 2845)**	5
						IDT8M612	**IDT (2803, 2846)**	
	75 nsF	Module	TS	40	5	**IDT8M612-B †**	**IDT (2803, 2846)**	
32768x18								
	45 nsF	Module	TS	50	5	DPX288	‡ Dense-Pac	
32768x24								
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS32X24V**	**Dense-Pac (2583)**	
32768x32								
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS32X32V**	**Dense-Pac (2583)**	10
		Module, 2-port						
			TS	84	5	**DPP32X32**	**Dense-Pac (2584)**	
	45 nsF	Module	TS	58	5	DPS3232	Dense-Pac	
65384x4								
	35 nsF	CMOS	TS	28	5	VT16H41-35	VLSI Tech	
	40 nsF	CMOS	TS	24	5	VT16H4-40	VLSI Tech	
				28	5	VT16H41-40	VLSI Tech	15
	45 nsF	CMOS	TS	28	5	VT16H41-45	VLSI Tech	
	55 nsF	CMOS	TS	28	5	VT16H41-55	VLSI Tech	
65536x1								
	12 nsF	CMOS	TS	22	5	P4C187-12C ◊	Performance	
						P4C187L-12C ◊	Performance	
	15 nsF	BiCMOS	TS	22	5	**IDT100490-15 ◊‡**	**IDT (2802, 2812)**	20
		CMOS	TS	22	5	**IDT7187L-15 ◊‡**	**IDT (2802)**	
						IDT7187S-15 ◊‡	**IDT (2802)**	
						P4C187-15C ◊	Performance	
						P4C187-15M	◊† Performance	
						P4C187L-15C ◊	Performance	25
						P4C187L-15M	◊† Performance	
			TTL	22	5	M5M5187B-15	◊ Mitsubishi	
		ECL	OE	22	4.5	**MBM100490-15 ◊**	**Fujitsu (2618)**	
	20 nsF	CMOS	TS	22	5	**IDT7187L-20**	**IDT (2802)**	
						IDT7187S-20	**IDT (2802)**	30
						P4C187-20C ◊	Performance	
						P4C187-20M	◊† Performance	
						P4C187L-20C ◊	Performance	
						P4C187L-20M	◊† Performance	
			TTL	22	5	M5M5187B-20	◊ Mitsubishi	35
	25 nsF	CMOS	TS	22	5	**CY7C187-25C**	**Cypress (2562)**	
						DPS9287 ◊	**Dense-Pac (2578)**	
						F1600A	Fairchild	
						F1601A	Fairchild	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x1							(Cont'd)	
	25 nsF	CMOS	TS	22	5	MB81C71A-25	Fujitsu	40
						IDT7187L-25 ◊‡	**IDT (2802)**	
						IDT7187S-25 ◊‡	**IDT (2802)**	
						HM65787-25 †	Matra-Harris	
						MCM6287-25	Motorola	
						P4C187-25C ◊	Performance	45
						P4C187-25M	◊† Performance	
						P4C187L-25C ◊	Performance	
						P4C187L-25M	◊† Performance	
						MK41H87-25	**Thomson (3266)**	
				24	5	**IDT71501S-25 ◊‡**	**IDT (2802, 2823)**	50
			TTL	22	5	HM6787 ◊	Hitachi	
						M5M5187A-25 ◊	Mitsubishi	
		ECL	OE	22	–5.2	MBM10490-25	Fujitsu	
					4.5	**MBM100490-25 ◊**	**Fujitsu (2618)**	
		TTL	OC	22	5	MB81C71A	Fujitsu	55
			TS	22	5	MT5C6401-25 ◊	MicronTech	
	30 nsF	CMOS	TS	22	5	**IDT7187L-30**	**IDT (2802)**	
						IDT7187L-30B †	**IDT (2802)**	
						IDT7187S-30	**IDT (2802)**	
						IDT7187S-30B †	**IDT (2802)**	60
						P4C187-30M	◊† Performance	
						P4C187L-30M	◊† Performance	
						SMJ61CD64-30	◊† TI	
	35 nsF	CMOS	TS	22	5	**CY7C187-35C**	**Cypress (2562)**	
						CY7C187-35M †	**Cypress (2562)**	65
						F1600AM †	Fairchild	
						F1601AM †	Fairchild	
						MB81C71A-35	Fujitsu	
						HY62C87-35 ◊	**Hyundai (2770)**	
						IMS1600-35	**Inmos (2785)**	70
						IDT7187L-35	**IDT (2802)**	
						IDT7187L-35B †	**IDT (2802)**	
						IDT7187S-35	**IDT (2802)**	
						IDT7187S-35B †	**IDT (2802)**	
						HM65787-35 †	Matra-Harris	75
						P4C187-35C ◊	Performance	
						P4C187-35M	◊† Performance	
						P4C187L-35M	◊† Performance	
						MKB41H87-835 †	**Thomson (3298)**	
						MK41H87-35	**Thomson (3266)**	80

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x1							(Cont'd)	
	35 nsF	CMOS	TS					
				24	5	**IDT71501S-35** ◇‡	**IDT (2802, 2823)**	
						VT64H1 †	VLSI Tech	
						VT64H1-35 †	VLSI Tech	
			TTL	22	5	M5M5187A-35 ◇	Mitsubishi	
		Module	TS	22	5	DPX9287 ‡	Dense-Pac	5
				26	5	**DPS81C64**	**Dense-Pac (2578)**	
						DPS8164	Dense-Pac	
		TTL	TS	22	5	MT5C6401-35 ◇	MicronTech	
	40 nsF	CMOS	TS	22	5	μPD4361-40	NEC	
						SMJ61CD64-40 ◇†	TI	10
				24	5	VT64H1-40	VLSI Tech	
	45 nsF	CMOS	TS	22	5	**CY7C187-45C**	**Cypress (2562)**	
						CY7C187-45M †	**Cypress (2562)**	
						F1600A-45	Fairchild	
						F1601-45	Fairchild	15
						GM76C64-45	**GoldStar (2692)**	
						HM6287-45	Hitachi	
						HY62C87-45 ◇	**Hyundai (2770)**	
						IMS1600-45	**Inmos (2785)**	
						IMS1600-45M ◇†	**Inmos (2785)**	20
						IDT7187L-45	**IDT (2802)**	
						IDT7187L-45B †	**IDT (2802)**	
						IDT7187S-45	**IDT (2802)**	
						IDT7187S-45B †	**IDT (2802)**	
						IDT7187S-85	**IDT (2802)**	25
						HM65787-45 †	Matra-Harris	
						M5M5187-45	Mitsubishi	
						μPD4361-45	NEC	
						MKB41H87-845 †	**Thomson (3298)**	
						MK41H87-45	**Thomson (3266)**	30
				24	5	**IDT71501S-45** ◇‡	**IDT (2802, 2823)**	
						VT64H1-45 †	VLSI Tech	
		TTL	OC	22	5	MB81C71 ◇	Fujitsu	
			TS	22	5	MT5C6401-45 ◇	MicronTech	
	55 nsF	CMOS	TS	22	5	**CY7C187-55M**	**Cypress (2562)**	35
						F1600AM-55 †	Fairchild	
						GM76C64-55	**GoldStar (2692)**	
						HM6287-55	Hitachi	
						HY62C87-55 ◇	**Hyundai (2770)**	
						IMS1600-55	**Inmos (2785)**	40
						IMS1600-55M †	**Inmos (2785)**	
						IMS1601L-55M ◇†	**Inmos (2786)**	
						IDT7187L-55	**IDT (2802)**	
						IDT7187L-55B †	**IDT (2802)**	
						IDT7187S-55	**IDT (2802)**	45
						IDT7187S-55B †	**IDT (2802)**	
						M5M5187-55	Mitsubishi	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x1							(Cont'd)	
	55 nsF	CMOS	TS	22	5	μPD4361-55	NEC	
						SRM2261C-55 ◇	S-MOS	
						SMJ61CD64-55 ◇†	TI	50
						MKB41H87-855 †	**Thomson (3298)**	
				24	5	VT64H1-55 †	VLSI Tech	
		NMOS	TTL	22	5	MB8171-55	Fujitsu	
	65 nsF	Module	TS	22	5	DPS7M164	Dense-Pac	
	70 nsF	CMOS	TS	20	5	HM6167H-70	Hitachi	55
				22	5	**GM76C64-70**	**GoldStar (2692)**	
						HM6287-70	Hitachi	
						IMS1600-70	**Inmos (2785)**	
						IMS1600-70M †	**Inmos (2785)**	
						IMS1601L-70M ◇†	**Inmos (2786)**	60
						IDT7187L-70	**IDT (2802)**	
						IDT7187L-70B †	**IDT (2802)**	
						IDT7187S-70	**IDT (2802)**	
						IDT7187S-70B †	**IDT (2802)**	
						μPD4361-70	NEC	65
						SRM2261C-70 ◇	S-MOS	
		NMOS	TTL	22	5	MB8171-70	Fujitsu	
	85 nsF	CMOS	TS	22	5	**IDT7187L-85**	**IDT (2802)**	
						IDT7187L-85B †	**IDT (2802)**	
						IDT7187S-85B †	**IDT (2802)**	70
	100 nsF	NMOS	TS	16	5	MT4264-10/883C ◇†	MicronTech	
	120 nsF	Module	TS	26	5	DPX8164	Dense-Pac	
		NMOS	TS	16	5	MT4264-12/883C ◇†	MicronTech	
	150 nsF	NMOS	TS	16	5	MT4264-15/883C ◇†	MicronTech	
						LH2164-15	**Sharp (2993)**	75
	200 nsF	NMOS	TS	16	5	MT4264-20/883C ◇†	MicronTech	
						LH2164-20	**Sharp (2993)**	
65536x4								
	15 nsF	ECL	OE	22	−5.2	MBM10490-15	Fujitsu	
	25 nsF	CMOS	TS	24	5	CY7C194-25C ◇	Cypress	
						IDT71258L-25 ◇‡	**IDT (2802)**	80
						IDT71258S-25 ◇‡	**IDT (2802)**	
						IDT712585S-25 ◇‡	IDT	
						M5M5258A-25 ◇	Mitsubishi	
						MCM6208-25	Motorola	
				28	5	CY7C191-25C ◇	Cypress	85
						CY7C192-25C ◇	Cypress	
						CY7C196-25C ◇	Cypress	
						IMS1820-25 ◇	**Inmos (2791)**	
						IDT61298L-25 ◇‡	**IDT (2802)**	
						IDT61298S-25 ◇‡	**IDT (2802)**	90

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◇ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x4								
	25 nsF	CMOS	TS	28	5		(Cont'd)	
						IDT7MP456-25		
						◊‡	**IDT (2803)**	
						IDT71281L-25	◊‡ **IDT (2802, 2819)**	
						IDT71281S-25	◊‡ **IDT (2802, 2819)**	
						IDT71282L-25	◊‡ **IDT (2802, 2819)**	
						IDT71282S-25	◊‡ **IDT (2802, 2819)**	5
						IDT71298L-25		
						◊‡	IDT	
						IDT71298S-25		
						◊‡	IDT	
		Module	TS	24	5	**DP86M44**	**Dense-Pac (2579)**	
				40	5	**IDT7M656L-25**	**IDT (2803)**	
	35 nsF	CMOS	TS	24	5	CY7C194-35C		
						◊	Cypress	10
						CY7C194-35M		
						◊†	Cypress	
						IDT71258L-35	**IDT (2802)**	
						IDT71258S-35	**IDT (2802)**	
						SR256K4-35C	Lattice	
						MCM6208-35	Motorola	15
						µPD43254-35	NEC	
				28	5	CY7C191-35C		
						◊	Cypress	
						CY7C191-35M		
						◊†	Cypress	
						CY7C192-35C		
						◊	Cypress	
						CY7C192-35M		
						◊†	Cypress	20
						CY7C196-35C		
						◊	Cypress	
						CY7C196-35M		
						◊†	Cypress	
						IMS1820-35 ◊		
							Inmos (2791)	
						IMS1820-35M ◊†	**Inmos (2791)**	
						IDT61298I-35 ◊‡	**IDT (2802)**	25
						IDT61298S-35 ◊‡	**IDT (2802)**	
						IDT71281L-35 ◊‡	**IDT (2802, 2819)**	
						IDT71281S-35 ◊‡	**IDT (2802, 2819)**	
						IDT71282L-35 ◊‡	**IDT (2802, 2819)**	
						IDT71282S-35 ◊‡	**IDT (2802, 2819)**	30
						IDT71298L-35		
						◊‡	IDT	
						IDT71298S-35		
						◊‡	IDT	
			TTL	24	5	M5M5258-35 ◊	Mitsubishi	
		Module	TS	24	5	DPS86M44	Dense-Pac	
						DPX86M44 ‡	Dense-Pac	35
						IMSM820-35 †		
							Inmos (2793)	
				30	5	DPS8444 ◊	Dense-Pac	
						DPS8644	**Dense-Pac (2579)**	
						DPS8645	**Dense-Pac (2579)**	
				40	5	**DPS129**	**Dense-Pac (2578)**	40
						DPS256KU	Dense-Pac	
						DPS257	**Dense-Pac (2578)**	
						IDT7M656L-35	**IDT (2803)**	
						IDT7M656L-35B †	**IDT (2803)**	
		NMOS	TS	25	5	MT5C2564	MicronTech	45
		TTL	OC	24	5	MB81C84A	Fujitsu	
							(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x4								
	35 nsF	TTL					(Cont'd)	
			TS	24	5	MT5C2564-35		
						◊	MicronTech	
				28	5	MT5C2565-35		
						◊	MicronTech	
	45 nsF	CMOS	TS	24	5	CY7C194-45C		
						◊	Cypress	
						CY7C194-45M		
						◊†	Cypress	50
						84H64C-45MHR		
						◊†	EDI	
						MB81C84-45	Fujitsu	
						IDT71258L-45	**IDT (2802)**	
						IDT71258L-45B †	**IDT (2802)**	
						IDT71258S-45	**IDT (2802)**	55
						IDT71258S-45B †	**IDT (2802)**	
						SR256K4-45C	Lattice	
						µPD43254-45	NEC	
						SRM20258-45	**S-MOS (3201)**	
				28	5	CY7C191-45C		
						◊	Cypress	60
						CY7C191-45M		
						◊†	Cypress	
						CY7C192-45C		
						◊	Cypress	
						CY7C192-45M		
						◊†	Cypress	
						CY7C196-45C		
						◊	Cypress	
						CY7C196-45M		
						◊†	Cypress	65
						IMS1820-45 ◊		
							Inmos (2791)	
						IMS1820-45M ◊†	**Inmos (2791)**	
						IDT61298L-45 ◊‡	**IDT (2802)**	
						IDT71281L-45 ◊‡	**IDT (2802, 2819)**	
						IDT71281S-45 ◊‡	**IDT (2802, 2819)**	70
						IDT71282L-45 ◊‡	**IDT (2802, 2819)**	
						IDT71282S-45 ◊‡	**IDT (2802, 2819)**	
						IDT71298L-45		
						◊‡	IDT	
						IDT71298S-45		
						◊‡	IDT	
			TTL	24	5	M5M258-45 ◊		
							Mitsubishi	75
		Module	TS	24	5	**IMSM820-45 †**		
							Inmos (2793)	
		TTL	OC	24	5	MB81C84 ◊	Fujitsu	
			TS	24	5	MT5C2564-45		
						◊	MicronTech	
				28	5	MT5C2565-45		
						◊	MicronTech	
	55 nsF	CMOS	TS	24	5	84H64C-55LMHR		
						◊†	EDI	80
						84H64C-55MHR		
						◊†	EDI	
						MB81C84-55	Fujitsu	
						IDT71258L-55	**IDT (2802)**	
						IDT71258L-55B †	**IDT (2802)**	
						IDT71258S-55	**IDT (2802)**	85
						IDT71258S-55B †	**IDT (2802)**	
						SR256K4-55C	Lattice	
						µPD43254-55	NEC	
						SRM20258-55	**S-MOS (3201)**	
				28	5	**DPS8186** ◊	**Dense-Pac (2578)**	90
						IDT61298L-55 ◊‡	**IDT (2802)**	
							(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x4								
	55 nsF	CMOS	TS	28	5			(Cont'd)
						IDT61298S-55	◊‡ **IDT**	**(2802)**
						IDT71281L-55	◊‡ **IDT**	**(2802, 2819)**
						IDT71281S-55	◊‡ **IDT**	**(2802, 2819)**
						IDT71282L-55	◊‡ **IDT**	**(2802, 2819)**
						IDT71282S-55	◊‡ **IDT**	**(2802, 2819)** 5
						IDT71298L-55	◊‡ IDT	
						IDT71298S-55	◊‡ IDT	
			TTL	24	5	M5M5258-55	◊ Mitsubishi	
		Module	TS	24	5	**IMSM820-55 †**	**Inmos (2793)**	
		TTL	OC	28	5	MB81C86	◊ Fujitsu	10
			TS	24	5	MT5C2564-55	◊ MicronTech	
				28	5	MT5C2565-55	◊ MicronTech	
	70 nsF	CMOS	TS	24	5	84H64C-70LMHR	◊† EDI	
						84H64C-70MHR	◊† EDI	
						IDT71258L-70	**IDT (2802)**	15
						IDT71258L-70B †	**IDT (2802)**	
						IDT71258S-70	**IDT (2802)**	
						IDT71258S-70B †	**IDT (2802)**	
				28	5	**IDT61298L-70**	◊‡ **IDT (2802)**	
						IDT61298S-70	◊‡ **IDT (2802)**	20
						IDT71281L-70	◊‡ **IDT (2802, 2819)**	
						IDT71281S-70	◊‡ **IDT (2802, 2819)**	
						IDT71282L-70	◊‡ **IDT (2802, 2819)**	
						IDT71282S-70	◊‡ **IDT (2802, 2819)**	
						IDT71298L-70	◊‡ IDT	25
						IDT71298S-70	◊‡ IDT	
		Module	TS	24	5	**IMSM820-70 †**	**Inmos (2793)**	
	85 nsF	CMOS	TS	24	5	**IDT71258L-85B †**	**IDT (2802)**	
						IDT71258S-85B †	**IDT (2802)**	
	100 nsF	NMOS	TS	18	5	MT4067-10/883C	◊† MicronTech	30
	120 nsF	Module	TS	40	5	DPX256KU	◊ Dense-Pac	
		NMOS	TS	18	5	MT4067-12/883C	◊† MicronTech	
	150 nsF	NMOS	TS	18	5	MT4067-15/883C	◊† MicronTech	
	200 nsF	NMOS	TS	18	5	MT4067-20/883C	◊† MicronTech	
	45 nsF	CMOS	TS	28	5	**IDT61298S-45**	◊‡ **IDT (2802)**	35
65536x5								
	35 nsF	Module	TS	40	5	**DPS320**	**Dense-Pac (2579)**	
65536x6								
	35 nsF	Module	TS	40	5	**DPS384**	**Dense-Pac (2579)**	
						DPX384	‡ Dense-Pac	
65536x8								
	25 nsF	CMOS	TS	40	5	**IDT7M812-25**	◊‡ **IDT (2803, 2844)**	
	35 nsF	CMOS	TS	40	5	**IDT7M812-35**	◊‡ **IDT (2803, 2844)**	40
		Module	TS	40	5	DPX8524	‡ Dense-Pac	
	40 nsF	CMOS	TS	43	5	**IDT7MP6025-40**	◊‡ **IDT (2803)**	
	45 nsF	CMOS	TS	40	5	**IDT7M812-45**	◊‡ **IDT (2803, 2844)**	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x8								
	45 nsF							(Cont'd)
		Module	TS	40	5	**DPS8524**	**Dense-Pac (2579)**	
						IDT7M812S-45	**IDT (2803, 2844)**	45
	55 nsF	Module	TS	40	5	**IDT7M812S-55**	**IDT (2803, 2844)**	
						IDT7M812S-55B †	**IDT (2803, 2844)**	
	65 nsF	Module	TS	40	5	**IDT7M812S-65**	**IDT (2803, 2844)**	
						IDT7M812S-65B †	**IDT (2803, 2844)**	
	85 nsF	Module	TS	40	5	**IDT7M812S-85**	**IDT (2803, 2844)**	50
						IDT7M812S-85B †	**IDT (2803, 2844)**	
	125 nsF	Module	TS	32	5	**DPS4648**	**Dense-Pac (2580)**	
65536x9								
	25 nsF	CMOS	TS	40	5	**IDT7M912-25**	◊‡ **IDT (2844)**	
	35 nsF	CMOS	TS	40	5	**IDT7M912-35**	◊‡ **IDT (2844)**	
		Module	TS	40	5	**DPS8589**	**Dense-Pac (2579)**	55
						DPX8589	‡ Dense-Pac	
	45 nsF	CMOS	TS	40	5	**IDT7M912-45**	◊‡ **IDT (2844)**	
		Module	TS	40	5	**IDT7M912S-45**	**IDT (2844)**	
	55 nsF	Module	TS	40	5	**IDT7M912S-55**	**IDT (2844)**	
						IDT7M912S-55B †	**IDT (2844)**	60
	65 nsF	Module	TS	40	5	**IDT7M912S-65**	**IDT (2844)**	
						IDT7M912S-65B †	**IDT (2844)**	
	85 nsF	Module	TS	40	5	**IDT7M912S-85**	**IDT (2844)**	
						IDT7M912S-85B †	**IDT (2844)**	
	100 nsF	Module	TS	40	5	**IDT7M912S-100B**	**† IDT (2844)**	65
65536x10								
	25 nsF	Module	TS	36	5	**DP6410**	**Dense-Pac (2579)**	
	35 nsF	Module	TS	36	5	DPS6410	Dense-Pac	
65536x12								
	25 nsF	Module	TS	36	5	**DP6412**	**Dense-Pac (2579)**	
	35 nsF	Module	TS	36	5	DPS6412	Dense-Pac	
						DPX6412	‡ Dense-Pac	70
65536x16								
	25 nsF	CMOS	TS	40	5	**IDT7M624S-25**	◊‡ **IDT (2803, 2842)**	
	30 nsF	Module	TS	40	5	**IDT7MB624-25**	**IDT (2803)**	
						IDT7M624S-30	**IDT (2803, 2842)**	
	35 nsF	CMOS	TS	40	5	816H64C-35C	EDI	
						IDT7M624S-35	◊‡ **IDT (2803, 2842)**	75
		Module	TS	40	5	**DPS1025**	**Dense-Pac (2579)**	
						DPS1026	**Dense-Pac (2579)**	
						DPS1027	**Dense-Pac (2579)**	
				42	5	**DPS1024**	**Dense-Pac (2579)**	
						DPX1024	‡ Dense-Pac	80
		Module, VERSAPAC	TS	66	5	**DPS64X16V**	**Dense-Pac (2583)**	
		Module, 2-port	TS	64	5	**DPP64X16**	**Dense-Pac (2584)**	
	45 nsF	CMOS	TS	40	5	816H64C-45C	EDI	
						816H64C-45MHR	† EDI	
		Module	TS	40	5	**DPS1026**	**Dense-Pac (2579)**	85
						DPS8M624	**Dense-Pac (2580)**	
						IDT7M624S-45	**IDT (2803, 2842)**	
						IDT7M624S-45B †	**IDT (2803, 2842)**	
				42	5	**DPS1024**	**Dense-Pac (2579)**	
				44	5	**DPS1152**	**Dense-Pac (2579)**	90
				48	5	DPS6417	Dense-Pac	
	55 nsF	CMOS	TS	40	5	816H64C-55C	EDI	
						816H64C-55MHR	† EDI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
65536x16								
	55 nsF	CMOS	TS	40	5			(Cont'd)
						S64K16-55CC	**Inova (2797)**	
						S64K16-55IC	**Inova (2797)**	
		Module	TS	40	5	**IDT7M624S-55**	**IDT (2803, 2842)**	
						IDT7M624S-55B †	**IDT (2803, 2842)**	
	60 nsF	Module	TS	40	5	**IDT8MP624**	**IDT (2803, 2845)**	5
						IDT8M624	**IDT (2846)**	
	65 nsF	CMOS Module						
			TS	48	5	**IDT7M624S-65**	**IDT (2803, 2842)**	
						IDT7M624S-65B	**IDT (2803, 2842)**	
	70 nsF	CMOS	TS	40	5	816H64C-70MHR		
							† EDI	
						S64K16-70CC	**Inova (2797)**	10
						S64K16-70IC	**Inova (2797)**	
						S64K8-70MC †		
							Inova	
	75 nsF	Module	TS	40	5	**IDT8M624-B †**		
							IDT (2846)	
	85 nsF	CMOS	TS	40	5	**S64K16-85CC**	**Inova (2797)**	
						S64K16-85IC	**Inova (2797)**	15
						S64K8-85MC †		
							Inova	
		CMOS Module						
			TS	48	5	**IDT7M624S-85**	**IDT (2803, 2842)**	
						IDT7M624S-85B	**IDT (2803, 2842)**	
	100 nsF	CMOS	TS	40	5	**S64K16-100CC**	**Inova (2797)**	
						S64K16-100IC	**Inova (2797)**	20
						S64K8-100MC		
							† Inova	
	120 nsF	Module	TS	48	5	**DPS1224**	**Dense-Pac (2579)**	
				56	5	**DPS1124**	**Dense-Pac (2579)**	
						DPS1125	Dense-Pac	
	150 nsF	CMOS	TS	48	5	891M2CL-15C	EDI	25
						891M2CL-15MHR		
							† EDI	
						HM91M2	**† Harris (2705, 2765)**	
		Module	TS	48	5	**DPS1224**	**Dense-Pac (2579)**	
				56	5	**DPS1124**	**Dense-Pac (2579)**	
						DPS1125	Dense-Pac	30
	200 nsF	CMOS	TS	48	5	891M2CL-20C	EDI	
						891M2CL-20MHR		
							† EDI	
65536x16, 13107x8, or 262144x4 User Configurable								
	45 nsF	Module	TS	40	5	**IMSM624-45 †**		
							Inmos (2792)	
65536x16, 131072x8, or 262144x4 User Configurable								
	35 nsF	Module	TS	40	5	**IMSM624-35 †**		
							Inmos (2792)	
	55 nsF	Module	TS	40	5	**IMSM624-55 †**		
							Inmos (2792)	35
	70 nsF	Module	TS	40	5	**IMSM624-70 †**		
							Inmos (2792)	
65536x18								
	35 nsF	Module	TS	50	5	**DPS1152**	**Dense-Pac (2579)**	
						DPX1152	‡ Dense-Pac	
	45 nsF	Module	TS	50	5	**DPS1152**	**Dense-Pac (2579)**	
65536x24								
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS64X24V ◊**		
							Dense-Pac (2583)	40
65536x32								
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS64X32V ◊**		
							Dense-Pac (2583)	
		Module, 2-port						
			TS	84	5	**DPP64X32**	**Dense-Pac (2584)**	
	45 nsF	CMOS	TS	60	5	**IDT7M4017-45**		
							◊‡ IDT (2803)	
				172	5	**IDT7M6026-45**		
							◊‡ IDT (2803)	
		Module	TS	64	5	**DPS6432**	**Dense-Pac (2580)**	45
	55 nsF	Module	TS	60	5	**DPS6433**	**Dense-Pac (2580)**	
	60 nsF	CMOS	TS	60	5	**IDT7M4017-60**		
							◊‡ IDT (2803)	
				172	5	**IDT7M6026-60**		
							◊‡ IDT (2803)	
98304x8								
	125 nsF	Module	TS	32	5	**DPS4968**	**Dense-Pac (2580)**	
131072x2								
	75 nsF	Module	TS	40	5	**DPS166167**	**Dense-Pac (2578)**	50
	120 nsF	Module	TS	40	5	DX166167	Dense-Pac	
131072x8								
	35 nsF	Module	TS	40	5	**DPS1027**	**Dense-Pac (2579)**	
		Module, VERSAPAC						
			TS	66	5	**DPS128X8V**	**Dense-Pac (2583)**	
		Module, 2-port						
			TS	58	5	**DPP128X8**	**Dense-Pac (2584)**	
	45 nsF	CMOS	TS	32	5	**S128K8-45CC**	**Inova (2797)**	55
						S128K8-45IC	**Inova (2797)**	
						IDT71024L-45		
							◊‡ IDT	
						IDT71024S-45		
							◊‡ IDT	
				64	5	**IDT7M824S-45**		
							◊‡ IDT (2803)	
		Module	TS	32	5	DPS412S88	Dense-Pac	60
				40	5	**DPS1025**	**Dense-Pac (2579)**	
						DPS1026	**Dense-Pac (2579)**	
						IDT7M624S-45B †	**IDT (2803, 2842)**	
				42	5	**DPS1024**	**Dense-Pac (2579)**	
	50 nsF	CMOS	TS	30	5	**IDT8MP824-50**		
							◊‡ IDT (2803, 2847)	65
	55 nsF	CMOS	TS	32	5	**S128K8-55CC**	**Inova (2797)**	
						S128K8-55IC	**Inova (2797)**	
						S128K8-55MC †		
							Inova (2797)	
						IDT71024L-55		
							◊‡ IDT	
						IDT71024S-55		
							◊‡ IDT	70
				64	5	**IDT7M824S-55**		
							◊‡ IDT (2803)	
		Module	TS	40	5	**IDT7M624S-55**	**IDT (2803, 2842)**	
						IDT7M624S-55B †	**IDT (2803, 2842)**	
	60 nsF	CMOS	TS	30	5	**IDT8MP824-60**		
							◊‡ IDT (2803, 2847)	
		Module	TS	32	5	**IDT8M824**	**IDT (2803, 2848)**	75
				64	5	IDT7MP824	IDT	
						IDT7M824	**IDT (2803)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—RAMs (Cont'd)

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
131072x8						(Cont'd)		
	65 nsF	CMOS Module						
			TS	48	5	**IDT7M624S-65**	**IDT (2803, 2842)**	
						IDT7M624S-65B	**IDT (2803, 2842)**	
	70 nsF	CMOS	TS	32	5	**S128K8-70CC**	**Inova (2797)**	
						S128K8-70IC	**Inova (2797)**	
						S128K8-70MC †	**Inova (2797)**	5
						IDT71024L-70	◊‡ IDT	
						IDT71024S-70	◊‡ IDT	
			TTL	32	5	M5M51000-70	◊ Mitsubishi	
	75 nsF	Module	TS	32	5	**IDT8M824-B †**	**IDT (2803, 2848)**	
				64	5	**IDT7M824-B †**	**IDT (2803)**	10
	85 nsF	CMOS	TTL	32	5	M5M51000-85	◊ Mitsubishi	
		CMOS Module						
			TS	48	5	**IDT7M624S-85**	**IDT (2803, 2842)**	
						IDT7M624S-85B	**IDT (2803, 2842)**	
	90 nsF	CMOS	TS	32	5	IDT71024L-90	◊‡ IDT	
						IDT71024S-90	◊‡ IDT	15
	100 nsF	CMOS	TS	32	5	**DPS921024 ◊**	**Dense-Pac (2578)**	
						88128C-10C	EDI	
						88128C-10MHR	† EDI	
						HM658128-10	Hitachi	
						S128K8-100CC	**Inova (2797)**	20
						S128K8-100IC	**Inova (2797)**	
						S128K8-100MC †	**Inova (2797)**	
			TTL	32	5	MH12808TNA-10	Mitsubishi	
						M5M51000-10	◊ Mitsubishi	
		Module	TS	68	5	**DPS91288**	**Dense-Pac (2579)**	25
	120 nsF	CMOS	TS	32	5	88128C-12C	EDI	
						88128C-12MHR	† EDI	
						HM658128-12	Hitachi	
			TTL	32	5	M5M51000-12	◊ Mitsubishi	
					8	MH12808TNA-12	Mitsubishi	30
		CMOS Module						
			TS	32	5	MC120	NEC	
	125 nsF	Module	TS	32	5	**DPS41288**	**Dense-Pac (2580)**	
	150 nsF	CMOS	TS	28	5	M5M23C100	Mitsubishi	
				32	5	88128C-15C	EDI	
						88128C-15MHR	† EDI	35
						HM658128-15	Hitachi	
				48	5	**HM91M2**	**† Harris (2705, 2765)**	
			TTL	32	5	MH12808TNA-15	Mitsubishi	
						M5M51000-15	◊ Mitsubishi	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
131072x8						(Cont'd)		
	150 nsF	Module	TS	48	5	**DPS1224**	**Dense-Pac (2579)**	40
				56	5	**DPS1124**	**Dense-Pac (2579)**	
						DPS1125	Dense-Pac	
	200 nsF	CMOS	TS	28	5	M5M231001	Mitsubishi	
				32	5	**X28C010**	**† Xicor (3395, 3414)**	
131072x9								
	45 nsF	Module	TS	50	5	**DPS1152**	**Dense-Pac (2579)**	45
131072x16								
	35 nsF	Modules, VERSAPAC						
			TS	66	5	**DPS128X16V ◊**	**Dense-Pac (2583)**	
	45 nsF	Module	TS	64	5	**DPS6432**	**Dense-Pac (2580)**	
	55 nsF	Module	TS	60	5	**DPS6433**	**Dense-Pac (2580)**	
	70	Module	TS	64	5	**DPS42568**	**Dense-Pac (2580)**	
131072x24								
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS128X24V ◊**	**Dense-Pac (2583)**	50
131072x32								
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS128X32V ◊**	**Dense-Pac (2583)**	
	55 nsF	Module	TS	60	5	**DPS12832**	**Dense-Pac (2580)**	
262144x1								
	25 nsF	CMOS	TS	24	5	CY7C197-25C	◊ Cypress	
						IDT71257L-25	**◊‡ IDT (2802)**	
						IDT71257S-25	**◊‡ IDT (2802)**	55
						M5M5257A-25	◊ Mitsubishi	
						MCM6207-25	Motorola	
				28	5	**IMS1800-25 ◊**	**Inmos (2790)**	
						IDT7MC156-25	**◊‡ IDT (2803, 2840)**	
						IDT7MP156-25	**◊‡ IDT (2803, 2841)**	60
	35 nsF	CMOS	TS	24	5	CY7C197-35M	◊† Cypress	
						IDT71257L-35	**◊‡ IDT (2802)**	
						IDT71257S-35	**◊‡ IDT (2802)**	
						SR256K1-35C	Lattice	
						M5M5257A-35	◊ Mitsubishi	65
						MCM6207-35	Motorola	
				28	5	CY7C197-35C	◊ Cypress	
						IMS1800-35 ◊	**Inmos (2790)**	
						IMS1800-35M	**◊† Inmos (2790)**	
						IDT7MC156-35	**◊‡ IDT (2803, 2840)**	70
						IDT7MP156-35	**◊‡ IDT (2803, 2841)**	
		Module	TS	26	5	DPX82M56	‡ Dense-Pac	
		NMOS	TS	24	5	MT5C2561	MicronTech	
		TTL	OC	24	5	**MB81C81A**	**Fujitsu (2622)**	
			TS	24	5	MT5C2561-35	◊ MicronTech	75
	45	CMOS	TS	24	5	**DPS8181**	**◊ Dense-Pac (2578)**	
	45 nsF	CMOS	TS	24	5	CY7C197-45C	◊ Cypress	
						CY7C197-45M	◊† Cypress	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Static (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source
262144x1							
	45 nsF	CMOS	TS	24	5		(Cont'd)
						MB81C81-45	**Fujitsu (2622)**
						IDT71257L-45	**IDT (2802)**
						IDT71257L-45B †	**IDT (2802)**
						IDT71257S-45	**IDT (2802)**
						IDT71257S-45B †	**IDT (2802)**
						SR256K1-45C	Lattice
						M5M5257A-45	◊ Mitsubishi
				28	5	**IMS1800-45 ◊**	**Inmos (2790)**
						IMS1800-45M ◊†	**Inmos (2790)**
		Module	TS	30	5	**DPS8256**	**Dense-Pac (2579)**
		TTL	OC	24	5	**MB81C81**	**Fujitsu (2622)**
			TS	24	5	MT5C2561-45	◊ MicronTech
	55 nsF	CMOS	TS	24	5	**MB81C81-55**	**Fujitsu (2622)**
						IDT71257L-55	**IDT (2802)**
						IDT71257L-55B †	**IDT (2802)**
						IDT71257S-55	**IDT (2802)**
						IDT71257S-55B †	**IDT (2802)**
						SR256K1-55C	Lattice
						M5M5257A-55	◊ Mitsubishi
		TTL	TS	24	5	MT5C2561-55	◊ MicronTech
	65 nsF	Module	TS	26	5	DPS82M56	Dense-Pac
	70 nsF	CMOS	TS	24	5	**IDT71257L-70**	**IDT (2802)**
						IDT71257L-70B †	**IDT (2802)**
						IDT71257S-70	**IDT (2802)**
						IDT71257S-70B †	**IDT (2802)**
	75 nsF	Module	TS	40	5	**DPS166167**	**Dense-Pac (2578)**
	100 nsF	NMOS	TS	16	5	MT1259-10/883C	◊† MicronTech
	120 nsF	NMOS	TS	16	5	MT1259-12/883C	◊† MicronTech
	150 nsF	NMOS	TS	16	5	MT1259-15/883C	◊† MicronTech
	200 nsF	NMOS	TS	16	5	MT1259-20/883C	◊† MicronTech
262144x4							
	35 nsF	Module	TS	32	5	**DPS256M4 ◊**	**Dense-Pac (2580)**
						DPS2564	**Dense-Pac (2580)**
				40	5	**DPS1026**	**Dense-Pac (2579)**
						DPS1027	**Dense-Pac (2579)**
				42	5	**DPS1024**	**Dense-Pac (2579)**
	45 nsF	CMOS	TS	28	5	IDT71028L-45	◊‡ IDT
						IDT71028S-45	◊‡ IDT
		Module	TS	40	5	**IDT7M624S-45B †**	**IDT (2803, 2842)**
	55 nsF	CMOS	TS	28	5	IDT71028L-55	◊‡ IDT
						IDT71028S-55	◊‡ IDT
		Module	TS	40	5	**IDT7M624S-55**	**IDT (2803, 2842)**
						IDT7M624S-55B †	**IDT (2803, 2842)**
	65 nsF	CMOS Module	TS	48	5	**IDT7M624S-65**	**IDT (2803, 2842)**
						IDT7M624S-65B	**IDT (2803, 2842)**

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source
262144x4							(Cont'd)
	70 nsF	CMOS	TS	28	5	IDT71028L-70	◊‡ IDT
						IDT71028S-70	◊‡ IDT
	85 nsF	CMOS Module	TS	48	5	**IDT7M624S-85**	**IDT (2803, 2842)**
						IDT7M624S-85B	**IDT (2803, 2842)**
	90 nsF	CMOS	TS	28	5	IDT71028L-90	◊‡ IDT
						IDT71028S-90	◊‡ IDT
	100 nsF	CMOS	TS	20	5	MT4C4256-10/883C	◊† MicronTech
	120 nsF	CMOS	TS	20	5	MT4C4256-12/883C	◊† MicronTech
		CMOS Module	TS	32	5	HM66204-12	Hitachi
						HM66204L-12	Hitachi
	150 nsF	CMOS	TS	20	5	MT4C4256-15/883C	◊† MicronTech
		CMOS Module	TS	32	5	HM66204-15	Hitachi
						HM66204L-15	Hitachi
262144x6							
	45 nsF	Module	TS	44	5	**DPS2566**	**Dense-Pac (2580)**
262144x8							
	35 nsF	Module, VERSAPAC	TS	66	5	**DPS256X8V**	**Dense-Pac (2583)**
	45 nsF	Module	TS	44	5	**DPS2568**	**Dense-Pac (2580)**
				54	5	**DPS5124**	**Dense-Pac (2580)**
				64	5	**DPS6432**	**Dense-Pac (2580)**
	55	Module	TS	54	5	**DPS5125**	**Dense-Pac (2580)**
	70 nsF	CMOS	TTL	35	5	MH25608S1N-70	Mitsubishi
		Module	TS	64	5	**DPS42568**	**Dense-Pac (2580)**
	85 nsF	CMOS	TTL	35	5	MH25608S1N-85	Mitsubishi
	100 nsF	CMOS	TTL	35	5	MH25608S1N-10	Mitsubishi
						M525608S1N-10	Mitsubishi
	120 nsF	CMOS	TTL	35	5	MH25608S1N-12	Mitsubishi
						M525608S1N-12	Mitsubishi
	150 nsF	CMOS	TS	35	5	MH25608S1N-15	Mitsubishi
262144x9							
	45 nsF	Module	TS	44	5	**DPS2569**	**Dense-Pac (2580)**
262144x12							
	45 nsF	Module	TS	40	5	**DPS25612**	**Dense-Pac (2580)**
262144x16							
	45 nsF	CMOS	TS	48	5	**IDT7M4016-45**	**◊‡ IDT (2803)**
		Module	TS	44	5	**DPS25616**	**Dense-Pac (2580)**
				56	5	**DPS45129**	**Dense-Pac (2580)**
	150 nsF	Module	TS	48	5	**DPS45128**	**Dense-Pac (2580)**
	250 nsF	CMOS	TS	40	5	M5M23C400 ◊	Mitsubishi
262144x18							
	45 nsF	Module	TS	54	5	**DPS25618**	**Dense-Pac (2580)**
524288x2							
	25 nsF	Module	TS	44	5	**DP5122**	**Dense-Pac (2579)**
	75 nsF	Module	TS	44	5	DPS5122	Dense-Pac

MEMORY

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—RAMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
Static (Cont'd)								
524288x4								
	45 nsF	Module	TS	54	5	**DPS5124**	**Dense-Pac (2580)**	
524288x8								
	35 nsF	Module, VERSAPAC						
			TS	66	5	**DPS512X8V**	**Dense-Pac (2583)**	
	45 nsF	CMOS	TS	36	5	**IDT7MP4008-45**		
						◊‡ **IDT**	**(2803)**	
		Module	TS	44	5	**DPS25616**	**Dense-Pac (2580)**	
				56	5	**DPS45129**	**Dense-Pac (2580)**	5
				68	5	**DPS96122**	**Dense-Pac (2580)**	
	55 nsF	CMOS	TS	36	5	**IDT7MP4008-55**		
						◊‡ **IDT**	**(2803)**	
		Module	TS	64	5	**DPS5125**	**Dense-Pac (2580)**	
	150 nsF	Module	TS	48	5	**DPS45128**	**Dense-Pac (2580)**	
	200 nsF	CMOS	TS	32	5	M5M23C401	Mitsubishi	10
		CMOS Module						
			TS	32	5	RAMBO	Onset	
524288x9								
	45 nsF	Module	TS	54	5	**DPS25618**	**Dense-Pac (2580)**	
1048576x1								
	45 nsF	Module	TS	32	5	**DPS1024M1**	**Dense-Pac (2580)**	
						DPS10241	**Dense-Pac (2580)**	
	75 nsF	Module	TS	44	5	DPS5122	Dense-Pac	15
1048576x4								
	35 nsF	Module	TS	44	5	**DPS25616**	**Dense-Pac (2580)**	
1048576x1								
	25 nsF	Module	TS	44	5	**DP5122**	**Dense-Pac (2579)**	
	35 nsF	CMOS	TS	30	5	**IDT7MC4001-35**		
						◊‡ **IDT**	**(2803)**	
	45 nsF	CMOS	TS	28	5	IDT71027L-45		
						◊‡ IDT		
						IDT71027S-45		
						◊‡ IDT		20
				30	5	**IDT7MC4001-45**		
						◊‡ **IDT**	**(2803)**	
	55 nsF	CMOS	TS	28	5	IDT71027L-55		
						◊‡ IDT		
						IDT71027S-55		
						◊‡ IDT		
	70 nsF	CMOS	TS	28	5	IDT71027L-70		
						◊‡ IDT		
						IDT71027S-70		
						◊‡ IDT		25
	90 nsF	CMOS	TS	28	5	IDT71027L-90		
						◊‡ IDT		
						IDT71027S-90		
						◊‡ IDT		
	100 nsF	CMOS	TS	18	5	MT4C1024C-10/883C		
						◊† MicronTech		
	120 nsF	CMOS	TS	18	5	MT4C1024C-12/883C		
						◊† MicronTech		
	150 nsF	CMOS	TS	18	5	MT4C1024C-15/883C		
						◊† MicronTech		30
16384x116384x1								
	85 nsF	CMOS	TS	20	5	HS65C262RH		
						◊‡ Harris		
2097152x2								
	75 nsF	Module	TS	44	5	**DPS20482**	◊ **Dense-Pac (2580)**	
4194204x1								
	75 nsF	Module	TS	44	5	**DPS20482**	◊ **Dense-Pac (2580)**	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—ROMs

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
256x8	725 nsF	PMOS	-	24	± 12	NCM4230Z	NCM	
512x8	1.5 nsF	GaAs	TS		5	**14GM048**	**GigaBit (2690)**	
	500 nsF	CMOS	TS	24	10	**CDP1831**	**† GE/RCA (2644)**	
						CDP1832	**† GE/RCA (2644)**	
						HCMP1831	◊ Hughes	5
						HCMP1832	◊ Hughes	
						HMMP1831	◊† Hughes	
						HMMP1832	◊† Hughes	
	1000 nsF							
		CMOS	TS	24	5	**CDP1832C**	**† GE/RCA (2644)**	
						HCMP1831C	Hughes	10
						HCMP1832C	Hughes	
						HMMP1831C	◊† Hughes	
						HMMP1832C	◊† Hughes	
1024x8	90 nsF	TTL	OC	24	5	DM75S29	† National	
			TS	24	5	DM75S28	† National	15
	250 nsF	NMOS	TS	24	5	F68B308	Fairchild	
	350 ns *							
		CMOS	TS	24	10	**CDP1833**	**† GE/RCA (2644)**	
						CDP1834	**† GE/RCA (2644)**	
						HCMP1833	◊ Hughes	
						HCMP1834	◊ Hughes	20
						HMMP1833	◊† Hughes	
						HMMP1834	† Hughes	
	850 ns *							
		CMOS	TS	24	5	**CDP1833C**	**† GE/RCA (2644)**	
						CDP1834C	**† GE/RCA (2644)**	
		NMOS	TS	24	5	HCMP1833C	Hughes	25
						HCMP1834C	Hughes	
						HMMP1833C	◊† Hughes	
						HMMP1834C	† Hughes	
2048x4	60 nsF	NMOS	TS	24	5	82HM185C	GE/Intersil	
2048x8	—	Emulator (RAM w/Bat.)				GR2516	◊ LMS	30
		NMOS	—	16	5	SPR016	GIM	
	55 nsF	CMOS	TS	40	5	CA83C55A	Calmos	
	200 nsF	NMOS	TS	24	5	NCR2316-20	NCR	
	250 nsF	NMOS	TS	24	5	F35316-25	Fairchild	
						NCR2316-25	NCR	35
	300 nsF	CMOS	TS	24	5	**CDP1835C**	**† GE/RCA (2644)**	
		NMOS	TS	24	5	F35316-30	Fairchild	
						NCR2316-30	NCR	
	350 nsF	NMOS	TS	24	5	AM9218C	AMD	
						F3516-35	Fairchild	40
						F68316	Fairchild	
						RO3-9316C	◊ GIM	
	450 nsF	NMOS	TS	24	5	AM9218B	AMD	
						F3516-45	Fairchild	
						RO3-9316B	◊ GIM	45
						MM52116	National	
						MSM2916	OKI	
						M2316	SGS	
						TSU2316E	Toshiba	
4096x4	45 nsF	TTL	TS	20	5	MB7134H	Fujitsu	50
	55 nsF	TTL	TS	20	5	MB7134E	Fujitsu	
4096x8	—	Emulator (RAM w/Bat.)				GR2532	◊ LMS	
	200 nsF	NMOS	TS	24	5	**2332**	**◊ Commodore (2557)**	
						RO9432D	GIM	
						RO9433D	GIM	55
						NCR2332-20	NCR	
						NCR2333-20	NCR	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
4096x8	200 nsF	NMOS	TS	24	5			(Cont'd)
						R2332A-2	Rockwell	
						M2332	SGS	
						M2333	SGS	60
	250 nsF	NMOS	TS	24	5	AM9232D	AMD	
						AM9233D	AMD	
						RO9432DS	GIM	
						RO9433DS	GIM	
						NCR2332-25	NCR	65
						NCR2333-25	NCR	
						R2332A-25	Rockwell	
	300 nsF	CMOS	TS	24	5	883C23C32	† Sprague	
						883C23C33	† Sprague	
		NMOS	TS	24	5	AM9232C	AMD	70
						AM9233C	AMD	
						F3532-30	Fairchild	
						F3533-30	Fairchild	
						RO9432C	GIM	
						NCR2332-30	NCR	75
						NCR2333-30	NCR	
						MSM2932	OKI	
						R2332A-3	Rockwell	
	350 nsF	CMOS	TS	24	4–6.5	**CDM5332**	**GE/RCA (2644)**	
						CDM5333	**GE/RCA (2644)**	80
		NMOS	TS	24	5	F3532-35	Fairchild	
						F3533-35	Fairchild	
						F68A332	Fairchild	
						RO94132CS	GIM	
						RO9432CS	GIM	85
						S2333	◊ Gould	
						LH2331A	**Sharp (2994)**	
						LH2332A	**Sharp (2994)**	
	450 nsF	CMOS	TS	24	5	**LH5332**	**Sharp (2994)**	
		NMOS	TS	24	5	AM9233BC	AMD	90
						AM9233BM	† AMD	
						F3532-45	Fairchild	
						F3533-45	Fairchild	
						RO94132B	GIM	
						RO9432B	GIM	95
						RO9433B	GIM	
						MM52132	National	
						R2332A-45	Rockwell	
						LH2331	**Sharp (2994)**	
						LH2332	**Sharp (2994)**	100
						TSU333-2	Toshiba	
						UM2332	UMC	
				28	5	UM2333	UMC	
	500 nsF	NMOS	TS	24	5	F68332	Fairchild	
	500 μsF	CMOS	TS	24	4–6.5	**CDP1837C**	**GE/RCA (2644)**	105
8192x8	—	Emulator (RAM w/Bat.)				GR2364	LMS	
	150 nsF	CMOS	TS	24	5	NCR23C64-15	NCR	
				28	5	NCR23C65-15	NCR	
						R23C64-15	Rockwell	
	200 nsF	CMOS	TS	24	5	NCR23C64-20	NCR	110
				28	5	NCR23C65-20	NCR	
		Mask ROM						
			TS	28	5	**LH2369**	**◊ Sharp (2994)**	
		NMOS	TS	24	5	AM9264E	AMD	
						NCR2364-20	NCR	
						NCR2364S-20	NCR	115
						R2364A-2	Rockwell	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—ROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
							(Cont'd)	
8192x8	200 nsF	NMOS	TS	28	5	AM9265E	AMD	
						2364	**Commodore (2557)**	
						RO9864AD	GIM	
						RO9864D	GIM	
						S2364C-200 ◊	Gould	5
						NCR2365-20	NCR	
						NCR2365S-20	NCR	
						MSM3864	OKI	
						R2364B-2	Rockwell	
						UM2366-2	UMC	10
						UM2366A-2	UMC	
	250 nsF	CMOS	TS	24	5	**CDM5364**	**GE/RCA (2644)**	
						HN61365	Hitachi	
						HN61366	Hitachi	
						NCR23C64-25	NCR	15
				28	5	**CDM5365**	**GE/RCA (2644)**	
						HN61364	Hitachi	
						NCR23C65-25	NCR	
						R23C64-25	Rockwell	
						SMM6365	**S-MOS (3201)**	20
		Mask ROM						
			TS	28	5	LH2367 ◊	Sharp	
		NMOS	TS	24	5	AM9264D	AMD	
						F3564-25	Fairchild	
						M5M2365	Mitsubishi	
						NCR2364-25	NCR	25
						NCR2364S-25	NCR	
						R2364A-25	Rockwell	
						LH2362B ◊	**Sharp (2994)**	
						MKB36000-83 †	Thomson	
						MKB37000-84 †	Thomson	30
				28	5	AM9265D	AMD	
						F3565-25	Fairchild	
						RO9864ADS	GIM	
						RO9864DS	GIM	
						S2364B ◊	Gould	35
						S2364B-250 ◊	Gould	
						S2364I-250 ◊	Gould	
						M5M2364	Mitsubishi	
						NCR2364S-20	NCR	
						NCR2365-25	NCR	40
						NCR2365S-25	NCR	
						R2364B-25	Rockwell	
						M2365	SGS	
						LH2361 ◊	Sharp	
		TTL	TS	24	5	F3566-25	Fairchild	45
				28	5	F3568-25	Fairchild	
						F3569-25	Fairchild	
						F3570-25	Fairchild	
	300 nsF	CMOS	TS	24	5	HCMP23C64C ◊	Hughes	
						883C23C64 †	Sprague	50
				28	5	R23C64-3	Rockwell	
						883C23C65 †	Sprague	
		NMOS	TS	24	5	AM9264C	AMD	
						RO9464C	GIM	
						NCR2364-30	NCR	
						NCR2364S-30	NCR	55
							(Continued)	

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
							(Cont'd)	
8192x8	300 nsF	NMOS	TS	24	5	MSM2965	OKI	
						R2364A-3	Rockwell	
						M2364	SGS	
						MKB36000-84 †	Thomson	60
						MKB37000-85 †	Thomson	
				28	5	AM9265C	AMD	
						RO9864AC	GIM	
						RO9864C	GIM	
						S2364M-300 ◊†	Gould	65
						NCR2365-30	NCR	
						NCR2365S-30	NCR	
						R2364B-3	Rockwell	
						UM2366-1	UMC	
						UM2366A-1	UMC	70
	350 nsF	CMOS	TS	24	5	**SMM2364**	**S-MOS (3201)**	
				28	5	R23C64-35	Rockwell	
						SMM2365	**S-MOS (3201)**	
		NMOS	TS	24	5	F3564-35	Fairchild	
						F3565-35	Fairchild	75
						RO9464ACS	GIM	
						RO9464CS	GIM	
						LH2364A ◊	Sharp	
				28	5	RO9864ACS	GIM	
						RO9864CS	GIM	80
						S2364A ◊	Gould	
						S68A364	Gould	
						LH2363A ◊	Sharp	
		TTL	TS	24	5	F3566-35	Fairchild	
				28	5	F3568-35	Fairchild	85
						F3569-35	Fairchild	
						F3570-35	Fairchild	
	450 nsF	CMOS	TS	44	5	**LH5367**	**Sharp (2994)**	
		NMOS	TS	24	5	AM9264B	AMD	
						RO9464AB	GIM	90
						RO9464B	GIM	
						MM52164	National	
						UM2364	UMC	
				28	5	AM9265B	AMD	
						RO9864AB	GIM	95
						RO9864B	GIM	
						LH2363 ◊	Sharp	
						UM2366	UMC	
						UM2366A	UMC	
	2500 nsF	CMOS	TS	44	5	LH5366A	Sharp	100
	6000 nsF	CMOS	TS	44	5	LH5366	Sharp	
						LH5366S	Sharp	
12288x8								
	3000 nsF	CMOS	TS	44	5	LH5396A	Sharp	
	6000 nsF	CMOS	TS	44	5	LH5396	Sharp	
	15000 nsF	CMOS	TS	44	5	LH5396S	Sharp	105
13072x8	150 nsF	CMOS	TS	28	5	M5M231001	Mitsubishi	
16384x8	—	NMOS	TS	28	5	SPR128	GIM	
	120 nsF	CMOS	TS	28	5	RP23C128H	Panatech	
						RP23C129H	Panatech	
							(Continued)	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—ROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x8							(Cont'd)	
	150 nsF	CMOS	TS	28	5	NCR23C128-15	NCR	
						R23C128 †	Rockwell	
		NMOS	TS	28	5	NCR23128-15 ◊	NCR	
						NCR23128S-15 ◊	NCR	
	200 nsF	CMOS	TS	28	5	NCR23C128-20	NCR	5
						RP23C128E	Panatech	
						RP23C129E	Panatech	
		NMOS	TS	28	5	AM92128E	AMD	
						S23128C-200	Gould	
						NCR23128-20 ◊	NCR	10
						NCR23128S-20 ◊	NCR	
						UM23128-2	UMC	
						UM23128A-2	UMC	
	250 nsF	CMOS	TS	28	5	**24C128**	**Commodore (2557)**	
						CDM53128	**GE/RCA (2644)**	15
						HN613128	Hitachi	
						NCR23C128-25	NCR	
						RP23C128D	Panatech	
						RP23C129D	Panatech	
						SMM6313-25	**S-MOS (3201)**	20
						LH53127	Sharp	
		Mask ROM	TS	28	5	**LH23126**	**Sharp (2994)**	
		NMOS	TS	28	5	AM92128D	AMD	
						23128 ◊	**Commodore (2557)**	
						24128	**Commodore (2557)**	25
						RO9128DS	GIM	
						S23128B	Gould	
						NCR23128-25 ◊	NCR	
						NCR23128S-25 ◊	NCR	
						MSM38128A	OKI	30
						R23128-25	Rockwell	
						LH23127	Sharp	
						LH23128	Sharp	
	300 nsF	NMOS	TS	28	5	AM92128C	AMD	
						RO9128C	GIM	35
						S23128I-300	Gould	
						S23128M-300 †	Gould	
						NCR23128-30 ◊	NCR	
						NCR23128S-30 ◊	NCR	
						R23128-3	Rockwell	40
						UM23128-1	UMC	
						UM23128A-1	UMC	
	350 nsF	NMOS	TS	28	5	RO9128CS	GIM	
						S23128A ◊	Gould	
	450 nsF	NMOS	TS	28	5	AM92128B	AMD	45
						RO9128B	GIM	
						MSM38128	OKI	
						UM23128	UMC	
						UM23128A	UMC	

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
16384x8							(Cont'd)	
	2500 nsF	CMOS	TS	44	5	LH53129A	Sharp	50
	4000 nsF	CMOS	TS	28	5	LH53128	Sharp	
	6000 nsF	CMOS	TS	44	5	LH53129 ◊	Sharp	
32768x8								
	150 nsF	CMOS	TS	28	5	S63256D-150	Gould	
						NCR23C256-15	NCR	
						μPD23C256E-1	NEC	55
		NMOS	TS	28	5	S23256C ◊	Gould	
						NCR23256-15	NCR	
						NCR23256S-15	NCR	
						NCR23257-15	NCR	
						NCR23257S-15	NCR	60
						TMM23256	Toshiba	
	175 nsF	CMOS	TS	28	5	S63256I-175	Gould	
	200 nsF	CMOS	TS	28	5	S63256M-200 †	Gould	
						NCR23C256-20	NCR	
						μPD23C256E	NEC	65
						MSM53256	OKI	
						RP23C256E	Panatech	
						RP23C257E	Panatech	
						TC53257	Toshiba	
		NMOS	TS	28	5	AM92256E	AMD	70
						RO9256AD	GIM	
						RO9256D	GIM	
						NCR23256-20	NCR	
						NCR23256S-20	NCR	
						NCR23257-20	NCR	75
						NCR23257S-20	NCR	
						MSM38256A	OKI	
						RP23256E	Panatech	
						RP23257E	Panatech	
						23256A-20	Signetics	80
						UM23256-2	UMC	
						UM23256A-2	UMC	
	250 nsF	CMOS	TS	28	5	**24C256**	**Commodore (2557)**	
						MB83256-25	Fujitsu	
						CDM53256	**GE/RCA (2644)**	85
						HN613256	Hitachi	
						NCR23C256-25	NCR	
						RP23C256D	Panatech	
						RP23C257D	Panatech	
						SMM6325	**S-MOS (3201)**	90
						SMM6326	S-MOS	
						LH53257 ◊	**Sharp (2994)**	
		Mask ROM	TS	28	5	**LH23257**	**Sharp (2994)**	
		NMOS	TS	28	5	AM92256D	AMD	
						24256	**Commodore (2557)**	95
						RO9256ADS	GIM	
						RO9256DS	GIM	
						S23256B ◊	Gould	
						M5M23256	Mitsubishi	
						NCR23256-25	NCR	100
						NCR23256S-25	NCR	
						NCR23257-25	NCR	
						NCR23257S-25	NCR	
						MSM38256	OKI	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—ROMs (Cont'd)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
32768x8							(Cont'd)	
	250 nsF	NMOS	TS	28	5	RP23256D	Panatech	
						RP23257D	Panatech	
						MKB38000-84	† Thomson	
	300 nsF	NMOS	TS	28	5	AM92256C	AMD	
						RO9256AC	GIM	5
						RO9256C	GIM	
						S23256I-300 ◊	Gould	
						S23256M-300	◊† Gould	
						NCR23256-30	NCR	
						NCR23256S-30	NCR	10
						NCR23257-30	NCR	
						NCR23257S-30	NCR	
						MKB38000-85	† Thomson	
						UM23256-1	UMC	
						UM23256A-1	UMC	15
	350 nsF	NMOS	TS	28	5	RO9256ACS	GIM	
						RO9256CS	GIM	
	450 nsF	CMOS	TS	28	5	**SMM2325**	**S-MOS (3201)**	
						SMM2326	**S-MOS (3201)**	
		NMOS	TS	28	5	RO9256AB	GIM	20
						RO9256B	GIM	
						UM23256	UMC	
						UM23256A	UMC	
	800 nsF	CMOS	TS	44	5	LH53256 ◊	Sharp	
65536x8								
	100 nsF	NMOS	TS	28	5	**GM23512-10**	**GoldStar (2692)**	25
	150 nsF	CMOS	TS	28	5	S63512D-150	Gould	
						NCR23C512-15	NCR	
		NMOS	TS	28	5	**GM23512-15**	**GoldStar (2692)**	
						VT23512-15 ◊	**VLSI Tech (3362)**	
	200 nsF	CMOS	TS	28	5	S63512C-200	Gould	30
						NCR23C512-20	NCR	
						µPD23C512E	NEC	
		NMOS	TS	28	5	**GM23512-20**	**GoldStar (2692)**	
						VT23512-20 ◊	**VLSI Tech (3362)**	
	250 nsF	CMOS	TS	28	5	NCR23C512-25	NCR	35
		NMOS	TS	28	5	RP23512D	Panatech	
						VT23512-25 ◊	**VLSI Tech (3362)**	
	300 nsF	NMOS	TS	28	5	**24512**	**Commodore (2557)**	
						RP23512B	Panatech	
	3000 nsF	CMOS	TS	24	5	LH53512 ◊	Sharp	40
65536x16								
	100 nsF	CMOS	TS	28	5	MK3901M-10	Thomson	
103680x12								
	250 nsF	CMOS	TS	40	5	LH53012 ◊	Sharp	
131072x1								
	250	CMOS	TS	28	5	MSM531000	OKI	
131072x8								
	100 nsF	CMOS	TS	28	5	**SMM4310**	**S-MOS (3201)**	
						MK3901M-12	Thomson	45

(Continued)

Organization	Access Time (Max)	Type	Output	No. Pins	Supply Voltage, V	Device	Source	Line
131072x8							(Cont'd)	
	120 nsF	NMOS	TS	28	5	**VT231025-12**	**VLSI Tech (3364)**	
	150 nsF	NMOS	TS	28	%5	**VT231025-15**	**VLSI Tech (3364)**	
					5	**VT231024**	**VLSI Tech (3363)**	
						VT231024-15	**VLSI Tech (3363)**	
	200 nsF	CMOS	TS	28	5	**TC531000**	**Toshiba (3305)**	50
		NMOS	TS	28	5	**GM231000-20**	**GoldStar (2692)**	
						GM231024-20	**GoldStar (2692)**	
						VT231024-20 †	**VLSI Tech (3363)**	
						VT231025-20	**VLSI Tech (3364)**	
	250 ns	NMOS	TS	28	5	M5M231000	Mitsubishi	55
	250 nsF	CMOS	TS	28	5	CDM53100	GE/RCA	
						HN62301S-25	Hitachi	
						M5M23C100	Mitsubishi	
						NCR23C1000	NCR	
						µPD23C1000 ◊	NEC	60
						SMM63100C	S-MOS	
				40	5	µPD23C2000 ◊	NEC	
		Mask ROM						
			TS	28	5	**LH231000**	**Sharp (2994)**	
						LH531000	**Sharp (2994)**	
		NMOS	TS	28	5	**GM231000-25**	**GoldStar (2692)**	65
						GM231024-25	**GoldStar (2692)**	
						RP231024D	Panatech	
						VT231024-25	**VLSI Tech (3363)**	
						VT231025-25	**VLSI Tech (3364)**	
	300 nsF	NMOS	TS	28	5	RP231024B	Panatech	70
	350 nsF	CMOS	TS	28	5	HN62301	Hitachi	
131072x16								
	200 nsF	CMOS	TS	40	5	HN62402-20	Hitachi	
262144x8								
	150 nsF	CMOS	TS	32	5	**TC532000-15**	**Toshiba (3305)**	
	200 nsF		TTL	32	12.5	MB832000	Fujitsu	
		CMOS	TS	40	5	HN62302-20	Hitachi	75
	250 nsF	NMOS	TS	32	5	**LH532100**	**Sharp (2994)**	
				40	5	**LH532000**	**Sharp (2994)**	
						LH534000	**Sharp (2994)**	
262144x16								
	250 nsF	CMOS	TS	40	5	µPD23C4000	NEC	
	250 nsF		TTL	40	12.5	MB834100	Fujitsu	80
524288x8								
	200 nsF	CMOS	TS	32	5	M5M23C401	Mitsubishi	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

Bits Per Register	No. of Reg.	Operation	Process	Frequency (Hz - Spec)	Supply Voltage, V	Device	Source	Line
Dynamic								
100	2	SS	PMOS	2.0 M	±5	AM1506	AMD	
						AM1507	AMD	
256	4	SS	PMOS	5.0 M	±5	AM1402AC	AMD	
						AM1402AM	† AMD	
				10.0 M	±5	AM2802C	AMD	5
						AM2802M	† AMD	
455	2	SS	CCD	20.0 M	17	CCD321A	◊ Fairchild	
512	2	SS	PMOS	5.0 M	±5	AM1403AC	AMD	
						AM1403AM	† AMD	
				10.0 M	±5	AM2803C	AMD	10
						AM2803M	† AMD	
1024	1	SS	PMOS	5.0 M	±5	AM1404AC	AMD	
						AM1404AM	† AMD	
				10.0 M	±5	AM2804C	AMD	
						AM2804M	† AMD	15
	2	SS	NMOS	2.0 M	5	AM9401C	AMD	
			PMOS	2.0 M	−12,5	MM4025	† AMD	
						MM4026	† AMD	
2048	1	SS	PMOS	2.0 M	−12,5	MM4027	† AMD	
				6.0M	−11,5	MIC2827	Micrel	20
4096	4	PP	CCD	5.0 M	±5,12	CCD460	Fairchild	
65536	1	SS	CCD	25 M	±5,12	F464	Fairchild	
Static								
1–134	4	SS	NMOS	1 M	5	SR5015	SMC	
4	PP	CMOS		2–6		MC54HC194	† Motorola	
						MC54HC195	† Motorola	25
						MC74HC194	◊ Motorola	
						MC74HC195	◊ Motorola	
	1	PP	Bipolar					
				3 M	12	375A/C	TeledyneS	
					15	375B/M	TeledyneS	
				6 M	5	DM54L95	† National	30
				15 M	5	93L00M	† Fairchild	
						N8271	**Signetics (3022)**	
						S8271	† Signetics	
				20 M	5	RM8270	† Raytheon	
						RM8271	† Raytheon	35
				25 M	5	5495	◊† Fairchild	
						7495	Fairchild	
						HD74LS194A	Hitachi	
						DM54194	† National	
						DM5495	† National	40
						DM74194	National	
						DM7495	◊ National	
						54194	† Signetics	
						5495A	† Signetics	
						74LS95B	**Signetics (3003)**	45
						74194	**Signetics (3003)**	
						7495A	**Signetics (3003)**	
						SN54LS194A	◊† TI	
						SN54LS95B	◊† TI	
						SN54178	† TI	50
						SN54179	† TI	
						SN5495A	† TI	
						SN74LS194A	◊ TI	
						SN74LS95B	TI	

(Continued)

Bits Per Register	No. of Reg.	Operation	Process	Frequency (Hz - Spec)	Supply Voltage, V	Device	Source	Line
4	1	PP	Bipolar					
				25 M	5			

(Cont'd)

SN74194	TI		55
SN7495A	TI		
30 M	5	54LS194A	Fairchild
		54LS195A	† Fairchild
		54LS295A	◊† Fairchild
		54LS395	† Fairchild 60
		54LS95B	† Fairchild
		74LS194A	Fairchild
		74LS195A	◊ Fairchild
		74LS295A	◊ Fairchild
		74LS395	◊ Fairchild 65
		74LS95B	◊ Fairchild
		9300C	Fairchild
		9300M	† Fairchild
		HD74LS195A	Hitachi
		SN54LS194A	† Motorola 70
		SN54LS195A	† Motorola
		SN54LS295A	† Motorola
		SN54LS395	† Motorola
		SN54LS95B	† Motorola
		SN74LS194A	Motorola 75
		SN74LS195A	Motorola
		SN74LS295A	Motorola
		SN74LS395	Motorola
		SN74LS95B	Motorola
		DM54195	† National 80
		DM74195	National
		DM8300	National
		DM9300	◊† National
		T54LS395	† SGS
		T74LS195A	◊ SGS 85
		T74LS395	SGS
		54LS195A	† Signetics
		74LS195A	**Signetics (3003)**
		74195	**Signetics (3003)**
		SN54LS195A	◊† TI 90
		SN54LS295B	◊† TI
		SN54LS395A	◊† TI
		SN54195	† TI
		SN74LS195A	◊ TI
		SN74LS295B	TI 95
		SN74LS395A	TI
		SN74195	TI
35 M	5	MC4012	Motorola
		MC4312	† Motorola
70 M	5	74S194	Fairchild 100
		93S00C	Fairchild
		93S00M	† Fairchild
		74S194	**Signetics (3003)**
		74S195	**Signetics (3003)**
		SN54S194	† TI 105
		SN54S195	† TI
		SN74S194	TI
		SN74S195	TI
150 M	−5.2	F10000C	Fairchild
		MC10141	Motorola 110

(Continued)

MEMORY

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

MEMORY—Shift Registers (Cont'd)

Static (Cont'd)

Bits Per Register	No. of Reg.	Operation	Process	Frequency (Hz - Spec)	Supply Voltage, V	Device	Source	Line
4	1	PP	Bipolar					(Cont'd)
				150 M	−5.2	MC10541 ◊†	Motorola	
						10141	**Signetics (3021)**	
			CMOS	2 M	3–15	F40194BM †	Fairchild	
						F40195BM †	Fairchild	
						F4035BM †	Fairchild	5
						CD4035BE	**GE/RCA (2634)**	
						MC14035BC	Motorola	
						CD4035BC	National	
						MM54C195 †	National	
						883C4035B †	Sprague	10
				3 M	3–15	F40194BC	Fairchild	
						F40195BC	Fairchild	
						F4035BC	Fairchild	
						CD4035B	**† GE/RCA (2634)**	
						CD4035B	‡ Micrel	15
						MC14035BA †	Motorola	
						CD4035BM †	National	
						MM74C195	National	
				4.5 M	3–15	MC14194BA †	Motorola	
				6.5 M	3–15	MM54C95 †	National	20
						MM74C95 ◊	National	
			GaAs	1.3G	−3.5, +4.5	**HMD12141-1**	**Harris (2726)**	
		PS	Bipolar					
				10 M	5	5494	Signetics	
						7494	**Signetics (3003)**	
						SN5494 †	TI	25
		SP	Bipolar					
				325 M	−5.2	MC1694 †	Motorola	
		SS		0.5 M	15	MC686	Motorola	
	2	SP	CMOS	2.5 M	3–15	F4015BC	Fairchild	
						CD4015BE	**GE/RCA (2634)**	
						MC14015BC	Motorola	30
						CD4015A	National	
				3 M	3–15	F4015BM †	Fairchild	
						CD4015B	**‡ GE/RCA (2634)**	
						CD4015B	‡ Micrel	
						883C4015B †	Sprague	35
					3–18	MC14015BA †	Motorola	
5	1	PP	Bipolar					
				10 M	5	DM5496 †	National	
						DM7496 ◊	National	
						54LS96	Signetics	
						5496 †	Signetics	40
						74LS96	**Signetics (3003)**	
						7496	**Signetics (3003)**	
						SN5496 †	TI	
						SN7496	TI	
				25	5	SN54LS96 †	TI	45
						SN74LS96	TI	
	4	SS	CMOS	2 M	3–15	F4006BC	Fairchild	
						CD4006BE	**GE/RCA (2634)**	
				2.5 M	3–15	F4006M †	Fairchild	
						CD4006A	National	50

(Continued)

Bits Per Register	No. of Reg.	Operation	Process	Frequency (Hz - Spec)	Supply Voltage, V	Device	Source	Line
5	4	SS	CMOS					(Cont'd)
				3 M	3–15	883C4006B †	Sprague	
				4 M	5–15	MC14006BC	Motorola	
				7 M	5–15	MC14006BA †	Motorola	
8	PS		CMOS	2–6		MC54HC589 †	Motorola	
						MC74HC589	Motorola	55
						MC74HC597	Motorola	
	SP		CMOS	2–6		MC54HC164 †	Motorola	
						MC54HC595 †	Motorola	
						MC74HC164	Motorola	
						MC74HC595	Motorola	60
	SS/PS		CMOS	2–6		MC54HC165 †	Motorola	
						MC74HC165	Motorola	
	1	PP	Bipolar					
				15 M	5	DM7546 †	National	
				25 M	5	DM54198 †	National	
						DM54199 †	National	65
						DM74198	National	
						DM74199	National	
						74199	**Signetics (3003)**	
						SN54198 †	TI	
						SN54199 †	TI	70
						SN74198	TI	
						SN74199 †	TI	
				35 M	5	AM25LS23C	AMD	
						AM25LS23M †	AMD	
						SN54LS323 †	AMD	75
						SN74LS323	AMD	
						54LS299 ◊†	Fairchild	
						54LS323 †	Fairchild	
						74LS299 ◊	Fairchild	
						74LS323	Fairchild	80
						SN54LS299 ◊†	TI	
						SN54LS323 ◊†	TI	
						SN74LS323	TI	
				50 M	5	SN54S299 †	TI	
						SN74S299	TI	85
			CMOS	2.5 M	3–18	MC14034BC	Motorola	
				3 M	3–15	**CD4034B**	**† GE/RCA (2634, 2636)**	
						CD4034B	‡ Micrel	
						CD4034BC	National	
						CD4034BM	National	90
						883C4034B †	Sprague	
						TC4034B	**Toshiba (3308)**	
					3–18	MC14034BA	Motorola	
		PS	Bipolar					
				14 M	5	DM7590 †	National	
						DM8590	National	95
				20 M	5	54165 †	Fairchild	
						74165	Fairchild	
						DM54165 †	National	
						DM74165	National	
						54165 †	Signetics	100
						74165	**Signetics (3003)**	
						SN54165 †	TI	
						SN74165	TI	
				25 M	5	54LS165 †	Fairchild	
						74LS165 ◊	Fairchild	105
						74166	Fairchild	
						HD74LS165A	Hitachi	

(Continued)

† Military Temperature Range (−55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—Shift Registers (Cont'd)

Static (Cont'd)

Bits Per Register	No. of Reg.	Operation	Process	Frequency (Hz - Spec)	Supply Voltage, V	Device	Source	Line
8	1	PS	Bipolar					
				25 M	5		(Cont'd)	
						SN54LS165	† Motorola	
						SN74LS165	Motorola	
						SN74LS166	Motorola	
						DM54166	† National	
						DM74LS166	National	5
						DM74166	National	
						54166	† Signetics	
						74166	**Signetics (3003)**	
						SN54LS165A	◊† TI	
						SN54LS166A	◊† TI	10
						SN54166	† TI	
						SN74LS165A	TI	
						SN74LS166A	TI	
						SN74166	TI	
			CMOS	1 M	3–15	F4014BC	Fairchild	15
						F4021BC	Fairchild	
				2.5 M	3–15	**CD4014BE**	**GE/RCA (2634)**	
						CD4021BE	**GE/RCA (2634)**	
						MC14021BC	Motorola	
						CD4014A	National	20
						CD4021A	National	
				3 M	3–15	F4014BM	† Fairchild	
						F4021BM	† Fairchild	
						CD4014B	**† GE/RCA (2634)**	
						CD4021B	**‡ GE/RCA (2634)**	25
						CD4014B	‡ Micrel	
						MC14014BA	† Motorola	
						MC14021BA	† Motorola	
						883C4014B	† Sprague	
						883C4021B	† Sprague	30
				5 M	3–15	MM54C165	† National	
						MM74C165	National	
		SP	Bipolar					
				6 M	5	DM54L164A	† National	
				25 M	5	54LS164	† Fairchild	
						54164	◊† Fairchild	35
						74LS164	◊ Fairchild	
						74164	Fairchild	
						HD74LS164	Hitachi	
						SN54LS164	† Motorola	
						SN74LS164	Motorola	40
						DM54LS164	◊† National	
						DM54164	† National	
						DM74LS164	National	
						DM74164	National	
						DM7570	† National	45
						DM8570	National	
						DN74LS164	◊ Panasonic	
						54LS164	◊† Signetics	
						54164	† Signetics	
						74LS164	**Signetics (3003)**	50
						74164	**Signetics (3003)**	
						SN54LS164	◊† TI	
						SN54164	† TI	

(Continued)

Bits Per Register	No. of Reg.	Operation	Process	Frequency (Hz - Spec)	Supply Voltage, V	Device	Source	Line
8	1	SP	Bipolar					
				25 M	5		(Cont'd)	
						SN74164	TI	
						TD3503	Toshiba	55
				350 M	–5.2	F10041	◊ Fairchild	
			CMOS	5.5 M	3–15	MM54C164	† National	
						MM74C164	National	
		SS	Bipolar					
				4 M	5	DM54L91	† National	
				10 M	5	MC5491A	† Motorola	60
						SN5491A	† National	
						SN7491A	National	
						5491	† Signetics	
						7491	**Signetics (3003)**	
						SN54LS91	† TI	65
						SN5491A	† TI	
						SN74LS91	TI	
			CMOS	2.5 M	3–15	**CD4094B**	**† GE/RCA (2634)**	
						CD4094BE	**GE/RCA (2634)**	
						CD4094B	‡ Micrel	70
						MC14094BA	† Motorola	
						MC14094BC	Motorola	
						883C4094B	† Sprague	
						TC4094B	**Toshiba (3308)**	
	2	SS	Bipolar					
				10 M	5	93L28C	Fairchild	75
						93L28M	† Fairchild	
				20 M	5	9328C	Fairchild	
						9328M	† Fairchild	
10	1	PP	Bipolar					
				25 M	5	RM8274	† Raytheon	
						S8274	† Signetics	80
		SP	Bipolar					
				25 M	5	RM8273	† Raytheon	
						N8273	**Signetics (3022)**	
						S8273	† Signetics	
16	1	S/SP	Bipolar					
				20M	5	54F676	◊ Fairchild	
						74F673	◊ Fairchild	85
						74F675	◊ Fairchild	
						74F676	◊ Fairchild	
						74F673	**Signetics (3024)**	
						74F674	**Signetics (3024)**	
						74F675	Signetics	90
						74F676	**Signetics (3024)**	
		SP	NMOS	3.0M	5	TSC9403	TeledyneS	
						TSC9404	TeledyneS	
16–128	1	SS	CMOS	1.5 M	3–15	MC14562BC	◊ Motorola	
				3 M	3–15	MC14562BA	◊† Motorola	95
18–3	8	PP	Bipolar					
				20M	5	TDC1011	TRW-LSI	
30	1	SS	CMOS	1 M	3–15	MD4330B	Mitel	
64	1	SS	CMOS	1 M	3–15	F4031BC	Fairchild	
						CD4031BE	**GE/RCA (2634)**	
				2 M	3–15	F4031BM	† Fairchild	100
						CD4031B	**† GE/RCA (2634)**	
						CD4031B	‡ Micrel	
				2.7 M	3–15	F4557BM	† Fairchild	
					3–16	**MC1455BC**	**Motorola (2958)**	

(Continued)

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

MEMORY—Shift Registers (Cont'd)

Bits Per Register	No. of Reg.	Oper-ation	Process	Frequency (Hz - Spec)	Supply Voltage, V	Device	Source	Line
Static							**(Cont'd)**	
64	1	SS	CMOS				(Cont'd)	
				4 M	3–15	CD4031BC	National	
						CD4031BM	† National	
				5 M	3–15	F4557BC	Fairchild	
					3–18	MC14557BA		
							◊† Motorola	
				10 M	3–16	MS612	RTC	5
	2	SS	CMOS	4 M	3–15	**CD4517BE**	**† GE/RCA (2634)**	
						MC14517BC	Motorola	
				5 M	3–15	**CD4517BE**	**† GE/RCA (2634)**	
						MC14517BA	† Motorola	
						883C4517B	† Sprague	10
			TTL	30 M	5	TDC1005	† TRW-LSI	
						TDC1005	TRW-LSI	
	4	SS	CMOS	4 M	4.5–12.5			
						F4731BC	◊ Fairchild	
						F4731BM	◊† Fairchild	
80	4	SS	NMOS	1 M	5	SR5015-80	SMC	15
			PMOS	1.5 M	–12,5	AM3347	AMD	
				2.5 M	–12,5	AM2847M	† AMD	
						F2847LM	† Fairchild	
						F2847M	† Fairchild	
				3 M	–12,5	AM2847C	AMD	20
						F2847	Fairchild	
						F2847L	Fairchild	
				4 M	–12,5	F3357M	† Fairchild	
81	4	SS	NMOS	1 M	5	SR5015-81	SMC	
						SR5018	SMC	25
100	2	SS	PMOS	10M	–30	NCM4231Z	† NCM	
128	1	SS	CMOS	5 M	12	MS625	RTC	
	2	SS	PMOS	1 M	–12,5	MK1002	AMD	
				2 M	–12,5	TMS3114	AMD	
	4	SS	PMOS	2.5 M	–12,5	AM2855	AMD	30
						AM4055	† AMD	
						AM5055	AMD	
133	4	SS	NMOS	1 M	5	SR5015-133	SMC	
						SR5017	SMC	
256	1	SS	TTL	30 M	5	TDC1006	† TRW-LSI	35
						TDC1006	TRW-LSI	
	2	SS	PMOS	2.5 M	–12,5	AM2856	AMD	
						AM4056	† AMD	
						AM5056	AMD	
480	2	PP	NMOS	3.0M	5	MIC2535	Micrel	40
512	1	SS	PMOS	2.5 M	–12,5	AM2857C	AMD	
						AM4057	† AMD	
						AM5057	AMD	
	2	PP	NMOS	3.0M	5	MIC2534	Micrel	
1024	1	SS	NMOS	1.5M	5	MIC2533	Micrel	45
				2.0M	5	MIC2833	Micrel	
						MIC2833M	† Micrel	
				3.0M	5	MIC2833A	Micrel	
				4.0M	5	MIC2833B	Micrel	
				5.0M	5	MIC2833C	Micrel	50
			PMOS	1.5 M	–12,5	AM2533	AMD	
				2 M	–12,5	AM2833C	AMD	
						AM2833M	† AMD	
290560	1	SS	Bubble		—	H4701B	◊ Hitachi	

† Military Temperature Range (–55° to 125°C) ‡ High Radiation Resistance *Typical Value °Macrocell ◊ Available in Surface Mount Package

Bold face indicates additional data is provided on the page noted.

© IC MASTER 1988

ALTERNATE SOURCE DIRECTORY

The Alternate Source Directory is an industry-wide cross reference of devices that manufacturers claim are pin-for-pin and functional equivalents to IC's made by other firms. It contains over 113,000 cross references.

The second column of this Alternate Source Directory shows devices that are replacements for those in the first column. Devices listed in **BOLD FACE** type have technical data in the Master Selection Guides. This information begins on the page listed to the right of the **BOLD FACE** part numbers. Products preceded by a ♦ have been discontinued by the manufacturer. This section does include discontinued devices that are not listed in the Master Selection Guides; in order to maintain this list within some reasonable bounds, the A and B suffixes indicating improved versions generally have been dropped.

One of the difficulties with any cross reference is that devices meant to be alternates do not necessarily perform the same in all circuits. Thus, it will be necessary for you to check specifications, or even check circuit performance before deciding which alternates are right for you. But if you do not find the devices you need here, it may be possible to find additional alternates by locating the device in the Master Selection Guides. Particularly for digital circuits, the other products grouped with it will normally offer similar or identical performance.

©IC MASTER 1988

Advanced Linear Devices

Manufacturer Device	Replacement Source	Device	IC Master Page
ALD1502	AdvLinear	ALD1504	
		ALD555	
		ALD555-1	
	GE/Intersil	**ICM7555**	**(2670)**
		ICM7555M	**(2670)**
	Maxim	ICM7555	
	NEC	μPD555	
	TI	TLC555	
ALD1504	AdvLinear	ALD1502	
		ALD555	
		ALD555-1	
	GE/Intersil	**ICM7555**	**(2670)**
		ICM7555M	**(2670)**
	Maxim	ICM7555	
	NEC	μPD555	
	TI	TLC555	
ALD2301	TI	TLC372	
ALD2502	AdvLinear	ALD2504	
	GE/Intersil	**ICM7556**	**(2670)**
		ICM7556M	**(2670)**
	Maxim	ICM7556	
	NEC	μPD556	
	TI	TLC552C	
		TLC552M	
		TLC556C	
		TLC556M	
ALD2504	AdvLinear	ALD2502	
	GE/Intersil	**ICM7556**	**(2670)**
		ICM7556M	**(2670)**
	Maxim	ICM7556	
	NEC	μPD556	
	TI	TLC552C	
		TLC552M	
		TLC556C	
		TLC556M	
ALD555	AdvLinear	ALD1502	
		ALD1504	
		ALD555-1	
	GE/Intersil	**ICM7555**	**(2670)**
		ICM7555M	**(2670)**
	Maxim	ICM7555	
	NEC	μPD555	
	TI	TLC555	
ALD555-1	AdvLinear	ALD1502	
		ALD1504	
		ALD555	
	GE/Intersil	**ICM7555**	**(2670)**
		ICM7555M	**(2670)**
	Maxim	ICM7555	
	NEC	μPD555	
	TI	TLC555	

Advanced Micro Devices

Manufacturer Device	Replacement Source	Device	IC Master Page
26L631	AMD	26LS31	
	AT&T	**41LG**	**(2492)**
	Motorola	26LS31	
	National	26LS31	
26LS31	AMD	26L631	
	AT&T	**41LG**	**(2492)**
	Motorola	26LS31	
	National	26LS31	
26LS32	**AT&T**	**41LF**	**(2490)**
	Motorola	26LS32	
	National	26LS32	
27256-25	Fujitsu	MBM27256-25	
	GIM	27256-25	
	Hitachi	HN27256-25	
	Intel	27256-25	
♦ 27PS181	**Raytheon**	**29633**	**(2985)**
27PS185	**Raytheon**	**29653**	**(2985)**
27PS191	**Raytheon**	**29683**	**(2985)**
27S185	AMD	AM2725S291	
		AM27S185	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**
	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
27S19	AMD	AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
27S19	MMI		(Cont'd)
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
27S191	AMD	AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
27S21	AMD	AM27S21	
	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
27S29	Fairchild	LF157A	
	National	545472	
		74S472	
		LF157A	
		LF351	
		LF353	
	PMI	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
27S41	AMD	AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
27S43	AMD	AM27S43	
	Fujitsu	MB7142	
	MMI	53S3281	
		63S3281	
	National	77S321	
		87S321	
		DM87S321	
	Raytheon	**29671**	**(2985)**
	Waferscale	**WS57C43**	**(3376)**
27S49	AMD	AM27S49	
	Cypress	**CY7C264**	**(2565)**
	Fairchild	32Z565	
		93Z565	
		93Z665	
	Fujitsu	7144H	
		MB7144	
	Raytheon	29VP864	
28C256	Atmel	28C256	
	GIM	28CP256A	
	SEEQ	28256	
		28C256	**(2991)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
28C256			(Cont'd)
	Xicor	**X28256**	**(3393, 3412)**
		X28C256	**(3394, 3413)**
2910A	Cypress	CY2910A	
29516/7	AMD	29516A/7	
	AD	ADSP1016/7A	
	Cypress	**CY7C516/7**	**(2569)**
	IDT	**IDT7216/7**	**(2806, 2832)**
	MMI	67C7016/7	
	Sprague	UCN4801	
		UCN5801	**(3203)**
	Weitek	WTL1016/7	
		WTL2516/7D	
29516A/7	AMD	29516/7	
	AD	ADSP1016/7A	
	Cypress	**CY7C516/7**	**(2569)**
	IDT	**IDT7216/7**	**(2806, 2832)**
	MMI	67C7016/7	
	Sprague	UCN4801	
		UCN5801	**(3203)**
	Weitek	WTL1016/7	
		WTL2516/7D	
29520/1	AMD	29520/1A	
	AD	AD3445	
	Hitachi	HA1393	
	Maxim	AD3554	
	MMI	29C520/1	
	Sprague	ULN3793	
29520/1A	AMD	29520/1	
	AD	AD3445	
	Hitachi	HA1393	
	Maxim	AD3554	
	MMI	29C520/1	
	Sprague	ULN3793	
55173	TI	SN55173	
♦ 715	Fairchild	μA715	
♦ 747	Fairchild	μA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	μPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
♦ 747	Raytheon	RC747	
		RM747	
♦ 747	Signetics	μA747	
	TeledyneS	747	
	TI	μA747	
		μA747M	
80186	Fujitsu	80186	
	Intel	80186	
	IMI	IMI6080	
	Siemens	80186	
80188	Fujitsu	80188	
	Intel	80188	
	Siemens	80188	
♦ 8035	Intel	8035	
	National	INS8035	
	NEC	μPD8035	
	Signetics	SCN8035	
	Toshiba	**TMP8035**	**(3306)**
♦ 8041	Intel	8041A	
	NEC	μPD8041A	
♦ 8048	Intel	8048	
	National	INS8048	
	NEC	μPD8048	
	Signetics	SCN8048	
	Toshiba	**TMP8048**	**(3306)**
♦ 8085	AMD	8085A	
	Calmos	**CA80C85**	**(2553)**
	Devtek	DS8085	
	Intel	8085	
		8085A	
♦ 8085	NEC	μPD8085	
	OKI	MSM8085	
	Toshiba	**TMP8085**	**(3306)**
		TMP8085A	**(3306)**
8085A	**Calmos**	**CA80C85**	**(2553)**
	Devtek	DS8085	
	Intel	8085	
		8085A	
	NEC	μPD8085	
	OKI	MSM8085	
	Toshiba	**TMP8085**	**(3306)**
		TMP8085A	**(3306)**

Manufacturer Device	Replacement Source	Device	IC Master Page
8088	Fujitsu	MBL8088	
	Intel	8088	
	Matra-Harris	8088	
8155	Harris	HS81C55	
	Intel	8155	
	NEC	μPD8155	
	Toshiba	**TMP8155**	**(3306)**
8156	Harris	HS81C56	
	Intel	8156	
	NEC	μPD8156	
♦ 8224	Intel	8224	
	National	DP8224	
		INS8224	
8228	Intel	8228	
	National	DP8228	
		INS8228	
	NEC	μPB8228	
	TI	SN74S428	
		TIM8228	
8237	**Calmos**	**CA82C37**	**(2553)**
	Harris	**82C37**	**(2731, 2768, 4249)**
	Intel	8037	
	NEC	μPD8237	
	OKI	MSM82C37	
8251	Intel	P8251	
	National	INS8251	
	NEC	μPD8251A	
	OKI	MSM82C51A	
	S-MOS	SMC82C51AC	
	SMC	COM8251A	
	Toshiba	**TMP8251**	**(3306)**
8253	Intel	8253	
	National	INS8253	
	NEC	μPD8253	
	Toshiba	**TMP8253**	**(3306)**
8255	**Calmos**	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
♦ 8257	Intel	8257	
	NEC	μPD8257	
8259	**Calmos**	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
8279-5	Intel	8279	
	NEC	μPD8279-5	
♦ 8284	**Calmos**	**CA82C84**	**(2553)**
	Fujitsu	MBL8284	
	Harris	**82C84**	**(2734, 2768, 4249)**
		82C84A	**(2734, 2768, 4249)**
♦ 8284	Intel	8284	
		82C84	
		82C84A	
♦ 8284	NEC	μPB8284	
		μPD71084	
		μPD8284	
♦ 8284	OKI	MSM82C84	
8287	**Harris**	**82C87H**	**(2733, 2768)**
	Intel	8287	
		82C87	
	MMI	82C87	
	NEC	μPD8287	
		μPS71087	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Advanced Micro Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
8287			(Cont'd)
	OKI	82C87	
8288	**Calmos**	**CA82C88**	**(2553)**
	Fujitsu	MBL8288	
	Harris	**82C88**	**(2734, 2768, 4249)**
	Intel	8288	
		82C88	
	NEC	μPB8288	
		μPD71088	
		μPD8288	
	OKI	82C88	
		MSM82C88	
♦ 8304	AMD	DP8304	
	Fujitsu	MBL8286	
	Harris	**82C86H**	**(2733, 2768)**
	Intel	8286	
		82C86	
♦ 8304	MMI	82C86	
	National	DP8304	
	NEC	μPB8286	
		μPD71086	
♦ 8304	OKI	82C86	
♦ 9264	GIM	RO3-9364	
	Hitachi	HN48364	
	Mitsubishi	M58334	
	National	MM52164	
	NEC	μPD2364	
	Rockwell	R2364A	
	Signetics	2664	
		26S64	
♦ 9280	Fujitsu	MB7118	
	Signetics	N82LS135	
	TI	28L22	
99C60	AMD	AM99CL68	
	Cypress	**CY7C170**	**(2562)**
	Motorola	MCM6270	
	Performance	P4C170	
	Thomson	MK4170	
		MK41H78	
	Toshiba	TMM2078	
		TMM2078D	
	Vitelic	V61C68	
99C88	AMD	AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
99C88			(Cont'd)
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
AM100415	Fairchild	F100415	
	Hitachi	HM100415	
AM100470	Fujitsu	MBM100470A	
	NEC	μPB100470	
AM100474	Fairchild	F100474	
	Fujitsu	MBM100474	
		MBM100474A	
	Hitachi	100474	
		HM100474	
	NEC	μPB100474	
AM100480	Hitachi	HM100480	
	NEC	μPB100480	
AM100484	Fujitsu	MBM100484	
	Hitachi	HM100484	
	NEC	μPB100484	
AM10415	Fujitsu	MBM100470A	
		MBM10415	
	Hitachi	HM2110	
		HM2112	
	Motorola	**MCM10146**	**(2918)**
	National	DM10415	
	Siemens	GXB10415	
AM10470	Fujitsu	MBM10470A	
	Hitachi	HM10470	
	Motorola	MCM10470	
	National	DM10470	
	NEC	μPB10470	
AM10474	Fairchild	F10474	
	Fujitsu	MBM10474A	
	Hitachi	HM10474	
	Motorola	MCM10474	
	National	DM10474	
	NEC	μPB10474	
AM10480	Fairchild	F10480	
	Fujitsu	MBM10480	
	Hitachi	HM10480	
	NEC	μPB10480	
AM1101ADM	Intel	1101	
	National	MM1101	
	NCM	NCM1101Z	
	Thomson	MK6027P	
AM1408	AMD	DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
AM1702A	National	MM1702	
AM2101	AMD	AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM2101			(Cont'd)
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	
AM2130	**IDT**	**IDT7130**	**(2804)**
	VLSI Tech	VT2130	
AM2141	AMD	AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
AM2147	**Cypress**	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM6147H	
	Intel	2147H	
	Matra-Harris	HN65747	
	National	NMC2147H	
AM2148	AMD	AM2149	
	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
	National	NMC2148	
	Thomson	ET2148	
	UMC	UM2148	
AM2149	AMD	AM2148	
	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
	National	NMC2148	
	Thomson	ET2148	
	UMC	UM2148	
AM2167	Fujitsu	MB8167A	
	Hitachi	HM6167	
	IDT	**IDT6167**	**(2802)**
	Matra-Harris	HM65263	
	TI	SMJ61CD16	
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
AM2168	AMD	AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM2168			(Cont'd)
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
AM2169	AMD	AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
AM21L48	Cypress	CY21L48	
		CY7C148	**(2562, 2564)**
	Matra-Harris	HN65748	
AM21L49	AMD	AM27S25	
	Cypress	**CY7C225**	**(2565)**
	Fujitsu	MB7226	
	MMI	53RA481	
		63RA481	
	Motorola	MCM27S25	
	National	DM87SR25	
		DM87SR474	
AM2504	Siliconix	SI25HC04	
AM25LS2521	TI	SN74LS688	
AM25S10	TI	SN74S350	
AM25S557	AMD	AM25S558	
	LogicDev	LMU558	
	MMI	74S558	
		SN54558	
		SN74S558	
AM25S558	AMD	AM25S557	
	LogicDev	LMU558	
	MMI	74S558	
		SN54558	
		SN74S558	
♦ AM25S558M	MMI	54S558	
AM26LS31	**Motorola**	**AM26LS31**	**(2952)**
	National	DS26LS31	
	TI	AM26LS31	
AM26LS32	National	DS26LS32	
	TI	AM26LS32A	
		AM26LS32AM	
AM26LS32A	TI	SN75ALS193	
AM26LS33	TI	AM26LS33A	
		AM26LS33AM	
AM26S10	**Motorola**	**MC26S10**	**(2952)**
	National	DS26S10	
	TI	AM26S10	
AM26S11	National	DS26S11	
	TI	AM26S11	
AM27128	Intel	M27128	
		M27C128	
	SEEQ	M27128	
	TI	**SMJ27C128**	**(3220)**
	VLSI Tech	VT27C128	
	Waferscale	**WS27C128**	**(3376)**
AM27128A	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Advanced Micro Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM27128A	Hitachi	(Cont'd)	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
♦ AM2716	**Harris**	**HM6616**	**(2768)**
	Hitachi	HN462716	
	National	MM2716	
	OKI	MSM2716	
	SGS	M2716	
	Thomson	ET2716	
AM27256	AMD	AM27C256	
	Intel	27256	
		27C256	**(2861)**
		M27256	
		M27C256	
	National	NMC27C256	
	SEEQ	**27C256**	**(2991)**
	SGS	M27256	
	TI	**SMJ27C256**	**(3220)**
	VLSI Tech	VT27C256	
	Waferscale	**WS27C256**	**(3376)**
AM27256-1	GIM	27256-1	
AM27256-17	Fujitsu	MBM27256-17	
	GIM	27256-17	
AM27256-2	GIM	27256-2	
	Intel	27256-2	
AM27256-20	Fujitsu	MBM27256-20	
	GIM	27256-20	
	Intel	27256-20	
	Toshiba	27256-20	
AM27256-3	GIM	27256-3	
	Intel	27256-3	
	NEC	μPD27256-3	
AM27256-30	Fujitsu	MBM27256-30	
	GIM	27256-30	
	Hitachi	HN27256-30	
	Intel	27256-30	
AM27256-4	GIM	27256-4	
AM2725S291	AMD	27S185	
		AM27S185	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**
	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
AM2732	Hitachi	HN462732	
	Intel	2732	
		2732A	
		M2732	
	National	MM2732	
		NMC2732	
	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
AM27512	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM27512			(Cont'd)
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
AM27512-25	Fujitsu	MBM27512-25	
	GIM	27512-25	
	Hitachi	HN27512-25	
	Intel	**27512-25**	**(2862)**
	Mitsubishi	M27512-25	
	Toshiba	VT27C512-25	
AM27512-3	GIM	27512-3	
	Intel	**27512-3**	**(2862)**
	Mitsubishi	M27512-3	
AM27512-30	Fujitsu	MBM27512-412	
	GIM	27512-30	
	Intel	**27512-30**	**(2862)**
	Mitsubishi	M27512-30	
AM27512-45	GIM	27C512-45	
AM27518	AMD	AM27LS18	
	National	74S188	
		DM54S188	
		DM7577	
	Signetics	N82S23	
		S82S23	
	TI	28SA030-25	
		38SA030	
		38SA030-25	
♦ AM27540	Fujitsu	MB7133	
AM2764	AMD	AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
AM27C1024	Fujitsu	MBM27C1000	
		MBM27C1024	
	Hitachi	HN27C301G	
	Mitsubishi	M5M27C101K	
	NEC	μPD27C1000	
		μPD27C1024	
	Toshiba	TC571001	
AM27C256	AMD	AM27256	
	Intel	27256	
		27C256	**(2861)**
		M27256	
		M27C256	
	National	NMC27C256	
	SEEQ	**27C256**	**(2991)**
	SGS	M27256	
	TI	**SMJ27C256**	**(3220)**
	VLSI Tech	VT27C256	
	Waferscale	**WS27C256**	**(3376)**

Manufacturer Device	Replacement Source	Device	IC Master Page
AM27C64	AMD	AM2764	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
AM27LS03	AMD	AM27S03	
		SN74S189	
	Cypress	27LS03M	
		CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**
	National	DM74S189	
		DM7599	
		DM8599	
AM27LS18	AMD	AM27518	
	National	74S188	
		DM54S188	
		DM7577	
	Signetics	N82S23	
		S82S23	
	TI	28SA030-25	
		38SA030	
		38SA030-25	
AM27LS19	AMD	27S19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
AM27S03	AMD	AM27LS03	
		SN74S189	
	Cypress	27LS03M	
		CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**
	National	DM74S189	
		DM7599	
		DM8599	
AM27S07	Cypress	CY27S07	
		CY7C190	**(2562, 2564)**
♦ AM27S11	AMD	27S21	
		AM27S21	
♦ AM27S11	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
♦ AM27S11	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	

Manufacturer Device	Replacement Source	Device	IC Master Page
AM27S12	Fujitsu	MB7115	
	MMI	63S240	
	National	74S570	
		DM74S570	
	Signetics	N82S130	
		S82S130	
AM27S13	Fujitsu	MB7116	
	MMI	63S241	
	National	74S571A	
		DM74S571	
	Signetics	N82S131	
AM27S15	Signetics	N82S115	
AM27S18	Fujitsu	MB7111	
	National	DM74S188	
	Signetics	N82S23	
	TI	28SA030-25	
AM27S180	Fujitsu	MB7131	
	National	DM87S180	
		DM87S229	
AM27S181	**Cypress**	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
♦ AM27S181M	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
♦ AM27S181M	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ AM27S181M	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ AM27S181M	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ AM27S181M	Signetics	N82S181	
		S82S181	
♦ AM27S181M	TI	28586-60	
		28S86-60	
		JBP28L86A	
AM27S184	National	DM87S184	
AM27S185	AMD	27S185	
		AM2725S291	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**
	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
AM27S19	AMD	27S19	
		AM27LS19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

ALT. SOURCE DIRECTORY

© IC MASTER 1988

Advanced Micro Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM27S190	Fujitsu	MB7137	
	Hitachi	HN25168	
	National	DM77S190	
		DM87S190	
AM27S191	AMD	27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
AM27S20	MMI	5300-1	
		53S140	
		63S140	
	National	DM54S387	
	Signetics	N82S126	
		S82S126	
	TI	34SA10-25	
AM27S21	AMD	27S21	
	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
AM27S25	AMD	AM21L49	
	Cypress	**CY7C225**	**(2565)**
	Fujitsu	MB7226	
	MMI	53RA481	
		63RA481	
	Motorola	MCM27S25	
	National	DM87SR25	
		DM87SR474	
AM27S28	National	DM74S473	
AM27S281	**Cypress**	**CY7C281**	**(2565)**
AM27S29	Fujitsu	MB7124	
	MMI	635481	
		63S481	
	National	DM74S472	
	Raytheon	**29623**	**(2985)**
	Signetics	N825147A	
		N82S147	
AM27S291	AMD	AM27S191	
		AM27S291A	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
	Motorola	MCM76	
	National	87S291	
		DM878291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
AM27S291A	AMD	AM27S191	
		AM27S291	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
	Motorola	MCM76	
	National	87S291	
		DM878291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM27S291A			(Cont'd)
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
AM27S291SA	**Cypress**	**CY7C291A**	**(2565)**
AM27S30	National	DM74S475	
		DM77S475	
		DM87S475	
AM27S31	MMI	63S485	
	National	74S474	
		DM74S474	
	Signetics	N82S141	
AM27S32	Fairchild	93452	
	Fujitsu	MB7121	
	Hitachi	HN25044	
	MMI	5352-1	
	National	DM54S572	
AM27S33	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
	National	74S573	
		DM74S573	
	NEC	μPB426	
	Signetics	N82S137	
♦ AM27S33M	MMI	53S441	
	Motorola	MCM7643M	
	National	DM54S573	
		DM54S573A	
♦ AM27S33M	Signetics	S82S137	
AM27S35	AMD	AM27S37	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
		S82HS189	
AM27S37	AMD	AM27S35	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
		S82HS189	
♦ AM27S40	Fujitsu	MB7151	
AM27S41	AMD	27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
AM27S41A	AMD	27S41	
		AM27S41	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM27S41A	TI		(Cont'd)
		JBP34S162	
		TBP34S162	
AM27S43	AMD	27S43	
	Fujitsu	MB7142	
	MMI	53S3281	
		63S3281	
	National	77S321	
		87S321	
		DM87S321	
	Raytheon	**29671**	**(2985)**
	Waferscale	**WS57C43**	**(3376)**
AM27S43A	Intel	3632-1	
		82HS321	
	MMI	53S3281B	
AM27S45	AMD	AM27S47	
	Cypress	**CY7C245**	**(2565)**
	MMI	63RA1681	
	Signetics	**N82HS187**	**(3178)**
		S82HS187	
AM27S455A	**Cypress**	**CY7C245A**	**(2565)**
AM27S47	AMD	AM27S45	
	Cypress	**CY7C245**	**(2565)**
	MMI	63RA1681	
	Signetics	**N82HS187**	**(3178)**
		S82HS187	
AM27S49	AMD	27S49	
	Cypress	**CY7C264**	**(2565)**
	Fairchild	32Z565	
		93Z565	
		93Z665	
	Fujitsu	7144H	
		MB7144	
	Raytheon	29VP864	
AM27S85	MMI	53DA1643	
		63D1641	
		63DA1643	
AM2812	Plessey	MP3812	
AM2813	Plessey	MJ2813	
AM2817A	EXEL	XL2817A	
	GIM	28C17	
	National	NMC9817	
	Samsung	KM2817A	
	SEEQ	**2817A**	**(2991)**
		DQ2817A	
AM2841	Fairchild	3341A	
		CY3341AC	
	Plessey	MJ2841	
AM2847	Fairchild	F2847	
AM28645	EXEL	XL2865A	
	GIM	28C64	
	Motorola	28C64	
	NCR	NCR5264	
	Samsung	KM2865A	
	SEEQ	DQ2864	
AM2864A	AMD	AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
AM2864B	Motorola	MCM76165	
♦ AM28LS32	AMD	AM26LS32	
	National	DS26LS32	
	TI	AM26LS32A	
		AM26LS32AM	
AM2901	Cypress	CY2901	
	IDT	**IDT39C01**	**(2801)**
	LogicDev	L429C01	
	Waferscale	**WS5901**	**(3376)**
♦ AM2902	**IDT**	**IDT39C02**	**(2801)**
♦ AM2909	Cypress	CY2909	
		CY7C909	**(2569)**
AM2910	**IDT**	**IDT39C10**	**(2801)**
	Waferscale	**WS5910**	**(3376)**
AM2910A	**Cypress**	**CY7C910**	**(2569)**
	Waferscale	**WS5910**	**(3376)**
♦ AM2911	Cypress	CY2911	
		CY7C911	**(2569)**
AM2914	Thomson	TS2914	
♦ AM2915	**IDT**	**IDT39C02**	**(2801)**
	Thomson	TS2915	

Manufacturer Device	Replacement Source	Device	IC Master Page
AM2917	Thomson	TS2917	
AM2919	Thomson	TS2919	
AM29203	**IDT**	**IDT39C03**	**(2801)**
AM29510	AMD	AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
AM29516	AMD	AM29C516	
	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LogicDev	LMU16	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TI	SN741616	
	TRW-LSI	MPY016H	
		MPY016K	
		TMC216H	
		TMC216K	
	Weitek	WTL1016	
		WTL1516	
		WTL2516	
AM29517	**Cypress**	**CY7C517**	**(2569)**
	IDT	**IDT7217**	**(2806, 2832)**
	LogicDev	LMU17	
		LMU217	
	LSI Logic	**L64017**	**(2868)**
	Weitek	WTL2517	
♦ AM29520	LogicDev	L29C520	
	Waferscale	**WS59520**	**(3376)**
AM29521	LogicDev	L29C521	
	Waferscale	**WS59521**	**(3376)**
AM2960	**IDT**	**IDT39C60**	**(2801)**
	Signetics	**2960**	**(3085)**
♦ AM2965M	MMI	54S730	
♦ AM2966M	MMI	54S734	
AM2968	Motorola	MC74F2968	
♦ AM2969	Motorola	MC74F2969	
AM2970	Motorola	MC74F2970	
AM29818A	AMD	AM29C818	
	TI	**SN74BCT29818**	**(3249)**
AM29821	AMD	AM29C821	
	TI	SN74AS821	
		SN74BCT29821	
AM29822	AMD	AM29C822	
	TI	SN74AS822	
		SN74BCT29822	
AM29823	AMD	AMC823	
	TI	SN74AS823	
		SN74BCT29823	
AM29824	AMD	AM29C824	
	TI	SN74AS824	
		SN74BCT29824	
AM29825	AMD	AM29C825	
	TI	SN74AS825	
		SN74BCT29825	
AM29826	AMD	AM29C826	
	TI	SN74AS826	
		SN74BCT29826	
AM29833	AMD	AM29C833	
	TI	**SN74BCT29833**	**(3249)**
AM29834	AMD	AM29841	
		AM29C834	
		AM29C841	
	TI	SN74AS841	
		SN74BCT29834	**(3249)**
		SN74BCT29841	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Advanced Micro Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM29841	AMD	AM29834	
		AM29C834	
		AM29C841	
	TI	SN74AS841	
		SN74BCT29834	**(3249)**
		SN74BCT29841	
AM29842	AMD	AM29C842	
	TI	SN74BCT29842	
AM29843	AMD	AM29C843	
	TI	SN74AS843	
		SN74BCT29843	
AM29844	AMD	AM29C844	
	TI	SN74AS844	
		SN74BCT29844	
AM29845	AMD	AM29C845	
	TI	SN74AS845	
		SN74BCT29845	
AM29846	AMD	AM29C846	
	TI	SN74AS846	
		SN74BCT29846	
AM29853	AMD	AM29C853	
	TI	**SN74BCT29853**	**(3249)**
AM29854	AMD	AM29C854	
	TI	**SN74BCT29854**	**(3249)**
AM29861	AMD	AM29C861	
	TI	**SN74BCT29861**	**(3249)**
AM29862	AMD	AM29C862	
	TI	**SN74BCT29862**	**(3249)**
AM29863	AMD	AM29C863	
	TI	**SN74BCT29863**	**(3249)**
AM29864	AMD	AM29C864	
	TI	**SN74BCT29864**	**(3249)**
AM29865	AMD	AM29C865	
	TI	SN74BCT29865	
AM29866	AMD	AM29C866	
	TI	SN74BCT29866	
AM29C101	**Cypress**	**CY7C9101**	**(2569)**
AM29C509	AD	ADSP1009	
	IDT	**IDT7209**	**(2806)**
	LogicDev	LMA1009	
	TRW-LSI	TDC1009	
		TMC2009	
AM29C516	AMD	AM29516	
	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LogicDev	LMU16	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TI	SN741616	
	TRW-LSI	MPY016H	
		MPY016K	
		TMC216H	
		TMC216K	
	Weitek	WTL1016	
		WTL1516	
		WTL2516	
AM29C517	AMD	AM29517	
	Cypress	**CY7C517**	**(2569)**
	IDT	**IDT7217**	**(2806, 2832)**
	LogicDev	LMU17	
	LSI Logic	**L64017**	**(2868)**
	Weitek	WTL1517	
		WTL2517	
		WTL9517	
AM29C818	AMD	AM29818A	
	TI	**SN74BCT29818**	**(3249)**
AM29C821	AMD	AM29821	
	TI	SN74AS821	
		SN74BCT29821	
AM29C822	AMD	AM29822	
	TI	SN74AS822	
		SN74BCT29822	
AM29C824	AMD	AM29824	
	TI	SN74AS824	
		SN74BCT29824	
AM29C825	AMD	AM29825	
	TI	SN74AS825	
		SN74BCT29825	
AM29C826	AMD	AM29826	
	TI	SN74AS826	
		SN74BCT29826	
AM29C833	AMD	AM29833	
	TI	**SN74BCT29833**	**(3249)**
AM29C834	AMD	AM29834	
		AM29841	
		AM29C841	
	TI	SN74AS841	
		SN74BCT29834	**(3249)**
		SN74BCT29841	
AM29C841	AMD	AM29834	
		AM29841	
		AM29C834	
	TI	SN74AS841	
		SN74BCT29834	**(3249)**
		SN74BCT29841	
AM29C842	AMD	AM29842	
	TI	SN74BCT29842	
AM29C843	AMD	AM29843	
	TI	SN74AS843	
		SN74BCT29843	
AM29C844	AMD	AM29844	
	TI	SN74AS844	
		SN74BCT29844	
AM29C845	AMD	AM29845	
	TI	SN74AS845	
		SN74BCT29845	
AM29C846	AMD	AM29846	
	TI	SN74AS846	
		SN74BCT29846	
AM29C853	AMD	AM29853	
	TI	**SN74BCT29853**	**(3249)**
AM29C854	AMD	AM29854	
	TI	**SN74BCT29854**	**(3249)**
AM29C861	AMD	AM29861	
	TI	**SN74BCT29861**	**(3249)**
AM29C862	AMD	AM29862	
	TI	**SN74BCT29862**	**(3249)**
AM29C863	AMD	AM29863	
	TI	**SN74BCT29863**	**(3249)**
AM29C864	AMD	AM29864	
	TI	**SN74BCT29864**	**(3249)**
AM29C865	AMD	AM29865	
	TI	SN74BCT29865	
AM29C866	AMD	AM29866	
	TI	SN74BCT29866	
AM2I4X2901	**IDT**	**IDT49C401**	**(2801)**
	IMI	IMI4X2901	
	Waferscale	**WS59016**	**(3376)**
AM5380	NCR	MCR5380	
AM6012	Exar	XR3464	
	Ferranti	ZN6012	
	National	NS8464	
	PMI	**DAC312**	**(2974)**
	Signetics	AM6012	
AM6080	Signetics	SE5019	
		SE5118	
		SE5119	
AM6081	**Datel**	**DACUP8B**	**(2576)**
	Signetics	**NE5018**	**(3117)**
		NE5019	
		NE5118	
		NE5119	
AM6108	**Motorola**	**MC6108**	**(2937)**
♦ AM6420	**Burr-Brown**	**SHC5320**	**(2543)**
	Datel	SHM20	
	Harris	**HA5320**	**(2737, 2747)**
	TeledyneP	4866	
AM7910	Thomson	EF7910	
AM7950	RIFA	PBL3736	
AM7990	**Thomson**	**MK68590**	**(3286)**
AM7991	Thomson	MK68591	
AM7992	Thomson	MK68592	
AM80515	Siemens	SAB80515	
AM8177	MMI	679502	
AM8212	**Calmos**	**CA82C12**	**(2553)**
	Intel	8212	
	NEC	μPB8212	
	OKI	MSM82C12	
AM8237A	AMD	AM9517A-4	
	Harris	**82C37A**	**(2731, 2768, 4249)**
	Intel	8237A-4	
AM9016	Fairchild	F16K	
		F4116	
	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
AM9044	**Harris**	**HM6504**	**(2704, 2762, 2768)**
	National	NMC5257A	
AM9064	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
AM90C256	GIM	WS57C256	
	MicronTech	MT1256	
	Motorola	MCM6256	
		MCM6257	
		MCM64256	
	TI	SMJ32010	
		SMJ4256	**(3220)**
	Thomson	MK45H56	
	Vitelic	V51C256	
		V51C257	
AM9101	AMD	AM2101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	
AM9114	AMD	AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM9114			(Cont'd)
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
AM9122	**Cypress**	**CY7C122**	**(2561, 2564)**
AM9124	AMD	AM9114	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
AM9128	AMD	AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Advanced Micro Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM9128	Toshiba	(Cont'd)	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
AM9150	**Cypress**	**CY7C150**	**(2562, 2564)**
AM91C65	Fujitsu	MB81C74	
		MB81C75	
	Lattice	SR4K4	
		SR64KX4	
	Toshiba	TC55417	
		TCC55417	
	Vitelic	V61C62	
AM91L01	AMD	AM2101	
		AM9101	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	
AM92128	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
♦ AM9212B	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
♦ AM9212B	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
♦ AM9212B	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
AM9218	AMD	AM9128	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM9218			(Cont'd)
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
♦ AM92256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
♦ AM92256	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
♦ AM92256	**S-MOS**	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
♦ AM92256	Signetics	23256	
		23256A	
♦ AM92256	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
♦ AM92256	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
♦ AM9232	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
♦ AM9232	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
♦ AM9232	Signetics	2332	
		2632A	
♦ AM9232	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ AM9232	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
AM9244	AMD	AM2141	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
♦ AM9264	Gould	S2364	
	Hitachi	HN48364	
	NCR	NCR2364	
	OKI	MSM3864	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**
	Sharp	LH2364A	
	Signetics	2364	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
♦ AM9265	Fairchild	F3568	
		F3569	
		F3570	
♦ AM9265	GIM	RO3-9365	
		RO9864	
♦ AM9265	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
♦ AM9265	National	MM52264	
		NM52264	
♦ AM9265	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
♦ AM9265	Supertex	23SC64	
		23SC64/A	
		CM6400	
♦ AM9265	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
AM93415	AMD	AM685	
	Fairchild	93415	
	Motorola	MCM93415	
AM93422	**Cypress**	**CY7C122**	**(2561, 2564)**
		CY93422	
	Fairchild	93422	
	Motorola	MCM93422	
	Performance	P4C422	
		P93U422	
AM93422A	Cypress	CY93422A	
AM93425	**Elantec**	**EDH0008**	**(2593)**
	Fairchild	93425	
AM93425A	**Apex**	**PA80**	**(2458)**
	Burr-Brown	**3580**	**(2536)**
	Fairchild	93425A	
AM93L412	Fairchild	97L412	
AM93L415	**Apex**	**PA81**	**(2458)**
	Burr-Brown	**3581**	**(2536)**
	Fairchild	93L415	
	Motorola	MCM93L415	
AM93L422	**Apex**	**PA82**	**(2458)**
	Burr-Brown	**3582**	**(2536)**
	Fairchild	93L422	
AM93L422A	Fairchild	93L422A	
	GE/RCA	**CD22212**	**(2637)**
	SiliconSys	SSIK212	
AM93L425	Fairchild	93L425	
	Motorola	MCM93L425	
	SiliconSys	SSI202	
♦ AM9511	AMD	AM9511A	
	Intel	8231	
AM9511A	Intel	8231	
♦ AM9517	AMD	AM9517A	
	Intel	8237	
AM9517A	Intel	8237	

Manufacturer Device	Replacement Source	Device	IC Master Page
AM9517A-4	AMD	AM8237A	
	Harris	**82C37A**	**(2731, 2768, 4249)**
	Intel	8237A-4	
AM9517A-5	Intel	8237A-5	
AM9518	AMD	Z8068	
	Zilog	**Z8068**	**(3418)**
AM9716	**Cypress**	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
AM9864	AMD	AM2864A	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
AM9968	AMD	AM2168	
		AM99CL68	
	Fairchild	F1620	
	Fujitsu	MB8168	
		MB81C69	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HM6168	
		HM6268	
	Inmos	IMS1420	
		IMS1421	
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Matra-Harris	HM65682	
		HMI65769	
	Motorola	MCM1423	
		MCM6168	
		MCM6288	
	NEC	μPD4314	
	S-MOS	SRM2274	
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
	Thomson	**MK41H68**	**(3265)**
	Toshiba	TMM2068	
	Vitelic	V61C62	
		V61C68	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C69	**(3349)**
AM9988	AMD	99C88	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Advanced Micro Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM9988	Matra-Harris		(Cont'd)
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
AM9988C	AMD	99C88	
		AM9988	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM9988C	Toshiba		(Cont'd)
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
AM99C164	AMD	AM99C165	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	Inmos	**IMS1620**	**(2787)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR4K4	
		SR64K4	
	Motorola	MCM6288	
		MCM62L88	
	NEC	μPD4362	
	Performance	P4C188	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
AM99C165	AMD	AM99C164	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	Inmos	**IMS1620**	**(2787)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR4K4	
		SR64K4	
	Motorola	MCM6288	
		MCM62L88	
	NEC	μPD4362	
	Performance	P4C188	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
AM99C328	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
AM99C641	Fairchild	F1600	
		F1601	
	Fujitsu	MB8171	
		MB81C71	
	Hitachi	HM10414	
	Inmos	**IMS1601**	**(2786)**
	IDT	**IDT7187L**	**(2802)**
	Motorola	MCM6287	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
AM99C68	AMD	AM2168	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM99C68			(Cont'd)
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
AM99C88	AMD	99C88	
		AM9988	
		AM9988C	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
AM99C89	TI	SMJ69CE72	
AM99CL68	AMD	AM2169	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM99CL68			(Cont'd)
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
AMC823	AMD	AM29823	
	TI	SN74AS823	
		SN74BCT29823	
AMD29510	AMD	AM29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
AMD29L510	AMD	AM29510	
		AMD29510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
♦ AMD5380	AMD	AM5380	
	NCR	MCR5380	
AMPAL16H8	MMI	PAL16P8A	
AMPAL16L8A	Fairchild	16P8B2	
	MMI	87097	
	National	DMPAL16L8A	
		DMPAL16L8B2	
	TI	PAL16L825	
		TIBPAL16L8-30	**(4320)**
AMPAL16L8L	MMI	PAL16L8A-2	
	Sprague	SPL16LC8	
	TI	PAL16L8A-2	
AMPAL16R4	AMD	AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Advanced Micro Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
AMPAL16R4			(Cont'd)
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
AMPAL16R4A	Fairchild	16RP4B2	
	MMI	PAL16R4B2	
	National	DMPAL16R42	
		DMPAL16R4A	
	TI	PAL16R425	
AMPAL16R4L	AMD	AMPAL16R4	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
AMPAL16R6	Cypress	CYPAL16R6	
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
AMPAL16R6A	Fairchild	16RP6B2	
	MMI	PAL16R6B2	
	National	DMPAL16R6A	
	TI	PAL16R625	
		TIBPAL16RS-30	
AMPAL16R6L	MMI	PAL16R6A-2	
	TI	PAL16R6A-2	
AMPAL16R8A	Fairchild	16RP8B2	
	MMI	PAL16R8B2	
	National	DMPAL16R8A	
		DMPAL16R8B2	
	TI	PAL16R825	
AMPAL16R8L	MMI	PAL16R8A-2	
	Sprague	SPL16RC8	
	TI	PAL16R8A-2	
♦ AMPALR4L	MMI	PAL16R4A-2	
	TI	PAL16R4A-2	
♦ D8259	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
♦ D8259	Intel	8259	
		82C59A	
♦ D8259	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
♦ D8259	OKI	MSM82C59	
		MSM82C59A	
♦ D8259	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
DAC08	AMD	AM1408	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
DP8303	National	DP8303	
DP8304	Fujitsu	MBL8286	
	Harris	**82C86H**	**(2733, 2768)**
	Intel	8286	
		82C86	
	MMI	82C86	
	National	DP8304	
	NEC	μPB8286	
		μPD71086	
	OKI	82C86	
♦ DP8307	National	DP8307	
♦ DS7838	National	DS7838	
♦ HM10484	Fairchild	F10484	
	Fujitsu	MBM10484	
	Hitachi	HM10484	
	NEC	μPB10484	
♦ LF156A	AD	AD544	
	Burr-Brown	**OPA156A**	**(2532)**
	Fairchild	LF156A	
	LinearTech	LF156A	
	National	LF156A	
		OPA101	
♦ LF156A	**PMI**	**OP43**	**(2970)**
		PM156A	**(2971)**
♦ LF156A	TI	TL081	
♦ LF157A	AMD	27S29	
	Fairchild	LF157A	
	National	545472	
		74S472	
		LF157A	
		LF351	
		LF353	
♦ LF157A	**PMI**	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
LF198	LinearTech	LF198	
	National	LF198	
	Signetics	LF198	
♦ LF255	MicroPwr	MP255	
	National	LF255	
	PMI	PM255	
	Thomson	LM255	
♦ LF256	National	LF256	
	Thomson	LM256	
♦ LF355	LinearTech	LF355	
	Motorola	**LF355**	**(2920)**
	National	LF355	
	PMI	**OP43**	**(2970)**
		PM355	
♦ LF355	Thomson	LF355	
♦ LF355A	LinearTech	LF355A	
	National	LF355A	
	PMI	PM355A	
♦ LF356	LinearTech	LF356	
	Motorola	**LF356**	**(2920)**
	National	LF356	
	PMI	PM356	
	Thomson	LF356	
♦ LF356A	**Burr-Brown**	**OPA356A**	**(2532)**
	LinearTech	LF356A	
	National	LF356A	
	PMI	PM356A	
♦ LH2101	GE/Intersil	LH2101	
	National	LH2101	
	Raytheon	LH2101	
♦ LH2111	National	LH2111	
	Raytheon	LH2111	
♦ LH2311	GE/Intersil	LH2311	
	National	LH2311	
LM101	AD	AD101	
	Fairchild	μA101	
	GE/Intersil	AD101	
	LinearTech	LM101	
	Motorola	LM101	
	Raytheon	LM101	
	SGS	LS101	
	SiliconG	SG101	
	Thomson	LM101	
♦ LM105	Fairchild	μA105	
	GE/Intersil	LM105	
	National	LM105	
	SiliconG	SG105	
	Thomson	LM105	
♦ LM107	AD	AD741S	
	Burr-Brown	3500	
	LinearTech	LM107	
	National	LH741A	
		LM107	
♦ LM107	PMI	PM741	
	Raytheon	RC741	
	SiliconG	SG107	
	Thomson	LM107	
♦ LM108A	AD	AD108A	
	Fairchild	UA108A	
	LinearTech	LM108A	
	Motorola	**LM108A**	**(2919)**
	PMI	**PM108A**	**(2970)**
♦ LM110	National	LM110	
♦ LM111	AD	AD111	
	Fairchild	μA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
♦ LM112	National	LM112	
♦ LM118	LinearTech	LM118	
	National	LM118	
♦ LM119	LinearTech	LM119	
		LT119	
♦ LM119	National	LM119	
	PMI	**PM119**	**(2975)**
	Signetics	LM119	
♦ LM124A	Fairchild	μA124	
	GE/RCA	**CA124**	**(2645)**
	LinearTech	LT1014	
	National	LM124A	
	SiliconG	SG124	
	TI	LM124	
♦ LM139	Fairchild	μA139	
	GE/RCA	**CA139**	**(2647)**
	Motorola	**LM139**	**(2925)**
	National	LM139	
	PMI	**CMP04**	**(2975)**
		PM139	**(2975)**
♦ LM139	Raytheon	LM139	
	Signetics	LM139	
	TI	LM139	
♦ LM139A	**GE/RCA**	**CA139A**	**(2647)**
	Motorola	**LM139A**	**(2925)**
	National	LM139A	
	PMI	**CMP04**	**(2975)**
		PM139A	**(2975)**
♦ LM139A	TI	LM139A	
♦ LM148	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
♦ LM148	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
♦ LM148	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
♦ LM148	Raytheon	LM148	
		RM4156	
		RM4158	
♦ LM148	TI	LM148	
♦ LM149	National	LM149	
♦ LM208A	AD	AD208A	
	Fairchild	UA208A	
	Motorola	**LM208A**	**(2919, 2958)**
	National	LM208A	
	PMI	PM208A	
♦ LM211	AD	AD211	
	Motorola	**LM211**	**(2925, 2958)**
	National	LM211	
	PMI	PM211	
	Signetics	LM211	
	SiliconG	SG211	
	TI	LM211	
	Thomson	LM211	
♦ LM218	National	LM218	
	TI	LM218	
	Thomson	LM218	
♦ LM219	National	LM219	
	Signetics	LM219	
	Thomson	LM219	
♦ LM239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
		μA239	
♦ LM239	**GE/RCA**	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
♦ LM239	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	
♦ LM239A	**GE/RCA**	**CA239A**	**(2647)**
	Motorola	**LM239A**	**(2925, 2958)**
	National	LM239A	
	PMI	**CMP04**	**(2975)**
♦ LM248	National	LM248	
	Thomson	LM248	
♦ LM308	AD	AD308	
	Burr-Brown	3500	
		3501	
♦ LM308	Fairchild	μA308	
	GE/Intersil	AD308	
		LM308	
♦ LM308	**Motorola**	**LM308**	**(2919, 2958)**
	National	LM308	
	Raytheon	LM308	
♦ LM308A	AD	AD308A	
	Fairchild	μA308A	
	LinearTech	LM308A	
	Motorola	**LM308A**	**(2919, 2958)**
	National	LM308A	
	PMI	PM308A	
♦ LM311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
♦ LM311	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
♦ LM311	National	LM2903	
		LM311	
♦ LM311	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
♦ LM311	Signetics	LM2903	
		LM311	
♦ LM311	SiliconG	SG311	
	TI	LM2903	
		LM311	
♦ LM311	Thomson	LM2903	
		LM311	
♦ LM311	Toshiba	TA75393	
♦ LM318	AD	AD518	
	LinearTech	LM318	
	National	LM318	
	NEC	μPC318	
	TI	LM318	
	Thomson	LM318	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Advanced Micro Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ LM319	NEC	μPC319	
	Signetics	LM319	
	Thomson	LM319	
♦ LM339A	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
♦ LM339A	**GoldStar**	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
♦ LM339A	**PMI**	**CMP04**	**(2975)**
		PM339A	**(2975)**
♦ LM339A	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
♦ MCM6256	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
♦ MCM6256	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
♦ MCM6256	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
♦ MCM6256	NEC	μPD41256	
		μPD41257	
♦ MCM6256	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
♦ MCM6256	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
♦ MCM6256	**TI**	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
♦ MCM6256	Western	WCM41256	
♦ MCM6257	Fujitsu	MB81257	
	Hitachi	HM50257	
	Motorola	MCM6256	
		MCM6257	
♦ MCM6257	National	41257	
	Vitelic	V51C256	
		V51C257	
P8031AH-15	Siemens	SAB8031A-16	
P8051	Fujitsu	MBL8051	
	Intel	P8051	
	Siemens	SAB8051	
	Signetics	SCN8051	
P80C31	Fujitsu	MBL80C31	
	Harris	P80C31	
	Intel	80C31	
		P80C31	
	OKI	M80C31	
	Siemens	SAB80C31	
	Signetics	SC80C31	
SN5489-1	National	DM5489	
		DM54S289	
		MM54S289	
	Signetics	S82S25	
SN54LS378	Motorola	SN54LS378	
	Signetics	54LS378	
	TI	SN54LS378	
SN54LS379	Fairchild	54LS379	
	Motorola	SN54LS379	
	SGS	T54LS379	
	TI	SN54LS379	
SN54LS385	Motorola	SN54LS385	
	TI	SN54LS385	
♦ SN54LS568	Motorola	SN54LS568	
SN54S189	National	DM54S189	
	Signetics	54S189	
♦ SN54S289	AMD	SN5489-1	
	National	DM5489	
		DM54S289	
		MM54S289	
♦ SN54S289	Signetics	S82S25	
SN74LS299	Fairchild	74LS299	
	Hitachi	HD74LS299	
	Motorola	SN74LS299	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS299			(Cont'd)
	SGS	T74LS299	
	TI	SN74LS299	
♦ SN74LS322	Fairchild	74LS322	
	Motorola	SN74LS322	
	TI	SN74LS322A	
♦ SN74LS323	Fairchild	54LS323	
		74LS323	
♦ SN74LS323	Motorola	SN74LS323	
	TI	SN54LS323	
		SN74LS323	
SN74LS378	Fairchild	74LS378	
	Motorola	SN74LS378	
	SGS	T74LS378	
	Signetics	**74LS378**	**(3003)**
	TI	SN74LS378	
♦ SN74LS379	Fairchild	74LS379	
	Motorola	SN74LS379	
	SGS	T74LS379	
	TI	SN74LS379	
SN74LS381	TI	SN74LS381A	
♦ SN74LS385	Motorola	SN74LS385	
SN74LS399	Motorola	SN74LS399	
	SGS	T74LS399	
	TI	SN74LS399	
♦ SN74LS568	Motorola	SN74LS568	
	Signetics	**74LS568**	**(3003)**
♦ SN74LS569	Motorola	SN74LS569	
	Signetics	**74LS569**	**(3003)**
SN74S138	Fairchild	74S138	
	National	DM74S138	
	Signetics	**74S138**	**(3003)**
	TI	SN74S138	
SN74S189	AMD	AM27LS03	
		AM27S03	
	Cypress	27LS03M	
		CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**
	National	DM74S189	
		DM7599	
		DM8599	
SN74S251	National	DM74S251	
	Signetics	**74S251**	**(3003)**
	TI	SN74S251	
♦ SSS725	Fairchild	μA725	
	National	LM725	
	PMI	**OP06**	**(2970)**
	Raytheon	RM725	
Z8001	SGS	Z8001	
Z8002	SGS	Z8002	
♦ Z8010	SGS	Z8010	
	Zilog	Z8010	
Z8016	**Zilog**	**Z8016**	**(3418)**
Z8030	SGS	Z8030	
	Zilog	**Z8030**	**(3418)**
Z8036	SGS	Z8036	
Z8038	SGS	Z8038	
	Zilog	**Z8038**	**(3418)**
Z8060	SGS	Z8060	
	Zilog	**Z8060**	**(3418)**
Z8068	AMD	AM9518	
	Zilog	**Z8068**	**(3418)**
Z8530	SGS	Z8530	
	Zilog	**Z8530**	**(3418)**
Z8536	SGS	Z8536	

Altera

EP1210	Intel	5C121
EP320	Intel	5C320
EP600	Intel	5C060
EP900	Intel	5C090

Amperex Electronic Corp.

AM9233	Commodore	MPS2333
	Fairchild	F3533
	GIM	RO3-9333
	Gould	S2333
	Signetics	2332
	Supertex	23C32

Analog Devices

142	AD	44
	Intech	A158
146	Intech	A137
148	Intech	A148
180	Intech	A185
184	Intech	A188

Manufacturer Device	Replacement Source	Device	IC Master Page
210	AD	211	
	Intech	A226	
211	AD	210	
	Intech	A226	
230	AD	233	
	Burr-Brown	3293	
	Intech	A230	
233	AD	230	
	Burr-Brown	3293	
	Intech	A230	
260	Intech	360	
40	Intech	A99	
41J	Intech	A124	
422	AD	429	
	Intech	A702	
428	Intech	551	
429	AD	422	
	Intech	A702	
43	Intech	A128	
433	Intech	A733	
434	Intech	A734	
436	Intech	540	
44	AD	142	
	Intech	A158	
440	Intech	590	
45	Intech	A45	
5360	Intech	AMP801	
574	**Intech**	**ADC574A**	**(2799)**
	MicroNet	MN574	
603	Intech	A202	
755	Intech	A730	
		A731	
902	Intech	A902	
903	Intech	A903	
904	Intech	A904	
905	Intech	A905	
AD0042	AD	AD503	
	GE/Intersil	AD503	
		LH0042	
	National	LH0042	
AD101	AMD	LM101	
	Fairchild	μA101	
	GE/Intersil	AD101	
	LinearTech	LM101	
	Motorola	LM101	
	Raytheon	LM101	
	SGS	LS101	
	SiliconG	SG101	
	Thomson	LM101	
AD108	Fairchild	μA108	
	GE/Intersil	LM108	
	LinearTech	LM108	
	MicroPwr	MP108	
	Motorola	**LM108**	**(2919)**
	National	LM108	
	PMI	**PM108**	**(2970)**
	SiliconSys	SSI108	
AD108A	Fairchild	UA108A	
	LinearTech	LM108A	
	Motorola	**LM108A**	**(2919)**
	PMI	**PM108A**	**(2970)**
AD111	Fairchild	μA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
AD1403	LinearTech	LT1009	
	Motorola	**MC1403**	**(2958)**
	SiliconG	SG3503	
	TI	LT1009	
AD1408	AMD	AM1408	
		DAC08	
	AD	ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AD1408			(Cont'd)
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
AD1508	**Datel**	**DACIC8BM**	**(2576)**
	Motorola	**MC1508**	**(2938)**
	National	MC1508	
	PMI	DAC1508	
	Signetics	MC1508	
		SE5008	
		SE5009	
AD2020	**GE/RCA**	**CA3162**	**(2651)**
AD208A	Fairchild	UA208A	
	Motorola	**LM208A**	**(2919, 2958)**
	National	LM208A	
	PMI	PM208A	
AD211	**Motorola**	**LM211**	**(2925, 2958)**
	National	LM211	
	PMI	PM211	
	Signetics	LM211	
	SiliconG	SG211	
	TI	LM211	
	Thomson	LM211	
AD2700	HybridSys	R675-4	
	HyComp	HC2700	
		HC2710	
	Maxim	AD2700	
AD2701	HybridSys	R675-5	
	HyComp	HC2701	
		HC2710	
	Maxim	AD2701	
AD2702	HybridSys	R675-3	
	HyComp	HC2702	
		HC2712	
AD2710	HyComp	HC201	
		HC2711	
	Maxim	AD2710	
AD301	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
AD308	Burr-Brown	3500	
		3501	
	Fairchild	μA308	
	GE/Intersil	AD308	
		LM308	
	Motorola	**LM308**	**(2919, 2958)**
	National	LM308	
	Raytheon	LM308	
AD308A	Fairchild	μA308A	
	LinearTech	LM308A	
	Motorola	**LM308A**	**(2919, 2958)**
	National	LM308A	
	PMI	PM308A	
AD311	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Analog Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
AD311			(Cont'd)
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
AD3445	AMD	29520/1	
		29520/1A	
	Hitachi	HA1393	
	Maxim	AD3554	
	MMI	29C520/1	
	Sprague	ULN3793	
AD346	HybridSys	HS346	
	Intech	**SH347**	**(2799)**
	MicroNet	MN346	
		MN347	
AD3542	Burr-Brown	3542	
AD370	AD	AD371	
	HybridSys	DAC346	
		DAC347	
		DAC356	
	MicroNet	MN370	
		MN371	
AD371	AD	AD370	
	HybridSys	DAC346	
		DAC347	
		DAC356	
	MicroNet	MN370	
		MN371	
AD376	**Burr-Brown**	**ADC76**	**(2541)**
AD381	AD	AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
		LF411	
	Thomson	LF155	
AD3860	HybridSys	HS3860	
	MicroNet	MN3860	
AD503	AD	AD0042	
	GE/Intersil	AD503	
		LH0042	
	National	LH0042	
AD504	TeledyneP	1319-01	
AD506	AD	AD542	
	National	LH0022	
		LH740A	
		LM0052	
	TeledyneP	1424	
		1425	
AD507	**Burr-Brown**	**3508**	**(2535)**
	Datel	**AM462-1**	**(2577)**
		AM462-2	**(2577)**
	GE/Intersil	A561	
	Harris	**HA2620**	**(2706, 2737, 2747)**
		HA2622	**(2706, 2768)**
		HA2625	
AD509	**Burr-Brown**	**3507**	**(2535)**
	Harris	**HA2520**	**(2705, 2737, 2747)**
	TeledyneP	1322	
AD510	AD	AD517	
	Burr-Brown	OP27	
		OPA27	**(2532)**
	Harris	**HA5127**	**(2737, 2747, 2768)**
		HAOP27	
	LinearTech	LT1007	
		OP27	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AD510			(Cont'd)
	Maxim	OP27	
	PMI	OP27	
		OP27	**(2970)**
	Raytheon	**RC714**	**(2979)**
	TI	LT1007	
AD515	**Burr-Brown**	**AD515**	**(2533)**
		OPA104	
AD517	AD	OP07	
	Fairchild	μA714	
	Harris	**HA5130**	**(2737, 2747)**
		HA5135	**(2706)**
	LinearTech	LT1001	
		OP07	
	Maxim	MAX400	
		OP07	
	Micra	MC0021	
	MicroPwr	MPOP07	
	Raytheon	**OP07**	**(2979)**
	TI	OP07D	
AD518	LinearTech	LM318	
	National	LM318	
	NEC	μPC318	
	TI	LM318	
	Thomson	LM318	
AD5201	MicroNet	MN5201	
AD5202	MicroNet	MN5202	
AD5203	MicroNet	MN5203	
AD5204	MicroNet	MN5204	
AD5205	MicroNet	MN5205	
AD5206	MicroNet	MN5206	
AD5207	MicroNet	MN5207	
AD521	AD	AD624	
	Burr-Brown	**INA110**	**(2537)**
	National	DS1603	
		LM148	
		LM163	
	PMI	**AMP05**	**(2975)**
	TI	LM148	
AD5210	Datel	ADC5210	
	HybridSys	HS5210	
	Intech	ADC5210	
	MicroNet	MN5210	
AD5211	**Datel**	**ADC5211**	**(2575)**
	MicroNet	MN5211	
AD5212	**Datel**	**ADC5212**	**(2575)**
	MicroNet	MN5212	
AD5213	Datel	ADC5213	
	MicroNet	MN5213	
AD5214	**Datel**	**ADC5214**	**(2575)**
	HybridSys	MN5214	
	MicroNet	MN5214	
	TeledyneP	TP5214	
AD5215	**Datel**	**ADC5215**	**(2575)**
	MicroNet	MN5215	
AD528	National	LH0062	
AD530	AD	AD533	
	Burr-Brown	4203	
		MPY100	**(2539)**
	GE/Intersil	**ICL8013**	**(2677)**
AD532	Burr-Brown	4205	
		4213	
		4214	
AD533	AD	AD530	
	Burr-Brown	4203	
		MPY100	**(2539)**
	GE/Intersil	**ICL8013**	**(2677)**
AD534	**Burr-Brown**	**MPY534**	**(2539)**
AD536	**Burr-Brown**	**4341**	**(2540)**
	Maxim	AD536	
AD540	**Datel**	**AM450-2**	**(2577)**
	Elantec	**EHA2505**	**(2593)**
	Harris	HA2505	
AD542	AD	AD506	
	National	LH0022	
		LH740A	
		LM0052	
	TeledyneP	1424	
		1425	
AD544	AD	AD381	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AD544			(Cont'd)
	TI	LF353	
		LF411	
	Thomson	LF155	
AD545	Burr-Brown	OPA103	
AD547	**Harris**	**HA5170**	**(2706, 2737, 2747)**
	National	LH0052	
	PMI	**OP41**	**(2970)**
		OP43	**(2970)**
AD549	**Burr-Brown**	**OPA128**	**(2533)**
AD558	Ferranti	ZN558	
	GE/Intersil	**ICL8023**	**(2673)**
	SiliconG	SG1253	
	SiliconSys	SSI6270	
AD562	**Datel**	**DAC562**	**(2576)**
	Harris	**HI562A**	**(2703, 2738, 2749)**
	PMI	**PM562**	**(2974)**
AD565	Maxim	AD565A	
AD565A	AD	AD565J	
	Fairchild	μA565	
	Harris	**HI565A**	**(2738, 2749)**
	Maxim	AD565A	
	MicroNet	MN565A	
	TeledyneP	TP565A	
AD565J	AD	AD565A	
	Fairchild	μA565	
	Harris	**HI565A**	**(2738, 2749)**
	Maxim	AD565A	
	MicroNet	MN565A	
	TeledyneP	TP565A	
AD566	MCE	MCE566	
AD566A	Maxim	AD566A	
AD570	MCE	MCE570	
AD571	AD	AD573	
	Fairchild	μA571	
	MCE	MCE571	
	PMI	**ADC910**	**(2973)**
AD573	AD	AD571	
	Fairchild	μA571	
	MCE	MCE571	
	PMI	**ADC910**	**(2973)**
AD574	**Burr-Brown**	**ADC574A**	**(2541)**
	Datel	**ADC574A**	**(2575)**
	Harris	**HI574**	**(2703, 2738, 2744)**
	HybridSys	HS574	
	Intech	**ADC574**	**(2799)**
	Maxim	MAX574	
	MCE	MCE574	
	MicroNet	MN574A	
	MicroPwr	MP574	
	TeledyneP	TP574A	
AD578	Maxim	AD578	
AD580	Hitachi	HA17012	
	Maxim	AD580	
	SiliconG	SG1503	
AD581	AD	ADREF01	
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
AD583	**Datel**	**SHMIC-1**	**(2577)**
	Harris	HA2475	
	PMI	**SMP10**	**(2975)**
		SMP11	**(2975)**
	TeledyneP	4856	
AD584	Maxim	AD584	
AD589	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM185-1	
		LM385-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM113	
		LM313	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
AD589			(Cont'd)
	TeledyneP	TSC9491	
	TeledyneS	9491	
		TSC9491	
AD590	**GE/Intersil**	**AD590**	**(2677)**
AD624	AD	AD521	
	Burr-Brown	**INA110**	**(2537)**
	National	DS1603	
		LM148	
		LM163	
	PMI	**AMP05**	**(2975)**
	TI	LM148	
AD632	**Burr-Brown**	**AD632**	**(2539)**
AD636	Fujitsu	MBL8031	
	Intel	AMD8031	
	Maxim	AD636	
	Siemens	SAB8031	
	Signetics	SCN8031	
AD650	Maxim	AD650	
AD674	Burr-Brown	ADC674A	
	GoldStar	GL7824	
	Gould	μA7824	
	Harris	**HI674A**	**(2703, 2738, 2745)**
	Hitachi	HA17824	
	National	μA7824	
AD7224	Maxim	AD7224	
	PMI	**PM7224**	**(2973, 2976)**
AD7225	Maxim	AD7225	
	PMI	**DAC8408**	**(2973, 2976)**
AD7226	**PMI**	**PM7226**	**(2973, 2976)**
AD741	Fairchild	μA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	μPC151	
		μPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	μA741	
	SiliconG	SG741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
AD741S	Burr-Brown	3500	
	LinearTech	LM107	
	National	LH741A	
		LM107	
	PMI	PM741	
	Raytheon	RC741	
	SiliconG	SG107	
	Thomson	LM107	
AD7501	MicroPwr	MP7501	
AD7502	MicroPwr	MP7502	
AD7503	**Datel**	**MV808**	**(2577)**
	HybridSys	MUX201	
	MicroPwr	MP7503	
AD7506	**Datel**	**MV1606**	**(2577)**
		MX1606	**(2577)**
	GE/Intersil	**IH6116**	**(2681)**
	Harris	**HI506**	**(2703, 2738, 2748)**
	MicroPwr	MP7506	
	Motorola	MC7506	
	PMI	**MUX16**	**(2975)**
	Siliconix	DG506A	
AD7507	**Datel**	**MVD807**	**(2577)**
		MXD807	**(2577)**
	GE/Intersil	**IH6216**	**(2681)**
	Harris	**HI507**	**(2703, 2738, 2748)**
	MicroPwr	MP7507	
	PMI	**MUX28**	**(2975)**
	Siliconix	DG507A	
	TeledyneP	4551	
AD7510	MicroPwr	MP7510DI	
	PMI	**SW7510**	**(2975)**
AD7511	MicroPwr	MP7511DI	
	PMI	**SW7511**	**(2975)**
AD7512	MicroPwr	MP7512DI	
AD7520	**Datel**	**DACHA10B**	**(2576)**
	GE/Intersil	**AD7520**	**(2668)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Analog Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
AD7520			(Cont'd)
	Maxim	AD7520	
	MicroPwr	MP7520	
	National	AD7520	
		DAC1020	
		DAC1021	
		DAC1022	
AD7521	**Burr-Brown**	**DAC7541A**	**(2541)**
	Datel	**DACHA12B**	**(2576)**
	GE/Intersil	**AD7521**	**(2668)**
	HybridSys	DAC331-12	
	Maxim	AD7521	
	MicroPwr	MP7521	
	National	AD7521	
		DAC1220	
		DAC1221	
		DAC1222	
	PMI	AD7521	
AD7522	MicroPwr	MP7522	
AD7523	**Datel**	**DAC7523**	**(2576)**
	GE/Intersil	**AD7523**	**(2668)**
	Maxim	AD7523	
	MicroPwr	MP7523	
AD7524	GE/Intersil	AD7524	
	Maxim	AD7524	
	MicroPwr	MP7524	
	PMI	**PM7524**	**(2973, 2976)**
AD7528	Ferranti	ZN7528	
	Maxim	AD7528	
	MicroPwr	MP7528	
	PMI	**PM7528**	**(2973, 2976)**
AD7530	**GE/Intersil**	**AD7530**	**(2668)**
	Maxim	AD7530	
	MicroPwr	MP7530	
AD7531	AD	AD8531	
	Burr-Brown	**DAC7541A**	**(2541)**
	GE/Intersil	AS7531	
	Maxim	AD7531	
	MicroPwr	MP7531	
	PMI	PM7531	
AD7533	**Datel**	**DAC7533**	**(2576)**
	GE/Intersil	**AD7533**	**(2668)**
	Maxim	AD7533	
	MicroPwr	MP7533	
		MP7633	
	National	AD7533	
	PMI	**PM7533**	**(2974, 2976)**
AD7537	Maxim	AD7537	
AD7541	**Burr-Brown**	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
AD7542	Maxim	AD7542	
	MicroPwr	MP7542	
	PMI	**PM7542**	**(2974, 2976)**
AD7543	Maxim	AD7543	
	MicroPwr	MP7543	
	PMI	**PM7543**	**(2974, 2976)**
AD7545	**Burr-Brown**	**DAC7545**	**(2541)**
	Maxim	AD7545	
	MicroPwr	MP7545	
	PMI	**PM7545**	**(2974, 2976)**
AD7547	Maxim	AD7547	
AD7548	Maxim	AD7548	
	PMI	**PM7548**	**(2974, 2976)**
AD7550	MicroPwr	MP7550	
AD7572	Maxim	AD7572	
AD7574	Maxim	AD7574	
		MAX160	
	MicroPwr	MP7574	
AD7575	Maxim	AD7575	
	Siemens	SDA3203	
	Toshiba	TD6316	
AD7576	Maxim	AD7576	
	Plessey	SP4632	
		SP4653	
	SEEQ	**8023**	**(2991)**
	Siemens	S062P	
		SDA2211	
		SDA4212	
	Telefunken	µ684	
		µ686BS	
AD7581	Maxim	AD7581	
		MAX161	
	MicroPwr	MP7581	
AD7628	Maxim	AD7628	
	Motorola	MC12020	
	Siemens	SO41P	
	Signetics	**NE604**	**(3103)**
		SA604	
	Sprague	ULN3820	
AD7820	Maxim	AD7820	
		MAX150	
	National	DS7820	
	TI	SN55182	
AD7824	Maxim	AD7824	
		MAX154	
AD7828	Maxim	AD7828	
		MAX158	
AD8007	**GE/Intersil**	**ICL8007**	**(2673)**
AD8531	AD	AD7531	
	Burr-Brown	**DAC7541A**	**(2541)**
	GE/Intersil	AS7531	
	Maxim	AD7531	
	MicroPwr	MP7531	
	PMI	PM7531	
ADADC80	**Burr-Brown**	**ADC80**	**(2541)**
	MicroNet	MNADC80	
ADADC84	AD	ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADADC85	AD	ADADC84	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADADC85S	AD	ADADC84	
		ADADC85	
		ADADC87	
ADADC85S			(Cont'd)
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADC10	Intech	CYAD10	
ADC1100	Intech	ADC1100	
ADC1111	Intech	ADC1111	
ADC12	Datel	ADCMA12	
	Intech	CYAD12	
ADC141	Intech	ADC141	
ADC16	Intech	A856	
ADC171	Intech	ADC171	
ADC71	**Burr-Brown**	**ADC71**	**(2541)**
ADC72	**Burr-Brown**	**ADC72**	**(2541)**
ADC8	Intech	CYAD8	
ADDAC-08	AMD	AM1408	
		DAC08	
	AD	AD1408	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		µA0801	
		µA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	µPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
ADDAC100	**PMI**	**DAC100**	**(2974)**
ADDAC71	**Burr-Brown**	**DAC700**	**(2541)**
		DAC701	**(2541)**
		DAC702	**(2541)**
		DAC703	**(2541, 2544)**
ADDAC71	**Burr-Brown**		(Cont'd)
		DAC71	**(2541)**
		DAC72	**(2541)**
	MicroNet	MNDAC71	
ADDAC80	AD	ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
ADDAC85	AD	ADDAC80	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
ADDAC87	Burr-Brown	DAC851	
		DAC87	**(2542, 2544)**
	Datel	DAC687	
		DAC87	
	Harris	**HI5687**	**(2703)**
	HybridSys	DAC335	
		HSDAC87	
	MicroNet	MNDAC87	
ADG200	**GE/Intersil**	**DG200**	**(2679)**
		IH200	
		IH5200	
	Harris	**HI200**	**(2707, 2737, 2747)**
	PMI	SW05	
	Siliconix	DG200A	
ADG201	**GE/Intersil**	**DG201**	**(2679)**
		DG201A	**(2679)**
		IH201	
		IH5201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	DG201A	
		MAX331	
	MicroPwr	MP201	
	National	LF11201	
		LF13201	
	PMI	**SW201**	**(2975)**
	Siliconix	DG201A	
ADLH0032	AD	HOS-060	
		HOS050	
		MOS050	
	Elantec	**ELH0032**	**(2593)**
	Harris	**HA2542**	**(2737, 2747, 2750)**
	Micra	MC0032	
	National	LH0032	
	TeledyneC	LH0032	
	TeledyneP	0032	
ADLH0033	AD	HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Analog Devices			**(Cont'd)**
ADLH0033	MicroPwr		(Cont'd)
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
ADREF01	AD	AD581	
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
ADREF02	Gennum	REF02	
	Maxim	REF02	
	MicroPwr	MPREF02	
	PMI	**REF02**	**(2975)**
	Raytheon	REF02	
ADS1012	LogicDev	LMU08	
	TRW-LSI	MPY112K	
ADSHC85	**Burr-Brown**	**SHC85**	**(2543)**
ADSP1008	TRW-LSI	TDC1008	
ADSP1009	AMD	AM29C509	
	IDT	**IDT7209**	**(2806)**
	LogicDev	LMA1009	
	TRW-LSI	TDC1009	
		TMC2009	
ADSP1010	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	**ADSP1010A**	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
ADSP1010A	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
ADSP1012	IDT	IDT7112	
		IDT7212	**(2806)**
	IMI	MPY12IMI	
	LogicDev	LMU12	
	TRW-LSI	MPY012H	
ADSP1016	AMD	AM29516	
		AM29C516	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ADSP1016			(Cont'd)
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LogicDev	LMU16	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TI	SN741616	
	TRW-LSI	MPY016H	
		MPY016K	
		TMC216H	
		TMC216K	
	Weitek	WTL1016	
		WTL1516	
		WTL2516	
ADSP1016/7A			
	AMD	29516/7	
		29516A/7	
	Cypress	**CY7C516/7**	**(2569)**
	IDT	**IDT7216/7**	**(2806, 2832)**
	MMI	67C7016/7	
	Sprague	UCN4801	
		UCN5801	**(3203)**
	Weitek	WTL1016/7	
		WTL2516/7D	
ADSP1080	AMD	AM25S557	
	IMI	H91102	
	LogicDev	LMU08	
	TRW-LSI	MPY08HU	
		TMC28KU	
ADSP1081	LogicDev	LMU8U	
ADVFC32	**Burr-Brown**	**VFC32**	**(2542, 2544)**
	Maxim	VFC32	
	MCE	MCEVFC32	
B100	Intech	A401	
DAC1136	Intech	CYDAC1136	
DAC1138	Intech	CYDAC1138	
DAC12	Intech	CYDAC12	
DAC14	Intech	CYDAC14	
	Matra-Harris	HC3054	
DAC16	Intech	CYDAC16	
DAC80	AD	ADDAC80	
		ADDAC85	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
HDG0605	MicroNet	MNO605	
HDG0805	Intech	0805H	
	MicroNet	MNO805	
HDS1250	ILC-DDC	DDC1250	
HOS-060	AD	ADLH0032	
		HOS050	
		MOS050	
	Elantec	**ELH0032**	**(2593)**
	Harris	**HA2542**	**(2737, 2747, 2750)**
	Micra	MC0032	
	National	LH0032	
	TeledyneC	LH0032	
	TeledyneP	0032	
HOS050	AD	ADLH0032	
		HOS-060	
		MOS050	
	Elantec	**ELH0032**	**(2593)**
	Harris	**HA2542**	**(2737, 2747, 2750)**
	Micra	MC0032	
	National	LH0032	
	TeledyneC	LH0032	
	TeledyneP	0032	
HOS100	AD	ADLH0033	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HOS100	Elantec		(Cont'd)
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
HTC0300A	**Intech**	**SH376**	**(2799)**
	MicroNet	MN0300A	
		MN376	
		MN377	
	TeledyneP	4860	
MOS050	AD	ADLH0032	
		HOS-060	
		HOS050	
	Elantec	**ELH0032**	**(2593)**
	Harris	**HA2542**	**(2737, 2747, 2750)**
	Micra	MC0032	
	National	LH0032	
	TeledyneC	LH0032	
	TeledyneP	0032	
MPX8	Intech	192	
OP07	AD	AD517	
	Fairchild	μA714	
	Harris	**HA5130**	**(2737, 2747)**
		HA5135	**(2706)**
	LinearTech	LT1001	
		OP07	
	Maxim	MAX400	
		OP07	
	Micra	MC0021	
	MicroPwr	MPOP07	
	Raytheon	**OP07**	**(2979)**
	TI	OP07D	
Analog Systems			
MA332	**Datel**	**AM453-2C**	**(2577)**
	Exar	XR5534	
	Raytheon	RC5534	
	Signetics	**NE5534**	**(3091)**
		NE5534A	**(3091)**
	SSM	SSM2134	
	TI	NE5534	
		NE5534A	
MA333	Fairchild	μA771	
	Motorola	**MC34001**	**(2920, 2959)**
	NEC	μPC4071	
		μPC4081	
	TI	TL071	
		TL081C	
	Toshiba	TA75071	
MA336	Fairchild	μA772	
	Motorola	**MC34002**	**(2922)**
	NEC	μPC4072	
		μPC4082	
	SGS	TL072	
	TI	TL072	
		TL082C	
	Toshiba	TA75072	
		TA75074	
MA374	Fairchild	μA774	
	Motorola	**MC33074**	**(2924)**
		MC34004	**(2923, 2959)**
		MC34004A	**(2923, 2959)**
		MC34074	**(2923, 2960)**
	NEC	μPC4084	
	TI	TL074	
		TL084BC	
MA459	Ferranti	ZN459	
♦ TL088	TI	TL088	
Analogic			
MP221	Intech	A221	
MP2700	Intech	ADC2700	
MP2712	Intech	A3103	
MP2800	Intech	ADC2800	

Manufacturer Device	Replacement Source	Device	IC Master Page
MP2900	Intech	ADC2900	
MP8016	**Intech**	**A8016**	**(2799)**
MP8308	**Datel**	**DAC8308**	**(2576)**
	Intech	**VDAC8308**	**(2799)**
Apex Microtechnology			
PA02	**Burr-Brown**	**3571**	**(2536)**
		3572	**(2536)**
	Elantec	**ELH0101**	**(2593)**
	Maxim	LH0101	
	National	LH0101	
PA07	**Apex**	**PA12**	**(2458)**
	Burr-Brown	**OPA512**	**(2536)**
PA10	**Apex**	**PA12**	**(2458)**
	Burr-Brown	**OPA511**	**(2536)**
		OPA512	**(2536)**
	TeledyneP	1468	
♦ PA11	**Apex**	**PA10**	**(2458)**
		PA12	**(2458)**
♦ PA11	**Burr-Brown**	**OPA511**	**(2536)**
		OPA512	**(2536)**
♦ PA11	TeledyneP	1468	
PA12	**Apex**	**PA07**	**(2458)**
	Burr-Brown	**OPA512**	**(2536)**
PA51	**Apex**	**PA61**	**(2458)**
	Burr-Brown	**OPA501**	**(2536)**
		OPA8785	
PA61	**Apex**	**PA51**	**(2458)**
	Burr-Brown	**OPA501**	**(2536)**
		OPA8785	
PA73	**Burr-Brown**	**3573**	**(2536)**
PA80	AMD	AM93425A	
	Burr-Brown	**3580**	**(2536)**
	Fairchild	93425A	
PA81	AMD	AM93L415	
	Burr-Brown	**3581**	**(2536)**
	Fairchild	93L415	
	Motorola	MCM93L415	
PA82	AMD	AM93L422	
	Burr-Brown	**3582**	**(2536)**
	Fairchild	93L422	
PA83	TeledyneP	1480	
PA84	**Burr-Brown**	**3584**	**(2536)**
Aptek Microsystems			
AMS3101	Burr-Brown	3293	
	Teltone	M-988	
AT&T			
41LF	AMD	26LS32	
	Motorola	26LS32	
	National	26LS32	
41LG	AMD	26L631	
		26LS31	
	Motorola	26LS31	
	National	26LS31	
41LK	National	DS8923A	
♦ M411024	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
♦ M411024	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
♦ M411024	**GoldStar**	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
♦ M411024	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
♦ M411024	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
AT&T			**(Cont'd)**
♦ M411024	NEC		(Cont'd)
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
♦ M411024	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
♦ M411024	**Toshiba**	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
♦ M411024XP	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
♦ M411024XP	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
♦ M411024XP	**GoldStar**	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
♦ M411024XP	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
♦ M411024XP	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
♦ M411024XP	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
♦ M411024XP	**Toshiba**	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
♦ M51064	TI	TMS4161	
T7513	Intel	2913	
		29C13	
	TI	2133	
		TCM2913	
		TCM29C13	
♦ WCM41256	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
♦ WCM41256	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
♦ WCM41256	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
♦ WCM41256	NEC	μPD41256	
		μPD41257	
♦ WCM41256	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
♦ WCM41256	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
♦ WCM41256	**TI**	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
♦ WCM41256	Western	WCM41256	
Atmel Corp.			
27HC64	Atmel	AT27HC64	
	GIM	27HC64	
	GoldStar	**GL3620**	**(2699)**
		GM27HC64	**(2692)**
	ICT	27CX641	
	Sanyo	LA7620	
	Sharp	**LH5763**	**(2994)**
	Waferscale	**WS57C64**	**(3376)**
27HC641	Atmel	AT27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C263	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GE/RCA	**CD22203**	**(2636)**
	GIM	27HC641	
	ICT	27CX642	
	Sharp	**LH5749**	**(2994)**
		LH5762	**(2994)**
	SiliconSys	SSI203	
	Waferscale	**WS57C49**	**(3376)**
2804	GIM	28C04	
	SEEQ	**2804**	**(2991)**
	Xicor	2804	
		X2804	**(3389, 3405)**
28C256	AMD	28C256	
	GIM	28CP256A	
	SEEQ	28256	
		28C256	**(2991)**
	Xicor	**X28256**	**(3393, 3412)**
		X28C256	**(3394, 3413)**
28C64	AMD	AM2864A	
		AM9864	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
AT27HC64	Atmel	27HC64	
	GIM	27HC64	
	GoldStar	**GL3620**	**(2699)**
		GM27HC64	**(2692)**
	ICT	27CX641	
	Sanyo	LA7620	
	Sharp	**LH5763**	**(2994)**
	Waferscale	**WS57C64**	**(3376)**
AT27HC641	Atmel	27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C263	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GE/RCA	**CD22203**	**(2636)**
	GIM	27HC641	
	ICT	27CX642	
	Sharp	**LH5749**	**(2994)**
		LH5762	**(2994)**
	SiliconSys	SSI203	
	Waferscale	**WS57C49**	**(3376)**
Brooktree			
BT101	Brooktree	BT102	
		BT106	
	Fairchild	FVG101	
	Intech	**VDAC1842**	**(2799)**
BT102	Brooktree	BT101	
		BT106	
	Fairchild	FVG101	
	Intech	**VDAC1842**	**(2799)**
BT103	Brooktree	Bt103	
	Intech	RGB3400	
BT106	Brooktree	BT101	
		BT102	
BT106			(Cont'd)
	Fairchild	FVG101	
	Intech	**VDAC1842**	**(2799)**
BT108	Fairchild	FVG108	
BT248	**IDT**	**IDT75C48**	**(2807, 2836)**
	TRW-LSI	TDC1048	
BT451	Fairchild	FVG451	
BT452	Brooktree	Bt452	
	Intech	RGBDAC4	
BT453	Fairchild	FVG453	
BT458	IDT	IDT75C458	
BTLOG	IDT	IDT7MB5038	
	TRW-LSI	TDC-1318	
Bt101	Brooktree	BT101	
		BT102	
		BT106	
	Fairchild	FVG101	
	Intech	**VDAC1850**	**(2799)**
Bt103	Brooktree	BT103	
	Intech	RGB3400	
Bt444	Intech	VDAC444	
Bt452	Intech	RGBDAC4T	
Burr-Brown Corporation			
3293	AD	230	
		233	
	Intech	A230	
3313	Intech	A101	
3500	AD	AD741S	
	LinearTech	LM107	
	National	LH741A	
		LM107	
	PMI	PM741	
	Raytheon	RC741	
	SiliconG	SG107	
	Thomson	LM107	
3501	AD	AD308	
	Burr-Brown	3500	
	Fairchild	μA308	
	GE/Intersil	AD308	
		LM308	
	Motorola	**LM308**	**(2919, 2958)**
	National	LM308	
	Raytheon	LM308	
3506	**Datel**	**AM460-2**	**(2577)**
	Elantec	**EHA2605**	**(2594)**
	Harris	HA2605	
	Motorola	**MC1456**	**(2920)**
	TI	MC1456	
3507	AD	AD509	
	Harris	**HA2520**	**(2705, 2737, 2747)**
	TeledyneP	1322	
3508	AD	AD507	
	Datel	**AM462-1**	**(2577)**
		AM462-2	**(2577)**
	GE/Intersil	A561	
	Harris	**HA2620**	**(2706, 2737, 2747)**
		HA2622	**(2706, 2768)**
		HA2625	
3522	**Harris**	**HA5180**	**(2706, 2737, 2747)**
3527	**Harris**	**HA5180**	**(2706, 2737, 2747)**
	PMI	**OP43**	**(2970)**
	TeledyneP	1346	
3542	AD	AD3542	
3554	TeledyneP	3554	
3571	**Apex**	**PA02**	**(2458)**
	Burr-Brown	**3572**	**(2536)**
	Elantec	**ELH0101**	**(2593)**
	Maxim	LH0101	
	National	LH0101	
3572	**Apex**	**PA02**	**(2458)**
	Burr-Brown	**3571**	**(2536)**
	Elantec	**ELH0101**	**(2593)**
	Maxim	LH0101	
	National	LH0101	
3573	**Apex**	**PA73**	**(2458)**
3580	AMD	AM93425A	
	Apex	**PA80**	**(2458)**
	Fairchild	93425A	
3581	AMD	AM93L415	
	Apex	**PA81**	**(2458)**
	Fairchild	93L415	
	Motorola	MCM93L415	
3582	AMD	AM93L422	
	Apex	**PA82**	**(2458)**
	Fairchild	93L422	
3584	**Apex**	**PA84**	**(2458)**
3621	Intech	A200	
4203	AD	AD530	
		AD533	
	Burr-Brown	**MPY100**	**(2539)**
	GE/Intersil	**ICL8013**	**(2677)**
4205	AD	AD532	
	Burr-Brown	4213	
		4214	
4213	AD	AD532	
	Burr-Brown	4205	
		4214	
4214	AD	AD532	
	Burr-Brown	4205	
		4213	
4341	AD	AD536	
	Maxim	AD536	
AD515	AD	AD515	
	Burr-Brown	OPA104	
AD632	AD	AD632	
ADC574A	AD	AD574	
	Datel	**ADC574A**	**(2575)**
	Harris	**HI574**	**(2703, 2738, 2744)**
	HybridSys	HS574	
	Intech	**ADC574**	**(2799)**
	Maxim	MAX574	
	MCE	MCE574	
	MicroNet	MN574A	
	MicroPwr	MP574	
	TeledyneP	TP574A	
ADC674A	**AD**	**AD674**	**(2411)**
	GoldStar	GL7824	
	Gould	μA7824	
	Harris	**HI674A**	**(2703, 2738, 2745)**
	Hitachi	HA17824	
	National	μA7824	
ADC71	AD	ADC71	
ADC72	AD	ADC72	
ADC76	AD	AD376	
ADC80	AD	ADADC80	
	MicroNet	MNADC80	
ADC82	HybridSys	ADC542	
		HSADC82	
ADC84	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC85**	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADC85	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Burr-Brown Corporation (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
ADC85	**Intech**		(Cont'd)
		ADC85	(2799)
		ADC87	(2799)
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADC87	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	(2541)
		ADC85	(2541)
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	(2799)
		ADC85	(2799)
		ADC87	(2799)
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
BB3553	Maxim	BB3553	
BB3554	Maxim	BB3554	
DAC700	AD	ADDAC71	
	Burr-Brown	**DAC701**	(2541)
		DAC702	(2541)
		DAC703	(2541, 2544)
		DAC71	(2541)
		DAC72	(2541)
	MicroNet	MNDAC71	
DAC701	AD	ADDAC71	
	Burr-Brown	**DAC700**	(2541)
		DAC702	(2541)
		DAC703	(2541, 2544)
		DAC71	(2541)
		DAC72	(2541)
	MicroNet	MNDAC71	
DAC702	AD	ADDAC71	
	Burr-Brown	**DAC700**	(2541)
		DAC701	(2541)
		DAC703	(2541, 2544)
		DAC71	(2541)
		DAC72	(2541)
	MicroNet	MNDAC71	
DAC703	AD	ADDAC71	
	Burr-Brown	**DAC700**	(2541)
		DAC701	(2541)
		DAC702	(2541)
		DAC71	(2541)
		DAC72	(2541)
	MicroNet	MNDAC71	
DAC71	AD	ADDAC71	
	Burr-Brown	**DAC700**	(2541)
		DAC701	(2541)
		DAC702	(2541)
		DAC703	(2541, 2544)
		DAC72	(2541)
	MicroNet	MNDAC71	
DAC72	AD	ADDAC71	
	Burr-Brown	**DAC700**	(2541)
		DAC701	(2541)
		DAC702	(2541)
		DAC703	(2541, 2544)
		DAC71	(2541)
	MicroNet	MNDAC71	
DAC7541A	**PMI**	**PM7541**	(2974, 2976)
	TeledyneS	TSC7541	
DAC7545	AD	AD7545	
	Maxim	AD7545	
	MicroPwr	MP7545	
	PMI	**PM7545**	(2974, 2976)
DAC80	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	DAC800	
		DAC85	(2542)
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	(2576)
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
DAC800	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	(2542)
		DAC85	(2542)
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	(2576)
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
DAC85	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	(2542)
		DAC800	
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	(2576)
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
DAC85/CCD	National	DAC1287	
DAC850	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	(2542)
		DAC800	
		DAC85	(2542)
	Datel	DAC85	
		DAC85C	
		DACHZ12B	(2576)
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
DAC851	AD	ADDAC87	
	Burr-Brown	**DAC87**	(2542, 2544)
	Datel	DAC687	
		DAC87	
	Harris	**HI5687**	(2703)
	HybridSys	DAC335	
		HSDAC87	
	MicroNet	MNDAC87	
DAC87	AD	ADDAC87	
	Burr-Brown	DAC851	
	Datel	DAC687	
		DAC87	
	Harris	**HI5687**	(2703)
	HybridSys	DAC335	
		HSDAC87	
	MicroNet	MNDAC87	
INA101	MicroPwr	MPINA101	
INA110	AD	AD521	
		AD624	
	National	DS1603	
		LM148	
		LM163	
INA110			(Cont'd)
	PMI	**AMP05**	(2975)
	TI	LM148	
MPC4D	**GE/Intersil**	**IH5208**	(2681)
	Harris	**HI509A**	(2703, 2738, 2748)
	Maxim	HI509A	
		MAX359	
	TeledyneP	4553	
MPC800	**Datel**	**MX1616**	(2577)
	Harris	**HI516**	(2703, 2738, 2748)
MPC801	**Harris**	**HI518**	(2703, 2738, 2749)
MPC8D	**Harris**	**HI507A**	(2703, 2738, 2748)
	TeledyneP	4551	
MPC8S	Datel	MUX808	
		MX808	(2577)
	GE/Intersil	ICL6108	
		IH6108	(2681)
	Harris	**HI508**	(2703, 2738, 2748)
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX08	(2975)
		MUX88	(2975)
	Siliconix	DG508A	
	TeledyneP	4554	
MPY100	AD	AD530	
		AD533	
	Burr-Brown	4203	
	GE/Intersil	**ICL8013**	(2677)
MPY534	AD	AD534	
OP27	AD	AD510	
		AD517	
	Burr-Brown	**OPA27**	(2532)
	Harris	**HA5127**	(2737, 2747, 2768)
		HAOP27	
	LinearTech	LT1007	
		OP27	
	Maxim	OP27	
	PMI	OP27	
		OP27	(2970)
	Raytheon	**RC714**	(2979)
	TI	LT1007	
OP37	Maxim	OP37	
OPA103	AD	AD545	
OPA104	AD	AD515	
	Burr-Brown	**AD515**	(2533)
OPA128	**AD**	**AD549**	(2431)
OPA156A	AD	AD544	
	Fairchild	LF156A	
	LinearTech	LF156A	
	National	LF156A	
		OPA101	
	PMI	**OP43**	(2970)
		PM156A	(2971)
	TI	TL081	
OPA27	AD	AD510	
		AD517	
	Burr-Brown	OP27	
	Harris	**HA5127**	(2737, 2747, 2768)
		HAOP27	
	LinearTech	LT1007	
		OP27	
	Maxim	OP27	
	PMI	OP27	
		OP27	(2970)
	Raytheon	**RC714**	(2979)
	TI	LT1007	
OPA356A	LinearTech	LF356A	
	National	LF356A	
	PMI	PM356A	
OPA37	**Harris**	**HA5137**	(2737, 2747, 2768)
		HAOP37	
		MA5147	
	LinearTech	LT1037	
		OP37	
	Maxim	OP37	
	PMI	OP37	
		OP37	(2970)
	TI	LT1037	
OPA501	**Apex**	**PA51**	(2458)
		PA61	(2458)
OPA501			(Cont'd)
	Burr-Brown	OPA8785	
OPA511	**Apex**	**PA10**	(2458)
		PA12	(2458)
	Burr-Brown	**OPA512**	(2536)
	TeledyneP	1468	
OPA512	**Apex**	**PA07**	(2458)
		PA12	(2458)
OPA605	OEI	AH0605	
OPA606	AD	AD381	
		AD544	
	LinearTech	LF155	
		LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	(2971)
		OP43	(2970)
	TI	LF353	
		LF411	
	Thomson	LF155	
OPA633	AD	ADLH0033	
		HOS100	
	Elantec	**EL2004**	(2591)
		EL2005	(2591)
		EL2033	(2592)
		ELH0033	(2593)
		ELH2004	
		ELH2005	
	Harris	**HA5033**	(2706, 2738, 2748)
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
OPA8780	SiliconG	SG75326	
OPA8785	**Apex**	**PA51**	(2458)
		PA61	(2458)
	Burr-Brown	**OPA501**	(2536)
PGA100	Maxim	PGA100	
REF10	LinearTech	LT1021	
	PMI	**REF10**	(2975)
SCH804	**Burr-Brown**	**SHC804**	(2543)
	Datel	**SHM4860**	(2577)
	ILC-DDC	THA05203	
	TeledyneP	TP4860	
SHC298	Datel	SHMLM2	
	National	LF298	
SHC5320	Datel	SHM20	
	Harris	**HA5320**	(2737, 2747)
	TeledyneP	4866	
SHC804	Burr-Brown	SCH804	
	Datel	**SHM4860**	(2577)
	ILC-DDC	THA05203	
	TeledyneP	TP4860	
SHC85	AD	ADSHC85	
VFC32	AD	ADVFC32	
	Maxim	VFC32	
	MCE	MCEVFC32	

Calmos Systems

CA29C128	GE/Intersil	IM29C128	
CA53C80	LogicDev	L5380	
	NCR	NMOS5380	
CA80C85	AMD	8085A	
	Devtek	DS8085	
	Intel	8085	
		8085A	
	NEC	μPD8085	
	OKI	MSM8085	
	Toshiba	**TMP8085**	(3306)
		TMP8085A	(3306)
CA82C12	AMD	AM8212	
	Intel	8212	
	NEC	μPB8212	
	OKI	MSM82C12	
CA82C37	AMD	8237	
	Harris	**82C37**	(2731, 2768, 4249)
	Intel	8037	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Calmos Systems (Cont'd)			
CA82C37			(Cont'd)
	NEC	μPD8237	
	OKI	MSM82C37	
CA82C54	**Harris**	**82C54**	**(2731, 2768, 4249)**
	Intel	8254	
		82C54	
	NEC	μPD71054	
	OKI	82C54	
	S-MOS	SMC82C54AC	
CA82C55	AMD	8255	
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
CA82C59	AMD	8259	
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
CA82C84	Fujitsu	MBL8284	
	Harris	**82C84**	**(2734, 2768, 4249)**
		82C84A	**(2734, 2768, 4249)**
	Intel	8284	
		82C84	
		82C84A	
	NEC	μPB8284	
		μPD71084	
		μPD8284	
	OKI	MSM82C84	
CA82C88	AMD	8288	
	Fujitsu	MBL8288	
	Harris	**82C88**	**(2734, 2768, 4249)**
	Intel	8288	
		82C88	
	NEC	μPB8288	
		μPD71088	
		μPD8288	
	OKI	82C88	
		MSM82C88	
Cherry Semiconductor			
CH1526	**IPS**	**IP1526**	**(2854, 2856)**
	LinearTech	LT1526	
	Motorola	**SG1526**	**(2931)**
		SG3526	**(2931)**
	SiliconG	SG1526	
		SG3525	
		SG3526	
	Unitrode	**UC1526**	**(3323)**
CS117	Fairchild	SSI117	
	MicroLinear	ML117	
	SiliconSys	SSI117	
CS1200	Exar	XR200	
CS1300	Exar	XR300	
CS1524	Exar	XR1524	
	Fairchild	μA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CS1524			(Cont'd)
	National	LM1524	
	SGS	SG1524	
		UC1524A	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524**	**(3323)**
		UC1524A	**(3323)**
CS1524A	**IPS**	**IP1524B**	**(2854)**
CS1525	LinearTech	LT1525	
		SG1525	
	SiliconG	SG1525	
	TI	TL1525	
CS1525A	**Exar**	**XR1525A**	**(2607)**
	IPS	**IP1525A**	**(2854)**
	LinearTech	LT1525A	
	Motorola	**SG1525A**	**(2931)**
	SGS	SG1524A	
	SiliconG	SG1525A	
	Siliconix	PWM125	
	Unitrode	**UC1525**	**(3323)**
		UC1525A	**(3323)**
CS1527	LinearTech	LT1527	
		SG1527	
	SiliconG	1526	
		SG1527	
	TI	TL1527	
	Unitrode	**UC1527**	**(3323)**
CS1527A	**IPS**	**IP1527A**	**(2854)**
	LinearTech	LT1527A	
	Motorola	**SG1527A**	**(2931)**
	SGS	SG1527A	
	SiliconG	SG1527A	
	Siliconix	PWM27	
	Unitrode	**UC1527A**	**(3323)**
CS166	Sprague	ULN2429	
CS1842	**IPS**	**IP1842**	**(2854, 2856)**
	LinearTech	LT1842	
	SiliconG	SG1842	
	Unitrode	**UC1842**	**(3323)**
CS1843	**IPS**	**IP1843**	**(2854)**
	LinearTech	LT1843	
	SiliconG	SG1843	
	Unitrode	**UC1843**	**(3323)**
CS2000	Exar	XRE100	
	Interdesign	MOE	
	MCE	MCEA20E	
CS250	Dionics	DI250	
CS2500	Exar	XRG100	
	Interdesign	MOG	
	MCE	MCEA20G	
CS2524	Exar	XR2524	
	Fairchild	μA2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
CS2524A	IPS	IP2524B	
CS2525	SiliconG	SG2525	
	TI	TL2525	
	Unitrode	**UC2525**	**(3323)**
CS2525A	**Exar**	**XR2525A**	**(2607)**
	IPS	IP2525A	
	LinearTech	LT2525A	
	Motorola	**SG2525A**	**(2931)**
	SiliconG	SG2525A	
	Siliconix	PWM25B	
	TI	SG2525A	
	Unitrode	**UC2525A**	**(3323)**
CS2526	**IPS**	**IP2526**	**(2856)**
	LinearTech	LT2526	
	Motorola	**SG2526**	**(2931)**
	SiliconG	SG2526	
		SG2527	
	Unitrode	**UC2526**	**(3323)**
CS2527	SiliconG	SG2527	
	TI	TL2527	
	Unitrode	**UC2527**	**(3323)**
CS2527A	**Exar**	**XR2527A**	**(2607)**
	IPS	IP2527A	
	LinearTech	LT2527A	
	Motorola	**SG2527A**	**(2931)**
	SiliconG	SG2527A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CS2527A			(Cont'd)
	TI	SG2527A	
	Unitrode	**UC2527A**	**(3323)**
CS260	Dionics	DI260	
CS2842	Gennum	LS2842	
CS2842A	Cherry	CS3842A	
	SiliconG	SG2842	
	Unitrode	**UC2842**	**(3323)**
CS2907-D14	National	LM2907	
CS2917	Exar	XR2917	
	National	LM2917	
CS3000	Exar	XRF100	
	Interdesign	MCF	
		MOF	
	MCE	MCEA20F	
CS3200	Exar	XRL100	
	Interdesign	MOL	
	MCE	MCEA20L	
CS3470A	Exar	XR3470	
	Motorola	**MC3470**	**(2950)**
CS3471	**Motorola**	**MC3471**	**(2949)**
	TI	MC3471	
CS3524	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	SG3524	
		UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
	TI	SG3524	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
CS3525A	**Exar**	**XR3525A**	**(2607)**
	IPS	**IP3525A**	**(2854)**
	LinearTech	LT3525A	
	Motorola	**SG3525A**	**(2931)**
	RIFA	RL3525A	
	SGS	SG3525A	
	SiliconG	SG3525A	
	Siliconix	PWM25	
	TI	SG3525A	
	Unitrode	**UC3525A**	**(3323)**
CS3527	Cherry	CS3527A	
	Exar	**XR3527A**	**(2607)**
	IPS	**IP3527**	**(2854)**
	LinearTech	LT3527A	
	Motorola	**SG3527A**	**(2931)**
	SGS	SG3527A	
	SiliconG	SG3527A	
	TI	SG3527A	
CS3527A	Cherry	CS3527	
	Exar	**XR3527A**	**(2607)**
	IPS	**IP3527**	**(2854)**
	LinearTech	LT3527A	
	Motorola	**SG3527A**	**(2931)**
	SGS	SG3527A	
	SiliconG	SG3527A	
	TI	SG3527A	
CS3842A	Cherry	CS2842A	
	SiliconG	SG2842	
	Unitrode	**UC2842**	**(3323)**
CS4000	Interdesign	ADVFC32	
CS494M	Exar	XR494	
	IPS	**IP494A**	**(2854)**
	Motorola	**TL494**	**(2931)**
	TI	TL494M	
		TL594M	
	Unitrode	**UC494A**	**(3323)**
♦ CS555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
♦ CS555	**Motorola**	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
♦ CS555	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ CS555			(Cont'd)
	Thomson	NE555	
	Toshiba	TA7555	
CS5560N	**IPS**	**IP5560C**	**(2854)**
	Signetics	**NE5560**	**(3129)**
CS5560S	**IPS**	**IP5560**	**(2854)**
CS5561	Cherry	CS5561N	
	IPS	**IP5561C**	**(2854)**
	Signetics	**NE5561**	**(3130)**
CS5561N	Cherry	CS5561	
	IPS	**IP5561C**	**(2854)**
	Signetics	**NE5561**	**(3130)**
CS5561S	**IPS**	**IP5561**	**(2854)**
	Signetics	SE5561	
CS594	Fujitsu	MB3759	
	IPS	**IP494**	**(2854)**
	TI	TL494M	
		TL594M	
	Unitrode	**UC494A**	**(3323)**
CS594C	**IPS**	**IP494AC**	**(2854)**
CS595	Fujitsu	MB3760	
CS8204	Plessey	MV8204	
	Samsung	KA2410	
CS8205	Exar	XRT8205	
	Samsung	KA2411	
Circuit Technology Inc.			
52981	National	TP50981	
	Samsung	KS5804	
54HC273	**GE/RCA**	**CD54HC273**	**(2631)**
	Motorola	MC54HC273	
	Signetics	54HC273	
	TI	SN54HC273	
54HCT137	**GE/RCA**	**CD54HCT137**	**(2632)**
	Supertex	54HCT137	
	TI	SN54HCT137	
54HCT138	**GE/RCA**	**CD54HCT138**	**(2632)**
	Mitel	MD54HCT138	
	Motorola	MC54HCT138	
	National	MM54HCT138	
	Signetics	54HCT138	
	Sprague	SS54HCT138	
	Supertex	54HCT138	
	TI	SN54HCT138	
54HCT139	**GE/RCA**	**CD54HCT139**	**(2632)**
	Mitel	MD54HCT139	
	National	MM54HCT139	
	Signetics	54HCT139	
	Sprague	SS54HCT139	
	Supertex	54HCT139	
54HCT237	**GE/RCA**	**CD54HCT237**	**(2632)**
	Supertex	54HCT237	
	TI	SN54HCT237	
54HCT238	**GE/RCA**	**CD54HCT238**	**(2632)**
	Signetics	54HCT238	
	Sprague	SS54HCT238	
	TI	SN54HCT238	
54HCT240	**GE/RCA**	**CD54HCT240**	**(2631)**
	Hitachi	HD54HCT240	
	Micrel	MC54HCT240	
		MIC54HCT240	
	Mitel	MD54HCT240	
	Motorola	MC54HCT240	
	National	MM54HCT240	
	Signetics	54HCT240	
	Supertex	SI54HCT240	
	TI	SN54HCT240	
54HCT241	**GE/RCA**	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Circuit Technology Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
54HCT241			(Cont'd)
	Vitelic	V51C256	
		V51C257	
54HCT244	**GE/RCA**	**CD54HCT244**	**(2631)**
	Micrel	MIC54HCT244	
	Mitel	MD54HCT244	
	Motorola	MC54HCT244	
	National	MM54HCT244	
	Signetics	54HCT244	
	Sprague	SS54HCT244	
	Supertex	SI54HCT244	
	TI	SN54HCT244	
54HCT245	**GE/RCA**	**CD54HCT245**	**(2631)**
	Mitel	MD54HCT245	
	Motorola	MC54HCT245	
	National	MM54HCT245	
	Signetics	54HCT245	
	Sprague	SS54HCT245	
	Supertex	54HCT245	
	TI	SN54HCT245	
54HCT373	**GE/RCA**	**CD54HCT373**	**(2632)**
	Micrel	MIC54HCT373	
	Mitel	MD54HCT373	
	Motorola	MC54HCT373	
	National	MM54HCT373	
	Signetics	54HCT373	
	Sprague	SS54HCT373	
	Supertex	SI54HCT373	
	TI	SN54HCT373	
54HCT374	GE/RCA	54HCT374	
		CD54HCT374	**(2631)**
	Micrel	MIC54HCT374	
		MICHCT374	
	Mitel	MD54HCT374	
	Motorola	MC54HCT374	
	National	MM54HCT374	
	Sprague	SS54HCT374	
	Supertex	SI54HCT374	
	TI	SN54HCT374	
54HCT533	**GE/RCA**	**CD54HCT533**	**(2632)**
	Motorola	MC54HCT533	
	Signetics	54HCT533	
	Sprague	SS54HCT533	
54HCT534	**GE/RCA**	**CD54HCT534**	**(2631)**
	Motorola	MC54HCT534	
	Signetics	54HCT534	
	Sprague	SS54HCT534	
54HCT540	**GE/RCA**	**CD54HCT540**	**(2631)**
	Mitel	MD54HCT540	
	Motorola	MC54HCT540	
	National	MM54HCT540	
	Signetics	54HCT540	
	Sprague	SS54HCT540	
	Supertex	54HCT540	
	TI	SN54HCT540	
54HCT541	**GE/RCA**	**CD54HCT541**	**(2631)**
	Mitel	MD54HCT541	
	Motorola	MC54HCT541	
	National	MM54HCT541	
	Signetics	54HCT541	
	Sprague	SS54HCT541	
	Supertex	54HCT541	
	TI	SN54HCT541	
54HCT563	**GE/RCA**	**CD54HCT563**	**(2632)**
	Signetics	54HCT563	
	Sprague	SS54HCT563	
54HCT564	**GE/RCA**	**CD54HCT564**	**(2631)**
	Signetics	54HCT564	
	Sprague	SS54HCT564	
54HCT573	**GE/RCA**	**CD54HCT573**	**(2632)**
	Mitel	MD54HCT573	
	Signetics	54HCT573	
	Sprague	SS54HCT573	
54HCT574	**GE/RCA**	**CD54HCT574**	**(2631)**
	Mitel	MD54HCT574	
	Signetics	54HCT574	
	Sprague	SS54HCT574	
74HC273	**GE/RCA**	**CD74HC273**	**(2631)**
	Hitachi	HD74HC273	
	Motorola	MC74HC273	
	SGS	M74HC273	
	Signetics	**74HC273 (3003)**	
	TI	SN74HC273	
74HCT137	**GE/RCA**	**CD74HCT137**	**(2632)**
	Plessey	MV74HCT137	
	SGS	M74HCT137	
	Supertex	74HCT137	
	TI	SN74HCT137	
	Toshiba	TC74HCT137	
74HCT138	**GE/RCA**	**CD74HCT138**	**(2632)**
	Hitachi	HD74HCT138	
	Mitel	MD74HCT138	
	National	MM74HCT138	
	Plessey	MV74HCT138	
	SGS	M74HCT138	
	Signetics	**74HCT138 (3003)**	
	Sprague	SS74HCT138	
	TI	SN74HCT138	
	Toshiba	TC74HCT138	
74HCT139	**GE/RCA**	**CD74HCT139**	**(2632)**
		CD74HCT273	**(2631)**
	Signetics	**74HCT273 (3003)**	
	Sprague	SS74HCT139	
74HCT238	**GE/RCA**	**CD74HCT238**	**(2632)**
	Plessey	MV74HCT238	
	Signetics	**74HCT238 (3003)**	
	Sprague	SS74HCT238	
	TI	SN74HCT238	
74HCT240	**GE/RCA**	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240 (3003)**	
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
74HCT241	**GE/RCA**	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241 (3003)**	
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
74HCT244	**GE/RCA**	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244 (3003)**	
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
74HCT245	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245 (3003)**	
	Sprague	SS74HCT245	
	Supertex	74HCT245	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74HCT245			(Cont'd)
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
74HCT373	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373 (3003)**	
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
74HCT374	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374 (3003)**	
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
74HCT533	**GE/RCA**	**CD74HCT533**	**(2632)**
	Hitachi	HD74HCT533	
	Micrel	MIC74HCT533	
	Motorola	MC74HCT533	
	Plessey	MV74HCT533	
	Signetics	**74HCT533 (3003)**	
	Sprague	SS74HCT533	
	TI	SN74HCT533	
74HCT534	**GE/RCA**	**CD74HCT534**	**(2631)**
	Hitachi	HD74HCT534	
	Micrel	MIC74HCT534	
	Motorola	MC74HCT534	
	Plessey	MV74HCT534	
	Signetics	**74HCT534 (3003)**	
	Sprague	SS74HCT534	
	TI	SN74HCT534	
74HCT540	**GE/RCA**	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540 (3003)**	
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
74HCT541	**GE/RCA**	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541 (3003)**	
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
74HCT563	**GE/RCA**	**CD74HCT563**	**(2632)**
	Hitachi	HD74HCT563	
	Micrel	MIC74HCT563	
	Plessey	MV74HCT563	
	SGS	M74HCT563	
	Signetics	**74HCT563 (3003)**	
	Sprague	SS74HCT563	
	TI	SN74HCT563	
	Toshiba	TC74HCT563	
74HCT564	**GE/RCA**	**CD74HCT564**	**(2631)**
	Hitachi	HD74HCT564	
	Micrel	MIC74HCT564	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74HCT564			(Cont'd)
	Plessey	MV74HCT564	
		MV74HCT573	
	SGS	M74HCT564	
	Signetics	**74HCT564 (3003)**	
	Sprague	SS74HCT564	
	TI	SN74HCT564	
74HCT573	**GE/RCA**	**CD74HCT573**	**(2632)**
	Hitachi	HD74HCT573	
	Micrel	MIC74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Signetics	**74HCT573 (3003)**	
	Sprague	SS74HCT573	
	Supertex	74HCT573	
	TI	SN74HCT573	
	Toshiba	TC74HCT573	
74HCT574	**GE/RCA**	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574 (3003)**	
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
CT0008	**Elantec**	**EDH0008 (2593)**	
	Micra	MC0008	
	National	DH0008	
CT1487D	ILC-DDC	BUS63125	
CT1487DI	ILC-DDC	BUS63135	
	TRW-LSI	MPY016K	
CT1487M	ILC-DDC	BUS63105	
CT1487MI	ILC-DDC	BUS63115	
CT1589D	ILC-DDC	BUS63127	
CT1589DI	ILC-DDC	BUS63137	
CT1589MI	ILC-DDC	BUS63117	
CT3231M	**CTI**	**CT3232M (2554)**	
	ILC-DDC	BUS63102	
		BUS8554	
CT3232M	**CTI**	**CT3231M (2554)**	
	ILC-DDC	BUS63102	
		BUS8554	
MA556	Fairchild	5156	
	National	TP5156	
	SGS	M5156	
	Thomson	MK5156	

CMD Microcircuits Division

G2114	AMD	AM9124	
	Fujitsu	MB8114	
	Harris	**HM6514 (2704, 2762, 2768)**	
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114 (3201)**	
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
G65SC02	**Rockwell**	**R65C02 (2990)**	
G65SC102	Rockwell	R65SC102	
G65SC112	Rockwell	R65SC112	
G65SC21	**Rockwell**	**R65C21 (2990)**	
G65SC22	**Rockwell**	**R65C22 (2990)**	
		R65C24 (2990)	
		R65NC22	
G65SC51	**GoldStar**	**GL4559 (2700)**	
	Raytheon	RC4136	
	TI	RC4136	
G65SC802	**CMD Micro**	**G65SC816 (2549)**	
	VLSI Tech	VL65C816	
	WDC	W65C802	
		W65C816	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

CMD Microcircuits Division (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
G65SC816	**CMD Micro**	**G65SC802**	**(2549)**
	VLSI Tech	VL65C816	
	WDC	W65C802	
		W65C816	
G74SC245	CTI	74HCT245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
G74SC373	CTI	74HCT373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
G74SC374	CTI	74HCT374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
G8860	Mitel	MT8860	
	Plessey	MB8860	
G8865	Mitel	MT8865	
	Plessey	MV8865	
	Thomson	MK8865	
G8870	Mitel	MT8870	
	Plessey	MV8870	
	Sierra	SC11270	
		SC11271	
G8880	Mitel	MT8880	
G8912B	Intel	2912	
		ID2912	
	National	TP3040	
	Plessey	MV8912	
	TI	TCM2912C	
	Thomson	ETC5040	

Commodore Semiconductor Group

Manufacturer Device	Replacement Source	Device	IC Master Page
MP6551	Commodore	MPS6551	
	Gould	S6551	
	Harris	**HM6551**	**(2704, 2763)**
	National	6551	
		74C920	
	Rockwell	**R6551**	**(2990)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	5101	
MPS2332	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MPS2332			(Cont'd)
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
MPS2333	Amperex	AM9233	
	Fairchild	F3533	
	GIM	RO3-9333	
	Gould	S2333	
	Signetics	2332	
	Supertex	23C32	
MPS6502	**Rockwell**	**R6502**	**(2987, 2990)**
MPS6507	Rockwell	R6507	
MPS6512	Rockwell	R6512	
MPS6522	**Rockwell**	**R6522**	**(2990)**
MPS6532	Rockwell	R6532	
MPS6551	Commodore	MP6551	
	Gould	S6551	
	Harris	**HM6551**	**(2704, 2763)**
	National	6551	
		74C920	
	Rockwell	**R6551**	**(2990)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	5101	

Cypress Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
27LS03M	AMD	AM27LS03	
		AM27S03	
		SN74S189	
	Cypress	CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**
	National	DM74S189	
		DM7599	
		DM8599	
7C291	EXEL	46C16	
	SEEQ	**36C16**	**(2991)**
	TI	27C292	
	Waferscale	57C291	
AM2167	**Cypress**	**CY7C167**	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
CUPLDC20G10	Fairchild	F100165	
	Hitachi	HD100165	
		HM6288	
	MMI	PAL20L8	
		PAL20L8B	
	National	PAL20L8	
	Signetics	**100165**	**(3020)**
	Sprague	SPL20LC8	
	TI	PAL20L8	
		TIBPAL20L8-20	**(3217, 4320)**
	Toshiba	TC55416	
CY2147	**Cypress**	**CY7C147**	**(2562, 2564)**
	Fujitsu	MBM2147	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CY2147			(Cont'd)
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
CY2148	AMD	AM2148	
		AM2149	
	Cypress	CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
	National	NMC2148	
	Thomson	ET2148	
	UMC	UM2148	
CY2149	AMD	AM2148	
		AM2149	
	Cypress	CY2148	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
	National	NMC2148	
	Thomson	ET2148	
	UMC	UM2148	
CY21L48	AMD	AM21L48	
	Cypress	**CY7C148**	**(2562, 2564)**
	Matra-Harris	HN65748	
CY27S03	AMD	AM27LS03	
		AM27S03	
		SN74S189	
	Cypress	27LS03M	
		CY74S189	
		CY7C189	**(2562, 2564)**
	National	DM74S189	
		DM7599	
		DM8599	
CY27S07	AMD	AM27S07	
	Cypress	**CY7C190**	**(2562, 2564)**
CY2901	AMD	AM2901	
	IDT	**IDT39C01**	**(2801)**
	LogicDev	L429C01	
	Waferscale	**WS5901**	**(3376)**
CY2909	**Cypress**	**CY7C909**	**(2569)**
CY2910A	AMD	2910A	
CY2911	**Cypress**	**CY7C911**	**(2569)**
CY6116	AMD	AM9128	
		AM9218	
	Cypress	**CY7C128**	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CY6116	Mitsubishi		(Cont'd)
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
CY74F189	Fairchild	74F189	
	Motorola	MC74F189	
	Signetics	**74F198**	**(3023)**
CY7C122	AMD	AM93422	
	Cypress	CY93422	
	Fairchild	93422	
	Motorola	MCM93422	
	Performance	P4C422	
		P93U422	
CY7C128	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Cypress Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CY7C128	OKI	(Cont'd)	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
♦ CY7C129	AMD	AM9128	
		AM9218	
♦ CY7C129	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ CY7C129	Fujitsu	MB8128	
		MB8416	
♦ CY7C129	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ CY7C129	Hitachi	HM6116	
		HM6166	
♦ CY7C129	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ CY7C129	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ CY7C129	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ CY7C129	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ CY7C129	National	MMC2116	
	NEC	μPD4016	
		μPD446	
♦ CY7C129	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ CY7C129	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ CY7C129	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ CY7C129	Stantel-STC	STC6116	
		STC6166	
♦ CY7C129	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ CY7C129	Toshiba	TC5516	
		TC5516A	
		TC5517	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ CY7C129	Toshiba	(Cont'd)	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ CY7C129	Vitelic	V61C16	
		V62C16	
CY7C130	**IDT**	**IDT7130**	**(2804)**
CY7C132	**IDT**	**IDT7132**	**(2804)**
	VLSI Tech	**VT7132**	**(3359)**
CY7C140	**IDT**	**IDT7140**	**(2804)**
CY7C142	**IDT**	**IDT7142**	**(2804)**
	VLSI Tech	**VT7142**	**(3359)**
CY7C147	AMD	AM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM6147H	
	Intel	2147H	
	Matra-Harris	HN65747	
	National	NMC2147H	
CY7C150	AMD	AM9150	
CY7C161	Fairchild	F100183	
	Hitachi	HD100183	
	IDT	**IDT71981**	**(2802)**
	Performance	P4C1981	
CY7C162	Fairchild	F100415	
	Fujitsu	MBM100415	
	Hitachi	HM100415	
	IDT	**IDT71982**	**(2803)**
	Performance	P4C1982	
CY7C164	Hitachi	HD74HC595	
	Inmos	**IMS1620**	**(2787)**
	Motorola	MC74HC595	
		MCM6288	
		MCM62L88	
	Performance	P4C188	
	SGS	M74HC595	
	TI	SMJ64C64	
		SN74HC595	
	Toshiba	TC55416	
	Vitelic	V61C62	
	VLSI Tech	CT64KS4	
CY7C166	Fairchild	F100182	
	Hitachi	HD100182	
		HM6789	
	Inmos	IMS1629	
	IDT	**IDT6198**	**(2802)**
		IDT7198	**(2802)**
	Motorola	MCM6290	
	NEC	μPD4363	
	Performance	P4C198	
	Vitelic	V61C62	
CY7C167	AMD	AM2167	
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
CY7C170	AMD	99C60	
		AM99CL68	
	Motorola	MCM6270	
	Performance	P4C170	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CY7C170		(Cont'd)	
	Thomson	MK4170	
		MK41H78	
	Toshiba	TMM2078	
		TMM2078D	
	Vitelic	V61C68	
CY7C171	**GE/RCA**	**CD74HC4518**	**(2632)**
	IDT	**IDT71681**	**(2802)**
	SGS	M74HC4518	
	Signetics	PC74HC4518	
CY7C172	**GE/RCA**	**CD74HC4543**	**(2632)**
	IDT	**IDT71682**	**(2802)**
	Motorola	MC74HC4543	
	National	MM74HC4543	
	Performance	P4C1682	
	SGS	M74HC4543	
	Signetics	PC74HC4543	
	Toshiba	**TC74HC4543**	**(3307)**
CY7C183	Fujitsu	MB81C79	
		MB81C79A	
	NEC	μP4369	
	Toshiba	TMM2089	
CY7C185	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C186**	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
CY7C186	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CY7C186	Fujitsu	(Cont'd)	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
CY7C187	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
CY7C194	Fujitsu	MB81C84	
	Inmos	**IMS1820**	**(2791)**
	IDT	**IDT71258**	**(2802)**
	Lattice	SR256K4	
	Mitsubishi	M5M5258	
	NEC	μPD43254	
CY7C196	Fujitsu	MB81C86	
CY7C197	**Fujitsu**	**MB81C81**	**(2622)**
	Inmos	**IMS1800**	**(2790)**
	IDT	**IDT71257**	**(2802)**
	Lattice	SR256K1	
	Mitsubishi	M5M5257	
CY7C198	AMD	AM99C328	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Cypress Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CY7C198			(Cont'd)
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
CY7C235	AMD	AM27S35	
		AM27S37	
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
		S82HS189	
CY7C245A	AMD	AM27S455A	
CY7C261	Atmel	27HC641	
		AT27HC641	
	Cypress	**CY7C263**	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GE/RCA	**CD22203**	**(2636)**
	GIM	27HC641	
	ICT	27CX642	
	Sharp	**LH5749**	**(2994)**
		LH5762	**(2994)**
	SiliconSys	SSI203	
	Waferscale	**WS57C49**	**(3376)**
CY7C263	Atmel	27HC641	
		AT27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GE/RCA	**CD22203**	**(2636)**
	GIM	27HC641	
	ICT	27CX642	
	Sharp	**LH5749**	**(2994)**
		LH5762	**(2994)**
	SiliconSys	SSI203	
	Waferscale	**WS57C49**	**(3376)**
CY7C264	AMD	27S49	
		AM27S49	
	Fairchild	32Z565	
		93Z565	
		93Z665	
	Fujitsu	7144H	
		MB7144	
	Raytheon	29VP864	
CY7C281	AMD	AM27S281	
CY7C282M	AMD	AM27S181	
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CY7C282M			(Cont'd)
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
CY7C291	AMD	27S191	
		AM27S191	
	Cypress	**CY7C292**	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
CY7C291A	AMD	AM27S291SA	
CY7C292	National	DM87S291	
	TI	**TMS27C292**	**(3257)**
	Waferscale	**WS57C291**	**(3376)**
CY7C401	Fairchild	74F413	
	IDT	**IDT72401**	**(2805, 2833)**
	MMI	57401	
		67C401	
		75401	
		C57401	
		C57L401	
		C67401	
		C67L401	
	National	DM77S401	
CY7C403	**IDT**	**IDT72403**	**(2805, 2833)**
	MMI	67L4013D	
CY7C404	**IDT**	**IDT72404**	**(2805, 2833)**
	MMI	67C4023	
CY7C409	TRW-LSI	TDC1030	
CY7C412	**IDT**	**IDT7201**	**(2805, 2826)**
	Thomson	**MK4501**	**(3268)**
CY7C414	**IDT**	**IDT7202**	**(2805, 2827)**
CY7C416	**IDT**	**IDT7203**	**(2805, 2828)**
	Thomson	**MK4503**	**(3271)**
CY7C510	Fairchild	F100180	
	Hitachi	HD100179	
		HD100180	
	LSI Logic	**L64010**	**(2868)**
	Signetics	**100180**	**(3020)**
	Waferscale	WS59610	
CY7C516/7	AMD	29516/7	
		29516A/7	
	AD	ADSP1016/7A	
	IDT	**IDT7216/7**	**(2806, 2832)**
	MMI	67C7016/7	
	Sprague	UCN4801	
		UCN5801	**(3203)**
	Weitek	WTL1016/7	
		WTL2516/7D	
CY7C517	AMD	AM29517	
	IDT	**IDT7217**	**(2806, 2832)**
	LogicDev	LMU17	
		LMU217	
	LSI Logic	**L64017**	**(2868)**
	Weitek	WTL2517	
CY7C901	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CY7C901			(Cont'd)
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
CY7C909	National	IDM2909	
	Thomson	TS2909	
CY7C910	AMD	AM2910A	
	Waferscale	**WS5910**	**(3376)**
CY7C9101	AMD	AM29C101	
CY93422	AMD	AM93422	
	Cypress	**CY7C122**	**(2561, 2564)**
	Fairchild	93422	
	Motorola	MCM93422	
	Performance	P4C422	
		P93U422	
CY93422A	AMD	AM93422A	
CY93L422	AMD	AM93L422	
CY93L422A	AMD	AM93L422A	
CYPAL16L8	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
CYPAL16R4	AMD	AMPAL16R4	
		AMPAL16R4L	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
CYPAL16R6	AMD	AMPAL16R6	
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
CYPAL16R8	**Harris**	**HPL16RC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R8	
		PAL16R8A	
	National	DMPAL16R8	
	Sprague	SPL16RC8	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CYPAL16R8			(Cont'd)
	TI	SN74PAL16R8A	
		TIBPAL16R8-15	**(4320)**
		TIBPAL16R8-20	**(4320)**
		TIBPAL16R8-25	**(4320)**
		TIBPAL16R8-30	**(4320)**
PAL20L10	Cypress	CUPLDC20G10	
	MMI	PAL20L10	
	National	DMPAL20L10	
		PAL20L10	
	Sprague	SPL20LC10	
	TI	**TIBPAL20L10**	**(4320)**
		TIBPAL20L10-25	**(3217, 4320)**
♦ PAL46R6	Cypress	PALC46R6	
	Fujitsu	HB84256	
	GoldStar	GM76C256	
	MMI	PAL16R6Q-25	
PALC16L8	**GoldStar**	**GM5375**	**(2701)**
	MMI	PALC16L8Q-25	
	Thomson	MK5375	
PALC16R4	**GoldStar**	**GM231024**	**(2692)**
	Hitachi	HM62301	
	Mitel	M5M231000	
	MMI	PALC16R4Q-25	
	NEC	μPD231000	
	Toshiba	TC53100	
PALC16R8	**GoldStar**	**GM5376**	**(2701)**
	MMI	PALC16R8Q-25	
	Thomson	MK5376	
PALC22V10	AMD	AMPAL22V10	
	MMI	PAL20X10	
		PALC22V10	
	National	DMPAL20X10	
		PAL20X10	
	Sprague	SPL20XC10	
	TI	**TIBPAL20X10-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
PALC46R6	Fujitsu	HB84256	
	GoldStar	GM76C256	
	MMI	PAL16R6Q-25	
PLDC20RA10	MMI	PAU20RA10	

Dallas Semiconductor

DS1228	Dallas	DS232	
	Maxim	MAX232	
DS1287	**GE/RCA**	**CDP6818**	**(2642)**
	Hitachi	HD146818	
		HD146818A	
	Motorola	**MC146818**	**(2902)**
		MC146818A	**(2902)**
DS232	Dallas	DS1228	
	Maxim	MAX232	

Data Translation

DT5712	**Intech**	**DAS5712**	**(2799)**
DT5714	**Intech**	**DAS5714**	**(2799)**
DT5716	**Intech**	**DAS5716**	**(2799)**

Datel

ADC500	**Intech**	**ADC6002A**	**(2799)**
ADC505BBM	**Intech**	**ADC6002C**	**(2799)**
ADC5101	MicroNet	MN5101	
ADC5210	AD	AD5210	
	HybridSys	HS5210	
	Intech	ADC5210	
	MicroNet	MN5210	
ADC5211	AD	AD5211	
	MicroNet	MN5211	
ADC5212	AD	AD5212	
	MicroNet	MN5212	
ADC5213	AD	AD5213	
	MicroNet	MN5213	
ADC5214	AD	AD5214	
	HybridSys	MN5214	
	MicroNet	MN5214	
	TeledyneP	TP5214	
ADC5215	AD	AD5215	
	MicroNet	MN5215	
ADC5216	HybridSys	HS5216	
	MicroNet	MN5216	

ALT. SOURCE DIRECTORY

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Datel			**(Cont'd)**
ADC574A	AD	AD574	
	Burr-Brown	**ADC574A**	**(2541)**
	Harris	**HI574**	**(2703, 2738, 2744)**
	HybridSys	HS574	
	Intech	**ADC574**	**(2799)**
	Maxim	MAX574	
	MCE	MCE574	
	MicroNet	MN574A	
	MicroPwr	MP574	
	TeledyneP	TP574A	
ADC7109	**GE/Intersil**	**ICL7109**	**(2667)**
	Maxim	ICL7109	
	TeledyneS	TSC7109	
ADC815	MicroNet	MN815	
ADC825	MicroNet	MN825	
ADC830	**GE/Intersil**	**ADC0803**	**(2667)**
	National	ADC0803	
	Signetics	ADC0803	
	TI	ADC0803	
ADC84	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADC847	Ferranti	ZN449	
	SiliconSy	SSI6052	
ADC847A	Ferranti	ZN447E	
ADC847B	Ferranti	ZN447J	
ADC847C	Ferranti	ZN449E	
ADC85	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADC856	Ferranti	ZN433	
	SiliconSy	SSI6020	
ADC87	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ADC87			(Cont'd)
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADC883	**GE/RCA**	**CA3306**	**(2651)**
	Hitachi	HA19216	
	MicroPwr	MP7682	
ADCEH12	Intech	ADC1202	
ADCEK10B	TeledyneP	4141	
	TeledyneS	8701	
ADCEK12B	TeledyneP	4142	
	TeledyneS	8702	
ADCEK12D	TeledyneP	4146	
	TeledyneS	8750	
ADCEK8B	TeledyneP	4140	
	TeledyneS	8700	
ADCET10B	TeledyneP	4144	
	TeledyneS	8704	
ADCET12B	TeledyneP	4145	
	TeledyneS	8705	
ADCET8B	TeledyneP	4143	
	TeledyneS	8703	
ADCHX12B	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADCHZ12B	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADCHZ12BGZ	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ADCHZ12BGZ	Datel		(Cont'd)
		ADCHX12B	
		ADCHZ12B	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADCMA12	AD	ADC12	
	Intech	CYAD12	
ADCMC8	Ferranti	ZN425	
AM450-2	AD	AD540	
	Elantec	**EHA2505**	**(2593)**
	Harris	HA2505	
AM450-2M	**Elantec**	**EHA2502**	**(2593)**
	Harris	**HA2502**	**(2705)**
AM452	**Burr-Brown**	**3507**	**(2535)**
	Harris	HA2525	
	Intronics	A560	
AM452-2M	**Elantec**	**EHA2522**	**(2594)**
	Harris	**HA2522**	**(2705, 2768)**
AM453-2C	AnalogSys	MA332	
	Exar	XR5534	
	Raytheon	RC5534	
	Signetics	**NE5534**	**(3091)**
		NE5534A	**(3091)**
	SSM	SSM2134	
	TI	NE5534	
		NE5534A	
AM453-2M	**Harris**	**HA5101**	**(2737, 2747, 2759)**
	Raytheon	**RM5534**	**(2979)**
	Signetics	SE5534	
		SE5534A	
AM460-2	Burr-Brown	3506	
	Elantec	**EHA2605**	**(2594)**
	Harris	HA2605	
	Motorola	**MC1456**	**(2920)**
	TI	MC1456	
AM460-2M	**Elantec**	**EHA2602**	**(2594)**
	Harris	**HA2602**	**(2706)**
AM462-1	AD	AD507	
	Burr-Brown	**3508**	**(2535)**
	Datel	**AM462-2**	**(2577)**
	GE/Intersil	A561	
	Harris	**HA2620**	**(2706, 2737, 2747)**
		HA2622	**(2706, 2768)**
		HA2625	
AM462-2	AD	AD507	
	Burr-Brown	**3508**	**(2535)**
	Datel	**AM462-1**	**(2577)**
	GE/Intersil	A561	
	Harris	**HA2620**	**(2706, 2737, 2747)**
		HA2622	**(2706, 2768)**
		HA2625	
AM464-2	Harris	HA2645	
	Motorola	**MC1436**	**(2920, 2958)**
	National	LM1436	
		LM343	
	SiliconG	SG1436	
		SG343	
	TeledyneP	1332	
AM464-2M	**Harris**	**HA2640**	**(2706, 2738, 2748)**
	Motorola	**MC1536**	**(2921)**
	National	LM143	
		LM1536	
	SiliconG	SG143	
		SG1536	
AM470-2	Datel	AM470-2C	
		AM470-2M	
	TeledyneP	1323	
AM470-2C	Datel	AM470-2	
		AM470-2M	
	TeledyneP	1323	
AM470-2M	Datel	AM470-2	
		AM470-2C	
	TeledyneP	1323	
AM500	TeledyneP	1430	

Manufacturer Device	Replacement Source	Device	IC Master Page
AM7650	LinearTech	LTC1052	
		LTC7652	
	Maxim	ICL7650	
		ICL7652	
	Siliconix	SI7135	
BPM12	Datel	BPM210	
	Intech	A3177	
BPM210	Datel	BPM12	
	Intech	A3177	
DA867541	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	**DAC7541**	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
DAC08B	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		µA0801	
		µA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	µPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
DAC112	Intech	A2991	
DAC198	Intech	CYDAC198	
DAC4910	Intech	CYDAC4910	
DAC4912	Intech	CYDAC4912	
DAC562	AD	AD562	
	Harris	**HI562A**	**(2703, 2738, 2749)**
	PMI	**PM562**	**(2974)**
DAC608	National	DAC0832	
DAC610	National	DAC1006	
DAC612	MicroPwr	MP1208	
	National	DAC1208	
DAC687	AD	ADDAC87	
	Burr-Brown	DAC851	
		DAC87	**(2542, 2544)**
	Datel	DAC87	
	Harris	**HI5687**	**(2703)**
	HybridSys	DAC335	
		HSDAC87	
	MicroNet	MNDAC87	
DAC6912	Intech	CYDAC6912	
♦ DAC71	AD	ADDAC71	
	Burr-Brown	**DAC700**	**(2541)**
		DAC701	**(2541)**
		DAC702	**(2541)**
		DAC703	**(2541, 2544)**
		DAC71	**(2541)**
		DAC72	**(2541)**
♦ DAC71	MicroNet	MNDAC71	
♦ DAC72	AD	ADDAC71	
	Burr-Brown	**DAC700**	**(2541)**
		DAC701	**(2541)**
		DAC702	**(2541)**
		DAC703	**(2541, 2544)**
		DAC71	**(2541)**
		DAC72	**(2541)**
♦ DAC72	MicroNet	MNDAC71	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Datel			**(Cont'd)**
DAC7523	AD	AD7523	
	GE/Intersil	**AD7523**	**(2668)**
	Maxim	AD7523	
	MicroPwr	MP7523	
DAC7533	AD	AD7533	
	GE/Intersil	**AD7533**	**(2668)**
	Maxim	AD7533	
	MicroPwr	MP7533	
		MP7633	
	National	AD7533	
	PMI	**PM7533**	**(2974, 2976)**
DAC7541	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
DAC8308	Analogic	MP8308	
	Intech	**VDAC8308**	**(2799)**
DAC85	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
DAC85C	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
DAC87	AD	ADDAC87	
	Burr-Brown	DAC851	
		DAC87	**(2542, 2544)**
	Datel	DAC687	
	Harris	**HI5687**	**(2703)**
	HybridSys	DAC335	
		HSDAC87	
	MicroNet	MNDAC87	
DACHA10B	AD	AD7520	
	GE/Intersil	**AD7520**	**(2668)**
	Maxim	AD7520	
	MicroPwr	MP7520	
	National	AD7520	
		DAC1020	
		DAC1021	
		DAC1022	
DACHA12B	AD	AD7521	
	Burr-Brown	**DAC7541A**	**(2541)**
	GE/Intersil	**AD7521**	**(2668)**
	HybridSys	DAC331-12	
	Maxim	AD7521	
	MicroPwr	MP7521	
	National	AD7521	
		DAC1220	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DACHA12B	National		(Cont'd)
		DAC1221	
		DAC1222	
	PMI	AD7521	
DACHA14	HybridSys	HS3140	
DACHK	**Intech**	**DACHK**	**(2799)**
	MicroNet	MNDACHK	
DACHK12	Intech	DACHK12	
	MicroNet	DAKHK	
DACHK12BGC			
	Intech	DACHK12BGC	
DACHK12BMM			
	Intech	DACHK12BMM	
DACHZ12B	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
DACI8BC	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		µA0801	
		µA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	µPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
DACIC10B	**PMI**	**DAC10**	**(2974)**
	Raytheon	DAC10	
DACIC10BM	Signetics	SE5410	
DACIC8B	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		µA0801	
		µA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	µPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
DACIC8BC	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DACIC8BC			(Cont'd)
	Fairchild	DAC08	
		MA0802M	
		µA0801	
		µA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	µPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
DACIC8BM	AD	AD1508	
	Motorola	**MC1508**	**(2938)**
	National	MC1508	
	PMI	DAC1508	
	Signetics	MC1508	
		SE5008	
		SE5009	
DACUP10	Signetics	NE5020	
DACUP8B	AMD	AM6081	
	Signetics	**NE5018**	**(3117)**
		NE5019	
		NE5118	
		NE5119	
DAS952	National	ADC0816	
DD7218	Maxim	ICM7218	
HDAS16	**Datel**	**HDAS8**	**(2577)**
	MicroNet	MN7150	
HDAS8	**Datel**	**HDAS16**	**(2577)**
	MicroNet	MN7150	
MUX808	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	**MX808**	**(2577)**
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
MV1606	AD	AD7506	
	Datel	**MX1606**	**(2577)**
	GE/Intersil	**IH6116**	**(2681)**
	Harris	**HI506**	**(2703, 2738, 2748)**
	MicroPwr	MP7506	
	Motorola	MC7506	
	PMI	**MUX16**	**(2975)**
	Siliconix	DG506A	
MV808	AD	AD7503	
	HybridSys	MUX201	
	MicroPwr	MP7503	
MVD409	**Harris**	**HI1818A**	**(2703, 2738, 2748)**
		HI1828A	**(2703, 2738, 2748)**
MVD807	AD	AD7507	
	Datel	**MXD807**	**(2577)**
	GE/Intersil	**IH6216**	**(2681)**
	Harris	**HI507**	**(2703, 2738, 2748)**
	MicroPwr	MP7507	
	PMI	**MUX28**	**(2975)**
	Siliconix	DG507A	
	TeledyneP	4551	
MX1606	AD	AD7506	
	Datel	**MV1606**	**(2577)**
	GE/Intersil	**IH6116**	**(2681)**
	Harris	**HI506**	**(2703, 2738, 2748)**
	MicroPwr	MP7506	
	Motorola	MC7506	
	PMI	**MUX16**	**(2975)**
	Siliconix	DG506A	
MX1616	**Burr-Brown**	**MPC800**	**(2543)**
	Harris	**HI516**	**(2703, 2738, 2748)**

Manufacturer Device	Replacement Source	Device	IC Master Page
MX808	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
♦ MX818	Burr-Brown	MPC801	
	Harris	**HI518**	**(2703, 2738, 2749)**
♦ MXD409	GE/Intersil	ICL6109	
		IH6208	**(2681)**
♦ MXD409	**Harris**	**HI509**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX359	
		MAX369	
♦ MXD409	MicroPwr	MP7509DI	
	National	LF11509	
		LF13509	
♦ MXD409	**PMI**	**MUX24**	**(2975)**
	Siliconix	DG509A	
	TeledyneP	4553	
MXD807	AD	AD7507	
	Datel	**MVD807**	**(2577)**
	GE/Intersil	**IH6216**	**(2681)**
	Harris	**HI507**	**(2703, 2738, 2748)**
	MicroPwr	MP7507	
	PMI	**MUX28**	**(2975)**
	Siliconix	DG507A	
	TeledyneP	4551	
SHM20	**Burr-Brown**	**SHC5320**	**(2543)**
	Harris	**HA5320**	**(2737, 2747)**
	TeledyneP	4866	
SHM20C	**Harris**	**HA5320**	**(2737, 2747)**
SHM20M	**Harris**	**HA5320**	**(2737, 2747)**
SHM4860	Burr-Brown	SCH804	
		SHC804	**(2543)**
	ILC-DDC	THA05203	
	TeledyneP	TP4860	
SHMIC-1	AD	AD583	
	Harris	HA2475	
	PMI	**SMP10**	**(2975)**
		SMP11	**(2975)**
	TeledyneP	4856	
SHMLM2	**Burr-Brown**	**SHC298**	**(2543)**
	National	LF298	
UPM5	**Intech**	**PS2805**	**(2799)**
VFQ1	TeledyneP	4780	
	TeledyneS	9400	
♦ VFQ2	TeledyneP	4781	
	TeledyneS	9401	
♦ VFQ3	TeledyneP	4782	
	TeledyneS	9402	
VI7660	LinearTech	LTC1044	
	Maxim	ICL7660	
	Siliconix	SI7660	
	TI	LTC1044	
VR182	Ferranti	ZN458	

Dense-Pac

DPD411M	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Dense-Pac			**(Cont'd)**
DPD411M	Hitachi		(Cont'd)
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
DPD42568	Hitachi	HB561008B	
	MicronTech	MT8259	
	Mitsubishi	MH25608A	
	NEC	MC41256A8	
	OKI	MSC2304KS8	
		MSC2304YS8	
	TI	TM4256FL8	
		TM4256GU8	
DPD42569	Hitachi	HB561003	
		HB561009	
	MicronTech	MT9259	
	Mitsubishi	MH25609A	
	NEC	MC41256A9	
	OKI	MSC2304KS9	
		MSC2304YS9	
	TI	TM4256EL9	
		TM4256GU9	
DPD44256	Fujitsu	MB85203	
		MB85204	
	Hitachi	HB561004A	
	MicronTech	MT4259	
	NEC	MC41256A4	
	TI	TM4256EC4	
DPD5124	Fujitsu	MB5210	
		MB85211	
	TI	TM4256HE4	
DPE41256	EDI	EDH5832	
DPS1027	EDI	EDI8M1664	
DPS257	**IDT**	**IDT7M656**	**(2803)**
DPS32H8	**Dense-Pac**	**DPS41257**	**(2579)**
	EDI	EDH8832	
	IDT	**IDT7M856**	**(2803)**
		IDT8M856	**(2803, 2851)**
DPS40128	EDI	EDH8816	
DPS41257	**Dense-Pac**	**DPS32H8**	**(2579)**
	EDI	EDH8832	
	IDT	**IDT7M856**	**(2803)**
		IDT8M856	**(2803, 2851)**
DPS41288	Dense-Pac	DPS412S88	
	EDI	EDH8M8128	
		EDI8M8128	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	NEC	MC-120	
DPS412S88	**Dense-Pac**	**DPS41288**	**(2580)**
	EDI	EDH8M8128	
		EDI8M8128	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	NEC	MC-120	
DPS4648	EDI	EDI8M864	
DPS6432	**IDT**	**IDT7M4017**	**(2803)**
DPS8132	EDI	EDH81H32	
DPS8164	EDI	EDH81H64	
DPS8256	EDI	EDI8F256	
DPS84H08	EDI	EDH84H08	
DPS8645	Dense-Pac	DPS86M44	
	EDI	EDH84H64	
DPS86M44	**Dense-Pac**	**DPS8645**	**(2579)**
	EDI	EDH84H64	
DPS8808	EDI	EDH8808	
DPS888H04	**Dense-Pac**	**DPS88H04**	**(2578)**
	EDI	EDH88H04	
DPS88H04	Dense-Pac	DPS888H04	
	EDI	EDH88H04	
DPS88H08	EDI	EDH88H08	
DPS88H16	EDI	EDH88H16	
Devtek Systems			
DS8085	AMD	8085A	
	Calmos	**CA80C85**	**(2553)**
	Intel	8085	
		8085A	
	NEC	μPD8085	
	OKI	MSM8085	
	Toshiba	**TMP8085**	**(3306)**
		TMP8085A	**(3306)**
Digital Equipment Corp.			
78808	TI	TCM7808	
Dionics Inc.			
DI230	National	DS8889	
DI250	Cherry	CS250	
DI260	Cherry	CS260	
DI300	Dionics	DI302	
	Sprague	UDN7180	
		UDN7183	
		UDN7184	
		UDN7186	
DI302	Dionics	DI300	
	Sprague	UDN7180	
		UDN7183	
		UDN7184	
		UDN7186	
DI480	Sprague	UHP480	
DI481	Sprague	UHP481	
DI482	Sprague	UHP482	
DI502	Sprague	UDN6144A	
DI504	Sprague	MC3495	
DI507	Sprague	UDN6164A	
		UHPD490	
		UHPD491	
DI508	**Sprague**	**UDN6116**	**(3203)**
DI510	**Sprague**	**UDN6510**	**(3203)**
DI513B	Dionics	DI514	
		DI514B	
	Exar	XR6118	
	Motorola	MC3490	
	National	DM8887	
		DS8887	
	OKI	MSL912	
	Sanyo	LB1290	
	Signetics	NE594	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
	Toshiba	TD62781	
DI514	Dionics	DI513B	
		DI514B	
	Exar	XR6118	
	Motorola	MC3490	
	National	DM8887	
		DS8887	
	OKI	MSL912	
	Sanyo	LB1290	
	Signetics	NE594	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
	Toshiba	TD62781	
DI514B	Dionics	DI513B	
		DI514	
	Exar	XR6118	
	Motorola	MC3490	
	National	DM8887	
		DS8887	
	OKI	MSL912	
	Sanyo	LB1290	
	Signetics	NE594	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DI514B			(Cont'd)
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
	Toshiba	TD62781	
DI604	National	DM8891	
		DS8891	
	Sprague	UHPD495	
DI804	National	DM8897	
		DS8897	
DI805	ITT	504	
	Motorola	MC3494	
EG&G-Reticon			
R5632	**EG&G-Reticon**		
		RM5632A	**(2590)**
	Exar	**XR2126**	**(2605)**
		XR2127	**(2605)**
	Gould	S35212	
		S35212A	
	Hitachi	HA17815	
	Mitel	MT35212A	
	National	μA7815	
	Sierra	SC11000	
		SC11005	
RM5632A	EG&G-Reticon		
		R5632	
	Exar	**XR2126**	**(2605)**
		XR2127	**(2605)**
	Gould	S35212	
		S35212A	
	Hitachi	HA17815	
	Mitel	MT35212A	
	National	μA7815	
	Sierra	SC11000	
		SC11005	
Elantec			
EDH0006	Micra	MC0006	
	National	DH0006	
EDH0008	CTI	CT0008	
	Micra	MC0008	
	National	DH0008	
EHA2500	**Harris**	**HA2500**	**(2705)**
EHA2502	Datel	AM450-2M	
	Harris	**HA2502**	**(2705)**
EHA2505	AD	AD540	
	Datel	**AM450-2**	**(2577)**
	Harris	HA2505	
EHA2510	**Harris**	**HA2510**	**(2705)**
EHA2512	**Harris**	**HA2512**	**(2705, 2768)**
EHA2515	Harris	HA2515	
EHA2520	**Harris**	**HA2520**	**(2705, 2737, 2747)**
EHA2522	Datel	AM452-2M	
	Harris	**HA2522**	**(2705, 2768)**
EHA2525	AD	AD509	
	Harris	HA2525	
EHA2600	**Harris**	**HA2600**	**(2706, 2737, 2747)**
	Hitachi	HA17741	
	Motorola	**MC1556**	**(2921)**
		ML1556	
	Signetics	SE556	
	TeledyneP	1326	
	TI	MC1556	
		SE556M	
EHA2602	Datel	AM460-2M	
	Harris	**HA2602**	**(2706)**
EHA2605	Burr-Brown	3506	
	Datel	**AM460-2**	**(2577)**
	Harris	HA2605	
	Motorola	**MC1456**	**(2920)**
	TI	MC1456	
EL2002	**Elantec**	**EL2003**	**(2591, 2595)**
		ELH0002	**(2592)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	Hytek	HY0002	
	LinearTech	LT1010	
	Micra	MC0002	
		MC0021	
	National	LH0002	
	OEI	9910	
	TeledyneC	LH0002	
EL2003	Elantec	EL2002	
		ELH0002	**(2592)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
EL2003			(Cont'd)
	Harris	**HA5002**	**(2706, 2738, 2748)**
	Hytek	HY0002	
	LinearTech	LT1010	
	Micra	MC0002	
		MC0021	
	National	LH0002	
	OEI	9910	
	TeledyneC	LH0002	
EL2004	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2005**	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
EL2005	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
EL2007	MicroLinear	ML402	
EL2033	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
ELH0002	Elantec	EL2002	
		EL2003	**(2591, 2595)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	Hytek	HY0002	
	LinearTech	LT1010	
	Micra	MC0002	
		MC0021	
	National	LH0002	
	OEI	9910	
	TeledyneC	LH0002	
ELH0021	National	LH0021	
ELH0032	AD	ADLH0032	
		HOS-060	
		HOS050	
		MOS050	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Elantec			**(Cont'd)**
ELH0032			(Cont'd)
	Harris	**HA2542**	**(2737, 2747, 2750)**
	Micra	MC0032	
	National	LH0032	
	TeledyneC	LH0032	
	TeledyneP	0032	
ELH0033	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
ELH0041	Elantec	LH0041	
	Micra	MC0041	
	National	LH0041	
ELH0101	**Apex**	**PA02**	**(2458)**
	Burr-Brown	**3571**	**(2536)**
		3572	**(2536)**
	Maxim	LH0101	
	National	LH0101	
ELH2004	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
ELH2005	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
LH0041	**Elantec**	**ELH0041**	**(2593)**
	Micra	MC0041	
	National	LH0041	
Electronic Designs Inc.			
88128	Hitachi	HM66204	
	NEC	MC120	
DH411M	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DH411M	Fujitsu		(Cont'd)
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		µPD411000	
		µPD411000C	
		µPD411001	
		µPD421000	
		µPD421001	
		µPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
EDH411M-C4	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		µPD411000	
		µPD411000C	
		µPD411001	
		µPD421000	
		µPD421001	
		µPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
EDH5832	Dense-Pac	DPE41256	

Manufacturer Device	Replacement Source	Device	IC Master Page
EDH8088CL-12			
	IDT	IDT8M864L-120	
EDH8088CL-15			
	IDT	IDT8M864L-150	
EDH8088CL-70			
	IDT	IDT8M864L-75	
EDH8088CL-85			
	IDT	IDT8M864L-85	
EDH816H64C	**IDT**	**IDT7M624**	**(2803, 2842)**
EDH816H64C-70			
	EDI	EDIM1664C45	
	IDT	**IDT7M624S-85**	**(2803, 2842)**
EDH81H256C	**IDT**	**IDT7MC156**	**(2803, 2840)**
	Mosaid	MS1256CS	
EDH81H32	**Dense-Pac**	**DPS8132**	**(2578)**
EDH81H64	Dense-Pac	DPS8164	
EDH84H08	**Dense-Pac**	**DPS84H08**	**(2578)**
EDH84H64	**Dense-Pac**	**DPS8645**	**(2579)**
		DPS86M44	
EDH84H64C	**IDT**	**IDT7MP456**	**(2803)**
EDH8808	**Dense-Pac**	**DPS8808**	**(2579)**
EDH8808ACL-12			
	IDT	IDT7M864L-120	
EDH8808ACL-15			
	EDI	EDI8M832C55	
	IDT	IDT7M864L-150	
		IDT8M856L-55	**(2803, 2851)**
EDH8808ACL-70			
	IDT	IDT7M864L-75	
EDH8808ACL-85			
	IDT	IDT7M864L-85	
EDH8816	Dense-Pac	DPS40128	
EDH8832	**Dense-Pac**	**DPS32H8**	**(2579)**
		DPS41257	**(2579)**
	IDT	**IDT7M856**	**(2803)**
		IDT8M856	**(2803, 2851)**
EDH8832HC-10			
	IDT	**IDT7M856S-100**	**(2803)**
EDH8832HC-55			
	EDI	EDH8832HC-85	
	IDT	**IDT7M856S-85**	**(2803)**
		IDT7M856S-90	**(2803)**
EDH8832HC-70			
	IDT	**IDT7M856S-70**	**(2803)**
		IDT7M856S70	
EDH8832HC-85			
	EDI	EDH8832HC-55	
	IDT	**IDT7M856S-85**	**(2803)**
		IDT7M856S-90	**(2803)**
EDH88H04	Dense-Pac	DPS888H04	
		DPS88H04	**(2578)**
EDH88H08	**Dense-Pac**	**DPS88H08**	**(2578)**
EDH88H16	**Dense-Pac**	**DPS88H16**	**(2578)**
EDH8M8128	**Dense-Pac**	**DPS41288**	**(2580)**
		DPS412S88	
	EDI	EDI8M8128	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	NEC	MC-120	
EDI8F1256C35			
	IDT	IDT7M9156S-35	
EDI8F1256C45			
	IDT	IDT7M9156S-45	
EDI8F1256C55			
	IDT	IDT7M9156S-55	
EDI8F256	**Dense-Pac**	**DPS8256**	**(2579)**
EDI8M1616C25			
	EDI	EDIM1664C-55	
	IDT	**IDT7M656L-25**	**(2803)**
EDI8M1616C35			
	EDI	EDIM1664C-70	
	IDT	**IDT7M656L-35**	**(2803)**
EDI8M1616C45			
	IDT	**IDT7M656L-45**	**(2803)**
EDI8M1616C55			
	IDT	**IDT7M656L-55**	**(2803)**
EDI8M1664	**Dense-Pac**	**DPS1027**	**(2579)**

Manufacturer Device	Replacement Source	Device	IC Master Page
EDI8M1664C25			
	IDT	**IDT7M624S-30**	**(2803, 2842)**
EDI8M1664C35			
	IDT	**IDT7M624S-35**	**(2803, 2842)**
EDI8M1664C45			
	IDT	**IDT7M624S-45**	**(2803, 2842)**
EDI8M1664C55			
	IDT	**IDT7M624S-55**	**(2803, 2842)**
EDI8M8128	**Dense-Pac**	**DPS41288**	**(2580)**
		DPS412S88	
	EDI	EDH8M8128	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	NEC	MC-120	
EDI8M8128C100			
	Hitachi	HM66204-100	
	IDT	**IDT8M824S-100**	**(2803, 2848)**
EDI8M8128C120			
	Hitachi	HM66204-120	
	IDT	**IDT8M824S-120**	**(2803, 2848)**
EDI8M8128C150			
	Hitachi	HM66204-150	
	IDT	**IDT8M824S-150**	**(2803, 2848)**
EDI8M832C55			
	EDI	EDH8808ACL-15	
	IDT	IDT7M864L-150	
		IDT8M856L-55	**(2803, 2851)**
EDI8M832C70			
	IDT	**IDT8M856L-75**	**(2803, 2851)**
EDI8M832C85			
	IDT	**IDT8M856L-100**	**(2803, 2851)**
EDI8M864	**Dense-Pac**	**DPS4648**	**(2580)**
EDIM1664C-55			
	EDI	EDI8M1616C25	
	IDT	**IDT7M656L-25**	**(2803)**
EDIM1664C-70			
	EDI	EDI8M1616C35	
	IDT	**IDT7M656L-35**	**(2803)**
EDIM1664C35			
	IDT	EDH816H64C-70	
EDIM1664C45			
	EDI	EDH816H64C-70	
	IDT	**IDT7M624S-85**	**(2803, 2842)**

Exar Corporation

C277	Exar	XRC277	
	PMI	**RPT82**	**(2975)**
		RPT83	**(2975)**
	Signetics	N82S147	
XR082	**GE/RCA**	**CA082**	**(2645)**
	SGS	TL082	
	TI	HA17082	
		TL082	
	Thomson	LF353	
XR083	Hitachi	HA17083	
	TI	TL083	
XR084	Fairchild	µAF774	
	GE/RCA	**CA084**	**(2645)**
	SGS	TL084	
	TI	TL084	
XR1001	National	MF10-100	
		MF4	
XR1002	National	MF10-50	
XR1010	Harris	HA10	
	LinearTech	LT1060	
	Maxim	MF10	
	MicroLinear	ML2110	
XR117	**Elantec**	**ELH0002**	**(2592)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	MicroLinear	ML117	
	SiliconSys	SSI117	
	VTC	**VM117**	**(3375)**
XR1310	National	LM1310	
	TI	SN76115	
	Toshiba	TA7157	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Exar Corporation (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
XR13600	National	LM13600	
	Signetics	NE5517	
XR14412	Motorola	MC14412	
XR146	National	LM140	
XR1468	Exar	XR4195	
	Fairchild	MC1489	
		μA212A	
		μA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG2501A	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
XR1488	Fairchild	MC1488	
		μA212A	
		μA750	
	GoldStar	**GD75188**	**(2694)**
	Hitachi	HD75188	
	National	DS1488	
	Signetics	MC1488	
		MC1489	
	SiliconG	SG75188	
		SG75788	
	TI	MC1488	
		MC1489	
		SN75188	
		SN75189	
XR1489A	Fairchild	UA150	
		UA212A	
		μA1489A	
	Motorola	**MC1489A**	**(2952, 2958)**
	National	DS1489A	
	SGS	MC1489	
	Signetics	MC1489A	
	SiliconG	SG1489A	
	TI	SN75189A	
XR1524	Cherry	CS1524	
	Fairchild	μA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	
	National	LM1524	
	SGS	SG1524	
		UC1524A	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524**	**(3323)**
		UC1524A	**(3323)**
XR1525A	Cherry	CS1525A	
	IPS	**IP1525A**	**(2854)**
	LinearTech	LT1525A	
	Motorola	**SG1525A**	**(2931)**
	SGS	SG1524A	
	SiliconG	SG1525A	
	Siliconix	PWM125	
	Unitrode	**UC1525**	**(3323)**
		UC1525A	**(3323)**
XR1543	IPS	IP1543	
	SiliconG	SG1543	
	Unitrode	**UC1543**	**(3324)**
XR1568	**Motorola**	**MC1568**	**(2931)**
	SiliconG	SG1501A	
		SG1568	
XR200	Cherry	CS1200	
XR2001	Exar	XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
XR2001			(Cont'd)
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
XR2001C	Exar	XR2001	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
XR2002	Sprague	ULQ2002	
XR2002C	Exar	XR2202	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
XR2003	SiliconG	SG2023	
	Sprague	**ULN2023**	**(3203)**
		ULQ2003	
		ULS2023	
	TI	SN75468	
XR2003C	Exar	XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
XR2004	Sprague	ULQ2004	
XR2011C	SiliconG	SG2011	
	Sprague	**ULN2011**	**(3203)**
		ULS2011	
XR2012C	SiliconG	SG3852	
XR2013C	SiliconG	SG2013	
		SG3853	
	Sprague	**ULN2013**	**(3203)**
		ULS2013	
XR2014C	SiliconG	SG2014	
		SG3854	
	Sprague	**ULN2014**	**(3203)**
		ULS2014	
XR2126	EG&G-Reticon		
		R5632	
		RM5632A	**(2590)**
	Exar	**XR2127**	**(2605)**
	Gould	S35212	
		S35212A	
	Hitachi	HA17815	
	Mitel	MT35212A	
	National	μA7815	
	Sierra	SC11000	
		SC11005	
XR2127	EG&G-Reticon		
		R5632	
		RM5632A	**(2590)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
XR2127			(Cont'd)
	Exar	**XR2126**	**(2605)**
	Gould	S35212	
		S35212A	
	Hitachi	HA17815	
	Mitel	MT35212A	
	National	μA7815	
	Sierra	SC11000	
		SC11005	
XR2128	Sierra	SC11001	
XR2201	Exar	XR2001	
		XR2001C	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
XR2202	Exar	XR2002C	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
XR2203	Exar	XR2003C	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
XR2204	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
XR2205	**Sprague**	**ULN2005**	**(3203)**
	TI	ULN2005	
XR2207	Raytheon	XR2207	
XR2211	Raytheon	XR2211	
XR2240	Fairchild	UA238	
		μA2240	
	GE/Intersil	ICL8240	
	TI	μA2240	
XR2242	Maxim	ICM7242	
XR246	National	LM246	
	Thomson	LM246	
XR2524	Cherry	CS2524	
	Fairchild	μA2524	
	IPS	IP2524	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
XR2524			(Cont'd)
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
XR2525A	Cherry	CS2525A	
	IPS	IP2525A	
	LinearTech	LT2525A	
	Motorola	**SG2525A**	**(2931)**
	SiliconG	SG2525A	
	Siliconix	PWM25B	
	TI	SG2525A	
	Unitrode	**UC2525A**	**(3323)**
XR2527A	Cherry	CS2527A	
	IPS	IP2527A	
	LinearTech	LT2527A	
	Motorola	**SG2527A**	**(2931)**
	SiliconG	SG2527A	
	TI	SG2527A	
	Unitrode	**UC2527A**	**(3323)**
XR2543	IPS	IP2543	
	SiliconG	SG2543	
	Unitrode	**UC2543**	**(3324)**
XR2567	Exar	XR567	
	MCE	MCE567	
	National	LM567	
	Samsung	LM567	
	Signetics	NE567	
		SE567	
XR2917	Cherry	CS2917	
	National	LM2917	
XR300	Cherry	CS1300	
XR3403M	Raytheon	RM3403	
XR3464	AMD	AM6012	
	Ferranti	ZN6012	
	National	NS8464	
	PMI	**DAC312**	**(2974)**
	Signetics	AM6012	
XR3470	Cherry	CS3470A	
	Motorola	**MC3470**	**(2950)**
XR3524	Cherry	CS3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	SG3524	
		UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
	TI	SG3524	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
XR3525A	Cherry	CS3525A	
	IPS	**IP3525A**	**(2854)**
	LinearTech	LT3525A	
	Motorola	**SG3525A**	**(2931)**
	RIFA	RL3525A	
	SGS	SG3525A	
	SiliconG	SG3525A	
	Siliconix	PWM25	
	TI	SG3525A	
	Unitrode	**UC3525A**	**(3323)**
XR3527A	Cherry	CS3527	
		CS3527A	
	IPS	**IP3527**	**(2854)**
	LinearTech	LT3527A	
	Motorola	**SG3527A**	**(2931)**
	SGS	SG3527A	
	SiliconG	SG3527A	
	TI	SG3527A	
XR3543	IPS	IP3543	
	SiliconG	SG3543	
	Unitrode	**UC3543**	**(3324)**
XR400	MCE	MCEAD15C	
XR4136M	Raytheon	RM4136	
	TI	RM4136	
XR4151	Raytheon	RC4151	
		RM4151	
		RV4151	
	TI	XR4151	
XR4194	MCE	MCE4194	
	Raytheon	RC4194	
		RM4194	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Exar Corporation (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
XR4195	Exar	XR1468	
	Fairchild	MC1489	
		μA212A	
		μA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG2501A	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
XR4202	Plessey	TAB1042	
XR4558	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
XR4560	Raytheon	RC4560	
XR4739	Fairchild	μA739	
		μA749	
	National	LM1303	
	Raytheon	RC4739	
	SGS	TBA231	
	TI	SN76131	
		SN76149	
XR4741	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
		RM4158	
	TI	LM148	
XR4751	Fairchild	μA348	
	GE/Intersil	LM348	
	GoldStar	**GL348**	**(2700)**
	Motorola	**LM348**	**(2923, 2958)**
		MC4741	**(2923, 2959)**
	National	LM348	
	Raytheon	HA4741	
	TI	LM348	
XR494	Cherry	CS494M	
	IPS	**IP494A**	**(2854)**
	Motorola	**TL494**	**(2931)**
	TI	TL494M	
		TL594M	
	Unitrode	**UC494A**	**(3323)**
XR500	MCE	MCED15B	
XR541	Fairchild	FGC8000	
	MicroLinear	ML541	
	PMI	**DAC88**	**(2974)**
	SiliconSys	SSI541	
XR5532	**Signetics**	**NE5532**	**(3090)**
		NE5532A	**(3090)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
XR5532	Signetics		(Cont'd)
		SE5532	
		SE5532A	
	TI	NE5532	
		NE5532A	
XR5533	Signetics	NE5533	
		NE5533A	
	TI	NE5533	
XR5534	AnalogSys	MA332	
	Datel	**AM453-2C**	**(2577)**
	Raytheon	RC5534	
	Signetics	**NE5534**	**(3091)**
		NE5534A	**(3091)**
	SSM	SSM2134	
	TI	NE5534	
		NE5534A	
XR555	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
XR555M	GE/Intersil	SE555	
	Motorola	MC1555	
	Raytheon	RM555	
	Signetics	SE555	
	TI	SE555	
		SE555M	
XR558	Signetics	NE558	
		SE558	
XR567	Exar	XR2567	
	MCE	MCE567	
	National	LM567	
	Samsung	LM567	
	Signetics	NE567	
		SE567	
XR6118	Dionics	DI513B	
		DI514	
		DI514B	
	Motorola	MC3490	
	National	DM8887	
		DS8887	
	OKI	MSL912	
	Sanyo	LB1290	
	Signetics	NE594	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
	Toshiba	TD62781	
XR6128	**Sprague**	**UDN6128**	**(3203)**
	Toshiba	TD62782	
XR8038	**GE/Intersil**	**ICL8038**	**(2677)**
XR8464	MicroLinear	ML8464	
	National	DP8464	
XR88C681	**Motorola**	**MC2681**	**(2898)**
	Signetics	**SCN2681**	**(3052)**
XRA100	Exar	XRM100	
	Interdesign	MOA	
		MOM	
	MCE	MCEA20	
		MCEA20A	
XRB100	Interdesign	MOB	
	MCE	MCEA20B	
XRC100A	Interdesign	MOC	
	MCE	MCEA20C	
XRC277	Exar	C277	
	PMI	**RPT82**	**(2975)**
		RPT83	**(2975)**
	Signetics	N82S147	
XRD100	Interdesign	MOD	
	MCE	MCEA40D	
XRE100	Cherry	CS2000	
	Interdesign	MOE	
	MCE	MCEA20E	
XRF100	Cherry	CS3000	
	Interdesign	MCF	
		MOF	
	MCE	MCEA20F	

Manufacturer Device	Replacement Source	Device	IC Master Page
XRG100	Cherry	CS2500	
	Interdesign	MOG	
	MCE	MCEA20G	
XRH100	Interdesign	MOH	
	MCE	MCEA20H	
XRJ100	Interdesign	MOJ	
	MCE	MCEA20J	
XRL100	Cherry	CS3200	
	Interdesign	MOL	
	MCE	MCEA20L	
XRL555	GE/Intersil	ICL7555	
	Maxim	ICL7555	
XRL556	GE/Intersil	ICL7556	
	Maxim	ICL7556	
XRL567	Samsung	LM567L	
XRM100	Exar	XRA100	
	Interdesign	MOA	
		MOM	
	MCE	MCEA20	
		MCEA20A	
XRT8205	Cherry	CS8205	
	Samsung	KA2411	

EXEL Microelectronics

Manufacturer Device	Replacement Source	Device	IC Master Page
46C16	Cypress	7C291	
	SEEQ	**36C16**	**(2991)**
	TI	27C292	
	Waferscale	57C291	
XL2816	EXEL	XL2816A	
	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	Intel	2816B	
	National	NMC9816A	
	Samsung	KM2816A	
	SEEQ	**2816**	**(2991)**
		2816A	**(2991)**
		M2816A	
	Xicor	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**
XL2816A	EXEL	XL2816	
	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	Intel	2816B	
	National	NMC9816A	
	Samsung	KM2816A	
	SEEQ	**2816**	**(2991)**
		2816A	**(2991)**
		M2816A	
	Xicor	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**
XL2817A	AMD	AM2817A	
	GIM	28C17	
	National	NMC9817	
	Samsung	KM2817A	
	SEEQ	**2817A**	**(2991)**
		DQ2817A	
XL2864A	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
XL2865A	AMD	AM28645	
	GIM	28C64	
	Motorola	28C64	
	NCR	NCR5264	
	Samsung	KM2865A	
	SEEQ	DQ2864	

Manufacturer Device	Replacement Source	Device	IC Master Page
XL46C16	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
XL68C681	**Exar**	**XR88C681**	**(2612)**
	Motorola	**MC68681**	**(2898)**
	Signetics	**SCN68681**	**(3054)**
XLS2864A	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**

Fairchild

Manufacturer Device	Replacement Source	Device	IC Master Page
100Z416	Fujitsu	100149	
11C01	Motorola	MC1688	
11C05	Motorola	MC1699	
	Plessey	SP8610	
		SP8616	
11C06	Motorola	MC1690	
♦ 11C24	Motorola	MC4024	
		MC4324	
♦ 11C44	Motorola	MC4044	
		MC4344	
♦ 11C58	Motorola	MC1658	
	Plessey	SP1658	
11C70	Motorola	MC1670	
	Plessey	SP1670	
11C90	Plessey	SP8680	
		SP8685	
11C91	Plessey	SP8740	
16P8B	Cypress	CYPAL16L8	
	Fairchild	16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
16P8B2	AMD	AMPAL16L8A	
	MMI	87097	
	National	DMPAL16L8A	
		DMPAL16L8B2	
	TI	PAL16L825	
		TIBPAL16L8-30	**(4320)**
16RP4B	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
16RP4B			(Cont'd)
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
16RP4B2	AMD	AMPAL16R4A	
	MMI	PAL16R4B2	
	National	DMPAL16R42	
		DMPAL16R4A	
	TI	PAL16R425	
16RP6B	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
16RP6B2	AMD	AMPAL16R6A	
	MMI	PAL16R6B2	
	National	DMPAL16R6A	
	TI	PAL16R625	
		TIBPAL16RS-30	
16RP8B	Cypress	CYPAL16L8	
	Fairchild	16P8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
16RP8B2	AMD	AMPAL16R8A	
	MMI	PAL16R8B2	
	National	DMPAL16R8A	
		DMPAL16R8B2	
	TI	PAL16R825	
2102H	National	MM2102A	
	Panasonic	MN2102	
2764	AMD	AM2764	
		AM27C64	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
2764			(Cont'd)
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
♦ 29F01	Fairchild	F2901A	
	National	IDM2901A	
	Thomson	TS2901	
	Waferscale	**WS5901**	**(3376)**
29F10	Motorola	MC2910	
	Thomson	TS2910	
	Waferscale	**WS5910**	**(3376)**
32Z565	AMD	27S49	
		AM27S49	
	Cypress	**CY7C264**	**(2565)**
	Fairchild	93Z565	
		93Z665	
	Fujitsu	7144H	
		MB7144	
	Raytheon	29VP864	
3341A	AMD	AM2841	
	Fairchild	CY3341AC	
	Plessey	MJ2841	
3347	SMC	SR5015	
5116	National	TP5116	
	SGS	M5116	
5151	Thomson	MK5151	
5156	CTI	MA556	
	National	TP5156	
	SGS	M5156	
	Thomson	MK5156	
5400	National	DM5400	
	Signetics	5400	
	TI	SN5400	
5402	National	DM5402	
	TI	SN5402	
5404	Fairchild	9016	
	National	DM5404	
		DM9016C	
5408	National	DM5408	
	TI	SN5408	
5409	National	DM5409	
	TI	SN5409	
5410	National	DM5410	
	TI	SN5410	
54121	National	DM54121	
	Signetics	54121	
	TI	SN54121	
54122	TI	SN54122	
54123	National	DM54123	
	Signetics	54123	
	TI	SN54123	
54125	National	DM54125	
		DM7093	
	TI	SN54125	
5414	National	DM5414	
	Signetics	5414	
	TI	SN5414	
54150	National	DM54150	
	TI	SN54150	
54151A	National	DM54151	
	Signetics	54151	
	TI	SN54151A	
54153	National	DM54153	
	Signetics	54153	
	TI	SN54153	
54157	National	DM54157	
	Signetics	54157	
	TI	SN54157	
54161	National	DM54161	
	Signetics	54161	
	TI	SN54161	
54164	National	DM54164	
		DM7570	
	Signetics	54164	
	TI	SN54164	
54165	National	DM54165	
		DM7590	
	Signetics	54165	
	TI	SN54165	

Manufacturer Device	Replacement Source	Device	IC Master Page
54170	National	DM54170	
	TI	SN54170	
54173	National	DM54173	
		DM7551	
	Raytheon	RM8T10	
	TI	SN54173	
54174	National	DM54174	
	Signetics	54174	
	TI	SN54174	
54175	National	DM54175	
	Signetics	54175	
	TI	SN54175	
54191	National	DM54191	
	Signetics	54191	
	TI	SN54191	
54197	National	DM54197	
	TI	SN54197	
5420	National	DM5420	
	Signetics	5420	
	TI	SN5420	
5422	**GE/RCA**	**CA5422**	**(2645)**
	TI	SN5422	
5425	National	DM5425	
	TI	SN5425	
54279	Signetics	54279	
	TI	SN54279	
54298	TI	SN54298	
5430	National	DM5430	
	TI	SN5430	
5432	National	DM5432	
	Signetics	5432	
	TI	SN5432	
5437	National	DM5437	
	TI	SN5437	
5440	National	DM5440	
	TI	SN5440	
5442A	National	DM5442	
	Signetics	5442	
	TI	SN5442A	
5446	National	DM5446	
	TI	SN5446	
5448	National	DM5448	
	TI	SN5448	
♦ 5451	National	DM5451	
	TI	SN5451	
5473	National	DM5473	
	Signetics	5473	
	TI	SN5473	
5474	National	DM5474	
	Signetics	5474	
	TI	SN5474	
5475	National	DM5475	
	Signetics	5475	
	TI	SN5475	
5476	National	DM5476	
	Signetics	5476	
	TI	SN5476	
5483A	Signetics	5483A	
	TI	SN5483A	
5485	National	DM5485	
	Signetics	5485	
	TI	SN5485	
5486	National	DM5486	
	Signetics	5486	
	TI	SN5486	
5491	Motorola	MC5491	
	National	SN5491	
	Signetics	5491	
	TI	SN5491	
5492	National	5492	
		DM5492	
	TI	SN5492	
5495	National	DM5495	
	Signetics	5495	
	TI	SN5495	
5497	TI	SN5497	
54AC00	Ferranti	REF12	
	GE/RCA	CD54AC00	
	LinearTech	LM385-1	
	National	LM385-1	
54AC02	GE/RCA	CD54AC02	
54AC04	GE/RCA	CD54AC04	
54AC08	GE/RCA	CD54AC08	
54AC109	GE/RCA	CD54AC109	
54AC138	GE/RCA	CD54AC138	
54AC139	GE/RCA	CD54AC139	
54AC14	GE/RCA	CD54AC14	
54AC151	GE/RCA	CD54AC151	
54AC153	GE/RCA	CD54AC153	
54AC157	GE/RCA	CD54AC157	
54AC158	GE/RCA	CD54AC158	
	Lattice	GAL20V8	

Manufacturer Device	Replacement Source	Device	IC Master Page
54AC161	GE/RCA	CD54AC161	
	Lattice	GAL20V8	
54AC163	GE/RCA	CD54AC163	
	Lattice	GAL20V8	
54AC174	GE/RCA	CD54AC174	
	Lattice	GAL20V8	
	National	PAL20R4	
54AC175	GE/RCA	CD54AC175	
54AC191	GE/RCA	CD54AC191	
54AC20	GE/RCA	CD54AC20	
54AC240	GE/RCA	CD54AC240	
54AC241	GE/RCA	CD54AC241	
54AC245	GE/RCA	CD54AC244	
		CD54AC245	
54AC251	GE/RCA	CD54AC251	
54AC253	GE/RCA	CD54AC253	
54AC257	GE/RCA	CD54AC257	
54AC258	GE/RCA	CD54AC258	
54AC273	GE/RCA	CD54AC273	
54AC299	GE/RCA	CD54AC299	
54AC32	GE/RCA	CD54AC32	
54AC323	GE/RCA	CD54AC323	
54AC373	GE/RCA	CD54AC373	
54AC374	GE/RCA	CD54AC374	
54AC540	GE/RCA	CD54AC540	
54AC541	GE/RCA	CD54AC541	
54AC563	GE/RCA	CD54AC563	
54AC564	GE/RCA	CD54AC564	
54AC573	GE/RCA	CD54AC573	
54AC574	GE/RCA	CD54AC574	
54AC646	GE/RCA	CD54AC646	
54AC648	GE/RCA	CD54AC648	
54AC74	GE/RCA	CD54AC74	
54AC86	GE/RCA	CD54AC86	
54ACT00	GE/RCA	CD54ACT00	
54ACT04	GE/RCA	CD54ACT04	
54ACT08	GE/RCA	CD54ACT08	
54ACT109	GE/RCA	CD54ACT109	
54ACT138	GE/RCA	CD54ACT138	
54ACT139	GE/RCA	CD54ACT139	
54ACT151	GE/RCA	CD54ACT151	
54ACT157	GE/RCA	CD54ACT157	
54ACT158	GE/RCA	CD54ACT158	
54ACT161	GE/RCA	CD54ACT161	
54ACT163	GE/RCA	CD54ACT163	
54ACT174	GE/RCA	CD54ACT174	
54ACT175	GE/RCA	CD54ACT175	
54ACT240	GE/RCA	CD54ACT240	
54ACT244	GE/RCA	CD54ACT244	
54ACT245	GE/RCA	CD54ACT245	
54ACT251	GE/RCA	CD54ACT251	
54ACT253	GE/RCA	CD54ACT252	
54ACT257	GE/RCA	CD54ACT257	
54ACT258	GE/RCA	CD54ACT258	
54ACT273	GE/RCA	CD54ACT273	
54ACT299	GE/RCA	CD54ACT299	
54ACT32	GE/RCA	CD54ACT32	
54ACT323	GE/RCA	CD54ACT323	
54ACT373	GE/RCA	CD54ACT373	
54ACT374	GE/RCA	CD54ACT374	
54ACT533	GE/RCA	CD54ACT533	
54ACT534	GE/RCA	CD54ACT534	
54ACT563	GE/RCA	CD54ACT563	
54ACT564	GE/RCA	CD54ACT564	
	TI	SN74F251	
54ACT573	GE/RCA	CD54ACT573	
54ACT574	GE/RCA	CD54ACT574	
54ACT74	GE/RCA	CD54ACT74	
54F00	Motorola	MC54F00	
	Signetics	54F00	
	TI	SN54F00	
54F02	Motorola	MC54F02	
	Signetics	54F02	
	TI	SN54F02	
54F04	Motorola	MC54F04	
	Signetics	54F04	
		S4F04	
	TI	SN54F04	
54F08	Motorola	MC54F08	
	Signetics	54F08	
	TI	SN54F08	
54F10	Motorola	MC54F10	
	Signetics	54F10	
	TI	SN54F10	
54F109	Motorola	MC54F109	
	Signetics	54F109	
	TI	SN54F109	
54F11	Signetics	54F11	
54F112	Motorola	MC54F112	
	TI	SN54F112	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
54F138	Motorola	MC54F138	
	Signetics	54F138	
	TI	SN54F138	
54F139	Motorola	MC54F139	
	Signetics	54F139	
54F153	Motorola	MC54F153	
	TI	SN54F153	
54F157	Motorola	MC54F157	
	Signetics	54F157	
	TI	SN54F157	
54F158	Motorola	MC54F158	
	Signetics	54F158	
	TI	SN54F158	
54F20	Motorola	MC54F20	
	Signetics	54F20	
	TI	SN54F20	
54F240	Motorola	MC54F240	
	Signetics	54F240	
		SN54F240	
54F241	Motorola	MC54F241	
	Signetics	54F241	
	TI	SN54F241	
54F242	Motorola	MC54F242	
	Signetics	54F242	
	TI	SN54F242	
54F243	Motorola	MC54F243	
	Signetics	54F243	
	TI	SN54F243	
54F244	Motorola	MC54F244	
	Signetics	54F244	
	TI	SN54F244	
54F245	Motorola	MC54F245	
	Signetics	54F245	
	TI	SN54F245	
54F253	TI	SN54F253	
54F257	Motorola	MC54F257	
	Signetics	54F257	
	TI	SN54F257	
54F258	Motorola	MC54F258	
	Signetics	54F258	
	TI	SN54F258	
54F27	TI	SN54F27	
54F280	Motorola	MC54F280	
	Signetics	54F280	
	TI	SN54F280	
54F283	Motorola	MC54F283	
	TI	SN54F283	
54F299	TI	SN54F299	
54F30	TI	SN54F30	
54F32	Motorola	MC54F32	
	Signetics	54F32	
	TI	SN54F32	
54F350	Motorola	MC54F350	
	TI	SN54F350	
54F352	Motorola	MC54F352	
	TI	SN54F352	
54F353	Motorola	MC54F353	
	TI	SN54F353	
54F373	Motorola	54F373	
		MC54F373	
	Signetics	54F373	
	TI	SN547F373	
54F374	Motorola	MC54F374	
	Signetics	54F374	
	TI	SN54F374	
54F381	Motorola	MC54F381	
	TI	SN54F381	
54F382	Motorola	MC54F382	
	TI	SN54F382	
54F521	Motorola	MC54F521	
	Signetics	54F521	
	TI	SN54F521	
54F533	Motorola	MC54F533	
	TI	SN54F533	
54F534	Motorola	MC54F534	
	Signetics	54F534	
	TI	SN54F534	
54F543	TI	SN54F543	
54F544	TI	SN54F544	
♦ 54F557	AMD	AM25S557	
	LogicDev	LMU557	
	MMI	SN54557	
		SN74S557	
54F573	TI	SN54F573	
54F620	Motorola	MC54F620	
	Signetics	54F620	
	TI	SN54F620	
54F621	TI	SN54F621	
54F623	Motorola	MC54F623	
	TI	SN54F623	
54F74	Motorola	MC54F74	
	TI	SN54F74	
♦ 54H08	National	DM54H08	
54HC125	**GE/RCA**	**CD54HC125**	**(2631)**
		CDHC125	
	Motorola	MC54HC125	
	National	MM54HC125	
	TI	SN54HC125	
54HC132	**GE/RCA**	**CD54HC132**	**(2631)**
	Motorola	MC54HC132	
	National	MM54HC132	
	Signetics	54HC132	
	TI	SN54HC132	
54HC243	**GE/RCA**	**CD54HC243**	**(2631)**
	Motorola	MC54HC243	
	National	MM54HC243	
	Signetics	54HC243	
	TI	SN54HC243	
54HC688	**GE/RCA**	**CD54HC688**	**(2632)**
	Motorola	MC54HC688	
	National	MM54HC688	
	Signetics	54HC688	
	TI	SN54HC688	
54HCT04	**GE/RCA**	**CD54HCT04 (2631)**	
	Motorola	MC54HCT04	
	National	MM54HCT04	
	Signetics	54HCT04	
	TI	SN54HCT04	
54LS00	Motorola	SN54LS00	
	National	DM54LS00	
	SGS	T54LS00	
	Signetics	54LS00	
	TI	SN54LS00	
54LS02	Motorola	SN54LS02	
	National	DM54LS02	
	SGS	T54LS02	
	Signetics	54LS02	
	TI	SN54LS02	
54LS03	Motorola	SN54LS03	
	National	DM54LS03	
	SGS	T54LS03	
	TI	SN54LS03	
54LS04	Motorola	SN54LS04	
	National	DM54LS04	
	SGS	T54LS04	
	Signetics	54LS04	
	TI	SN54LS04	
54LS05	Motorola	SN54LS05	
	National	DM54LS05	
	SGS	T54LS05	
	TI	SN54LS05	
54LS08	Motorola	SN54LS08	
	National	DM54LS08	
	SGS	T54LS08	
	Signetics	54LS08	
	TI	SN54LS08	
54LS09	Motorola	SN54LS09	
	National	DM54LS09	
	SGS	T54LS09	
	TI	SN54LS09	
54LS10	Motorola	SN54LS10	
	National	DM54LS10	
	SGS	54LS10	
		T54LS10	
	Signetics	54LS10	
	TI	SN54LS10	
54LS109	Motorola	SN54LS109	
	National	DM54LS109	
	SGS	54LS109	
		T54LS109	
	Signetics	54LS109	
	TI	SN54LS109	
54LS11	Motorola	SN54LS11	
	National	DM54LS11	
	SGS	T54LS11	
	TI	SN54LS11	
54LS112	SGS	T54LS112	
54LS113	SGS	T54LS113	
54LS114	SGS	T54LS114	
54LS125A	Motorola	SN54LS125	
		SN54LS125A	
	National	DM54LS125	
	SGS	T54LS125	
	Signetics	54LS125A	
	TI	SN54LS125A	
54LS126	Motorola	SN54LS126	
	National	DM54LS126	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
54LS126			(Cont'd)
	SGS	54LS126	
		T54LS126	
	Signetics	54LS126	
	TI	SN54LS126	
54LS13	Motorola	SN54LS13	
	National	DM54LS13	
	SGS	T54LS13	
	TI	SN54LS13	
54LS133	Motorola	SN54LS133	
	SGS	T54LS133	
54LS136	Motorola	SN54LS136	
	National	DM54LS136	
	SGS	T54LS136	
	Signetics	54LS136	
	TI	SN54LS136	
54LS138	Motorola	SN54LS138	
	National	DM54LS138	
	SGS	T54LS138	
	Signetics	54LS138	
	TI	SN54LS138	
54LS139	Motorola	SN54LS139	
	National	DM54LS139	
	SGS	T54LS139	
	Signetics	54LS139	
	TI	SN54LS139A	
54LS14	Motorola	SN54LS14	
	National	DM54LS14	
	SGS	T54LS14	
	Signetics	54LS14	
	TI	SN54LS14	
54LS15	Motorola	SN54LS15	
	National	DM54LS15	
	SGS	T54LS15	
	TI	SN54LS15	
54LS151	Motorola	SN54LS151	
	National	DM54LS151	
	SGS	T54LS151	
	Signetics	54LS151	
	TI	SN54LS151	
54LS153	Motorola	SN54LS153	
	National	DM54LS153	
	SGS	T54LS153	
	Signetics	54LS153	
	TI	SN54LS153	
54LS155	Motorola	SN54LS155	
	National	DM54LS155	
	SGS	T54LS155	
	TI	SN54LS155A	
54LS156	Motorola	SN54LS156	
	National	DM54LS156	
	SGS	T54LS156	
	TI	SN54LS156	
54LS157	Motorola	SN54LS157	
	National	DM54LS157	
	SGS	T54LS157	
	Signetics	54LS157	
	TI	SN54LS157	
54LS158	Motorola	SN54LS158	
	National	DM54LS158	
	SGS	T54LS158	
	Signetics	54LS158	
	TI	SN54LS158	
54LS160A	Motorola	SN54LS160A	
	SGS	T54LS160	
	Signetics	54LS160A	
	TI	SN54LS160A	
54LS161A	Motorola	SN54LS161A	
	National	DM54LS161A	
	SGS	T54LS161	
	Signetics	54LS161A	
	TI	SN54LS161A	
54LS162A	Motorola	SN54LS162A	
	National	DM54LS162A	
	SGS	T54LS162	
	Signetics	54LS162A	
	TI	SN54LS162A	
54LS163A	Motorola	SN54LS163A	
	National	DM54LS163	
		DM54LS163A	
	SGS	T54LS163	
	Signetics	54LS163A	
	TI	SN54LS163A	
54LS164	Motorola	SN54LS164	
	SGS	T54LS164	
	Signetics	54LS164	
	TI	SN54LS164	
54LS165	Motorola	SN54LS165	
	TI	SN54LS165A	
54LS168	Motorola	SN54LS168	
	National	DM54LS168	
	SGS	T54LS168	
54LS169	Motorola	SN54LS169	
	National	DM54LS169	
	SGS	T54LS169	
	TI	SN54LS169B	
54LS170	National	DM54LS170	
	SGS	T54LS170	
	TI	SN54LS170	
54LS173	Motorola	SN54LS173A	
	National	DM54LS173	
	Signetics	54LS173	
	TI	SN54LS173A	
54LS174	Motorola	SN54LS174	
	National	DM54LS174	
	SGS	T54LS174	
	Signetics	54LS174	
	TI	SN54LS174	
54LS175	Motorola	SN54LS175	
	National	DM54LS175	
	SGS	T54LS175	
	Signetics	54LS175	
	TI	SN54LS175	
54LS181	Motorola	SN54LS181	
	SGS	T54LS181	
	Signetics	54LS181	
	TI	SN54LS181	
54LS189	TI	SN54LS189	
54LS192	Motorola	SN54LS192	
	National	DM54LS192	
	SGS	T54LS192	
	Signetics	54LS192	
	TI	SN54LS192	
54LS193	Motorola	SN54LS193	
	National	DM54LS193	
	SGS	T54LS193	
	Signetics	54LS193	
	TI	SN54LS193	
54LS194A	Motorola	SN54LS194A	
	SGS	T54LS194	
	TI	SN54LS194A	
54LS195A	Motorola	SN54LS195A	
	SGS	T54LS195	
	Signetics	54LS195A	
	TI	SN54LS195A	
54LS20	Motorola	SN54LS20	
	National	DM54LS20	
	SGS	T54LS20	
	Signetics	54LS20	
	TI	SN54LS20	
54LS21	Motorola	SN54LS21	
	National	DM54LS21	
	SGS	T54LS21	
	TI	SN54LS21	
54LS22	National	DM54LS22	
	SGS	T54LS22	
	TI	SN54LS22	
54LS240	MMI	SN54LS240	
	Motorola	SN54LS240	
	SGS	T54LS240	
	TI	SN54LS240	
54LS241	MMI	SN54LS241	
	Motorola	SN54LS241	
	SGS	T54LS241	
	TI	SN54LS241	
54LS244	MMI	SN54LS244	
	Motorola	SN54LS244	
	SGS	T54LS244	
	TI	SN54LS244	
54LS245	MMI	SN54LS245	
	Motorola	SN54LS245	
	National	DM54LS245	
	Signetics	54LS245	
	TI	SN54LS245	
54LS247	Motorola	SN54LS247	
	National	DM54LS247	
	TI	SN54LS247	
54LS248	Motorola	SN54LS248	
	National	DM54LS248	
	Signetics	54LS248	
	TI	SN54LS248	
54LS249	Motorola	SN54LS249	
	National	DM54LS249	
	TI	SN54LS249	
54LS251	Motorola	SN54LS251	
	SGS	T54LS251	
	Signetics	54LS251	
	TI	SN54LS251	
54LS253	Motorola	SN54LS253	
	National	DM54LS253	
		DM7214	
	SGS	T54LS253	
	Signetics	54LS253	
	TI	SN54LS253	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
54LS256	Motorola	SN54LS256	
	SGS	T54LS256	
54LS257A	National	DM54LS257	
	SGS	T54LS257	
54LS258A	Motorola	SN54LS258A	
	TI	SN54LS258B	
54LS259	Motorola	SN54LS259	
	SGS	T54LS259	
	TI	SN54LS259B	
54LS26	Motorola	SN54LS26	
	National	DM54LS26	
	SGS	T54LS26	
	TI	SN54LS26	
54LS260	Motorola	SN54LS260A	
	SGS	T54LS260	
	Signetics	54LS260A	
54LS266	Motorola	SN54LS266	
	National	DM54LS266	
	SGS	T54LS266	
	Signetics	54LS266	
	TI	SN54LS266	
54LS27	Motorola	SN54LS27	
	National	DM54LS27	
	SGS	T54LS27	
	TI	SN54LS27	
54LS273	MMI	SN54LS273	
	Motorola	SN54LS273	
	SGS	T54LS273	
	Signetics	54LS273	
	TI	SN54LS273	
54LS279	Motorola	SN54LS279	
	National	DM54LS279	
	SGS	T54LS279	
	Signetics	54LS279	
	TI	SN54LS279A	
54LS28	Motorola	SN54LS28	
	SGS	T54LS28	
	Signetics	54LS194A	
		54LS28	
	TI	SN54LS28	
54LS283	Motorola	SN54LS283	
	National	DM54LS283	
	SGS	T54LS283	
	Signetics	54LS283	
	TI	SN54LS283	
54LS289	TI	SN54LS289	
54LS295A	Motorola	SN54LS295A	
	SGS	T54LS295	
	TI	SN54LS295B	
54LS298	Motorola	SN54LS298	
	National	DM54LS298	
	SGS	54LS298	
		T54LS298	
	Signetics	54LS298	
	TI	SN54LS298	
54LS299	Motorola	DM54LS299	
	TI	SN54LS299	
54LS30	Motorola	SN54LS30	
	National	DM54LS30	
	SGS	T54LS30	
	Signetics	54LS30	
	TI	SN54LS30	
54LS32	Motorola	SN54LS32	
	National	DM54LS32	
	SGS	T54LS32	
	Signetics	54LS32	
	TI	SN54LS32	
54LS322	TI	SN54LS322A	
54LS323	Fairchild	74LS323	
	Motorola	SN74LS323	
	TI	SN54LS323	
		SN74LS323	
54LS33	Motorola	SN54LS33	
	SGS	T54LS33	
	TI	SN54LS33	
54LS347	TI	SN54LS347	
54LS352	Motorola	SN54LS352	
	National	DM54LS352	
	SGS	T54LS352	
	TI	SN54LS352	
54LS353	Motorola	SN54LS353	
	National	DM54LS353	
	SGS	T54LS353	
		T54LS354	
	TI	SN54LS353	
54LS365A	Motorola	SN54LS365A	
	SGS	T54LS365	
	Signetics	54LS365	
		54LS365A	
	TI	SN54LS365A	

Manufacturer Device	Replacement Source	Device	IC Master Page
54LS366A	Motorola	SN54LS366A	
	National	DM54LS366	
	SGS	T54LS366	
	Signetics	54LS366A	
	TI	SN54LS366A	
54LS367A	Motorola	SN54LS367A	
	National	DM54LS367	
	SGS	T54LS367	
	Signetics	54LS367	
		54LS367A	
	TI	SN54LS367A	
54LS368A	Motorola	SN54LS368A	
	National	DM54LS368	
	SGS	T54LS368	
	Signetics	54LS368	
		54LS368A	
	TI	SN54LS368A	
54LS37	Motorola	SN54LS37	
	National	DM54LS37	
	SGS	T54LS37	
	Signetics	54LS37	
	TI	SN54LS37	
54LS374	MMI	SN54LS374	
	Motorola	SN54LS374	
	National	DM54LS374	
	SGS	T54LS374	
	TI	SN54LS374	
54LS375	Motorola	SN54LS375	
	Signetics	54LS375	
	TI	SN54LS375	
54LS377	Motorola	SN54LS377	
	SGS	T54LS377	
	Signetics	54LS377	
	TI	SN54LS377	
54LS378	SGS	T54LS378	
54LS379	AMD	SN54LS379	
	Motorola	SN54LS379	
	SGS	T54LS379	
	TI	SN54LS379	
54LS38	Motorola	SN54LS38	
	National	DM54LS38	
	SGS	T54LS38	
	TI	SN54LS38	
54LS395	Motorola	SN54LS395	
	SGS	T54LS395	
	Signetics	54LS395	
	TI	SN54LS395	
54LS40	Motorola	SN54LS40	
	National	DM54LS40	
	SGS	T54LS40	
	TI	SN54LS40	
54LS42	Motorola	SN54LS42	
	National	DM54LS42	
	SGS	T54LS42	
	Signetics	54LS42	
	TI	SN54LS42	
54LS47	Motorola	SN54LS47	
	National	DM54LS47	
	TI	SN54LS47	
54LS48	Motorola	SN54LS48	
	National	DM54LS48	
	TI	SN54LS48	
54LS49	Motorola	SN54LS49	
	National	DM54LS49	
	TI	SN54LS49	
54LS490	Motorola	SN54LS490	
	SGS	T54LS490	
	TI	SN54LS490	
54LS51	Motorola	SN54LS51	
	National	DM54LS51	
	SGS	T54LS51	
	Signetics	54LS51	
	TI	SN54LS51	
54LS54	Motorola	SN54LS54	
	National	DM54LS54	
	SGS	T54LS54	
	TI	SN54LS54	
54LS541	Motorola	SN54LS541	
	Signetics	54LS541	
	TI	SN54LS541	
54LS55	Motorola	SN54LS55	
	National	DM54LS55	
	SGS	T54LS55	
54LS670	Motorola	SN54LS670	
	National	DM54LS670	
	SGS	T54LS670	
	Signetics	54LS670	
	TI	SN54LS670	
54LS74	Motorola	SN54LS74A	
	National	DM54LS74	
		DM54LS74A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
54LS74			(Cont'd)
	SGS	T54LS74	
	Signetics	54LS74	
	TI	SN54LS74A	
54LS83A	Motorola	SN54LS83A	
	National	DM54LS83A	
	SGS	T54LS83	
	Signetics	54LS83	
		54LS83A	
	TI	SN54LS83A	
54LS85	Motorola	SN54LS85	
	National	DM54LS85	
	Signetics	54LS85	
	TI	SN54LS85	
54LS95B	Motorola	SN54LS95B	
	National	DM54LS95B	
	SGS	T54LS95	
	Signetics	54LS95B	
	TI	SN54LS95B	
54S10	National	DM54S10	
	Signetics	54S10	
	TI	SN54S10	
54S114	TI	SN54S114	
54S132	TI	SN54S132	
54S133	National	DM54S133	
	Signetics	54S133	
	TI	SN54S133	
54S134	National	DM54S134	
	TI	SN54S134	
54S135	National	DM54S135	
	Signetics	54S135	
	TI	SN54S135	
54S138	National	DM54S138	
	Signetics	54S138	
	TI	SN54S138	
54S139	National	DM54S139	
	Signetics	54S139	
	TI	SN54S139	
54S151	National	DM54S151	
	Signetics	54S151	
	TI	SN54S151	
54S153	National	DM54S153	
	Signetics	54S153	
	TI	SN54S153	
54S157	National	DM54S157	
	Signetics	54S157	
	TI	SN54S157	
54S158	National	DM54S158	
	Signetics	54S158	
	TI	SN54S158	
54S175	National	DM54S175	
	Signetics	54S175	
	TI	SN54S175	
54S194	National	DM54S194	
	Signetics	54S134	
	TI	SN54S194	
54S20	National	DM54S20	
	Signetics	54S20	
	TI	SN54S20	
54S258	National	DM54S258	
	Signetics	54S258	
	TI	SN54S258	
54S280	National	DM54S280	
	Signetics	54S280	
	TI	SN54S280	
54S30	National	DM54S30	
	TI	SN54S30	
54S40	National	DM54S40	
	Signetics	54S40	
	TI	SN54S40	
54S51	National	DM54S51	
	Signetics	54S51	
	TI	SN54S51	
54S64	National	DM54S64	
	Signetics	54S64	
	TI	SN54S64	
54S65	National	DM54S65	
	Signetics	54S65	
	TI	SN54S65	
54S74	Signetics	54S74	
	TI	SN54S74	
♦ 55107	Motorola	MC55107	
	National	DS55107	
		LM55107A	
♦ 55107	TI	SN55107A	
		SN55107B	
55108	Motorola	MC55108	
	National	DS55108	
		LM55108A	
	TI	SN55108A	
		SN55108B	
55157	TI	SN55157	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 55450	Signetics	55450	
	SiliconG	SG55450B	
	TI	SN55450	
55451	National	DS55451	
	Signetics	55451	
	SiliconG	SG55451	
		SG55451B	
	TI	SN55451	
♦ 55452	Fairchild	μA55452	
	National	DS55452	
	Signetics	55452	
	SiliconG	SG55452	
	TI	SN55452	
		SNJ55452	
55453	National	DS55453	
		LM55453	
	Signetics	55453	
	SiliconG	SG55453	
	TI	SN55453	
		SNJ55453	
7400	National	DM7400	
	Signetics	**7400**	**(3003)**
	TI	SN7400	
	Toshiba	TC7400	
7401	National	DM7401	
	TI	SN7401	
7402	National	DM7402	
	Signetics	**7402**	**(3003)**
	TI	SN7402	
7403	National	DM7403	
	Signetics	**7403**	**(3003)**
	TI	SN7403	
7404	National	DM7404	
	Signetics	**7404**	**(3003)**
	TI	SN7404	
	Toshiba	TC7404	
7405	National	DM7405	
	Signetics	**7405**	**(3003)**
	TI	SN7405	
7406	National	DM7406	
	Signetics	**7406**	**(3003)**
	TI	SN7406	
7407	Hitachi	HD7407	
	National	DM7407	
	Signetics	**7407**	**(3003)**
	TI	SN7407	
7408	National	DM7408	
	Signetics	**7408**	**(3003)**
	TI	SN7408	
7409	National	DM7409	
	TI	SN7409	
7410	National	DM7410	
	Signetics	**7410**	**(3003)**
	TI	SN7410	
	Toshiba	TC7410	
♦ 74107	National	DM74107	
	Signetics	**74107**	**(3003)**
	TI	SN74107	
7411	Hitachi	HD7411	
	National	DM7411	
	Signetics	**7411**	**(3003)**
♦ 7412	TI	SN7412	
74121	National	DM74121	
	Signetics	**74121**	**(3003)**
	TI	SN74121	
♦ 74122	Fairchild	9601	
	National	DM8601	
		DM9601	
♦ 74122	Raytheon	RF8601	
		RF9601	
♦ 74122	Signetics	N8T22	
		S8T22	
♦ 74122	TI	SN74122	
74123	National	DM74123	
	Signetics	**74123**	**(3003)**
	TI	SN74123	
74125	National	DM74125	
		DM8093	
	Signetics	**74125**	**(3003)**
	TI	SN74125	
♦ 74126	National	DM74126	
		DM8094	
♦ 74126	**Signetics**	**74126**	**(3003)**
	TI	SN74126	
♦ 7413	National	DM7413	
	Signetics	**7413**	**(3003)**
	TI	SN7413	
74132	National	DM74132	
	Signetics	**74132**	**(3003)**
	TI	SN74132	
74136	TI	SN74136	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
7414	National	DM7414	
	Signetics	**7414**	**(3003)**
	TI	SN7414	
♦ 74141	Fairchild	93141	
	Hitachi	HD7441	
	National	DM74141	
		DM7441	
♦ 74141	Signetics	74141	
		7441	
74145	National	DM74145	
	Signetics	**74145**	**(3003)**
	TI	SN74145	
74150	National	DM74150	
	Signetics	**74150**	**(3003)**
	TI	SN74150	
74153	National	DM74153	
	Signetics	**74153**	**(3003)**
	TI	SN74153	
74155	National	DM74155	
	Signetics	**74155**	**(3003)**
	TI	SN74155	
♦ 74156	National	DM74156	
	Signetics	**74156**	**(3003)**
	TI	SN74156	
74159	TI	SN74159	
7416	National	DM7416	
	Signetics	**7416**	**(3003)**
	TI	SN7416	
♦ 74160	National	DM74160	
	Signetics	**74160**	**(3003)**
	TI	SN74160	
74161	National	DM74161	
	Signetics	**74161**	**(3003)**
	TI	SN74161	
♦ 74162	National	DM74162	
	TI	SN74162	
74163	National	DM74163	
	Signetics	**74163**	**(3003)**
	TI	SN74163	
74165	National	DM74165	
		DM8590	
	Signetics	**74165**	**(3003)**
	TI	SN74165	
74166	National	DM74166	
	Signetics	**74166**	**(3003)**
	TI	SN74166	
7417	National	DM7417	
	Signetics	**7417**	**(3003)**
	TI	SN7417	
74170	Hitachi	HD74170	
	National	DM74170	
	Signetics	**74170**	**(3003)**
	TI	SN74170	
74173	National	DM74173	
		DM8551	
	Raytheon	RC8T10	
	Signetics	**N8T10**	**(3022)**
	TI	SN74173	
74174	National	DM74174	
	Signetics	**74174**	**(3003)**
	TI	SN74174	
74175	National	DM74175	
	TI	SN74175	
♦ 74176	Fairchild	96176	
	National	DM74176	
		DM8280	
♦ 74176	Raytheon	RC8280	
	Signetics	74176	
	TI	SN74176	
♦ 74177	National	DM74177	
		DM8281	
♦ 74177	Raytheon	RC8281	
	Signetics	74177	
	TI	SN74177	
♦ 74179	Raytheon	RC8271	
	Signetics	**N8271**	**(3022)**
74180	National	DM74180	
	Signetics	**74180**	**(3003)**
	TI	SN74180	
♦ 74190	National	DM74190	
	Signetics	**74190**	**(3003)**
	TI	SN74190	
♦ 74191	National	DM74191	
	Signetics	**74191**	**(3003)**
	TI	SN74191	
♦ 74192	National	DM74192	
		DM8560	
♦ 74192	Raytheon	RC9360	
	Signetics	**74192**	**(3003)**
	TI	SN74192	
♦ 74194	National	DM74194	
	Signetics	**74194**	**(3003)**
	TI	SN74194	
♦ 74195	National	DM74195	
	Signetics	**74195**	**(3003)**
	TI	SN74195	
♦ 74196	National	DM74196	
		DM8290	
♦ 74196	Raytheon	RC8290	
	Signetics	74196	
	TI	SN74196	
74197	National	DM74197	
		DM8291	
	Raytheon	RC8291	
	Signetics	74197	
	TI	SN74197	
♦ 74198	National	DM74198	
	Signetics	74198	
	TI	SN74198	
♦ 74199	National	DM74199	
	Signetics	**74199**	**(3003)**
	TI	SN74199	
7420	Fairchild	9004	
	National	DM7420	
		DM9004C	
	Signetics	**7420**	**(3003)**
	TI	SN7420	
	Toshiba	TC7420	
♦ 7421	**Signetics**	**7421**	**(3003)**
♦ 7422	TI	SN7422	
♦ 7423	National	DM7423	
	TI	SN7423	
7425	National	DM7425	
	TI	SN7425	
♦ 7426	Fairchild	μA75451	
	National	DM7426	
		DM8810	
♦ 7426	**Signetics**	**7426**	**(3003)**
	TI	SN7426	
7427	National	DM7427	
	Signetics	**7427**	**(3003)**
	TI	SN7427	
74279	**Signetics**	**74279**	**(3003)**
	TI	SN74279	
74283	TI	SN74283	
♦ 74293	TI	SN74293	
♦ 74298	**Signetics**	**74298**	**(3003)**
	TI	SN74298	
7430	National	DM7430	
	Signetics	**7430**	**(3003)**
	TI	SN7430	
7432	National	DM7432	
	Signetics	**7432**	**(3003)**
	TI	SN7432	
7437	National	DM7437	
	Signetics	**7437**	**(3003)**
	TI	SN7437	
7438	National	DM7438	
	Signetics	**7438**	**(3003)**
	TI	SN7438	
7439	**Signetics**	**7439**	**(3003)**
7440	National	DM7440	
	Signetics	**7440**	**(3003)**
	TI	SN7440	
7442	National	DM7442	
		DM8842	
	Signetics	**7442**	**(3003)**
	TI	SN7442A	
7445	**Signetics**	**7445**	**(3003)**
	TI	SN7445	
♦ 7446	TI	SN7446A	
7450	National	DM7450	
	Signetics	**7450**	**(3003)**
	TI	SN7450	
7451	Hitachi	HD7451	
	National	DM7451	
	Signetics	**7451**	**(3003)**
	TI	SN7451	
♦ 7453	National	DM7453	
♦ 7454	National	DM7454	
	TI	SN7454	
♦ 7460	National	DM7460	
♦ 7470	Hitachi	HD7470	
	National	DM7470	
	TI	SN7470	
♦ 7472	National	DM7472	
7473	National	DM7473	
	Signetics	**7473**	**(3003)**
	TI	SN7473	
7474	National	DM7474	
	Signetics	**7474**	**(3003)**
	TI	SN7474	
7475	National	DM7475	
	Signetics	**7475**	**(3003)**
	TI	SN7475	
7476	National	DM7476	
	Signetics	**7476**	**(3003)**
	TI	SN7476	
7485	National	DM7485	
	Signetics	**7485**	**(3003)**
	TI	SN7485	
7486	National	DM7486	
	Signetics	**7486**	**(3003)**
	TI	SN7486	
7489	National	DM7489	
		DM74S289	
		DM8589	
		MM74S289	
	Signetics	74S289	
		N82S25	
♦ 7494	Hitachi	HD7494	
	Signetics	**7494**	**(3003)**
♦ 7496	National	DM7496	
	Signetics	**7496**	**(3003)**
	TI	SN7496	
7497	TI	SN7497	
♦ 74AC1010	AMD	AM29510	
		AMD29510	
		AMD29L510	
♦ 74AC1010	AD	ADSP1010	
		ADSP1010A	**(2450)**
♦ 74AC1010	**Cypress**	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
♦ 74AC1010	**LSI Logic**	**L64010**	**(2868)**
		L64012	**(2868)**
♦ 74AC1010	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
♦ 74AC1010	TRW-LSI	TDC1010	
		TMC2210	
♦ 74AC1010	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
♦ 74AC1010	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
74AC244	**GE/RCA**	**CD74AC244**	**(2629)**
74AC245	**GE/RCA**	**CD74AC245**	**(2629)**
74AC251	**GE/RCA**	**CD74AC251**	**(2629)**
74AC253	**GE/RCA**	**CD74AC253**	**(2629)**
74AC257	**GE/RCA**	**CD74AC257**	**(2629)**
74AC258	**GE/RCA**	**CD74AC258**	**(2629)**
74AC273	**GE/RCA**	**CD74AC273**	**(2629)**
74AC299	Fairchild	CD74AC299	
	GE/RCA	**CD74AC299**	**(2629)**
74AC323	**GE/RCA**	**CD74AC323**	**(2629)**
74AC373	**GE/RCA**	**CD74AC373**	**(2629)**
74AC374	**GE/RCA**	**CD74AC374**	**(2629)**
74AC540	**GE/RCA**	**CD74AC540**	**(2629)**
74AC541	**GE/RCA**	**CD74AC541**	**(2629)**
74AC546	Fairchild	74AC646	
	GE/RCA	**CD74AC646**	**(2629)**
74AC563	**GE/RCA**	**CD74AC563**	**(2629)**
74AC564	**GE/RCA**	**CD74AC564**	**(2629)**
74AC573	**GE/RCA**	**CD74AC573**	**(2629)**
74AC574	**GE/RCA**	**CD74AC574**	**(2629)**
74AC646	Fairchild	74AC546	
	GE/RCA	**CD74AC646**	**(2629)**
74AC648	**GE/RCA**	**CD74AC648**	**(2629)**
74ACT00	**GE/RCA**	**CD74ACT00**	**(2629)**
74ACT04	**GE/RCA**	**CD74ACT04**	**(2629)**
74ACT08	**GE/RCA**	**CD74ACT08**	**(2629)**
74ACT109	Fairchild	74ACT175	
	GE/RCA	**CD74ACT109**	**(2629)**
74ACT138	**GE/RCA**	**CD74ACT138**	**(2629)**
74ACT139	**GE/RCA**	**CD74ACT139**	**(2629)**
74ACT151	Fairchild	74F653	
	GE/RCA	**CD74ACT151**	**(2629)**
	Motorola	MC74F653	
	TI	SN74F653	
74ACT153	**GE/RCA**	**CD74ACT153**	**(2629)**
74ACT157	**GE/RCA**	**CD74ACT157**	**(2629)**
74ACT158	**GE/RCA**	**CD74ACT158**	**(2629)**
74ACT161	**GE/RCA**	**CD74ACT161**	**(2629)**
74ACT163	**GE/RCA**	**CD74ACT163**	**(2629)**
74ACT173	GE/RCA	CD74ACT173	
74ACT175	Fairchild	74ACT109	
	GE/RCA	**CD74ACT109**	**(2629)**
74ACT240	**GE/RCA**	**CD74ACT240**	**(2629)**
74ACT241	**GE/RCA**	**CD74ACT241**	**(2629)**
74ACT244	**GE/RCA**	**CD74ACT244**	**(2629)**
74ACT245	**GE/RCA**	**CD74ACT245**	**(2629)**
74ACT257	**GE/RCA**	**CD74ACT257**	**(2629)**
74ACT258	**GE/RCA**	**CD74ACT258**	**(2629)**
74ACT273	**GE/RCA**	**CD74ACT273**	**(2629)**
74ACT299	GE/RCA	CD74ACT299	
74ACT32	**GE/RCA**	**CD74ACT32**	**(2629)**
74ACT323	**GE/RCA**	**CD74ACT323**	**(2629)**
74ACT373	**GE/RCA**	**CD74ACT373**	**(2629)**
74ACT374	GE/RCA	CD74ACT374	
74ACT533	**GE/RCA**	**CD74ACT533**	**(2629)**
74ACT534	**GE/RCA**	**CD74ACT534**	**(2629)**
74ACT563	**GE/RCA**	**CD74ACT563**	**(2629)**
74ACT564	**GE/RCA**	**CD74ACT564**	**(2629)**
74ACT573	**GE/RCA**	**CD74ACT573**	**(2629)**
74ACT574	**GE/RCA**	**CD74ACT574**	**(2629)**
74ACT74	**GE/RCA**	**CD74ACT74**	**(2629)**
74F00	Motorola	MC74F00	
	Signetics	**74F00**	**(3023)**
	TI	SN74F00	
74F02	Motorola	MC74F02	
	Signetics	**74F02**	**(3023)**
	TI	SN74F02	
74F04	Motorola	MC74F04	
	Signetics	**74F04**	**(3023)**
	TI	SN74F04	
74F08	Motorola	MC74F08	
	Signetics	**74F08**	**(3023)**
74F10	Motorola	MC74F10	
	Signetics	**74F10**	**(3023)**
74F109	Motorola	MC74F109	
	Signetics	**74F109**	**(3023)**
	TI	SN74F109	
74F11	Motorola	MC74F11	
	Signetics	**74F11**	**(3023)**
	TI	SN74F11	
74F112	Motorola	MC74F112	
	Signetics	**74F112**	**(3023)**
	TI	SN74F112	
74F113	Motorola	ML74F113	
	TI	SN74F113	
74F114	Motorola	MC74F114	
	TI	SN74F114	
74F125	**Signetics**	**74F125**	**(3023)**
74F126	**Signetics**	**74F126**	**(3023)**
74F13	**Signetics**	**74F13**	**(3023)**
74F132	**Signetics**	**74F132**	**(3023)**
74F138	Motorola	MC74F138	
	Signetics	**74F138**	**(3023)**
	TI	SN74F138	
74F14	**Signetics**	**74F14**	**(3023)**
74F148	Motorola	MC74F148	
	Signetics	**74F148**	**(3023)**
74F151	Motorola	MC74F151	
	Signetics	**74F151**	**(3023)**
	TI	SN74F151	
74F153	Motorola	MC74F153	
	Signetics	**74F153**	**(3023)**
	TI	SN74F153	
74F157	Motorola	MC74F157	
	Signetics	**74F157**	**(3023)**
	TI	SN74F157	
74F158	Motorola	MC74F158	
	Signetics	**74F158**	**(3023)**
	TI	SN74F158	
74F160	Motorola	MC74F160	
	Signetics	74F160	
	TI	SN74F160	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Fairchild (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
74F161	Motorola	MC74F161	
	Signetics	74F161	
	TI	SN74F161	
74F162	Motorola	MC74F162	
	Signetics	74F162	
	TI	SN74F162	
74F163	Motorola	MC74F163	
	Signetics	74F163	
	TI	SN74F163	
74F164	Motorola	MC74F164	
	Signetics	**74F164**	**(3023)**
74F168	Motorola	MC74F168	
	Signetics	**74F168**	**(3023)**
	TI	SN74F168	
74F169	Motorola	MC74F169	
	Signetics	**74F169**	**(3023)**
	TI	SN74F169	
74F174	Motorola	MC74F174	
	Signetics	**74F174**	**(3023)**
	TI	SN74F174	
74F175	Motorola	MC74F175	
	Signetics	**74F175**	**(3023)**
	TI	SN74F175	
74F181	Motorola	MC74F181	
	Signetics	**74F181**	**(3023)**
74F182	Motorola	MC74F182	
	Signetics	**74F182**	**(3023)**
74F189	Cypress	CY74F189	
	Motorola	MC74F189	
	Signetics	**74F198**	**(3023)**
74F190	Motorola	MC74F190	
	Signetics	**74F190**	**(3023)**
74F191	Motorola	MC74F191	
	Signetics	**74F191**	**(3023)**
74F192	Motorola	MC74F192	
	Signetics	**74F192**	**(3023)**
74F193	Motorola	MC74F193	
	Signetics	**74F193**	**(3023)**
74F194	Motorola	MC74F194	
	Signetics	**74F194**	**(3023)**
74F195	Motorola	MC74F195	
	Signetics	**74F195**	**(3023)**
74F20	Motorola	MC74F20	
	Signetics	**74F20**	**(3023)**
	TI	SN74F20	
74F240	Motorola	MC74F240	
	Signetics	**74F240**	**(3023)**
	TI	**SN74BCT240**	**(3249)**
		SN74F240	
74F241	Motorola	MC74F241	
	Signetics	**74F241**	**(3023)**
	TI	**SN74BCT241**	**(3249)**
		SN74F241	
♦ 74F242	Motorola	MC74F242	
	Signetics	**74F242**	**(3023)**
	TI	SN74F242	
74F243	Motorola	MC74F243	
	Signetics	**74F243**	**(3023)**
	TI	SN74F243	
74F244	Motorola	MC74F244	
	Signetics	**74F244**	**(3023)**
	TI	**SN74BCT244**	**(3249)**
		SN74F244	
74F245	Motorola	MC74F245	
	Signetics	**74F245**	**(3023)**
	TI	**SN74BCT245**	**(3249)**
		SN74F245	
74F251	**Signetics**	**74F251**	**(3023)**
74F253	Motorola	MC74F253	
	Signetics	**74F253**	**(3023)**
	TI	SN74F253	
74F256	Fairchild	74F368	
	Signetics	**74F256**	**(3023)**
		74F368	**(3023)**
74F257	Motorola	MC74F257	
	Signetics	**74F257**	**(3023)**
	TI	SN74F257	
74F258	Motorola	MC74F258	
	Signetics	**74F258**	**(3023)**
	TI	SN74F258	
74F259	Fairchild	74F37	
	Motorola	MC74F259	
	Signetics	**74F259**	**(3023)**
		74F37	**(3023)**
74F269	Fairchild	74F377	
	Signetics	**74F269**	**(3023, 3038)**
		74F377	**(3023)**
	TI	SN74F377	
74F27	Fairchild	74F395	
	Signetics	74F27	
		74F395	**(3024)**
	TI	SN74F27	
74F273	Fairchild	74F398	
	Motorola	MC74F398	
	Signetics	**74F273**	**(3023)**
		74F398	**(3024)**
	TI	SN74F273	
74F280	Motorola	MC74F280	
	Signetics	**74F280**	**(3023)**
	TI	SN74F280	
74F283	Motorola	MC74F283	
	Signetics	**74F283**	**(3023)**
	TI	SN74F283	
74F298	Fairchild	74F323	
	Motorola	MC74F323	
	Signetics	**74F298**	**(3023)**
		74F323	**(3023)**
	TI	SN74F323	
74F299	Fairchild	74F350	
	Motorola	MC74F350	
	Signetics	**74F299**	**(3023)**
		74F350	**(3023)**
	TI	SN74F299	
		SN74F350	
74F30	Fairchild	74F352	
	Motorola	MC74F352	
	Signetics	**74F30**	**(3023)**
		74F352	**(3023)**
	TI	SN74F30	
		SN74F352	
74F30244	Fairchild	74F353	
	Motorola	MC74F353	
	Signetics	**74F30244**	**(3023)**
		74F353	**(3023)**
	TI	SN74F353	
74F3037	Fairchild	74F378	
	Motorola	MC74F378	
	Signetics	**74F3037**	**(3023, 3043)**
		74F378	**(3023)**
	TI	SN74F378	
74F3040	Fairchild	74F379	
	Motorola	MC74F379	
	Signetics	**74F3040**	**(3023)**
		74F379	**(3023)**
	TI	SN74F379	
74F32	Motorola	MC74F32	
	Signetics	**74F32**	**(3023)**
74F322	Fairchild	74F381	
	Motorola	MC74F381	
	Signetics	**74F322**	**(3023)**
		74F381	**(3024)**
	TI	SN74F381	
74F323	Fairchild	74F298	
	Motorola	MC74F323	
	Signetics	**74F298**	**(3023)**
		74F323	**(3023)**
	TI	SN74F323	
74F350	Fairchild	74F299	
	Motorola	MC74F350	
	Signetics	**74F299**	**(3023)**
		74F350	**(3023)**
	TI	SN74F299	
		SN74F350	
74F352	Fairchild	74F30	
	Motorola	MC74F352	
	Signetics	**74F30**	**(3023)**
		74F352	**(3023)**
	TI	SN74F30	
		SN74F352	
74F353	Fairchild	74F30244	
	Motorola	MC74F353	
	Signetics	**74F30244**	**(3023)**
		74F353	**(3023)**
	TI	SN74F353	
74F365	Fairchild	74F382	
	Motorola	MC74F382	
	Signetics	**74F365**	**(3023)**
		74F382	**(3024)**
	TI	SN74F382	
74F366	Fairchild	74F620	
	Motorola	MC74F620	
	Signetics	**74F366**	**(3023)**
		74F620	**(3024)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74F366			(Cont'd)
	TI	**SN74BCT620**	**(3249)**
		SN74F620	
74F367	Fairchild	74F623	
	Motorola	MC74F623	
	Signetics	**74F367**	**(3023)**
		74F623	**(3024)**
	TI	**SN74BCT623**	**(3249)**
		SN74F623	
74F368	Fairchild	74F256	
	Signetics	**74F256**	**(3023)**
		74F368	**(3023)**
74F37	Fairchild	74F259	
	Motorola	MC74F259	
	Signetics	**74F259**	**(3023)**
		74F37	**(3023)**
74F373	Motorola	MC74F373	
	Signetics	**74F373**	**(3023)**
	TI	**SN74BCT373**	**(3249)**
		SN74F373	
74F374	Motorola	MC74F374	
	Signetics	**74F374**	**(3023)**
	TI	**SN74BCT374**	**(3249)**
		SN74F374	
74F377	Fairchild	74F269	
	Signetics	**74F269**	**(3023, 3038)**
		74F377	**(3023)**
	TI	SN74F377	
74F378	Fairchild	74F3037	
	Motorola	MC74F378	
	Signetics	**74F3037**	**(3023, 3043)**
		74F378	**(3023)**
	TI	SN74F378	
74F379	Fairchild	74F3040	
	Motorola	MC74F379	
	Signetics	**74F3040**	**(3023)**
		74F379	**(3023)**
	TI	SN74F379	
74F38	Signetics	74F38	
74F381	Fairchild	74F322	
	Motorola	MC74F381	
	Signetics	**74F322**	**(3023)**
		74F381	**(3024)**
	TI	SN74F381	
74F382	Fairchild	74F365	
	Motorola	MC74F382	
	Signetics	**74F365**	**(3023)**
		74F382	**(3024)**
	TI	SN74F382	
74F385	**Signetics**	**74F385**	**(3024)**
74F395	Fairchild	74F27	
	Signetics	74F27	
		74F395	**(3024)**
	TI	SN74F27	
74F398	Fairchild	74F273	
	Motorola	MC74F398	
	Signetics	**74F273**	**(3023)**
		74F398	**(3024)**
	TI	SN74F273	
74F399	Motorola	MC74F399	
	Signetics	**74F399**	**(3024)**
74F40	Signetics	74F40	
74F407	Signetics	74F407	
74F410	Signetics	74F410	
74F412	**Signetics**	**74F412**	**(3024)**
74F413	**Cypress**	**CY7C401**	**(2567)**
	IDT	**IDT72401**	**(2805, 2833)**
	MMI	57401	
		67C401	
		75401	
		C57401	
		C57L401	
		C67401	
		C67L401	
	National	DM77S401	
74F432	**Signetics**	**74F432**	**(3024)**
74F455	Signetics	74F455	
74F456	Signetics	74F456	
74F521	Motorola	MC74F521	
	Signetics	**74F521**	**(3024)**
	TI	SN74F521	
74F524	**Signetics**	**74F524**	**(3024)**
74F533	Motorola	MC74F533	
	Signetics	**74F533**	**(3024)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74F533			(Cont'd)
	TI	**SN74BCT533**	**(3249)**
		SN74F533	
74F534	Motorola	MC74F534	
	Signetics	**74F534**	**(3024)**
	TI	**SN74BCT534**	**(3249)**
		SN74F534	
74F537	**Signetics**	**74F537**	**(3024)**
	TI	SN74F537	
74F538	**Signetics**	**74F538**	**(3024)**
	TI	SN74F538	
74F539	**Signetics**	**74F539**	**(3024)**
	TI	SN74F539	
74F540	**Signetics**	**74F540**	**(3024)**
74F541	**Signetics**	**74F541**	**(3024)**
74F543	**Signetics**	**74F543**	**(3024)**
	TI	**SN74BCT543**	**(3249)**
		SN74F543	
74F544	**Signetics**	**74F544**	**(3024)**
	TI	**SN74BCT544**	**(3249)**
		SN74F544	
74F545	**Signetics**	**74F545**	**(3024)**
74F547	**Signetics**	**74F547**	**(3024)**
74F548	**Signetics**	**74F548**	**(3024)**
74F550	**Signetics**	**74F550**	**(3024)**
74F551	**Signetics**	**74F551**	**(3024)**
74F552	**Signetics**	**74F552**	**(3024)**
♦ 74F557	MMI	74S557	
♦ 74F558	AMD	AM25S557	
		AM25S558	
♦ 74F558	LogicDev	LMU558	
	MMI	74S558	
		SN54558	
		SN74S558	
74F563	**Signetics**	**74F563**	**(3024)**
	TI	SN74F563	
74F564	**Signetics**	**74F564**	**(3024)**
74F568	**Signetics**	**74F568**	**(3024)**
	TI	SN74F568	
74F569	**Signetics**	**74F569**	**(3024)**
	TI	SN74F569	
74F573	**Signetics**	**74F573**	**(3024)**
	TI	SN74F573	
74F574	Signetics	74F574	
74F579	**Signetics**	**74F579**	**(3024, 3039)**
74F582	**Signetics**	**74F582**	**(3024)**
74F583	**Signetics**	**74F583**	**(3024)**
74F588	**Signetics**	**74F588**	**(3024)**
74F595	**Signetics**	**74F595**	**(3024)**
74F597	**Signetics**	**74F597**	**(3024)**
74F598	**Signetics**	**74F598**	**(3024)**
74F604	**Signetics**	**74F604**	**(3024)**
74F605	**Signetics**	**74F605**	**(3024)**
74F620	Fairchild	74F366	
	Motorola	MC74F620	
	Signetics	**74F366**	**(3023)**
		74F620	**(3024)**
	TI	**SN74BCT620**	**(3249)**
		SN74F620	
74F621	**Signetics**	**74F621**	**(3024)**
	TI	SN74F621	
74F622	**Signetics**	**74F622**	**(3024)**
	TI	SN74F622	
74F623	Fairchild	74F367	
	Motorola	MC74F623	
	Signetics	**74F367**	**(3023)**
		74F623	**(3024)**
	TI	**SN74BCT623**	**(3249)**
		SN74F623	
74F630	Signetics	74F630	
74F631	Signetics	74F631	
74F64	**Signetics**	**74F64**	**(3024)**
	TI	SN74F64	
74F640	**Signetics**	**74F640**	**(3024)**
74F646	**Signetics**	**74F646**	**(3024, 3030)**
74F648	**Signetics**	**74F648**	**(3024, 3030)**
74F653	Fairchild	74ACT151	
	GE/RCA	**CD74ACT151**	**(2629)**
	Motorola	MC74F653	
	TI	SN74F653	
74F655	**Signetics**	**74F655**	**(3024)**
74F656	Signetics	74F656	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
74F657	**Signetics**	**74F657**	**(3024, 3034)**
74F673	**Signetics**	**74F673**	**(3024)**
74F674	**Signetics**	**74F674**	**(3024)**
74F675	Signetics	74F675	
74F676	**Signetics**	**74F676**	**(3024)**
74F74	Motorola	MC74F74	
	Signetics	74F74	
	TI	SN74F74	
74F779	**Signetics**	**74F779**	**(3024, 3041)**
74F821	**Signetics**	**74F821**	**(3025)**
74F823	**Signetics**	**74F823**	**(3025)**
	TI	OP27	
74F825	**Signetics**	**74F825**	**(3025)**
74F827	**Signetics**	**74F827**	**(3025)**
74F828	Signetics	74F282	
74F841	**Signetics**	**74F841**	**(3025)**
	TI	OP37	
74F843	**Signetics**	**74F843**	**(3025)**
74F845	**Signetics**	**74F845**	**(3025)**
74F85	Signetics	74F85	
74F86	Signetics	74F86	
♦ 74H00	National	DM74H00	
♦ 74H01	National	DM74H01	
		DM74H08	
♦ 74H04	National	DM74H04	
♦ 74H08	National	DM74H01	
		DM74H08	
♦ 74H10	National	DM74H10	
	TI	SN74H10	
♦ 74H101	Signetics	74H101	
♦ 74H103	National	DM74H103	
♦ 74H106	National	DM74H106	
♦ 74H108	National	DM74H108	
♦ 74H11	National	DM74H11	
♦ 74H20	National	DM74H20	
♦ 74H21	National	DM74H21	
♦ 74H30	National	DM74H30	
♦ 74H40	National	DM74H40	
♦ 74H50	National	DM74H50	
♦ 74H51	National	DM74H51	
♦ 74H62	National	DM74H62	
♦ 74H74	National	DM74H74	
74LS00	Hitachi	HD74LS00	
	Motorola	SN74LS00	
	National	DM74LS00	
	Panasonic	DN74LS00	
	SGS	T74LS00	
	Signetics	**74LS00**	**(3003)**
	TI	SN74LS00	
74LS01	Hitachi	HD74LS01	
	Motorola	SN74LS01	
	National	DM74LS01	
	Panasonic	DN74LS01	
	Signetics	**74LS01**	**(3003)**
	TI	SN74LS01	
74LS02	Hitachi	HD74LS02	
	Motorola	SN74LS02	
	National	DM74LS02	
	Panasonic	DN74LS02	
	SGS	T74LS02	
	Signetics	**74LS02**	**(3003)**
	TI	SN74LS02	
74LS03	Hitachi	HD74LS03	
	Motorola	SN74LS03	
	National	DM74LS03	
	Panasonic	DN74LS03	
	SGS	T74LS03	
	TI	SN74LS03	
74LS04	Hitachi	HD74LS04	
	Motorola	SN74LS04	
	National	DM74LS04	
	Panasonic	DN74LS04	
	SGS	T74LS04	
	Signetics	**74LS04**	**(3003)**
	TI	SN74LS04	
74LS05	Hitachi	HD74LS05	
	Motorola	SN74LS05	
	National	DM74LS05	
	Panasonic	DN74LS05	
	SGS	T74LS05	
	Signetics	**74LS05**	**(3003)**
	TI	SN74LS05	
74LS08	Hitachi	HD74LS08	
	Motorola	SN74LS08	
	National	DM74LS08	
	Panasonic	DN74LS08	
	SGS	T74LS08	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS08			(Cont'd)
	Signetics	**74LS08**	**(3003)**
	TI	SN74LS08	
74LS09	Hitachi	HD74LS09	
	Motorola	SN74LS09	
	National	DM74LS09	
	Panasonic	DN74LS09	
	SGS	T74LS09	
	TI	SN74LS09	
74LS10	Hitachi	HD74LS10	
	Motorola	SN74LS10	
	National	DM74LS10	
	Panasonic	DN74LS10	
	SGS	T74LS10	
	Signetics	**74LS10**	**(3003)**
	TI	SN74LS10	
74LS109	Hitachi	HD74LS109	
	Motorola	SN74LS109	
	National	DM74LS109	
	Panasonic	DN74LS109	
	SGS	T74LS109	
	Signetics	**74LS109**	**(3003)**
	TI	SN74LS109A	
74LS11	Hitachi	HD74LS11	
	Motorola	SN74LS11	
	National	DM74LS11	
	Panasonic	DN74LS11	
	SGS	T74LS11	
	Signetics	**74LS11**	**(3003)**
	TI	SN74LS11	
74LS112	Hitachi	HD74LS112	
	Motorola	SN74LS112A	
	National	DM74LS112	
	Panasonic	DN74LS112	
	SGS	T74LS112	
	Signetics	**74LS112**	**(3003)**
	TI	SN74LS112A	
♦ 74LS113	Hitachi	HD74LS113	
	Motorola	SN74LS113A	
	National	DM74LS113	
	Panasonic	DN74LS113	
	SGS	T74LS113	
	Signetics	**74LS113**	**(3003)**
	TI	SN74LS113A	
♦ 74LS114	Hitachi	HD74LS114	
	Motorola	SN74LS114A	
	National	DM74LS114	
	Panasonic	DN74LS114	
	SGS	T74LS114	
	TI	SN74LS114A	
74LS125A	Motorola	SN74LS125A	
	National	DM74LS125	
	Panasonic	DN74LS125A	
	SGS	T74LS125	
	Signetics	**74LS125A**	**(3003)**
	TI	SN74LS125A	
74LS126	Motorola	SN74LS126A	
	National	DM74LS126	
	SGS	T74LS126	
	Signetics	**74LS126A**	**(3003)**
	TI	SN74LS126A	
74LS13	Hitachi	HD74LS13	
	Motorola	SN74LS13	
	National	DM74LS13	
	Panasonic	DN74LS13	
	SGS	T74LS13	
	Signetics	**74LS13**	**(3003)**
	TI	SN74LS13	
74LS132	Hitachi	HD74LS132	
	Motorola	SN74LS132	
	National	DM74LS132	
	Panasonic	DN74LS132	
	SGS	T74LS132	
	Signetics	**74LS132**	**(3003)**
	TI	SN74LS132	
74LS133	Motorola	SN74LS133	
	SGS	TL74LS133	
74LS136	Hitachi	HD74LS136	
	Motorola	SN74LS136	
	National	DM74LS136	
	Panasonic	DN74LS136	
	SGS	T74LS136	
	Signetics	**74LS136**	**(3003)**
	TI	SN74LS136	
74LS138	Hitachi	HD74LS138	
	Motorola	SN74LS138	
	National	DM74LS138	
	Panasonic	DN74LS138	
	SGS	T74LS138	
	Signetics	**74LS138**	**(3003)**
	TI	SN74LS138	

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS139	Hitachi	HD74LS139	
	Motorola	SN74LS139	
	National	DM74LS139	
	Panasonic	DN74LS139	
	SGS	T74LS139	
	Signetics	**74LS139**	**(3003)**
	TI	SN74LS139A	
74LS14	Hitachi	HD74LS14	
	Motorola	SN74LS14	
	National	DM74LS14	
	Panasonic	DN74LS14	
	Signetics	**74LS14**	**(3003)**
	TI	SN74LS14	
♦ 74LS145	Motorola	SN74LS145	
	Panasonic	DN74LS145	
	TI	SN74LS145	
74LS15	Motorola	SN74LS15	
	National	DM74LS15	
	Panasonic	DN74LS15	
	SGS	T74LS15	
	TI	SN74LS15	
74LS151	Hitachi	HD74LS151	
		HD74LS151A	
	Motorola	SN74LS151	
	National	DM74LS151	
	Panasonic	DN74LS151	
	SGS	T74LS151	
	Signetics	**74LS151**	**(3003)**
	TI	SN74LS151	
74LS153	Hitachi	HD74LS153	
	Motorola	SN74LS153	
	National	DM74LS153	
	Panasonic	DN74LS153	
	SGS	T74LS153	
	Signetics	**74LS153**	**(3003)**
	TI	SN74LS153	
74LS155	Hitachi	HD74LS155	
	Motorola	SN74LS155	
	National	DM74LS155	
	Panasonic	DN74LS155	
	Signetics	**74LS155**	**(3003)**
	TI	SN74LS155A	
74LS156	Hitachi	HD74LS156	
	Motorola	SN74LS156	
	National	DM74LS156	
	Panasonic	DN74LS156	
	SGS	T74LS156	
	Signetics	**74LS156**	**(3003)**
	TI	SN74LS156	
74LS157	Hitachi	HD74LS157	
	Motorola	SN74LS157	
	National	DM74LS157	
	Panasonic	DN74LS157	
	SGS	T74LS157	
	Signetics	**74LS157**	**(3003)**
	TI	SN74LS157	
74LS158	Hitachi	HD74LS158	
	Motorola	SN74LS158	
	National	DM74LS158	
	Panasonic	DN74LS158	
	SGS	T74LS158	
	Signetics	**74LS158**	**(3003)**
	TI	SN74LS158	
74LS160	Hitachi	HD74LS160A	
	Motorola	SN74LS160A	
	National	DM74LS160	
	Panasonic	DN74LS160A	
	SGS	T74LS160	
	Signetics	**74LS160**	**(3003)**
		74LS160A	**(3003)**
	TI	SN74LS160A	
74LS161A	Hitachi	HD74LS161A	
	Motorola	SN74LS161A	
	National	DM74LS161	
	Panasonic	DN74LS161A	
	SGS	T74LS161	
	Signetics	**74LS161A**	**(3003)**
	TI	SN74LS161A	
74LS162	Hitachi	HD74LS162A	
	Motorola	SN74LS162A	
	National	DM74LS162	
	Panasonic	DN74LS162A	
	SGS	T74LS162	
	Signetics	**74LS162A**	**(3003)**
	TI	SN74LS162A	
74LS163	Hitachi	HD74LS163	
		HD74LS163A	
	Motorola	SN74LS163A	
	National	DM74LS163	
	Panasonic	DN74LS163A	
	SGS	T74LS163	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS163			(Cont'd)
	Signetics	**74LS163A**	**(3003)**
	TI	SN74LS163A	
74LS164	Hitachi	HD74LS164	
	Motorola	SN74LS164A	
	National	DM74LS164	
	Panasonic	DN74LS164	
	SGS	T74LS164	
	Signetics	**74LS164**	**(3003)**
		74LS164A	**(3003)**
	TI	SN74LS164	
74LS165	Motorola	SN74LS165	
	SGS	T74LS165	
	TI	SN74LS165A	
♦ 74LS168	SGS	T74LS168	
74LS169	Hitachi	HD74LS169	
	Motorola	SN74LS169	
	National	DM74LS169	
	SGS	T74LS169	
	Signetics	**74LS169A**	**(3003)**
	TI	SN74LS169	
74LS170	Motorola	SN74LS170	
	National	DM74LS170	
	Panasonic	DN74LS170	
	SGS	T74LS170	
	Signetics	**74LS170**	**(3003)**
	TI	SN74LS170	
74LS173	Motorola	SN74LS173A	
	National	DM74LS173	
	Panasonic	DN74LS173	
	SGS	T74LS173	
	Signetics	**74LS173**	**(3003)**
	TI	SN74LS173A	
74LS174	Hitachi	HD74LS174	
	Motorola	SN74LS174	
	National	DM74LS174	
	Panasonic	DN74LS174	
	SGS	T74LS174	
	Signetics	**74LS174**	**(3003)**
	TI	SN74LS174	
74LS175	Hitachi	HD74LS175	
	Motorola	SN74LS175	
	Panasonic	DN74LS175	
	SGS	T74LS175	
	Signetics	**74LS175**	**(3003)**
	TI	SN74LS175	
74LS181	Hitachi	HD74LS181	
	Motorola	SN74LS181	
	SGS	T74LS181	
	Signetics	**74LS181**	**(3003)**
	TI	SN74LS181	
♦ 74LS189	Cypress	CY74S189	
	National	DM74LS189	
74LS190	Hitachi	HD74LS190	
	Motorola	SN74LS190	
	National	DM74LS190	
	Panasonic	DN74LS190	
	SGS	T74LS190	
	TI	SN74LS190	
74LS191	Hitachi	HD74LS191	
	Motorola	SN74LS191	
	National	DM74LS191	
	Panasonic	DN74LS191	
	SGS	T74LS191	
	Signetics	**74LS191**	**(3003)**
	TI	SN74LS191	
74LS192	Hitachi	HD74LS192	
	Motorola	SN74LS192	
	National	DM74LS192	
	Panasonic	DN74LS192	
	SGS	T74LS192	
	Signetics	**74LS192**	**(3003)**
	TI	SN74LS192	
74LS193	Hitachi	HD74LS193	
	Motorola	SN74LS193	
	National	DM74LS193	
	Panasonic	DN74LS193	
	SGS	T74LS193	
	Signetics	**74LS193**	**(3003)**
	TI	SN74LS193	
74LS194A	Hitachi	HD74LS194A	
	Motorola	SN74LS194A	
	National	DM74LS194	
	Panasonic	DN74LS194A	
	SGS	T74LS194A	
	Signetics	**74LS194A**	**(3003)**
	TI	SN74LS194A	
74LS195A	Fairchild	μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
74LS195A	**Motorola**		**(Cont'd)**
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
74LS196	Hitachi	HD74LS196	
	Motorola	SN74LS196	
	National	DM74LS196	
	Panasonic	DN74LS196	
	SGS	T74LS196	
	Signetics	N82S80	
	TI	SN74LS196	
74LS197	Hitachi	HD74LS197	
	Motorola	SN74LS197	
	National	DM74LS197	
	Panasonic	DN74LS197	
	SGS	T74LS197	
	Signetics	**74LS197**	**(3003)**
	TI	SN74LS197	
74LS20	Hitachi	HD74LS20	
	Motorola	SN74LS20	
	National	DM74LS20	
	Panasonic	DN74LS20	
	SGS	T74LS20	
	Signetics	**74LS20**	**(3003)**
	TI	SN74LS20	
74LS21	Hitachi	HD74LS21	
	Motorola	SN74LS21	
	National	DM74LS21	
	Panasonic	DN74LS21	
	SGS	T74LS21	
	Signetics	**74LS21**	**(3003)**
	TI	SN74LS21	
♦ 74LS22	Hitachi	HD74LS22	
	Motorola	SN74LS22	
	National	DM74LS22	
	Panasonic	DN74LS22	
	SGS	T74LS22	
74LS221	Hitachi	HD74LS221	
	Motorola	SN74LS221	
	National	DM74LS221	
	TI	SN74LS221	
74LS240	Hitachi	HD74LS240	
	Motorola	SN74LS240	
	Panasonic	DN74LS240	
	SGS	T74LS240	
	Signetics	**74LS240**	**(3003)**
	TI	SN74LS240	
74LS241	Hitachi	HD74LS241	
	Motorola	SN74LS241	
	Panasonic	DN74LS241	
	SGS	T74LS241	
	Signetics	**74LS241**	**(3003)**
	TI	SN74LS241	
74LS242A	Motorola	SN74LS242	
	Signetics	**74LS242**	**(3003)**
	TI	SN74LS242	
74LS243A	Motorola	SN74LS243	
	Signetics	**74LS243**	**(3003)**
	TI	SN74LS243	
74LS244	Hitachi	HD74LS244	
	Motorola	SN74LS244	
	Panasonic	DN74LS244	
	SGS	T74LS244	
	Signetics	**74LS244**	**(3003)**
	TI	SN74LS244	
74LS247	Hitachi	HD74LS247	
	Motorola	SN74LS247	
	National	DM74LS247	
	TI	SN74LS247	
74LS248	Hitachi	HD74LS248	
	Motorola	SN74LS248	
	National	DM74LS248	
	SGS	T74LS248	
74LS249	Hitachi	HD74LS249	
	Motorola	SN74LS249	
	National	DM74LS249	
	SGS	T74LS249	
74LS251	Hitachi	HD74LS251	
	Motorola	SN74LS251	
	National	DM74LS251	
	Panasonic	DN74LS251	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS251			(Cont'd)
	SGS	T74LS251	
	Signetics	**74LS251**	**(3003)**
	TI	SN74LS251	
74LS253	Hitachi	HD74LS253	
	Motorola	SN74LS253	
	National	DM74LS253	
		DM8214	
	Panasonic	DN74LS253	
	SGS	T74LS253	
	Signetics	**74LS253**	**(3003)**
	TI	SN74LS253	
74LS256	Motorola	SN74LS256	
	Signetics	**74LS256**	**(3003)**
74LS257A	Hitachi	HD74LS257	
	Motorola	SN74LS257A	
	National	DM74LS257	
	SGS	T74LS257	
	Signetics	**74LS257**	**(3003)**
		74LS257A	**(3003)**
	TI	SN74LS257B	
74LS258A	Hitachi	HD74LS258	
	Motorola	SN74LS258A	
	National	DM74LS258	
	Panasonic	DN74LS258A	
	SGS	T74LS258	
	Signetics	**74LS258**	**(3003)**
	TI	SN74LS258B	
74LS259	Motorola	SN74LS259	
	SGS	T74LS259	
	Signetics	**74LS259**	**(3003)**
	TI	SN74LS259B	
74LS26	Hitachi	HD74LS26	
	Motorola	SN74LS26	
	National	DM74LS26	
	Panasonic	DN74LS26	
	SGS	T74LS26	
	Signetics	**74LS26**	**(3003)**
	TI	SN74LS26	
74LS260	Motorola	SN74LS260	
	Signetics	**74LS260**	**(3003)**
74LS266	Motorola	SN74LS266	
	National	DM74LS266	
	Panasonic	DN74LS266	
	Raytheon	RC8242	
	SGS	T74LS266	
	Signetics	**74LS266**	**(3003)**
		N8242	**(3022)**
	TI	SN74LS266	
74LS27	Hitachi	HD74LS27	
	Motorola	SN74LS27	
	National	DM74LS27	
	Panasonic	DN74LS27	
	SGS	T74LS27	
	Signetics	**74LS27**	**(3003)**
	TI	SN74LS27	
74LS273	Motorola	SN74LS273	
	SGS	T74LS273	
	Signetics	**74LS273**	**(3003)**
	TI	SN74LS273	
74LS279	Hitachi	HD74LS279	
	Motorola	SN74LS279	
	National	DM74LS279	
	Panasonic	DN74LS279	
	SGS	T74LS279	
	Signetics	74LS279	
	TI	SN74LS279A	
74LS28	Motorola	SN74LS28	
	SGS	T74LS28	
	TI	SN74LS28	
74LS283	Hitachi	HD74LS283	
		HD74LS283A	
	Motorola	SN74LS283	
	National	DM74LS283	
	Panasonic	DN74LS283	
	SGS	T74LS283	
	Signetics	**74LS283**	**(3003)**
	TI	SN74LS283	
♦ 74LS289	National	DM74LS289	
74LS290	Hitachi	HD74LS290	
	Motorola	SN74LS290	
	National	DM74LS290	
	Panasonic	DN74LS290	
	SGS	T74LS290	
	Signetics	**74LS290**	**(3003)**
	TI	SN74LS290	
74LS293	Hitachi	HD74LS293	
	Motorola	SN74LS293	
	National	DM74LS293	
	Panasonic	DN74LS293	
	SGS	T74LS293	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS293			(Cont'd)
	Signetics	**74LS293**	**(3003)**
	TI	SN74LS293	
74LS295A	Motorola	SN74LS295A	
	SGS	T74LS295A	
	Signetics	**74LS295A**	**(3003)**
		74LS295B	**(3003)**
	TI	SN74LS295B	
74LS298	Hitachi	HD74LS298	
	Motorola	SN74LS298	
	SGS	T74LS298	
	Signetics	**74LS298**	**(3003)**
	TI	SN74LS298	
74LS299	AMD	SN74LS299	
	Hitachi	HD74LS299	
	Motorola	SN74LS299	
	SGS	T74LS299	
	TI	SN74LS299	
74LS30	Hitachi	HD74LS30	
	Motorola	SN74LS30	
	National	DM74LS30	
	Panasonic	DN74LS30	
	SGS	T74LS30	
	Signetics	**74LS30**	**(3003)**
	TI	SN74LS30	
74LS322	Motorola	SN74LS322	
	TI	SN74LS322A	
74LS323	Fairchild	54LS323	
	Motorola	SN74LS323	
	TI	SN54LS323	
		SN74LS323	
74LS33	Motorola	SN74LS33	
	Panasonic	DN74LS33	
	SGS	T74LS33	
	Signetics	**74LS33**	**(3003)**
	TI	SN74LS33	
74LS352	Motorola	SN74LS352	
	National	DM74LS352	
	SGS	T74LS352	
	TI	SN74LS352	
74LS353	Motorola	SN74LS353	
	National	DM74LS353	
	SGS	T74LS353	
	TI	SN74LS353	
74LS365A	Motorola	SN74LS365A	
	National	DM74LS365	
	Panasonic	DN74LS365A	
	SGS	T74LS365	
		T74LS365A	
	Signetics	**74LS365**	**(3003)**
		74LS365A	**(3003)**
	TI	SN74LS365A	
74LS366A	Motorola	SN74LS366A	
	National	DM74LS366	
	Panasonic	DN74LS366A	
	SGS	T74LS366	
		T74LS366A	
	Signetics	**74LS366A**	**(3003)**
	TI	SN74LS366A	
74LS367A	Hitachi	HD74LS367	
		HD74LS367A	
	Motorola	SN74LS367A	
	National	DM74LS367	
	Panasonic	DN74LS367A	
	SGS	T74LS367	
		T74LS367A	
	Signetics	**74LS367**	**(3003)**
		74LS367A	**(3003)**
	TI	SN74LS367A	
74LS368A	Hitachi	HD74LS368	
	Motorola	SN74LS368A	
	National	DM74LS368	
	Panasonic	DN74LS368A	
	SGS	T74LS368	
	Signetics	**74LS368**	**(3003)**
		74LS368A	**(3003)**
	TI	SN74LS368A	
74LS37	Hitachi	HD74LS37	
	Motorola	SN74LS37	
	National	DM74LS37	
	Panasonic	DN74LS37	
	SGS	T74LS37	
	Signetics	74LS37	
	TI	SN74LS37	
74LS373	Motorola	SN74LS373	
	Panasonic	DN74LS373	
	SGS	T74LS373	
	Signetics	**74LS373**	**(3003)**
	TI	SN74LS373	
74LS374	Motorola	SN74LS374	
	National	DM74LS374	
	SGS	T74LS374	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS374			(Cont'd)
	Signetics	**74LS374**	**(3003)**
	TI	SN74LS374	
74LS375	Motorola	SN74LS375	
	Signetics	**74LS375**	**(3003)**
	TI	SN74LS375	
74LS377	Motorola	SN74LS377	
	SGS	T74LS377	
	Signetics	**74LS377**	**(3003)**
	TI	SN74LS377	
74LS378	AMD	SN74LS378	
	Motorola	SN74LS378	
	SGS	T74LS378	
	Signetics	**74LS378**	**(3003)**
	TI	SN74LS378	
74LS379	Motorola	SN74LS379	
	SGS	T74LS379	
	TI	SN74LS379	
74LS38	Hitachi	HD74LS38	
	Motorola	SN74LS38	
	National	DM74LS38	
	Panasonic	DN74LS38	
	SGS	T74LS38	
	Signetics	**74LS38**	**(3003)**
	TI	SN74LS38	
74LS390	Motorola	SN74LS390	
	Panasonic	DN74LS390	
	SGS	T74LS390	
	TI	SN74LS390	
74LS393	Motorola	SN74LS393	
	Panasonic	DN74LS393	
	SGS	T74LS393	
	Signetics	**74LS393**	**(3003)**
	TI	SN74LS393	
74LS395	National	DM74LS395	
	Panasonic	DN74LS395A	
	SGS	T74LS395	
	Signetics	**74LS395**	**(3003)**
	TI	SN74LS395A	
74LS40	Hitachi	HD74LS40	
	Motorola	SN74LS40	
	National	DM74LS40	
	Panasonic	DN74LS40	
	SGS	T74LS40	
	Signetics	**74LS40**	**(3003)**
	TI	SN74LS40	
74LS42	Hitachi	HD74LS42	
	Motorola	SN74LS42	
	National	DM74LS42	
	Panasonic	DN74LS42	
	SGS	T74LS42	
	Signetics	**74LS42**	**(3003)**
	TI	SN74LS42	
74LS47	Hitachi	HD74LS47	
	Motorola	SN74LS47	
	National	DM74LS47	
	SGS	T74LS47	
	TI	SN74LS47	
74LS48	Hitachi	HD74LS48	
	Motorola	SN74LS48	
	National	DM74LS48	
	SGS	T74LS48	
	Signetics	74LS48	
♦ 74LS49	Hitachi	HD74LS49	
	Motorola	SN74LS49	
	National	DM74LS49	
	SGS	T74LS49	
	TI	SN74LS49	
74LS490	Motorola	SN74LS490	
	Panasonic	DN74LS490	
	SGS	T74LS490	
	Signetics	**74LS490**	**(3003)**
74LS51	Hitachi	HD74LS51	
	Motorola	SN74LS51	
	National	DM74LS51	
	Panasonic	DN74LS51	
	SGS	T74LS51	
	Signetics	**74LS51**	**(3003)**
	TI	SN74LS51	
74LS54	Hitachi	HD74LS54	
	Motorola	SN74LS54	
	National	DM74LS54	
	Panasonic	DN74LS54	
	SGS	T74LS54	
	Signetics	**74LS54**	**(3003)**
	TI	SN74LS54	
74LS540	Motorola	SN74LS540	
	Signetics	**74LS540**	**(3003)**
	TI	SN74LS540	
♦ 74LS541	Motorola	SN74LS541	
	Signetics	**74LS541**	**(3003)**
	TI	SN74LS541	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
74LS55	Hitachi	HD74LS55	
	Motorola	SN74LS55	
	National	DM74LS55	
	Panasonic	DN74LS55	
	SGS	T74LS55	
	TI	SN74LS55	
74LS670	Motorola	SN74LS670	
	National	DM74LS670	
	SGS	T74LS670	
	Signetics	**74LS670**	**(3003)**
	TI	SN74LS670	
74LS74	Hitachi	HD74LS74	
		HD74LS74A	
	Motorola	SN74LS74A	
	National	DM74LS74	
	Panasonic	DN74LS74A	
	SGS	T74LS74	
	Signetics	74LS74	
	TI	SN74LS74A	
74LS83A	Hitachi	HD74LS183A	
		HD74LS83A	
	Motorola	SN74LS83A	
	National	DM74LS83A	
	Panasonic	DN74LS83A	
	SGS	T74LS83	
	Signetics	**74LS83**	**(3003)**
		74LS83A	**(3003)**
	TI	SN74LS83A	
74LS85	Hitachi	HD74LS85	
	Motorola	SN74LS85	
	National	DM74LS85	
	Panasonic	DN74LS85	
	Signetics	**74LS85**	**(3003)**
	TI	SN74LS85	
74LS86	Hitachi	HD74LS86	
	Motorola	SN74LS86	
	National	DM74LS86	
	Panasonic	DN74LS86	
	SGS	T74LS86	
	Signetics	**74LS86**	**(3003)**
	TI	SN74LS86A	
74LS90	Motorola	SN74LS90	
	National	DM74LS90	
	Panasonic	DN74LS90	
	SGS	T74LS90	
	Signetics	**74LS90**	**(3003)**
	TI	SN74LS90	
♦ 74LS92	Hitachi	HD74LS92	
	Motorola	SN74LS92	
	National	DM74LS92	
	Panasonic	DN74LS92	
	SGS	T74LS92	
	Signetics	**74LS92**	**(3003)**
	TI	SN74LS92	
♦ 74LS93	Hitachi	HD74LS93	
	Motorola	SN74LS93	
	National	DM74LS93	
	Panasonic	DN74LS93	
	SGS	T74LS93	
	Signetics	**74LS93**	**(3003)**
	TI	SN74LS93	
74LS95B	Hitachi	HD74LS95B	
	Motorola	SN74LS95B	
	National	DM74LS95B	
	Panasonic	DN74LS95B	
	SGS	T74LS95	
		T74LS95B	
	Signetics	**74LS95B**	**(3003)**
	TI	SN74LS95B	
74S00	National	DM74S00	
	Signetics	**74S00**	**(3003)**
	TI	SN74S00	
74S02	National	DM74S02	
	Signetics	**74S02**	**(3003)**
	TI	SN74S02	
		SN74S32	
74S03	National	DM74S03	
	Signetics	**74S03**	**(3003)**
	TI	SN74S03	
74S04	National	DM74S04	
	Signetics	**74S04**	**(3003)**
	TI	SN74S04	
74S05	National	DM74S05	
	Signetics	**74S05**	**(3003)**
	TI	SN74S05	
74S08	**Signetics**	**74S08**	**(3003)**
	TI	SN74S08	
74S10	National	DM74S10	
	Signetics	**74S10**	**(3003)**
	TI	SN74S10	
74S11	National	DM74S11	
	Signetics	**74S11**	**(3003)**
	TI	SN74S11	
74S112	Motorola	SN74S112	
	National	DM74S112	
	Signetics	**74S112**	**(3003)**
	TI	SN74S112	
♦ 74S113	National	DM74S113	
	Signetics	**74S113**	**(3003)**
	TI	SN74S113	
74S132	TI	SN74S132	
74S133	National	DM74S133	
	Signetics	**74S133**	**(3003)**
	TI	SN74S133	
♦ 74S135	National	DM74S135	
	Signetics	**74S135**	**(3003)**
	TI	SN74S135	
74S138	AMD	SN74S138	
	National	DM74S138	
	Signetics	**74S138**	**(3003)**
	TI	SN74S138	
♦ 74S140	National	DM74S140	
	Signetics	**74S140**	**(3003)**
	TI	SN74S140	
♦ 74S15	National	DM74S15	
	TI	SN74S15	
74S182	MMI	SN74S182	
	National	DM74S182	
	Signetics	**74S182**	**(3003)**
	TI	SN74S182	
♦ 74S189	AMD	AM27LS03	
		AM27S03	
		SN74S189	
♦ 74S189	Cypress	27LS03M	
		CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**
♦ 74S189	National	DM74S189	
		DM7599	
		DM8599	
74S20	National	DM74S20	
	Signetics	**74S20**	**(3003)**
	TI	SN74S20	
♦ 74S22	National	DM74S22	
	TI	SN74S22	
74S30	National	DM74S30	
	TI	SN74S30	
74S32	**Signetics**	**74S32**	**(3003)**
74S40	National	DM74S40	
	Signetics	**74S40**	**(3003)**
	TI	SN74S40	
74S51	National	DM74S51	
	Signetics	**74S51**	**(3003)**
	TI	SN74S51	
♦ 74S65	National	DM74S65	
	TI	SN74S65	
74S74	Hitachi	HD74S74	
	National	DM74S74	
	Signetics	**74S74**	**(3003)**
	TI	SN74S74	
74S86	National	DM74S86	
	Signetics	**74S86**	**(3003)**
	TI	SN74S86	
75107	**Motorola**	**MC75107**	**(2952)**
	National	DS75107	
		LM75107A	
	TI	SN75107B	
75108	**Motorola**	**MC75108**	**(2952)**
	National	DS75108	
		LM75108A	
	TI	SN75108B	
75110	**Motorola**	**MC75S110**	**(2952)**
	National	LM75110	
	TI	SN75110A	
♦ 75150	National	DS75150	
	TI	SN75150	
♦ 75154	National	DS75154	
	TI	SN75154	
7520	Motorola	MC7520	
7521	Motorola	MC7521	
	National	LM7521	
7525	Motorola	MC7525	
	National	LM7525	
7529	Motorola	MC7529	
	National	LM7529	
	Raytheon	RC7529	
7538	Motorola	MC7538	
	National	LM7538	
7539	Motorola	MC7539	
	National	LM7539	
75430	SiliconG	SG75430	
75450	National	DS75450	
	SiliconG	SG75450B	
75451	National	DS75451	
	SiliconG	SG75451	
	TI	SN75451	
75452	National	DS75452	
	SiliconG	SG75452A	
		SG75452B	
	TI	SN75452B	
75453	Motorola	MC75453	
	National	DS75453	
		LM75453	
	SiliconG	SG75453A	
		SG75453B	
	TI	SN75453B	
♦ 75461	Fairchild	μA75461	
	Motorola	MC75401	
	National	DS75461	
	SiliconG	SG75461	
	TI	SN75461	
♦ 75462	Fairchild	μA75462	
	Motorola	MC75402	
	National	DS75462	
	SiliconG	SG75462	
	TI	SN75462	
♦ 75S234	SiliconG	SG75234	
♦ 75S24	Motorola	MC7524	
	National	DS75S24	
	Signetics	7524	
9001	Fairchild	74H105	
9004	Fairchild	7420	
	National	DM7420	
		DM9004C	
	Signetics	**7420**	**(3003)**
	TI	SN7420	
	Toshiba	TC7420	
9016	Fairchild	5404	
	National	DM5404	
		DM9016C	
9031	Fairchild	9301	
	National	DM8301	
		DM9301	
	Raytheon	RC8252	
	Signetics	S8252	
9093	Motorola	MC853	
		MC953	
	National	DM9093	
	Raytheon	RM993	
9094	Motorola	MC856	
		MC956	
	National	DM9094	
	Raytheon	RM9094	
		RM994	
9097	Motorola	MC855	
		MC955	
	National	DM9097	
	Raytheon	RM997	
9099	Motorola	MC952	
	Raytheon	RM952	
		RM999	
9135	Fairchild	9935	
	Motorola	MC835	
		MC935	
	National	DM935	
9157	Motorola	MC857	
		MC957	
	National	DM9567	
		DM957	
	Raytheon	RM957	
9158	Motorola	MC858	
		MC958	
	National	DM958	
	Raytheon	RM958	
930	Fairchild	9930	
	Motorola	MC830	
		MC930	
	National	DM930	
	Raytheon	RM930	
9300	National	DM54195	
	TI	SN54195	
9301	Fairchild	9031	
	National	DM8301	
		DM9301	
	Raytheon	RC8252	
	Signetics	S8252	
9308	Raytheon	RC9308	
	TI	SN74116	
9309	National	DM8309	
		DM9309	
9311	National	DM7213	
		DM74154	
		DM8311	
9311			**(Cont'd)**
	Raytheon	RC9311	
	Signetics	**74154**	**(3003)**
	TI	SN74154	
9312	National	DM8312	
	Raytheon	RC8230	
		RC9312	
93141	Hitachi	HD7441	
	National	DM74141	
		DM7441	
	Signetics	74141	
		7441	
9316	Raytheon	RC9316	
932	Fairchild	9932	
	Motorola	MC932	
	National	DM932	
	Raytheon	RM932	
9322	National	DM8322	
	Raytheon	RC9322	
932451	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
932511	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
932511M	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
9334	TI	SN74259	
♦ 93405	AMD	AM27LS03	
		AM27S03	
		SN74S189	
♦ 93405	Cypress	27LS03M	
		CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
♦ 93405	National	DM74S189	
		DM7599	
		DM8599	
♦ 93412	AMD	AM93412	
93415	AMD	AM685	
		AM93415	
	Motorola	MCM93415	
♦ 93417	Fujitsu	MB7113	
	National	DM74S387	
93419	Signetics	S82S09	
93422	AMD	AM93422	
	Cypress	**CY7C122**	**(2561, 2564)**
		CY93422	
	Motorola	MCM93422	
	Performance	P4C422	
		P93U422	
93425	AMD	AM93425	
	Elantec	**EDH0008**	**(2593)**
93425A	AMD	AM93425A	
	Apex	**PA80**	**(2458)**
	Burr-Brown	**3580**	**(2536)**
♦ 93436	AMD	AM27S12	
	Fujitsu	MB7115	
	MMI	63S240	
	National	74S570	
		DM74S570	
♦ 93436	Signetics	N82S130	
		S82S130	
♦ 93438	AMD	AM27S30	
	National	DM74S475	
		DM77S475	
		DM87S475	
♦ 93448	AMD	AM27S31	
	MMI	63S485	
	National	74S474	
		DM74S474	
♦ 93448	Signetics	N82S141	
♦ 93450	AMD	AM27S180	
	Fujitsu	MB7131	
	National	DM87S180	
		DM87S229	
♦ 93451	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
♦ 93451	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ 93451	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ 93451	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ 93451	Signetics	N82S181	
		S82S181	
♦ 93451	TI	28586-60	
		28S86-60	
		JBP28L86A	
♦ 93451M	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
♦ 93451M	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ 93451M	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ 93451M	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ 93451M	Signetics	N82S181	
		S82S181	
♦ 93451M	TI	28586-60	
		28S86-60	
		JBP28L86A	
93452	AMD	AM27S32	
	Fujitsu	MB7121	
	Hitachi	HN25044	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
93452			(Cont'd)
	MMI	5352-1	
	National	DM54S572	
♦ 93453	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
♦ 93453	National	74S573	
		DM74S573	
♦ 93453	NEC	μPB426	
	Signetics	N82S137	
♦ 93453C	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
♦ 93453C	National	74S573	
		DM74S573	
♦ 93453C	NEC	μPB426	
	Signetics	N82S137	
♦ 93453M	MMI	53S441	
	Motorola	MCM7643M	
	National	DM54S573	
		DM54S573A	
♦ 93453M	Signetics	S82S137	
♦ 93458	Signetics	N82S101	
♦ 93459	Signetics	N82S100	
		S82S100	
♦ 93475	AMD	AM2148	
		AM2149	
♦ 93475	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
♦ 93475	**Harris**	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
♦ 93475	National	NMC2148	
	Thomson	ET2148	
	UMC	UM2148	
93479	Signetics	N82S212	
♦ 93564	Fujitsu	MB7143	
♦ 93565	AMD	27S49	
		AM27S49	
♦ 93565	**Cypress**	**CY7C264**	**(2565)**
	Fairchild	32Z565	
		93Z565	
		93Z665	
♦ 93565	Fujitsu	7144H	
		MB7144	
♦ 93565	Raytheon	29VP864	
936	Fairchild	9936	
	Motorola	MC936	
	National	DM936	
937	Fairchild	9937	
	Motorola	MC837	
		MC937	
	National	DM937	
9374	Signetics	N8T74	
♦ 937510	AMD	AM27S190	
	Fujitsu	MB7137	
	Hitachi	HN25168	
	National	DM77S190	
		DM87S190	
93L415	AMD	AM93L415	
	Apex	**PA81**	**(2458)**
	Burr-Brown	**3581**	**(2536)**
	Motorola	MCM93L415	
93L422	AMD	AM93L422	
	Apex	**PA82**	**(2458)**
	Burr-Brown	**3582**	**(2536)**
93L422A	AMD	AM93L422A	
	GE/RCA	**CD22212**	**(2637)**
	SiliconSys	SSIK212	
93L425	AMD	AM93L425	
	Motorola	MCM93L425	
	SiliconSys	SSI202	
93Z451	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
93Z451	National		(Cont'd)
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
93Z459	**GE/RCA**	**CD22204**	**(2636)**
	Signetics	N82S100	
	SiliconSys	SSI204	
93Z511	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
93Z565	AMD	27S49	
		AM27S49	
	Cypress	**CY7C264**	**(2565)**
	Fairchild	32Z565	
		93Z665	
	Fujitsu	7144H	
		MB7144	
	Raytheon	29VP864	
93Z665	AMD	27S49	
		AM27S49	
	Cypress	**CY7C264**	**(2565)**
	Fairchild	32Z565	
		93Z565	
	Fujitsu	7144H	
		MB7144	
	Raytheon	29VP864	
93Z667	Atmel	27HC641	
		AT27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C263	**(2565)**
		CY7C264	**(2565)**
	GE/RCA	**CD22203**	**(2636)**
	GIM	27HC641	
	ICT	27CX642	
	Sharp	**LH5749**	**(2994)**
		LH5762	**(2994)**
	SiliconSys	SSI203	
	Waferscale	**WS57C49**	**(3376)**
944	Fairchild	9944	
	Motorola	MC944	
	National	DM944	
945	Fairchild	9945	
	Motorola	MC945	
	National	DM945	
946	Fairchild	9946	
	Motorola	MC946	
	National	DM946	
948	Fairchild	9948	
	Motorola	MC948	
	National	DM948	
949	Motorola	MC949	
	National	DM949	
	Raytheon	RM949	
♦ 95H90	Plessey	SP8640	
		SP8647	
9601	National	DM8601	
		DM9601	
	Raytheon	RF8601	
		RF9601	
	Signetics	N8T22	
		S8T22	
	TI	SN74122	
9602	National	DM8602	
		DM9602	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
9602			(Cont'd)
	Raytheon	RF8602	
		RF9602	
96114	TI	SN55114	
		SN75114	
96115	TI	SN55115	
		SN75115	
96176	National	DM74176	
		DM8280	
	Raytheon	RC8280	
	Signetics	74176	
	TI	SN74176	
962	Fairchild	9962	
	Motorola	MC962	
	National	DM962	
97L412	AMD	AM93L412	
9930	Fairchild	930	
	Motorola	MC830	
		MC930	
	National	DM930	
	Raytheon	RM930	
9932	Fairchild	932	
	Motorola	MC932	
	National	DM932	
	Raytheon	RM932	
9933	Motorola	MC933	
	National	DM933	
9935	Fairchild	9135	
	Motorola	MC835	
		MC935	
	National	DM935	
9936	Fairchild	936	
	Motorola	MC936	
	National	DM936	
9937	Fairchild	937	
	Motorola	MC837	
		MC937	
	National	DM937	
9941	Motorola	MC941	
	Raytheon	RM941	
9944	Fairchild	944	
	Motorola	MC944	
	National	DM944	
9945	Fairchild	945	
	Motorola	MC945	
	National	DM945	
9946	Fairchild	946	
	Motorola	MC946	
	National	DM946	
9948	Fairchild	948	
	Motorola	MC948	
	National	DM948	
9950	Motorola	MC950	
9951	Motorola	MC851	
		MC852	
		MC951	
	Raytheon	RM951	
9961	Motorola	MC961	
	National	DM961	
9962	Fairchild	962	
	Motorola	MC962	
	National	DM962	
9963	Motorola	MC963	
	National	DM963	
	Raytheon	RM963	
CD74AC00	**GE/RCA**	**CD74AC00**	**(2629)**
CD74AC02	**GE/RCA**	**CD74AC02**	**(2629)**
CD74AC04	**GE/RCA**	**CD74AC04**	**(2629)**
CD74AC08	**GE/RCA**	**CD74AC08**	**(2629)**
CD74AC10	**GE/RCA**	**CD74AC10**	**(2629)**
CD74AC109	**GE/RCA**	**CD74AC109**	**(2629)**
CD74AC138	**GE/RCA**	**CD74AC138**	**(2629)**
CD74AC139	**GE/RCA**	**CD74AC139**	**(2629)**
CD74AC151	**GE/RCA**	**CD74AC151**	**(2629)**
CD74AC153	**GE/RCA**	**CD74AC153**	**(2629)**
CD74AC157	**GE/RCA**	**CD74AC157**	**(2629)**
CD74AC158	**GE/RCA**	**CD74AC158**	**(2629)**
CD74AC161	**GE/RCA**	**CD74AC161**	**(2629)**
CD74AC163	**GE/RCA**	**CD74AC163**	**(2629)**
CD74AC174	**GE/RCA**	**CD74AC174**	**(2629)**
CD74AC175	**GE/RCA**	**CD74AC175**	**(2629)**
CD74AC191	**GE/RCA**	**CD74AC191**	**(2629)**
CD74AC20	**GE/RCA**	**CD74AC20**	**(2629)**
CD74AC299	Fairchild	74AC299	
	GE/RCA	**CD74AC299**	**(2629)**
CD74AC32	**GE/RCA**	**CD74AC32**	**(2629)**
CD74AC74	**GE/RCA**	**CD74AC74**	**(2629)**
CD74AC86	**GE/RCA**	**CD74AC86**	**(2629)**
CY3341AC	AMD	AM2841	
	Fairchild	3341A	
	Plessey	MJ2841	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
DAC08	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
F100112	Hitachi	HD100112	
	Signetics	**100112**	**(3020)**
	Sprague	SPL16LC6	
F100113	**Signetics**	**100113**	**(3020)**
F100123	Hitachi	HD100123	
	Signetics	**100123**	**(3020)**
F100124	**Signetics**	**100124**	**(3020)**
F100125	Hitachi	HD100125	
	Signetics	**100125**	**(3020)**
F100126	**Signetics**	**100126**	**(3020)**
F100130	Hitachi	HD100130	
F100131	Hitachi	HD100131	
	Signetics	**100131**	**(3020)**
F100136	Hitachi	HD100136	
	Signetics	**100136**	**(3020)**
F100141	Hitachi	HD100141	
	Signetics	**100141**	**(3020)**
F100142	Hitachi	HD100142	
F100145	Hitachi	HD100145	
	Signetics	**100145**	**(3020)**
F100150	Hitachi	HD100150	
	Signetics	**100150**	**(3020)**
F100151	Hitachi	HD100151	
	Signetics	**100151**	**(3020)**
F100156	Hitachi	HD100156	
F100164	Hitachi	HD100164	
	Signetics	**100164**	**(3020)**
F100165	Cypress	CUPLDC20G10	
	Hitachi	HD100165	
		HM6288	
	MMI	PAL20L8	
		PAL20L8B	
	National	PAL20L8	
	Signetics	**100165**	**(3020)**
	Sprague	SPL20LC8	
	TI	PAL20L8	
		TIBPAL20L8-20	**(3217, 4320)**
	Toshiba	TC55416	
F100170	Cypress	CUPLDC20G10	
	Hitachi	HD100170	
	MMI	PAL20R6	
		PAL20R6B	
	Signetics	**100170**	**(3020)**
	Sprague	SPL20RC6	
	TI	PAL20R6	
		TIBPAL20R6-20	**(3217, 4320)**
F100171	Hitachi	HD100171	
	Signetics	**100171**	**(3020)**
F100175	**GE/RCA**	**CD22223**	**(2637)**
	Signetics	**100175**	**(3020)**
	SiliconSys	SSI223	
F100179	Cypress	CUPLDC20G10	
	Hitachi	HD100179	
	MMI	PAL20R4	
		PAL20R4B	
	Sprague	SPL20RC4	
	TI	PAL20R4	
		TIBPAL20R4-20	**(3217, 4320)**
F100180	**Cypress**	**CY7C510**	**(2569)**
	Hitachi	HD100179	
		HD100180	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
F100180			(Cont'd)
	LSI Logic	**L64010**	**(2868)**
	Signetics	**100180**	**(3020)**
	Waferscale	WS59610	
F100181	**Cypress**	**CY7C164**	**(2562)**
	Hitachi	HD100181	
	IDT	**IDT7188**	**(2802)**
	Signetics	**100181**	**(3020)**
	TI	SMJ64C64	
	Vitelic	V61C62	
	VLSI Tech	CT64KS4	
F100182	**Cypress**	**CY7C166**	**(2562)**
	Hitachi	HD100182	
		HM6789	
	Inmos	IMS1629	
	IDT	**IDT6198**	**(2802)**
		IDT7198	**(2802)**
	Motorola	MCM6290	
	NEC	μPD4363	
	Performance	P4C198	
	Vitelic	V61C62	
F100183	**Cypress**	**CY7C161**	**(2562)**
	Hitachi	HD100183	
	IDT	**IDT71981**	**(2802)**
	Performance	P4C1981	
F100415	AMD	AM100415	
	Hitachi	HM100415	
F100422	Fujitsu	MB8118	
		MBM100422	
		MBM100422A	
	Hitachi	HM100422	
	National	DM100422	
		NMC5295	
	NEC	μPB100422	
F100474	AMD	AM100474	
	Fujitsu	MBM100474	
		MBM100474A	
	Hitachi	100474	
		HM100474	
	NEC	μPB100474	
♦ F100480	AMD	AM100480	
	Hitachi	HM100480	
	NEC	μPB100480	
♦ F100484	AMD	AM100484	
	Fujitsu	MBM100484	
	Hitachi	HM100484	
	NEC	μPB100484	
♦ F10100	Motorola	MC10100	
	Signetics	**10100**	**(3021)**
♦ F10101	Hitachi	HD10101	
	Motorola	MC10101	
	Signetics	**10101**	**(3021)**
♦ F10102	Hitachi	HD10102	
	Motorola	MC10102	
	Signetics	**10102**	**(3021)**
♦ F10103	Motorola	MC10103	
	Signetics	**10103**	**(3021)**
♦ F10104	Hitachi	HD10104	
	Motorola	MC10104	
	Signetics	**10104**	**(3021)**
♦ F10105	Hitachi	HD10105	
	Motorola	MC10105	
	Signetics	**10105**	**(3021)**
♦ F10106	Hitachi	HD10106	
	Motorola	MC10106	
	Signetics	**10106**	**(3021)**
♦ F10107	Hitachi	HD10107	
	Motorola	MC10107	
	Signetics	**10107**	**(3021)**
♦ F10109	Hitachi	HD10109	
	Motorola	MC10109	
	Signetics	**10109**	**(3021)**
♦ F10110	Hitachi	HD10110	
	Motorola	MC10110	
	Signetics	**10110**	**(3021)**
♦ F10111	Hitachi	HD10111	
	Motorola	MC10111	
	Signetics	**10111**	**(3021)**
♦ F10113	**Signetics**	**10113**	**(3021)**
♦ F10114	Motorola	MC10114	
	Signetics	**10114**	**(3021)**
♦ F10115	Motorola	MC10115	
	Signetics	**10115**	**(3021)**
♦ F10116	Hitachi	HD10116	
	Motorola	MC10116	
	National	DM10116	
	Signetics	**10116**	**(3021)**
♦ F10117	Hitachi	HD10117	
	Motorola	MC10117	
	Signetics	**10117**	**(3021)**

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ F10118	Hitachi	HD10118	
	Motorola	MC10118	
	Signetics	**10118**	**(3021)**
♦ F10119	Hitachi	HD10119	
	Motorola	MC10119	
	Signetics	**10119**	**(3021)**
♦ F10121	Hitachi	HD10121	
	Motorola	MC10121	
	Signetics	**10121**	**(3021)**
♦ F10123	Motorola	MC10123	
	Signetics	**10123**	**(3021)**
♦ F10124	Hitachi	HD10124	
	Motorola	MC10124	
	Signetics	**10124**	**(3021)**
♦ F10125	Hitachi	HD10125	
	Motorola	MC10125	
	Signetics	**10125**	**(3021)**
♦ F10130	Hitachi	HD10130	
	Motorola	MC10130	
	Signetics	**10130**	**(3021)**
♦ F10132	Hitachi	HD10132	
	Motorola	MC10132	
	Signetics	**10132**	**(3021)**
♦ F10133	Hitachi	HD10133	
	Motorola	MC10133	
	Signetics	**10133**	**(3021)**
♦ F10134	Hitachi	HD10134	
	Motorola	MC10134	
	Signetics	**10134**	**(3021)**
♦ F10135	Motorola	MC10135	
	Signetics	**10135**	**(3021)**
♦ F10136	Hitachi	HD10136	
	Motorola	MC10136	
	Signetics	**10136**	**(3021)**
♦ F10137	Motorola	MC10137	
	Signetics	**10137**	**(3021)**
♦ F10141	Motorola	MC10141	
	Signetics	**10141**	**(3021)**
F10144	**Motorola**	**MCM10144**	**(2918)**
	TI	SN10144	
♦ F10145A	**Motorola**	**MCM10145**	**(2918)**
	Signetics	10145	
♦ F10158	Motorola	MC10158	
	Signetics	**10158**	**(3021)**
♦ F10159	Motorola	MC10159	
	Signetics	**10159**	**(3021)**
♦ F10160	Hitachi	HD10160	
	Motorola	MC10160	
	Signetics	**10160**	**(3021)**
♦ F10161	Hitachi	HD10161	
	Motorola	MC10161	
	Signetics	**10161**	**(3021)**
♦ F10162	Hitachi	HD10162	
	Motorola	MC10162	
	Signetics	**10162**	**(3021)**
♦ F10164	Hitachi	HD10164	
	Motorola	MC10164	
	Signetics	**10164**	**(3021)**
	TI	SN10164	
♦ F10165	Hitachi	HD10165	
	Motorola	MC10165	
	Signetics	**10165**	**(3021)**
♦ F10168	Motorola	MC10168	
♦ F10171	Motorola	MC10171	
	Signetics	**10171**	**(3021)**
♦ F10172	Motorola	MC10172	
	Signetics	**10172**	**(3021)**
♦ F10173	Motorola	MC10173	
	Signetics	**10173**	**(3021)**
♦ F10174	Hitachi	HD10174	
	Motorola	MC10174	
	Signetics	**10174**	**(3021)**
	TI	SN10174	
♦ F10175	Hitachi	HD10175	
	Motorola	MC10175	
	Signetics	**10175**	**(3021)**
♦ F10176	Motorola	MC10176	
♦ F10177	Motorola	MC10177	
F10178	Motorola	MC10178	
♦ F10179	Hitachi	HD10179	
	Motorola	MC10179	
	Signetics	**10179**	**(3021)**
♦ F10180	Hitachi	HD10180	
	Motorola	MC10180	
	Signetics	**10180**	**(3021)**
♦ F10181	Hitachi	HD10181	
	Motorola	MC10181	
	Signetics	**10181**	**(3021)**
♦ F10186	Motorola	MC10186	
♦ F10192	Motorola	MC10192	
	Signetics	**10192**	**(3021)**

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ F10210	Motorola	MC10210	
	Signetics	**10210**	**(3021)**
♦ F10211	Motorola	MC10211	
	Signetics	**10211**	**(3021)**
♦ F10212	Motorola	MC10212	
F10216	Motorola	MC10216	
	Signetics	**10216**	**(3021)**
♦ F10231	Motorola	MC10231	
	Signetics	**10231**	**(3021)**
♦ F10402	**Motorola**	**MC10H145**	**(2918)**
♦ F10414	Motorola	MCM10152	
	National	DM10414	
♦ F10415	AMD	AM10415	
	Fujitsu	MBM100470A	
		MBM10415	
♦ F10415	Hitachi	HM2110	
		HM2112	
♦ F10415	**Motorola**	**MCM10146**	**(2918)**
	National	DM10415	
	Siemens	GXB10415	
♦ F10416	**Motorola**	**MCM10149**	**(2918)**
	Signetics	**10149**	**(3021, 3185)**
♦ F10422	Fujitsu	MBM10422A	
	National	DM10422	
	NEC	μPB10422	
♦ F10470	AMD	AM10470	
	Fujitsu	MBM10470A	
	Hitachi	HM10470	
	Motorola	MCM10470	
	National	DM10470	
	NEC	μPB10470	
F10474	AMD	AM10474	
	Fujitsu	MBM10474A	
	Hitachi	HM10474	
	Motorola	MCM10474	
	National	DM10474	
	NEC	μPB10474	
F10480	AMD	AM10480	
	Fujitsu	MBM10480	
	Hitachi	HM10480	
	NEC	μPB10480	
F10484	Fujitsu	MBM10484	
	Hitachi	HM10484	
	NEC	μPB10484	
♦ F10501	Motorola	MC10501	
♦ F10502	Motorola	MC10502	
♦ F10504	Motorola	MC10504	
♦ F10514	Motorola	MC10514	
♦ F10515	Motorola	MC10515	
♦ F10516	Motorola	MC10516	
♦ F10524	Motorola	MC10524	
♦ F10525	Motorola	MC10525	
♦ F10535	Motorola	MC10535	
♦ F10558	Motorola	MC10558	
♦ F10562	Motorola	MC10562	
F1600	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
♦ F16008	National	NS16008	
F1601	AMD	AM99C641	
	Fairchild	F1600	
	Fujitsu	MB8171	
		MB81C71	
	Hitachi	HM10414	
	Inmos	**IMS1601**	**(2786)**
	IDT	**IDT7187L**	**(2802)**
	Motorola	MCM6287	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
♦ F16016	National	NS16016	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
F1602	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
♦ F16105	National	NS16105	
F1620	AMD	AM2168	
		AM9968	
		AM99CL68	
	Fujitsu	MB8168	
		MB81C69	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HM6168	
		HM6268	
	Inmos	IMS1420	
		IMS1421	
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Matra-Harris	HM65682	
		HMI65769	
	Motorola	MCM1423	
		MCM6168	
		MCM6288	
	NEC	μPD4314	
	S-MOS	SRM2274	
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
	Thomson	**MK41H68**	**(3265)**
	Toshiba	TMM2068	
	Vitelic	V61C62	
		V61C68	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C69	**(3349)**
F1621	**IDT**	**IDT7188L**	**(2802)**
♦ F16413	National	NS16413	
♦ F16425	National	NS16425	
♦ F16802	National	NS16802	
F16K	AMD	AM9016	
	Fairchild	F4116	
	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
F2114	AMD	AM9114	
		AM9124	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
F2114			(Cont'd)
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
F2847	AMD	AM2847	
F2901A	National	IDM2901A	
	Thomson	TS2901	
	Waferscale	**WS5901**	**(3376)**
♦ F2910	Fairchild	29F10	
	Motorola	MC2910	
	Thomson	TS2910	
	Waferscale	**WS5910**	**(3376)**
♦ F3528	AMD	AM9128	
		AM9218	
♦ F3528	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ F3528	Fujitsu	MB8128	
		MB8416	
♦ F3528	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ F3528	Hitachi	HM6116	
		HM6166	
♦ F3528	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ F3528	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ F3528	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ F3528	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ F3528	National	MMC2116	
	NEC	μPD4016	
		μPD446	
♦ F3528	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ F3528	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ F3528	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ F3528	Stantel-STC	STC6116	
		STC6166	
♦ F3528	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ F3528	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ F3528	Vitelic	V61C16	
		V62C16	
F3532	Commodore	MPS2332	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
F3532			(Cont'd)
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
F3533	Amperex	AM9233	
	Commodore	MPS2333	
	GIM	RO3-9333	
	Gould	S2333	
	Signetics	2332	
	Supertex	23C32	
F3568	Fairchild	F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
F3569	Fairchild	F3568	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
F3570	Fairchild	F3568	
		F3569	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
F3870	SGS	M3870	
F3872	SGS	M3872	
F400014	Fairchild	F40014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14106	
		MC14584	
	National	CD40106	
		CD4584	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
F400014	National		(Cont'd)
		MM54C14	
		MM74C14	
	SGS	HCC/HCF40106	
	Signetics	HEF40106	
	Sprague	SCL4584	
F4001	**GE/RCA**	**CD4001**	**(2633)**
	Motorola	MC14001	
	National	CD4001	
		MM74C02	
	OKI	MSM4001	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
F40014	Fairchild	F400014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14106	
		MC14584	
	National	CD40106	
		CD4584	
		MM54C14	
		MM74C14	
	SGS	HCC/HCF40106	
	Signetics	HEF40106	
	Sprague	SCL4584	
F4002	**GE/RCA**	**CD4002**	**(2633)**
	Motorola	MC14002	
	National	CD4002	
	SGS	HCC/HCF4002	
	Signetics	HEF4002	
	Solitron	CM4002	
	Sprague	SCL4002	
	Toshiba	**TC4002**	**(3308)**
F4006	**GE/RCA**	**CD4006**	**(2634)**
	National	CD4006	
	SGS	HCC/HCF4006	
	Signetics	HEF4006	
	Solitron	CM4006	
	Sprague	SCL4006	
	Toshiba	**TC4006**	**(3308)**
F4006B	**GE/RCA**	**CD4006B**	**(2634)**
	Motorola	MC14006	
	National	CD4006	
F4007	**GE/RCA**	**CD4007**	**(2633)**
	Motorola	MC14007	
	National	CD4007	
	SGS	HCC/HCF4007	
	Signetics	HEF4007	
	Solitron	CM4007	
	Sprague	SCL4007	
	Toshiba	**TC4007**	**(3308)**
F4008	**GE/RCA**	**CD4008**	**(2636)**
	Motorola	MC14008	
	National	CD4008	
		MM74C83	
	SGS	HCC/HCF4008	
	Signetics	HEF4008	
	Solitron	CM4008	
	Sprague	SCL4008	
	Toshiba	**TC4008**	**(3308)**
F40085	**GE/RCA**	**CD4585**	**(2636)**
	Motorola	MC14585	
	National	MM74C85	
	SGS	HCC/HCF4585	
	Signetics	HEF4585	
	Sprague	SCL4585	
	Toshiba	**TC4585**	**(3308)**
F40089	National	MM74C89	
F40097B	**GE/RCA**	**CD4503**	**(2633)**
	Motorola	MC14503	
	National	CD4503	
	SGS	HCF4503	
	Toshiba	TC4503	
F40098	National	MM80C98	
F4011	**GE/RCA**	**CD4011**	**(2633)**
	Motorola	MC14011	
	National	CD4011	
		MM74C00	
	OKI	MSM4011	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
F4012	**GE/RCA**	**CD4012**	**(2633)**
	Motorola	MC14012	
	National	CD4012	
	SGS	HCC/HCF4012	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
F4012			(Cont'd)
	Signetics	HEF4012	
	Solitron	CM4012	
	Sprague	SCL4012	
	Toshiba	**TC4012**	**(3308)**
F4013	**GE/RCA**	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	CD4013	
		MM74C74	
	OKI	MSM4013	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
	Signetics	HEF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
F4014	**GE/RCA**	**CD4014**	**(2634)**
	Motorola	MC14014	
	National	CD4014	
	SGS	HCC/HCF4014	
	Signetics	HEF4014	
	Solitron	CM4014	
	Sprague	SCL4014	
	Toshiba	**TC4014**	**(3308)**
F4015	**GE/RCA**	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	CD4015	
		MM74C164	
	OKI	MSM4015	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
F4016	Fairchild	F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
F40160	**GE/RCA**	**CD40160**	**(2635)**
	Motorola	MC14160	
	National	CD40160	
	Sprague	SCL4160	
F40161	**GE/RCA**	**CD40161**	**(2635)**
	Motorola	MC14161	
	National	CD40161	
	Sprague	SCL4161	
F40162	**GE/RCA**	**CD40162**	**(2635)**
	Motorola	MC14162	
	National	CD40162	
	Sprague	SCL4162	
F40163	**GE/RCA**	**CD40163**	**(2635)**
	Motorola	MC14163	
	National	CD40163	
	Sprague	SCL4163	
F4017	**GE/RCA**	**CD4017**	**(2635)**
	Motorola	MC14017	
	National	CD4017	
	SGS	HCC/HCF4017	
	Signetics	HEF4017	
	Solitron	CM4017	
	Sprague	SCL4017	
	Toshiba	**TC4017**	**(3308)**
F40174B	**GE/RCA**	**CD40174B**	**(2634)**
	Motorola	MC14174	
	National	CD40174B	
F40175	Motorola	MC14175	
	National	CD40175	
		MM54C175	
		MM74C175	
	Signetics	HEF40175	
	Toshiba	**TC40175**	**(3308)**
F4018	**GE/RCA**	**CD4018**	**(2635)**
	Motorola	MC14018	
			(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
F4018			(Cont'd)
	National	CD4018	
	SGS	HCC/HCF4018	
	Signetics	HEF4018	
	Solitron	CM4018	
	Sprague	SCL4018	
	Toshiba	**TC4018**	**(3308)**
F4019	**GE/RCA**	**CD4019**	**(2633, 2635)**
	National	CD4019	
	OKI	MSM4019	
	Sanyo	LC4019	
	SGS	HCC/HCF4019	
	Signetics	HEF4019	
	Solitron	CM4019	
	Sprague	SCL4019	
	Toshiba	**TC4019**	**(3308)**
F40192	National	MM54C192	
		MM74C192	
F40193	**GE/RCA**	**CD40193**	**(2635)**
	National	CD40193	
		MM54C193	
		MM74C193	
	SGS	HCC/HCF40193	
	Signetics	HEF40193	
	Sprague	SCL4193	
	Toshiba	**TC40193**	**(3308)**
F40194	**GE/RCA**	**CD40194**	**(2634)**
	Motorola	MC14194	
	SGS	HCC/HCF40194	
	Signetics	HEF40194	
F40195	National	CD40195	
		MM74C195	
F4019B	Motorola	MC14519	
F4020	**GE/RCA**	**CD4020**	**(2634)**
	Motorola	MC14020	
	National	CD4020	
	SGS	HCC/HCF4020	
	Signetics	HEF4020	
	Solitron	CM4020	
	Sprague	SCL4020	
	Toshiba	**TC4020**	**(3308)**
F4021	**GE/RCA**	**CD4021**	**(2634)**
	Motorola	MC14021	
	National	CD4021	
	SGS	HCC/HCF4021	
	Signetics	HEF4021	
	Sprague	SCL4021	
	Toshiba	**TC4021**	**(3308)**
F4022	**GE/RCA**	**CD4022**	**(2635)**
	Motorola	MC14022	
	National	CD4022	
	SGS	HCC/HCF4022	
	Signetics	HEF4022	
	Solitron	CM4022	
	Sprague	SCL4022	
	Toshiba	**TC4022**	**(3308)**
F4023	**GE/RCA**	**CD4023**	**(2633)**
	Motorola	MC14023	
	National	CD4023	
		MM74C10	
	SGS	HCC/HCF4023	
	Signetics	HEF4023	
	Solitron	CM4023	
	Sprague	SCL4023	
	Toshiba	**TC4023**	**(3308)**
F4024	**GE/RCA**	**CD4024**	**(2634)**
	Motorola	MC14024	
	National	CD4024	
	SGS	HCC/HCF4024	
	Signetics	HEF4024	
	Solitron	CM4024	
	Sprague	SCL4024	
	Toshiba	**TC4024**	**(3308)**
F4025	**GE/RCA**	**CD4025**	**(2633)**
	Motorola	MC14025	
	National	CD4025	
	SGS	HCC/HCF4025	
	Signetics	HEF4025	
	Solitron	CM4025	
	Sprague	SCL4025	
	Toshiba	**TC4025**	**(3308)**
F4027	**GE/RCA**	**CD4027**	**(2634)**
	Motorola	MC14027	
	National	CD4027	
		MM74C76	
	OKI	MSM4027	
	Sanyo	LC4027	
	SGS	HCC/HCF4027	
	Signetics	HEF4027	
	Solitron	CM4027	
	Sprague	SCL4027	

Manufacturer Device	Replacement Source	Device	IC Master Page
F4028	**GE/RCA**	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	CD4028	
		MM74C42	
	OKI	MSM4028	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	
	Solitron	CM4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
F4029	**GE/RCA**	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
F4030	**GE/RCA**	**CD4030**	**(2633, 2636)**
	National	CD4030	
	SGS	HCC/HCF4030	
	Signetics	HEF4030	
	Solitron	CM4030	
	Sprague	SCL4030	
	Toshiba	**TC4030**	**(3308)**
F4031	**GE/RCA**	**CD4031**	**(2634)**
	National	CD4031	
	SGS	HCC/HCF4031	
	Signetics	HEF4731	
F4034	**GE/RCA**	**CD4034**	**(2634, 2636)**
	Motorola	MC14034	
	National	CD4034	
	SGS	HCC/HCF4034	
	Solitron	CM4034	
	Sprague	SCL4034	
	Toshiba	**TC4034**	**(3308)**
F4035	**GE/RCA**	**CD4035**	**(2634)**
	Motorola	MC14035	
	SGS	HCC/HCF4035	
	Signetics	HEF4035	
	Solitron	CM4035	
	Toshiba	TC4035	
F4040	**GE/RCA**	**CD4040**	**(2634)**
	Motorola	MC14040	
	National	CD4040	
	SGS	HCC/HCF4040	
	Signetics	HEF4040	
	Solitron	CM4040	
	Sprague	SCL4040	
	Toshiba	**TC4040**	**(3308)**
F4041	**GE/RCA**	**CD4041**	**(2633)**
	National	CD4041	
	SGS	HCC/HCF4041	
	Signetics	HEF4041	
	Solitron	CM4041	
	Sprague	SCL4041	
F4042	**GE/RCA**	**CD4042**	**(2634)**
	Motorola	MC14042	
	National	CD4042	
	SGS	HCC/HCF4042	
	Signetics	HEF4042	
	Solitron	CM4042	
	Sprague	SCL4042	
	Toshiba	**TC4042**	**(3308)**
F4044	**GE/RCA**	**CD4044**	**(2634)**
	Motorola	MC14044	
	National	CD4044	
	SGS	HCC/HCF4044	
	Signetics	HEF4044	
	Solitron	CM4044	
	Toshiba	**TC4044**	**(3308)**
F4046	**GE/RCA**	**CD4046**	**(2635)**
	Motorola	MC14046	
	National	CD4046	
	SGS	HCC/HCF4046	
	Solitron	CM4046	
	Sprague	SCL4046	
F4047	**GE/RCA**	**CD4047**	**(2634)**
	National	CD4047	
	SGS	HCC/HCF4047	
	Signetics	HEF4047	
	Solitron	CM4047	
	Sprague	SCL4047	
	Toshiba	**TC4047**	**(3308)**

Manufacturer Device	Replacement Source	Device	IC Master Page
F4049	**GE/RCA**	**CD4049**	**(2633)**
	Motorola	MC14049	
	National	CD4049	
	OKI	MSM4049	
	Sanyo	LC4049	
	SGS	HCC/HCF4049	
	Signetics	HEF4049	
	Solitron	CM4049	
	Sprague	SCL4049	
	Toshiba	**TC4049**	**(3308)**
F4050	**GE/RCA**	**CD4050**	**(2633)**
	Motorola	MC14050	
	National	CD4050	
	SGS	HCC/HCF4050	
	Signetics	HEF4050	
	Solitron	CM4050	
	Sprague	SCL4050	
	Toshiba	**TC4050**	**(3308)**
F4051	**GE/RCA**	**CD4051**	**(2635)**
	Motorola	MC14051	
	National	CD4051	
	SGS	HCC/HCF4051	
	Signetics	HEF4051	
	Solitron	CM4051	
	Sprague	SCL4051	
	Toshiba	**TC4051**	**(3308)**
F4052	**GE/RCA**	**CD4052**	**(2635)**
	Motorola	MC14052	
	SGS	HCC/HCF4052	
	Signetics	HEF4052	
F4053	**GE/RCA**	**CD4053**	**(2635)**
	Motorola	MC14053	
	National	CD4053	
	SGS	HCC/HCF4053	
	Signetics	HEF4053	
	Solitron	CM4053	
	Sprague	SCL4053	
	Toshiba	**TC4053B**	**(3308)**
F4066	Fairchild	F4016	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
F4067	Motorola	MC14067	
	SGS	HCC/HCF4067	
	Signetics	HEF4067	
F4068	**GE/RCA**	**CD4068**	**(2633)**
	Motorola	MC14068	
	SGS	HCC/HCF4068	
	Signetics	HEF4068	
	Solitron	CM4068	
	Sprague	SCL4068	
	Toshiba	**TC4068**	**(3308)**
F4069	**GE/RCA**	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
F4070	**GE/RCA**	**CD4070**	**(2633, 2636)**
	Motorola	MC14070	
	National	CD4070	
		MM74C86	
	SGS	HCC/HCF4070	
	Signetics	HEF4070	
	Solitron	CM4070	
	Sprague	SCL4070	
F4071	**GE/RCA**	**CD4071**	**(2633)**
	Motorola	MC14071	
			(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Fairchild (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
F4071			(Cont'd)
	National	CD4071	
		MM74C32	
	OKI	MSM4071	
	Sanyo	LC4071	
	SGS	HCC/HCF4071	
	Signetics	HEF4071	
	Solitron	CM4071	
	Sprague	SCL4071	
F4072	**GE/RCA**	**CD4072**	**(2633)**
	Motorola	MC14072	
	National	CD4072	
	SGS	HCC/HCF4072	
	Signetics	HEF4072	
	Sprague	SCL4072	
	Toshiba	TC4072	
F4073	**GE/RCA**	**CD4073**	**(2633)**
	Motorola	MC14073	
	National	CD4073	
	SGS	HCC/HCF4073	
	Signetics	HEF4073	
	Solitron	CM4073	
	Sprague	SCL4073	
	Toshiba	TC4073	
F4075	**GE/RCA**	**CD4075**	**(2633)**
	Motorola	MC14075	
	National	CD4075	
	SGS	HCC/HCF4075	
	Signetics	HEF4075	
	Solitron	CM4075	
	Sprague	SCL4075	
	Toshiba	TC4075	
F4076	**GE/RCA**	**CD4076**	**(2634)**
	Motorola	MC14076	
	National	CD4076	
		MM54C173	
		MM74C173	
	SGS	HCC/HCF4076	
	Signetics	HEF4076	
	Solitron	CM4076	
	Sprague	SCL4076	
	Toshiba	**TC4076**	**(3308)**
F4077	**GE/RCA**	**CD4077**	**(2633, 2636)**
	Motorola	MC14077	
	National	CD4077	
	SGS	HCC/HCF4077	
	Signetics	HEF4077	
	Solitron	CM4077	
	Sprague	SCL4077	
F4078	**GE/RCA**	**CD4078**	**(2633)**
	Motorola	MC14078	
	SGS	HCC/HCF4078	
	Signetics	HEF4078	
	Solitron	CM4078	
	Sprague	SCL4078	
	Toshiba	**TC4078**	**(3308)**
F4081	**GE/RCA**	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	CD4081	
		MM74C08	
	OKI	MSM4081	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
F4082	**GE/RCA**	**CD4082**	**(2633)**
	Motorola	MC14082	
	National	CD4082	
	SGS	HCC/HCF4082	
	Signetics	HEF4082	
	Sprague	SCL4082	
	Toshiba	TC4082	
F4093B	**GE/RCA**	**CD4093B**	**(2633)**
	Motorola	MC14093	
	National	CD4093B	
F4097	Motorola	MC14097	
	SGS	HCC/HCF4097	
F4116	AMD	AM9016	
	Fairchild	F16K	
	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
F4116			(Cont'd)
	Stantel-STC	STC4116	
	Toshiba	TMM416	
F4164	AMD	AM9064	
	Fairchild	F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
F4510	**GE/RCA**	**CD4510**	**(2635)**
	Motorola	MC14510	
	National	CD4510	
	SGS	HCC/HCF4510	
	Signetics	HEF4510	
	Solitron	CM4510	
	Sprague	SCL4510	
	Toshiba	**TC4510**	**(3308)**
F4511	**GE/RCA**	**CD4511**	**(2635)**
	Motorola	MC14511	
	National	CD4511	
	NEC	μPD4511	
	SGS	HCC/HCF4511	
	Signetics	HEF4511	
	Solitron	CM4511	
	Sprague	SCL4511	
	Toshiba	**TC4511**	**(3308)**
F4512	**GE/RCA**	**CD4512**	**(2635)**
	Motorola	MC14512	
	National	CD4512	
	SGS	HCC/HCF4512	
	Sprague	SCL4512	
	Toshiba	**TC4512**	**(3308)**
F4514	**GE/RCA**	**CD4514**	**(2633)**
	Motorola	MC14514	
	National	CD4514	
	SGS	HCC/HCF4514	
	Signetics	HEF4514	
	Solitron	CM4514	
	Sprague	SCL4514	
	Toshiba	**TC4514**	**(3308)**
F4515	**GE/RCA**	**CD4515**	**(2633)**
	Motorola	MC14515	
	National	CD4515	
	SGS	HCC/HCF4515	
	Signetics	HEF4515	
	Solitron	CM4515	
	Sprague	SCL4515	
	Toshiba	**TC4515**	**(3308)**
F4516	**GE/RCA**	**CD4516**	**(2635)**
	Motorola	MC14516	
	National	CD4516	
	SGS	HCC/HCF4516	
	Signetics	HEF4516	
	Solitron	CM4516	
	Sprague	SCL4516	
	Toshiba	**TC4516**	**(3308)**
F4518	**GE/RCA**	**CD4518**	**(2635)**
	Motorola	MC14518	
	National	CD4518	
	SGS	HCC/HCF4518	
	Signetics	HEF4518	
	Solitron	CM4518	
	Sprague	SCL4518	
	Toshiba	**TC4518**	**(3308)**
F4520	**GE/RCA**	**CD4520**	**(2635)**
	Motorola	MC14520	
	National	CD4520	
	OKI	MSM4520	
	Sanyo	LC4520	
	SGS	HCC/HCF4520	
	Signetics	HEF4520	
	Solitron	CM4520	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
F4520			(Cont'd)
	Sprague	SCL4520	
	Toshiba	**TC4520**	**(3308)**
F4521	Motorola	MC14521	
	SGS	HCC/HCF4045	
	Signetics	HEF4521	
	Solitron	CM4045	
	Sprague	SCL4445	
	Toshiba	**TC4521**	**(3308)**
F4522	Motorola	MC14522B	
	National	CD4522	
	Sprague	SCL4522	
F4526	Motorola	MC14526	
	National	CD4526	
	Signetics	HEF4526	
	Sprague	SCL4526	
	Toshiba	**TC4526**	**(3308)**
F4527	**GE/RCA**	**CD4527**	**(2636)**
	Motorola	MC14527	
	National	CD4527	
	SGS	HCC/HCF4527	
	Signetics	HEF4527	
	Sprague	SCL4527	
	Toshiba	**TC4527**	**(3308)**
F4528	Motorola	MC14528	
	National	CD4528	
		MM74C221	
	SGS	HCC/HCF4098	
	Signetics	HEF4528	
	Toshiba	**TC4528**	**(3308)**
F4531	Motorola	MC14531	
	SGS	HCC/HCF40101	
	Signetics	HEF4531	
	Sprague	SCL4531	
	Toshiba	**TC4531**	**(3308)**
F4532	GE/RCA	CD4532	
	Motorola	MC14532	
	SGS	HCC/HCF4532	
	Signetics	HEF4532	
	Sprague	SCL4532	
	Toshiba	**TC4532**	**(3308)**
F4539	Motorola	MC14539	
	Signetics	HEF4539	
F4543	**GE/RCA**	**CD4543**	**(2635)**
	Motorola	MC14543	
		MC14543B	
	National	CD4543	
	Signetics	HEF4543	
	Toshiba	**TC4543**	**(3308)**
F4553	Motorola	MC14553	
F4555	**GE/RCA**	**CD4555**	**(2633, 2635)**
	Motorola	MC14555	
	SGS	HCC/HCF4555	
	Signetics	HEF4555	
	Sprague	SCL4555	
	Toshiba	**TC4555**	**(3308)**
F4556	**GE/RCA**	**CD4556**	**(2633, 2635)**
	Motorola	MC14556	
	SGS	HCC/HCF4556	
	Signetics	HEF4556	
	Sprague	SCL4556	
	Toshiba	**TC4556**	**(3308)**
F4557	Motorola	MC14557	
	Signetics	HEF4557	
F4582	**GE/RCA**	**CD40182**	**(2636)**
	Motorola	MC14582	
	National	74C182	
	SGS	HCC/HCF40182	
	Sprague	SCL4582	
F4583	Motorola	MC14583	
	Toshiba	**TC4583**	**(3308)**
F4702	**Harris**	**HD4702**	**(2703, 2735, 2768)**
F4720	Signetics	HEF4720	
F4723	National	CD4723	
F4727	Signetics	HEF4724	
F64K	AMD	AM9064	
	Fairchild	F4164	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
F64K			(Cont'd)
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
F6800A	Hitachi	HD6800	
		HD68A00	
		HD68B00	
	Motorola	MC6800	
	Thomson	EF6800	
F6802	Hitachi	HD6802	
	Motorola	**MC6802**	**(2902)**
	Thomson	EF6802	
F6808	Motorola	MC6808	
F6810	Hitachi	HD6810	
		HD68A10	
	Motorola	MC6810	
		MCM6810	**(2902)**
F681488	National	NS32488	
F6821	Gould	S6821	
	Hitachi	HD6821	
		HD68A21	
		HD68B21	
	Mitel	MD68SC21	
	Motorola	**MC6821**	**(2902)**
	Thomson	EF6821	
F6840	Hitachi	HD6840	
	Mitel	MD68SC40	
	Motorola	**MC6840**	**(2902)**
	Thomson	EF6840	
F6845	Hitachi	HD6845	
	Motorola	**MC6845**	**(2903)**
F68456	National	NS32456	
F6845A	Hitachi	HD6845A	
	Motorola	**MC6845A**	**(2903)**
F6846	Hitachi	HD6846	
F6850	Hitachi	HD6850	
	Motorola	**MC6850**	**(2902)**
	Thomson	EF6850	
F6852	Hitachi	HD6852	
	Motorola	**MC6852**	**(2902)**
F6854	Thomson	EF6854	
F6860	**Motorola**	**MC6860**	**(2902)**
F6862	Motorola	MC6862	
F68B10	Motorola	MCM68B10	
F8804	Mitel	MT8804	
	Plessey	MV8804	
F93419	Fujitsu	MBM93419	
F9401	Motorola	MC8503	
	Signetics	9401	
F9403	Signetics	9403	
FGC0500	VLSI Tech	FGC0500	
FGC0900	VLSI Tech	VT0900	
FGC1200	**VLSI Tech**	**VGC1200**	**(4665)**
FGC1900	**VLSI Tech**	**VGC1900**	**(4665)**
FGC2400	**VLSI Tech**	**VGC2400**	**(4665)**
FGC3200	VLSI Tech	FGC3200	
		VGC3200	**(4665)**
FGC4000	**VLSI Tech**	**VGC4000**	**(4665)**
FGC6000	**VLSI Tech**	**VGC6000**	**(4665)**
FGC8000	Exar	XR541	
	MicroLinear	ML541	
	PMI	**DAC88**	**(2974)**
	SiliconSys	SSI541	
FQ3724	Motorola	MQ3724	
	Raytheon	SP3724	
FQ3725	Motorola	MQ3725	
	National	DH3725	
	Raytheon	SP3725	
FVG101	Brooktree	BT101	
		BT102	
		BT106	
	Intech	**VDAC1842**	**(2799)**
FVG108	Brooktree	BT108	
FVG450	**Intech**	**RGBDAC3405**	**(2799)**
FVG451	Brooktree	BT451	
FVG453	Brooktree	BT453	
LF156A	AD	AD544	
	Burr-Brown	**OPA156A**	**(2532)**
	LinearTech	LF156A	
	National	LF156A	
		OPA101	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
LF156A			(Cont'd)
	PMI	**OP43**	**(2970)**
		PM156A	**(2971)**
	TI	TL081	
LF157A	AMD	27S29	
	National	545472	
		74S472	
		LF157A	
		LF351	
		LF353	
	PMI	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
M4027	Motorola	MCM4027	
	Stantel-STC	STC4027	
MA0802M	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		µA0801	
		µA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	µPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
MB8875	Fujitsu	F6854	
MC1412	Exar	XR2002C	
		XR2202	
	Fairchild	µA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	µPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
MC1413	Exar	XR2003C	
		XR2203	
	Fairchild	µA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
MC1488	Exar	XR1488	
	Fairchild	µA212A	
		µA750	
	GoldStar	**GD75188**	**(2694)**
	Hitachi	HD75188	
	National	DS1488	
	Signetics	MC1488	
		MC1489	
	SiliconG	SG75188	
		SG75788	
	TI	MC1488	
		MC1489	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC1488	TI		(Cont'd)
		SN75188	
		SN75189	
MC1489	Exar	XR1468	
		XR4195	
	Fairchild	µA212A	
		µA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG2501A	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
MC5524	Motorola	MC5524	
	National	LM5524	
	Raytheon	RM5524	
	TI	SNJ5524	
MC5525	Motorola	MC5525	
	National	LM5525	
MC5528	Motorola	MC5528	
	National	LM5528	
MC5529	Motorola	MC5529	
	National	LM5529	
MC5534	Motorola	MC5534	
	National	LM5534	
MC7905	Fairchild	µA7905	
	GoldStar	**GL7905**	**(2701)**
	Gould	µA7905	
	Motorola	MC7905	
	Samsung	MC7905	
	SGS	L7905	
	SiliconG	SG7905	
		SG7905A	
MC7908	Fairchild	µA7908	
		µA79M08	
	Motorola	MC7908	
	National	LM7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908	
		SG7908A	
	TI	µA7908	
		µA79M08	
	Toshiba	TA79008	
SH0323	Fairchild	SH323	
		µA323	
		µA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
SH123	Fairchild	UA138	
		µA123	
	IPS	**IP123**	**(2854)**
	LinearTech	LM123	
		LT123	
	Motorola	**LM123**	**(2927)**
		MC78T05	**(2926)**
	National	LM123	
	SiliconG	SG123	
		SG123A	
SH2001	Motorola	MC943	
SH223	Fairchild	µA223	
	IPS	**IP223**	**(2854)**
	Motorola	**LM223**	**(2927)**
	National	LM223	
	SiliconG	SG223	
	Thomson	LM223	
SH3002	Siliconix	SI3002	
SH323	Fairchild	SH0323	
		µA323	
		µA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SH323			(Cont'd)
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
SSI117	Cherry	CS117	
	MicroLinear	ML117	
	SiliconSys	SSI117	
TBA800	Plessey	TBA800	
	SGS	TBA800	
	Telefunken	TDA800	
TBA810	SGS	TBA810	
	Telefunken	TDA810	
TDA2003	Sprague	ULN3703	
	Thomson	TDA2003	
UA108A	AD	AD108A	
	LinearTech	LM108A	
	Motorola	**LM108A**	**(2919)**
	PMI	**PM108A**	**(2970)**
UA138	Fairchild	SH123	
		µA123	
	IPS	**IP123**	**(2854)**
	LinearTech	LM123	
		LT123	
	Motorola	**LM123**	**(2927)**
		MC78T05	**(2926)**
	National	LM123	
	SiliconG	SG123	
		SG123A	
UA1458HC	**GE/RCA**	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	µPC1458	
		µPC251	
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	µA1458	
	Toshiba	TA75458	
		TA75558	
UA150	Exar	XR1489A	
	Fairchild	UA212A	
		µA1489A	
	Motorola	**MC1489A**	**(2952, 2958)**
	National	DS1489A	
	SGS	MC1489	
	Signetics	MC1489A	
	SiliconG	SG1489A	
	TI	SN75189A	
UA208A	AD	AD208A	
	Motorola	**LM208A**	**(2919, 2958)**
	National	LM208A	
	PMI	PM208A	
UA212A	Exar	XR1489A	
	Fairchild	UA150	
		µA1489A	
	Motorola	**MC1489A**	**(2952, 2958)**
	National	DS1489A	
	SGS	MC1489	
	Signetics	MC1489A	
	SiliconG	SG1489A	
	TI	SN75189A	
UA238	Exar	XR2240	
	Fairchild	µA2240	
	GE/Intersil	ICL8240	
	TI	µA2240	
UA250	Fairchild	UA26LS31	
		UA26LS32	
		µA239	
	GE/RCA	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	

Manufacturer Device	Replacement Source	Device	IC Master Page
UA26LS31	Fairchild	UA250	
		UA26LS32	
		µA239	
	GE/RCA	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	
UA26LS32	Fairchild	UA250	
		UA26LS31	
		µA239	
	GE/RCA	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	
UA3045	National	LM3045	
	Plessey	SL3086	
	Sanyo	LA3045	
	SGS	LM3045	
	Sprague	ULS2045	
µA0801	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		µA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	µPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
µA0802	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		µA0801	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	µPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
µA101	AMD	LM101	
	AD	AD101	
	GE/Intersil	AD101	
	LinearTech	LM101	
	Motorola	LM101	
	Raytheon	LM101	
	SGS	LS101	
	SiliconG	SG101	
	Thomson	LM101	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Fairchild (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
μA105	GE/Intersil	LM105	
	National	LM105	
	SiliconG	SG105	
	Thomson	LM105	
μA108	AD	AD108	
	GE/Intersil	LM108	
	LinearTech	LM108	
	MicroPwr	MP108	
	Motorola	**LM108**	**(2919)**
	National	LM108	
	PMI	**PM108**	**(2970)**
	SiliconSys	SSI108	
μA109	**IPS**	**IP140-5**	**(2854)**
	Motorola	**LM109**	**(2926)**
	National	LM109	
	SiliconG	SG109	
	Thomson	LM109	
		SFC2109	
μA111	AD	AD111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
μA117	**IPS**	**IP117**	**(2854)**
	LinearTech	LM117	
	MCE	MCELM117	
	Motorola	**LM117**	**(2929)**
	National	LM117	
	SiliconG	SG117	
	TI	TL117	
	Thomson	LM117	
	Unitrode	**UC117**	**(3325)**
μA123	Fairchild	SH123	
		UA138	
	IPS	**IP123**	**(2854)**
	LinearTech	LM123	
		LT123	
	Motorola	**LM123**	**(2927)**
		MC78T05	**(2926)**
	National	LM123	
	SiliconG	SG123	
		SG123A	
μA124	**GE/RCA**	**CA124**	**(2645)**
	LinearTech	LT1014	
	National	LM124A	
	SiliconG	SG124	
	TI	LM124	
μA139	**GE/RCA**	**CA139**	**(2647)**
	Motorola	**LM139**	**(2925)**
	National	LM139	
	PMI	**CMP04**	**(2975)**
		PM139	**(2975)**
	Raytheon	LM139	
	Signetics	LM139	
	TI	LM139	
μA148	Exar	XR4741	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
		RM4158	
	TI	LM148	
μA1489	Fairchild	μA212A	
		μA750	
	Motorola	**MC1489**	**(2952, 2958)**
	Signetics	MC1489	
	SiliconG	SG1489	
		SG508	
	Sprague	UHD508	
	TI	MC1489	
		SN55189	
		SN75189	
μA1489A	Exar	XR1489A	
	Fairchild	UA150	
		UA212A	
	Motorola	**MC1489A**	**(2952, 2958)**
	National	DS1489A	
	SGS	MC1489	
	Signetics	MC1489A	
	SiliconG	SG1489A	
	TI	SN75189A	
μA1524	Cherry	CS1524	
	Exar	XR1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	
	National	LM1524	
	SGS	SG1524	
		UC1524A	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524**	**(3323)**
		UC1524A	**(3323)**
♦ μA193	**Motorola**	**LM193**	**(2925)**
	National	LM193A	
	Signetics	LM193	
	TI	LM193	
μA201	**Motorola**	**LM201**	**(2958)**
		MC1748	**(2919)**
	National	LM748	
	SGS	LM748	
		LS148	
	SiliconG	SG201	
	TI	LM201	
		LM748	
		SN72748P	
		μA748	
	Thomson	LM201	
		LM748	
μA209	Ferranti	ZN437	
	Motorola	**LM208**	**(2919, 2958)**
	National	LM209	
	SiliconG	SG209	
	SiliconSys	SSI6410	
μA212A	Fairchild	μA1489	
		μA750	
	Motorola	**MC1489**	**(2952, 2958)**
	Signetics	MC1489	
	SiliconG	SG1489	
		SG508	
	Sprague	UHD508	
	TI	MC1489	
		SN55189	
		SN75189	
♦ μA217	**IPS**	**IP217**	**(2854)**
	MCE	MCELM217	
	Motorola	**LM217**	**(2929)**
	National	LM217	
	SGS	LM217	
	SiliconG	SG217	
		SG217A	
♦ μA217	Thomson	LM217	
	Unitrode	**UC217**	**(3325)**
μA223	Fairchild	SH223	
	IPS	**IP223**	**(2854)**
	Motorola	**LM223**	**(2927)**
	National	LM223	
	SiliconG	SG223	
	Thomson	LM223	
μA224	Ferranti	ZN448	
	Motorola	**LM224**	**(2923, 2958)**
	SiliconG	SG224	
	SiliconSys	SSI6051	
	TI	LM224	
μA2240	Exar	XR2240	
	Fairchild	UA238	
	GE/Intersil	ICL8240	
	TI	μA2240	
μA238	**IPS**	**IP238**	**(2854)**
	National	LM238	
	SiliconG	SG238	
μA239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
	GE/RCA	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
μA239			(Cont'd)
	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	
μA2524	Cherry	CS2524	
	Exar	XR2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
μA2901	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
μA2902	Fairchild	μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	μPC324	
		μPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
♦ μA2903	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
♦ μA2903	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
♦ μA2903	National	LM2903	
		LM311	
♦ μA2903	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
♦ μA2903	Signetics	LM2903	
		LM311	
♦ μA2903	SiliconG	SG311	
	TI	LM2903	
		LM311	
♦ μA2903	Thomson	LM2903	
		LM311	
♦ μA2903	Toshiba	TA75393	
♦ μA293	**Motorola**	**LM293**	**(2925, 2958)**
	National	LM293	
	Signetics	LM293	
	TI	LM293	
μA301	AD	AD301	
	Fairchild	μA301A	
	GE/Intersil	AD301	
μA301			(Cont'd)
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
μA301A	AD	AD301	
	Fairchild	μA301	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
μA3046	Fairchild	μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
μA305	Ferranti	ZNREF025	
	National	LM305	
	SiliconG	SG305	
	SiliconSys	SSI6505	
μA3054	**GE/RCA**	**CA3054**	**(2647, 2649)**
	Motorola	**CA3054**	**(2948)**
	National	LM3054	
	Sprague	ULN2054	
	Thomson	SFC2054	
μA3054/7	**GoldStar**	**GM3054/7**	**(2701)**
	MMI	M2064-50	
	Xilinx	**XC2064-50**	**(4346)**
μA3057	Matra-Harris	HC3057	
	National	TP3057	
	Sierra	SC11302	
	Thomson	ETC5057	
μA308	AD	AD308	
	Burr-Brown	3500	
		3501	
	GE/Intersil	AD308	
		LM308	
	Motorola	**LM308**	**(2919, 2958)**
	National	LM308	
	Raytheon	LM308	
μA3086	Fairchild	μA3046	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
µA3086			(Cont'd)
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
µA308A	AD	AD308A	
	LinearTech	LM308A	
	Motorola	**LM308A**	**(2919, 2958)**
	National	LM308A	
	PMI	PM308A	
µA309	Ferranti	ZN447	
	Motorola	**LM309**	**(2926)**
	National	LM309	
	SiliconG	SG309	
	SiliconSys	SSI6050	
µA311	AD	AD311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	µPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
µA317	**IPS**	**IP317**	**(2854)**
	LinearTech	LM317	
	MCE	MCELM317	
	Motorola	**LM317**	**(2929)**
	National	LM317	
	SGS	LM317	
	SiliconG	SG317	
	TI	LM317	
	Thomson	LM317	
		TDB0117	
	Unitrode	**UC317**	**(3325)**
♦ µA318	AD	AD518	
	LinearTech	LM318	
	National	LM318	
	NEC	µPC318	
	TI	LM318	
	Thomson	LM318	
µA323	Fairchild	SH0323	
		SH323	
		µA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
µA324	**Harris**	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17324	
	Motorola	**MC33174**	**(2924, 2959)**
	National	LM324	
	PMI	**OP421**	**(2970, 2972)**
	Samsung	LM324	
	SGS	LM324	
	SiliconG	SG324	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA324			(Cont'd)
	Thomson	LM324	
	Toshiba	TA79502	
µA3302	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	µA2901	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
µA3303	**Motorola**	**MC3303**	**(2924)**
	SGS	MC3303	
	Signetics	MC3303	
	TI	MC3303	
µA338	**IPS**	**IP338**	**(2854)**
	LinearTech	LM338	
		LT338	
	Micropac	MLM338	
	National	LM338	
	SiliconG	SG338	
µA339	**GE/RCA**	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	µPC137	
		µPC177	
		µPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
µA3448A	Fairchild	µA3486	
		µA3487	
	Motorola	**MC3448A**	**(2952, 2959)**
µA348	Exar	XR4751	
	GE/Intersil	LM348	
	GoldStar	**GL348**	**(2700)**
	Motorola	**LM348**	**(2923, 2958)**
		MC4741	**(2923, 2959)**
	National	LM348	
	Raytheon	HA4741	
	TI	LM348	
µA3486	Fairchild	µA3448A	
		µA3487	
	Motorola	**MC3448A**	**(2952, 2959)**
µA3487	Fairchild	µA3448A	
		µA3486	
	Motorola	**MC3448A**	**(2952, 2959)**
µA350	Fairchild	µA78HGA	
	IPS	**IP350**	**(2854)**
	LinearTech	LM350	
		LT350	
	Motorola	**LM350**	**(2929)**
	National	LM350	
	SiliconG	SG350	
	TI	LM350	
	Unitrode	**UC350**	**(3325)**
µA3524	LinearTech	SG3524	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
		SG3525A	
	TI	SG3525	
	Unitrode	**UC3524**	**(3323)**
		UC3524A	**(3323)**
µA3680	National	DS3680	
	TI	DS3680	
µA376	National	LM376	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ µA393	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	µPC393	
	Sanyo	LA6393	
	Signetics	LM393	
	TI	LM393	
	Toshiba	TA75393	
µA4136	MicroPwr	MPOP09	
	PMI	**OP09**	**(2972)**
µA431	**Motorola**	**TL431**	**(2960)**
	TI	TL431	
µA4558	Exar	XR4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	µPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
µA494	TI	TL494	
	Toshiba	TA76494	
µA55450	SiliconG	SG55450	
	TI	SNJ55450	
µA55452	National	DS55452	
	Signetics	55452	
	SiliconG	SG55452	
	TI	SN55452	
		SNJ55452	
µA55462	National	DS55462	
	SiliconG	SG55462	
	TI	SN55462	
		SNJ55462	
µA555	Exar	XR555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	µPC1555	
		µPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
µA565	AD	AD565A	
		AD565J	
	Harris	**HI565A**	**(2738, 2749)**
	Maxim	AD565A	
	MicroNet	MN565A	
	TeledyneP	TP565A	
µA571	AD	AD571	
		AD573	
	MCE	MCE571	
	PMI	**ADC910**	**(2973)**
µA705	National	LM1800	
	Sanyo	LA705	
		LA758	
	Signetics	µA758	
	Sprague	ULN3809	
		ULN3812	
	TI	SN76111	
		SN76116	
µA709	**Motorola**	**MC1709**	**(2919)**
	National	LM1709	
		LM709	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA709			(Cont'd)
	NEC	µPC55	
	TI	µ709	
		µA709	
	Toshiba	TA7502	
µA710	TI	µA710M	
µA711	TI	µA711M	
µA714	LinearTech	OP07	
µA723	Fairchild	µA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	µA723	
	SiliconG	SG723	
	TI	µA723	
		µA723M	
	Thomson	SFC2723	
		µA723	
µA723M	Fairchild	µA723	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	µA723	
	SiliconG	SG723	
	TI	µA723	
		µA723M	
	Thomson	SFC2723	
		µA723	
µA725	National	LM725	
	PMI	**OP06**	**(2970)**
	Raytheon	RM725	
µA7327	**GoldStar**	**GL1170**	**(2699)**
	SGS	TDA1170	
	Sprague	ULN2270	
	Telefunken	TDA1170	
µA733	GE/Intersil	µA733	
	Hitachi	HA17733	
	Motorola	**MC1733**	**(2920)**
		NE592	**(2960)**
	National	LM733	
	Signetics	µA733	
	SiliconG	SG1401	
	TI	µA733	
		µA733M	
µA739	Exar	XR4739	
	Fairchild	µA749	
	National	LM1303	
	Raytheon	RC4739	
	SGS	TBA231	
	TI	SN76131	
		SN76149	
µA741M	AD	AD741	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	µPC151	
		µPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	µA741	
	SiliconG	SG741	
	TI	µA741	
		µA741M	
	Thomson	µA741	
	Toshiba	TA7504	
µA747	**GE/RCA**	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
µA747			(Cont'd)
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	µPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	µA747	
	TeledyneS	747	
	TI	µA747	
		µA747M	
µA749	Exar	XR4739	
	Fairchild	µA739	
	National	LM1303	
	Raytheon	RC4739	
	SGS	TBA231	
	TI	SN76131	
		SN76149	
µA750	Fairchild	µA1489	
		µA212A	
	Motorola	**MC1489**	**(2952, 2958)**
	Signetics	MC1489	
	SiliconG	SG1489	
		SG508	
	Sprague	UHD508	
	TI	MC1489	
		SN55189	
		SN75189	
µA75450	SiliconG	SG75450	
	TI	SN75450	
µA75451	National	DM7426	
		DM8810	
	Signetics	**7426**	**(3003)**
	TI	SN7426	
µA75452	SiliconG	SG75452	
	TI	SN75452	
µA75453	National	LM340-08	
	SiliconG	SG340-08	
		SG75453	
µA75461	Motorola	MC75401	
	National	DS75461	
	SiliconG	SG75461	
	TI	SN75461	
µA75462	Motorola	MC75402	
	National	DS75462	
	SiliconG	SG75462	
	TI	SN75462	
♦ µA758	Fairchild	µA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
♦ µA758	Signetics	µA758	
	Sprague	ULN3809	
		ULN3812	
♦ µA758	TI	SN76111	
		SN76116	
µA760	National	LM160	
	PMI	**CMP05**	**(2975)**
µA771	AnalogSys	MA333	
	Motorola	**MC34001**	**(2920, 2959)**
	NEC	µPC4071	
		µPC4081	
	TI	TL071	
		TL081C	
	Toshiba	TA75071	
µA772	AnalogSys	MA336	
	Motorola	**MC34002**	**(2922)**
	NEC	µPC4072	
		µPC4082	
	SGS	TL072	
	TI	TL072	
		TL082C	
	Toshiba	TA75072	
		TA75074	
µA774	AnalogSys	MA374	
	Motorola	**MC33074**	**(2924)**
		MC34004	**(2923, 2959)**
		MC34004A	**(2923, 2959)**
		MC34074	**(2923, 2960)**
	NEC	µPC4084	
	TI	TL074	
		TL084BC	

Manufacturer Device	Replacement Source	Device	IC Master Page
µA7805	GoldStar	GL7805	
	Gould	µA7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
		LM7805	
	Samsung	MC7805	
	SiliconG	SG7805	
		SG7805A	
	TI	µA7805	
	Toshiba	TA78005	
		TA79005	
	Unitrode	**UC7805**	**(3325)**
µA7806	**Motorola**	**MC7806**	**(2927)**
	National	LM7806	
	NEC	µPC7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806	
		SG7806A	
	TI	µA7806	
	Thomson	µA7806	
	Toshiba	TA78006	
µA7808	GoldStar	GL7808	
	Gould	µA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	NEC	µPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	µA7808	
	Thomson	µA7808	
	Toshiba	TA78008	
µA7809	GoldStar	GL7809	
	Gould	µA7809	
	Hitachi	HA17809	
	Motorola	MC7809	
	National	LM7809	
	NEC	µPC7809	
	TI	µA7809	
	Toshiba	TA78009	
µA7810	National	LM7810	
	SGS	L7810	
	TI	µA7810	
	Toshiba	TA78010	
µA7812	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	µPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	µA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
µA7815	GoldStar	GL7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	
		LM340T-15	
		LM78L15	
	NEC	µPC78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	SN75555	
		µA78L15	
	Toshiba	TA78L015	
µA7818	**Motorola**	**MC7818**	**(2928)**
	National	LM7818	
	Samsung	MC7818	
	SGS	L7818	
	TI	µA7818	
	Toshiba	TA78018	
µA7820	Fairchild	µA7910	
	National	LM7820	
	SGS	L7820	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA7820			(Cont'd)
	SiliconG	SG7820	
		SG7820A	
	TI	µA7820	
		µA7910	
	Toshiba	TA78020	
µA7824	GoldStar	GL7824	
	Gould	µA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	µPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
		µA7824	
	Thomson	µA7824	
	Toshiba	TA78024	
µA78H05	Fairchild	SH0323	
		SH323	
		µA323	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
µA78H12A	Lambda	LAS1412	
	Micropac	M78H12	
µA78HGA	Fairchild	µA350	
	IPS	**IP350**	**(2854)**
	LinearTech	LM350	
		LT350	
	Motorola	**LM350**	**(2929)**
	National	LM350	
	SiliconG	SG350	
	TI	LM350	
	Unitrode	**UC350**	**(3325)**
µA78L02	TI	µA78L02	
µA78L02A	TI	µA78L02A	
µA78L05	**Motorola**	**MC78L05**	**(2926, 2959)**
	National	LM340LA-5	
		LM78L05	
	NEC	µPC78L05	
	TI	µA78L05	
	Thomson	µA7805	
	Toshiba	TA78L006	
µA78L05A	TI	µA78L05A	
µA78L06	National	LM78L06	
	TI	µA78L06	
		µA87L06	
	Toshiba	TA78L012	
µA78L06A	TI	µA78L06A	
µA78L08	**Motorola**	**MC78L08**	**(2959)**
	National	LM78L08	
	NEC	µPC78L08	
	TI	µA78L08	
	Toshiba	TA78L008	
µA78L08A	TI	µA78L08A	
µA78L09	National	LM78L09	
	TI	µA78L09	
	Toshiba	TA78L009	
µA78L09A	TI	µA78L09A	
µA78L10	National	LM78L10	
	TI	µA78L10	
	Toshiba	TA78L010	
µA78L10A	TI	µA78L10A	
µA78L12	**Motorola**	**MC78L12**	**(2927, 2959)**
	National	LM340LA-12	
		LM78L12	
	NEC	µPC78L12	
	TI	µA78L12	
	Thomson	µA7812	
	Toshiba	TA78L012	
µA78L12A	TI	µA78L12A	
µA78L15	GoldStar	GL7815	
	Gould	µA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA78L15			(Cont'd)
	National	LM340-15	
		LM7815	
	NEC	µPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		µA7815	
	Thomson	µA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
µA78L15A	TI	µA78L15A	
µA78L18	**Motorola**	**MC78L18**	**(2928)**
	National	LM78L18	
	TI	µA78L18	
		µA78m20	
	Toshiba	TA78L018	
µA78L20	National	LM78L20	
	TI	µA78L20	
	Toshiba	TA78L024	
		TA78L20	
µA78M05	**Motorola**	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	µPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	TI	µA78M05	
	Toshiba	TA78M05	
µA78M06	**Motorola**	**MC78M06**	**(2927)**
	National	LM78M06	
	Samsung	MC78M06	
	Sanyo	L78M06	
	SGS	L78M06	
		L78M06CV	
	TI	µA78M06	
	Toshiba	TA78M06	
µA78M08	Motorola	MC78M08	
	National	LM78M08	
	NEC	µPC78M08	
	Samsung	MC78M08	
	Sanyo	L78M08	
	SGS	L78M08	
		L78M08CV	
	TI	µA78M08	
	Toshiba	TA78M08	
µA78M09	National	LM78M09	
	SGS	L78M09	
	TI	µA78M09	
	Toshiba	TA78M09	
µA78M10	National	LM78M10	
		LM7910	
	SGS	L78M10	
	TI	µA78M10	
	Toshiba	TA78M10	
µA78M12	**Motorola**	**MC78M12**	**(2927, 2959)**
	National	LM341-12	
		LM342-12	
		LM78M12	
	NEC	µPC78M12	
	Samsung	MC78M12	
	Sanyo	L78M12	
	SGS	L78M12	
		L78M12CV	
	TI	µA78M12	
	Toshiba	TA78M12	
µA78M15	**Motorola**	**MC78M15**	**(2928, 2959)**
	National	LM341-15	
		LM342-15	
		LM78M15	
	NEC	µPC78M15	
	Samsung	MC78M15	
	Sanyo	L78M15	
	SGS	L78M15	
		L78M15CV	
	TI	µA78M15	
	Toshiba	TA78M15	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild			**(Cont'd)**
µA78M18	Motorola	MC78M18	
	Samsung	MC78M18	
	Sanyo	L78M18	
	SGS	L78M18	
	TI	µA78M18	
	Toshiba	TA78M18	
µA78M20	**Motorola**	**MC78M20**	**(2928)**
	National	LM78M20	
	SGS	L78M20	
	TI	µA78M20	
	Toshiba	TA78M20	
µA78M24	**Motorola**	**MC78M24**	**(2928)**
	Samsung	MC78M24	
	Sanyo	L78M24	
	SGS	L78M24	
		L78M24CV	
	TI	µA78M24	
	Toshiba	TA78M24	
µA78P05	Lambda	LAS3905	
	Micropac	M78P05	
		MLAS3905	
µA78S40	**Motorola**	**µA78S40**	**(2930)**
µA7902	Samsung	MC7902	
µA7905	Fairchild	MC7905	
	GoldStar	**GL7905**	**(2701)**
	Gould	µA7905	
	Motorola	MC7905	
	Samsung	MC7905	
	SGS	L7905	
	SiliconG	SG7905	
		SG7905A	
µA7906	GoldStar	GL7806	
	Gould	µA7806	
	Motorola	MC7906	
	National	LM7906	
	NEC	µPC7806	
	Samsung	MC7906	
	SGS	L7906	
	TI	µA7906	
	Toshiba	TA78006	
µA7908	Fairchild	MC7908	
		µA79M08	
	Motorola	MC7908	
	National	LM7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908	
		SG7908A	
	TI	µA7908	
		µA79M08	
	Toshiba	TA79008	
µA7909	**GoldStar**	**GL7909**	**(2701)**
	Gould	µA7909	
	National	LM7909	
	NEC	µPC7909	
	SGS	L7909	
	TI	µA7909	
	Toshiba	TA7900	
		TA79009	
♦ µA791	Thomson	µA791	
µA7910	Fairchild	µA7820	
	National	LM7820	
	SGS	L7820	
	SiliconG	SG7820	
		SG7820A	
	TI	µA7820	
		µA7910	
	Toshiba	TA78020	
µA7912	Fairchild	µA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	µA7824	
		µA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	µPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	µA7912	
	Thomson	µA7912	
	Toshiba	TA78024	
		TA79012	

Manufacturer Device	Replacement Source	Device	IC Master Page
µA7915	**GoldStar**	**GL7915**	**(2701)**
	Gould	µA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	µPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	µA7915	
	Thomson	µA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
µA7918	Motorola	MC7918	
	National	LM7918	
	Samsung	MC7918	
	SGS	L7918	
	SiliconG	SG7918	
		SG7918A	
	TI	µA7918	
	Toshiba	TA79018	
µA7920	National	LM7920	
	SGS	L7920	
	SiliconG	SG7920	
		SG7920A	
	SiliconSys	SSI957	
	TI	µA7920	
	Toshiba	TA79020	
µA7924	Fairchild	74LS195A	
	GoldStar	**GL7924**	**(2701)**
	Gould	µA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	µPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		µA7924	
	Toshiba	TA79024	
µA796	**Motorola**	**MC1596**	**(2939)**
	National	LM1596	
	SiliconG	SG1596	
µA798	**Motorola**	**MC3458**	**(2921, 2959)**
		MC3558	**(2922)**
µA79HG	Lambda	LAS79HG	
µA79M05	**GoldStar**	**GL7905**	**(2701)**
	Gould	µA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	µPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	µA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
µA79M06	TI	µA79M06	
µA79M08	Fairchild	MC7908	
		µA7908	
	Motorola	MC7908	
	National	LM7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908	
		SG7908A	
	TI	µA7908	
		µA79M08	
	Toshiba	TA79008	
µA79M12	Fairchild	µA7912	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	µA7824	
		µA7912	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA79M12			(Cont'd)
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	µPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	µA7912	
	Thomson	µA7912	
	Toshiba	TA78024	
		TA79012	
µA79M12M	TI	µA79M12M	
µA8T26A	**Motorola**	**MC8T26A**	**(2951)**
	National	DS8T26A	
	Signetics	**N8T26A**	**(3022)**
µA8T28	Fairchild	µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
µA96172	Fairchild	µA8T28	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
µA96173	Fairchild	µA8T28	
		µA96172	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
µA96174	Fairchild	µA8T28	
		µA96172	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA96174	Fairchild		(Cont'd)
		µA96173	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
µA96175	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
µA96176	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
µA96177	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Fairchild (Cont'd)			
µA96178	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
µA9636A	TI	µA9636A	
µA9637A	TI	µA9637A	
µA9638	Fairchild	µA9679	
	TI	SN75ALS191	
		µA9638	
µA9639	TI	SN75175	
		µA9639	
µA9665	Exar	XR2001	
		XR2001C	
		XR2201	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
µA9666	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	µPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
µA9667	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
µA9668	SGS	ULQ2004	
µA9679	Fairchild	µA9638	
	TI	SN75ALS191	
		µA9638	
µA9708	Hitachi	HD14443	
		HD14447	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA9708			(Cont'd)
	Motorola	**MC14443**	**(2937)**
		MC14447	**(2937)**
♦ µAF398	LinearTech	LF398	
	National	LF398	
		LM298	
♦ µAF398	**PMI**	**SMP10**	**(2975)**
	Signetics	LF398	
		NE5537	
♦ µAF771	**GE/RCA**	**CA081**	**(2645)**
	PMI	**OP16**	**(2971)**
	Thomson	LF351	
		TL081	
µAF774	Exar	XR084	
	GE/RCA	**CA084**	**(2645)**
	SGS	TL084	
	TI	TL084	

Ferranti Electric

REF12	Fairchild	54AC00	
	GE/RCA	CD54AC00	
	LinearTech	LM385-1	
	National	LM385-1	
REF25	LinearTech	LM336-2	
		LM385-2	
	Motorola	LM385-2	
	National	LM336-2	
		LM385-2	
REF50	National	LM336-5	
ULA1G000	Interdesign	1G000	
ULA1U000	Interdesign	1U000	
ULA2C000	Interdesign	MSA	
ULA2U000	Interdesign	2U000	
ULA3U000	Interdesign	3U000	
ULA5C000	Interdesign	MSB	
ULA9C000	Interdesign	MSC	
ZN1060	**Signetics**	**NE5560**	**(3129)**
ZN423	AD	AD589	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM185-1	
		LM385-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM113	
		LM313	
	TeledyneP	TSC9491	
	TeledyneS	9491	
		TSC9491	
ZN425	Datel	ADCMC8	
ZN426	SiliconG	SG2815	
	SiliconSys	SSI6220	
	Sprague	**ULN2815**	**(3203)**
ZN429	SiliconG	SG2825	
	SiliconSys	SSI6240	
	Sprague	**ULN2825**	**(3203)**
ZN433	**Datel**	**ADC856**	**(2575)**
	SiliconSys	SSI6020	
ZN435	SiliconG	SG55236A	
	SiliconSys	SSI6030	
ZN436	Motorola	MC3523	
	SiliconG	SG3523A	
	SiliconSys	SSI6260	
ZN437	Fairchild	µA209	
	Motorola	**LM208**	**(2919, 2958)**
	National	LM209	
	SiliconG	SG209	
	SiliconSys	SSI6410	
ZN438	SiliconG	SG2825	
	SiliconSys	SSI6272	
	Sprague	**ULN2825**	**(3203)**
ZN439	SiliconG	SG2813	
	SiliconSys	SSI6080	
	Sprague	**ULN2813**	**(3203)**
ZN440	SiliconG	SG55234	
	SiliconSys	SSI6040	
	TI	SN55234	
		SNJ55234	
ZN441	SiliconSys	SSI6041	
ZN443	SiliconG	SG75432	
	SiliconSys	SSI6044	
ZN445	SiliconG	SG75431	
	SiliconSys	SSI6042	
ZN447	Fairchild	µA309	
	Motorola	**LM309**	**(2926)**
	National	LM309	
	SiliconG	SG309	
	SiliconSys	SSI6050	
ZN447E	**Datel**	**ADC847A**	**(2575)**
ZN447J	**Datel**	**ADC847B**	**(2575)**

Manufacturer Device	Replacement Source	Device	IC Master Page
ZN448	Fairchild	µA224	
	Motorola	**LM224**	**(2923, 2958)**
	SiliconG	SG224	
	SiliconSys	SSI6051	
	TI	LM224	
ZN449	**Datel**	**ADC847**	**(2575)**
	SiliconSys	SSI6052	
ZN449E	**Datel**	**ADC847C**	**(2575)**
ZN454	LinearTech	LT138	
	SiliconG	SG138	
	SiliconSys	SSI6280	
ZN455	SiliconG	SG138A	
	SiliconSys	SSI6282	
ZN458	Datel	VR182	
ZN459	AnalogSys	MA459	
ZN501	SiliconG	SG224A	
	SiliconSys	SSI6070M	
ZN502	National	LM240-05	
		LM240-5	
	SiliconG	SG240-05	
	SiliconSys	SSI6070C	
ZN503	**Motorola**	**LM340-05**	**(2926, 2928)**
	National	LM340-5	
	SiliconG	SG340-05	
	SiliconSys	SSI6072M	
	Unitrode	UC340-05	
ZN504	SiliconG	SG2811	
	SiliconSys	SSI6072C	
	Sprague	**ULN2811**	**(3203)**
		ULS2811	
ZN508	SiliconG	SG1253	
	SiliconSys	SSI6274	
ZN509	SiliconG	SG2814	
	SiliconSys	SSI6082	
	Sprague	**ULN2814**	**(3203)**
ZN512	SiliconG	SG2812	
	SiliconSys	SSI6074	
	Sprague	**ULN2812**	**(3203)**
		ULS2812	
ZN515	National	LM205	
	SiliconG	SG205	
	SiliconSys	SSI6284	
ZN518	**Motorola**	**LM124**	**(2924)**
	SiliconG	SG124A	
	SiliconSys	SSI6276	
ZN558	AD	AD558	
	GE/Intersil	**ICL8023**	**(2673)**
	SiliconG	SG1253	
	SiliconSys	SSI6270	
ZN6012	AMD	AM6012	
	Exar	XR3464	
	National	NS8464	
	PMI	**DAC312**	**(2974)**
	Signetics	AM6012	
ZN7528	AD	AD7528	
	Maxim	AD7528	
	MicroPwr	MP7528	
	PMI	**PM7528**	**(2973, 2976)**
ZNREF025	Fairchild	µA305	
	National	LM305	
	SiliconG	SG305	
	SiliconSys	SSI6505	
ZNREF050	National	LM207	
	SiliconG	SG207	
	SiliconSys	SSI6505	
	TI	LM207	
ZNREF100	LinearTech	LM307	
	National	LM307	
	SiliconG	SG307	
	SiliconSys	SSI6507	
	TI	LM307	

Fujitsu Microelectronics, Inc.

100149	Fairchild	100Z416	
7144H	AMD	27S49	
		AM27S49	
	Cypress	**CY7C264**	**(2565)**
	Fairchild	32Z565	
		93Z565	
		93Z665	
	Fujitsu	MB7144	
	Raytheon	29VP864	
80186	AMD	80186	
	Intel	80186	
	IMI	IMI6080	
	Siemens	80186	

Manufacturer Device	Replacement Source	Device	IC Master Page
80188	AMD	80188	
	Intel	80188	
	Siemens	80188	
8401	GE/Intersil	6508	
		IM6508-1	
	Harris	**HM6508**	**(2704, 2762)**
	National	6508	
		74C929	
		NM2102	
	Toshiba	5508	
D51C68	Hitachi	D51C68	
	Siliconix	SI9552	
	Sprague	**UCN5852**	**(3203)**
	Supertex	HV5222	
	TI	D51C68	
		SN75552	
D51C69	Hitachi	D51C69	
	Intel	TMS2168	
	Siliconix	SI9554	
	Sprague	**UCN5854**	**(3203)**
	Supertex	HV5308	
	TI	D51C69	
		SN75554	
F6854	Fairchild	MB8875	
HB84256	Cypress	PALC46R6	
	GoldStar	GM76C256	
	MMI	PAL16R6Q-25	
♦ MB2716	**Harris**	**HM6616**	**(2768)**
	Hitachi	HN462716	
	National	MM2716	
	OKI	MSM2716	
	SGS	M2716	
	Thomson	ET2716	
MB3759	Cherry	CS594	
	IPS	**IP494**	**(2854)**
	TI	TL494M	
		TL594M	
	Unitrode	**UC494A**	**(3323)**
MB3760	Cherry	CS595	
MB4111	SiliconSys	104	
MB4112	SiliconSys	105	
MB5208	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		µPD411000	
		µPD411000C	
		µPD411001	
		µPD421000	
		µPD421001	
		µPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MB5210	**Dense-Pac**	**DPD5124**	**(2581)**
	Fujitsu	MB85211	
	TI	TM4256HE4	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Fujitsu Microelectronics, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB7111	AMD	AM27S18	
	National	DM74S188	
	Signetics	N82S23	
	TI	28SA030-25	
MB7112	AMD	27S19	
		AM27LS19	
		AM27S19	
	MMI	53S081	
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
MB7113	National	DM74S387	
MB7114	AMD	27S21	
		AM27S21	
	MMI	63S141	
		63S141A	
	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
MB7115	AMD	AM27S12	
	MMI	63S240	
	National	74S570	
		DM74S570	
	Signetics	N82S130	
		S82S130	
MB7116	AMD	AM27S13	
	MMI	63S241	
	National	74S571A	
		DM74S571	
	Signetics	N82S131	
MB7118	Signetics	N82LS135	
	TI	28L22	
MB7121	AMD	AM27S32	
	Fairchild	93452	
	Hitachi	HN25044	
	MMI	5352-1	
	National	DM54S572	
MB7122	AMD	AM27S33	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
	National	74S573	
		DM74S573	
	NEC	μPB426	
	Signetics	N82S137	
MB7123	National	DM54S473	
MB7124	AMD	AM27S29	
	MMI	635481	
		63S481	
	National	DM74S472	
	Raytheon	**29623 (2985)**	
	Signetics	N825147A	
		N82S147	
MB7127	National	DM77S184	
MB7128	AMD	27S185	
		AM2725S291	
		AM27S185	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
	Raytheon	**29651 (2985)**	
		29651A (2985)	
	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
MB7131	AMD	AM27S180	
	National	DM87S180	
		DM87S229	
MB7132	AMD	AM27S181	
	Cypress	**CY7C282M (2565)**	
	Fairchild	932451	
		93Z451	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB7132	National		(Cont'd)
		DM77S281	
		DM87S281	
	Raytheon	**29631 (2985)**	
		29631AM (2985)	
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
MB7134	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
MB7137	AMD	AM27S190	
	Hitachi	HN25168	
	National	DM77S190	
		DM87S190	
MB7138	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291 (2565)**	
		CY7C292 (2565)	
	Fairchild	932511	
		93Z511	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191 (3376)**	
		WS57C291 (3376)	
MB7138E	AMD	AM9716	
	Cypress	**CY7C291 (2565)**	
	EXEL	XL46C16	
	Fairchild	932511M	
	GE/Intersil	IM6716	
	Harris	**HM6616 (2768)**	
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681 (2985)**	
		29681A (2985)	
		29683 (2985)	
		29683A (2985)	
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191 (3376)**	
MB7138H	AMD	AM27S191	
		AM27S291	
		AM27S291A	
	Cypress	**CY7C291 (2565)**	
	Fairchild	932511	
	MMI	63S1681	
		63S1681A	
	Motorola	MCM76	
	National	87S291	
		DM87S291	
	NEC	μPB429	
	Raytheon	**29683A (2985)**	
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191 (3376)**	
		WS57C291 (3376)	
MB7142	AMD	27S43	
		AM27S43	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB7142			(Cont'd)
	MMI	53S3281	
		63S3281	
	National	77S321	
		87S321	
		DM87S321	
	Raytheon	**29671 (2985)**	
	Waferscale	**WS57C43 (3376)**	
MB7144	AMD	27S49	
		AM27S49	
	Cypress	**CY7C264 (2565)**	
	Fairchild	32Z565	
		93Z565	
		93Z665	
	Fujitsu	7144H	
	Raytheon	29VP864	
MB7152	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
MB7226	AMD	AM21L49	
		AM27S25	
	Cypress	**CY7C225 (2565)**	
	MMI	53RA481	
		63RA481	
	Motorola	MCM27S25	
	National	DM87SR25	
		DM87SR474	
MB723	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235 (2565)**	
	Fujitsu	MB7232	
	MMI	53RS881	
		63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187 (3178)**	
		N82HS189 (3179)	
		S82HS189	
MB7232	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235 (2565)**	
	Fujitsu	MB723	
	MMI	53RS881	
		63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187 (3178)**	
		N82HS189 (3179)	
		S82HS189	
MB811000	**Dense-Pac**	**DPD411M (2581)**	
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB81C1000	
			(2621)
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024 (2692)**	
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB811000			(Cont'd)
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1 (3260)**	
		TM5256	
		TMS4C1024 (3259)	
		TMS4C1025 (3259)	
		TMS4C1027 (3259)	
	Toshiba	**TC511000 (3302)**	
		TC511000C (3302)	
		TC511001C	
		TC511002	
		TMM411001C	
MB811001	**Dense-Pac**	**DPD411M (2581)**	
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB81C1000	
			(2621)
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024 (2692)**	
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1 (3260)**	
		TM5256	
		TMS4C1024 (3259)	
		TMS4C1025 (3259)	
		TMS4C1027 (3259)	
	Toshiba	**TC511000 (3302)**	
		TC511000C (3302)	
		TC511001C	
		TC511002	
		TMM411001C	
MB8114	AMD	AM9124	
	CMD Micro	G2114	
	Harris	**HM6514 (2704, 2762, 2768)**	
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114 (3201)**	
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Fujitsu Microelectronics, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB8114			(Cont'd)
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
♦ MB8116	AMD	AM9016	
	Fairchild	F16K	
		F4116	
♦ MB8116	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
MB8118	Fairchild	F100422	
	Fujitsu	MBM100422	
		MBM100422A	
	Hitachi	HM100422	
	National	DM100422	
		NMC5295	
	NEC	μPB100422	
MB81256	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
MB81257	Hitachi	HM50257	
	Mitsubishi	MSM4257	
	Motorola	MCM6256	
		MCM6257	
	NEC	μPD41257	
	Samsung	KM41257	
	TI	**TMS4256**	**(3259)**
		TMS4257	**(3259)**
	Toshiba	TMM41257	
	Vitelic	V51C256	
		V51C257	
MB8128	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB8128	Mitsubishi		(Cont'd)
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MB81416	Hitachi	HM48416	
	Inmos	IMS2620	
	Mitsubishi	M5M4416	
	NEC	μPD41416	
	TI	TMS4416	
MB81461	Hitachi	HM53461	
		HM53462	
		HM53464	
	Mitsubishi	M5M4C264	
		MB81461	
	NEC	μPD41254	
		μPD41264	
		μPD42264	
	Samsung	KM41464	
	TI	**TMS4461**	**(3259)**
MB81464	Hitachi	HM50464	
		HM50465	
	Inmos	IMS2820	
	MicronTech	MT4064	
	Mitsubishi	M5M4464	
		MSM4464P	
	NEC	μPD41464	
	OKI	MSM41464	
	Samsung	KM41464	
	TI	SMJ4469	
		TMS4464	**(3259)**
	Toshiba	TMM41464	
MB8164A	Cypress	AM2167	
		CY7C167	**(2562)**
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
MB8167	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB8167			(Cont'd)
	Fujitsu	MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
MB8167A	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
MB8168	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB8168			(Cont'd)
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
MB8171	Fairchild	F1600	
		F1602	
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
	Inmos	**IMS1600**	**(2785)**
	Lattice	SR64K1	
	Matra-Harris	HM62641	
	Motorola	MCM6164	
		MCM62L87	
	Stantel-STC	STC6264	
	TI	SMJ61CD64	
		SMJ68CE64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
	Vitelic	V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
		VT64KD1	
MB81C1000	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MB81C1001	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Fujitsu Microelectronics, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB81C1001			(Cont'd)
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1 (3260)**	
		TM5256	
		TMS4C1024 (3259)	
		TMS4C1025 (3259)	
		TMS4C1027 (3259)	
	Toshiba	**TC511000 (3302)**	
		TC511000C (3302)	
		TC511001C	
		TC511002	
		TMM411001C	
MB81C1002	**Dense-Pac**	**DPD411M (2581)**	
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000 (2621)	
		MB81C1001	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024 (2692)**	
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1 (3260)**	
		TM5256	
		TMS4C1024 (3259)	
		TMS4C1025 (3259)	
		TMS4C1027 (3259)	
	Toshiba	**TC511000 (3302)**	
		TC511000C (3302)	
		TC511001C	
		TC511002	
		TMM411001C	
MB81C258	Fujitsu	MB81C4258	
	Hitachi	HM51258	
	Motorola	MCM6256	
		MCM6257	
	Vitelic	V51C256	
		V51C257	
MB81C4258	Fujitsu	MB81C258	
	Hitachi	HM51258	
	Motorola	MCM6256	
		MCM6257	
	Vitelic	V51C256	
		V51C257	
MB81C466	Hitachi	HM50465	
	Inmos	IMS2820	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB81C466			(Cont'd)
	Intel	P51C259H	
	SGS	L7910	
MB81C67	AMD	AM2167	
	Cypress	**CY7C167 (2562)**	
	Fujitsu	MB8167	
		MB8167A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262 (2704, 2761, 2768)**	
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67 (2770)**	
	Inmos	IMS1400	
		IMS1403 (2782)	
	IDT	**IDT6167 (2802)**	
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367 (3201)	
	Sharp	**LH5167 (2993)**	
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66 (3264)**	
		MK41H67 (3264)	
	UMC	**UM6167 (3312)**	
	Vitelic	V61C67	
MB81C68	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168 (2562)**	
	Fujitsu	MB8168	
	Inmos	IMS1420	
		IMS1421	
		IMS1423 (2783)	
		IMS1424	
	IDT	**IDT6120 (2802)**	
		IDT6168 (2802)	
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268 (3201)**	
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68 (3265)**	
	UMC	**UM6168 (3312)**	
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19 (3347)	
MB81C68A	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168 (2562)**	
		CY7C169 (2562)	
	Fujitsu	MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120 (2802)**	
		IDT6169 (2802)	
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB81C68A			(Cont'd)
	Thomson	**MK41H68 (3265)**	
		MK41H69 (3265)	
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19 (3347)**	
		VT20C98 (3352)	
MB81C69	AMD	AM2168	
		AM9968	
		AM99CL68	
	Fairchild	F1620	
	Fujitsu	MB8168	
	GoldStar	**GM76C164 (2692)**	
	Hitachi	HM6168	
		HM6268	
	Inmos	IMS1420	
		IMS1421	
		IMS1424	
	IDT	**IDT6120 (2802)**	
		IDT6169 (2802)	
	Matra-Harris	HM65682	
		HMI65769	
	Motorola	MCM1423	
		MCM6168	
		MCM6288	
	NEC	μPD4314	
	S-MOS	SRM2274	
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
	Thomson	**MK41H68 (3265)**	
	Toshiba	TMM2068	
	Vitelic	V61C62	
		V61C68	
	VLSI Tech	**VT20C19 (3347)**	
		VT20C69 (3349)	
MB81C69A	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168 (2562)**	
		CY7C169 (2562)	
	Fujitsu	MB81C68A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120 (2802)**	
		IDT6169 (2802)	
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68 (3265)**	
		MK41H69 (3265)	
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19 (3347)**	
		VT20C98 (3352)	
MB81C71	AMD	AM99C641	
	Fairchild	F1600	
		F1601	
	Fujitsu	MB8171	
	Hitachi	HM10414	
	Inmos	**IMS1601 (2786)**	
	IDT	**IDT7187L (2802)**	
	Motorola	MCM6287	
	TI	SMJ61CD64	
	Thomson	**MK41H87 (3266)**	
MB81C74	AMD	AM91C65	
	Fujitsu	MB81C75	
	Lattice	SR4K4	
		SR64KX4	
	Toshiba	TC55417	
		TCC55417	
	Vitelic	V61C62	
MB81C75	AMD	AM91C65	
	Fujitsu	MB81C74	
	Lattice	SR4K4	
		SR64KX4	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB81C75			(Cont'd)
	Toshiba	TC55417	
		TCC55417	
	Vitelic	V61C62	
MB81C78	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185 (2562)**	
		CY7C186 (2562)	
	Fujitsu	MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264 (2643)**	
	GoldStar	**GM76C88 (2692)**	
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64 (2770)	
	Inmos	**IMS1630 (2789)**	
	IDT	**IDT7188 (2802)**	
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064 (3201)**	
		SRM2264 (3201)	
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98 (3352)**	
MB81C78A	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185 (2562)**	
		CY7C186 (2562)	
	Fujitsu	MB81C78	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264 (2643)**	
	GoldStar	**GM76C88 (2692)**	
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64 (2770)	
	Inmos	**IMS1630 (2789)**	
	IDT	**IDT7188 (2802)**	
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Fujitsu Microelectronics, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB81C78A			(Cont'd)
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
MB81C79	Cypress	CY7C183	
	Fujitsu	MB81C79A	
	NEC	μP4369	
	Toshiba	TMM2089	
MB81C79A	Cypress	CY7C183	
	Fujitsu	MB81C79	
	NEC	μP4369	
	Toshiba	TMM2089	
MB81C81	Cypress	CY7C197	
	Inmos	**IMS1800**	**(2790)**
	IDT	**IDT71257**	**(2802)**
	Lattice	SR256K1	
	Mitsubishi	M5M5257	
MB81C84	Cypress	CY7C194	
	Inmos	**IMS1820**	**(2791)**
	IDT	**IDT71258**	**(2802)**
	Lattice	SR256K4	
	Mitsubishi	M5M5258	
	NEC	μPD43254	
MB81C86	Cypress	CY7C196	
♦ MB8264	AMD	AM9064	
	Fairchild	F4164	
		F64K	
♦ MB8264	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
♦ MB8264	Hitachi	HM4864	
		HM4864A	
♦ MB8264	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
♦ MB8264	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
♦ MB8264	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
♦ MB8264	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
♦ MB8264	Vitelic	V51C64	
MB8264A	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB8264A	Motorola		(Cont'd)
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
MB8265	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
MB8265A	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
♦ MB8266A	AMD	AM9064	
	Fairchild	F4164	
		F64K	
♦ MB8266A	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
♦ MB8266A	Hitachi	HM4864	
		HM4864A	
♦ MB8266A	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
♦ MB8266A	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
♦ MB8266A	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
♦ MB8266A	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
♦ MB8266A	Vitelic	V51C64	

Manufacturer Device	Replacement Source	Device	IC Master Page
MB831000	Fujitsu	MB831124	
	GIM	RO91000	
	Hitachi	HN62301	
	NEC	μPD23C1000	
	Toshiba	**TC531000**	**(3305)**
	VLSI Tech	VT23C1024	
MB831124	Fujitsu	MB831000	
	GIM	RO91000	
	Hitachi	HN62301	
	NEC	μPD23C1000	
	Toshiba	**TC531000**	**(3305)**
	VLSI Tech	VT23C1024	
♦ MB83256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
♦ MB83256	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
♦ MB83256	**S-MOS**	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
♦ MB83256	Signetics	23256	
		23256A	
♦ MB83256	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
♦ MB83256	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
♦ MB8404	AMD	AM2141	
		AM9244	
♦ MB8404	**Cypress**	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
♦ MB8404	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
♦ MB8404	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
♦ MB8414	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
♦ MB8414	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
♦ MB8414	Toshiba	TC5513	
		TC5514	
		TMM2114	
♦ MB8414	UMC	UM6104	
MB8416	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB8416			(Cont'd)
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MB8417	**S-MOS**	**SRM2017**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
	Toshiba	TC5516A	
MB8418	Fujitsu	MBM8418	
	Hitachi	HM6117	
	NEC	μPD449	
	S-MOS	**SRM2018**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
	Toshiba	TC5518	
		TC5518B	
MB84256	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Fujitsu Microelectronics, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB84256			(Cont'd)
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
MB8464	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
MB8464A	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB8464A	Mitsubishi		(Cont'd)
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
MB85101A	Vitelic	V61C62	
MB85201	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	
			(2621)
		MB81C1001	
		MB81C1002	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MB85203	**Dense-Pac**	**DPD44256**	**(2581)**
	Fujitsu	MB85204	
	Hitachi	HB561004A	
	MicronTech	MT4259	
	NEC	MC41256A4	
	TI	TM4256EC4	
MB85204	**Dense-Pac**	**DPD44256**	**(2581)**
	Fujitsu	MB85203	
	Hitachi	HB561004A	
	MicronTech	MT4259	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB85204			(Cont'd)
	NEC	MC41256A4	
	TI	TM4256EC4	
MB85211	**Dense-Pac**	**DPD5124**	**(2581)**
	Fujitsu	MB5210	
	TI	TM4256HE4	
MB85214	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	
			(2621)
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MB85227	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	
			(2621)
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB85227	**TI**		**(Cont'd)**
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MB8B464	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
MBL8031	AD	AD636	
	Intel	AMD8031	
	Maxim	AD636	
	Siemens	SAB8031	
	Signetics	SCN8031	
♦ MBL8035	Intel	8035	
	National	INS8035	
	NEC	μPD8035	
	Signetics	SCN8035	
	Toshiba	**TMP8035**	**(3306)**
♦ MBL8048	Intel	8048	
	National	INS8048	
	NEC	μPD8048	
	Signetics	SCN8048	
	Toshiba	**TMP8048**	**(3306)**
♦ MBL8049	Intel	8049	
	National	INS8049	
	NEC	μPD8049	
	Signetics	**SCN8049**	**(3076)**
	Toshiba	**TMP8049**	**(3306)**
MBL8051	AMD	P8051	
	Intel	P8051	
	Siemens	SAB8051	
	Signetics	SCN8051	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Fujitsu Microelectronics, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MBL8088	AMD	8088	
	Intel	8088	
	Matra-Harris	8088	
MBL80C31	AMD	P80C31	
	Harris	P80C31	
	Intel	80C31	
		P80C31	
	OKI	M80C31	
	Siemens	SAB80C31	
	Signetics	SC80C31	
MBL80C51	Intel	80C51	
		P80C51	
	Matra-Harris	P80C51	
	OKI	M80C51	
	Siemens	SAB80C51	
	Signetics	SC80C51	
MBL8259	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
MBL8282	**Harris**	**82C82**	**(2733, 2768)**
	Intel	8282	
		82C82	
	MMI	82C82	
	NEC	μPB8282	
		μPD71082	
	OKI	82C82	
MBL8284	**Calmos**	**CA82C84**	**(2553)**
	Harris	**82C84**	**(2734, 2768, 4249)**
		82C84A	**(2734, 2768, 4249)**
	Intel	8284	
		82C84	
		82C84A	
	NEC	μPB8284	
		μPD71084	
		μPD8284	
	OKI	MSM82C84	
MBL8286	AMD	DP8304	
	Harris	**82C86H**	**(2733, 2768)**
	Intel	8286	
		82C86	
	MMI	82C86	
	National	DP8304	
	NEC	μPB8286	
		μPD71086	
	OKI	82C86	
MBL8288	AMD	8288	
	Calmos	**CA82C88**	**(2553)**
	Harris	**82C88**	**(2734, 2768, 4249)**
	Intel	8288	
		82C88	
	NEC	μPB8288	
		μPD71088	
		μPD8288	
	OKI	82C88	
		MSM82C88	
MBL8289	**Harris**	**82C89**	**(2734, 2768)**
	Intel	8289	
	NEC	μPB8289	
MBM100415	**Cypress**	**CY7C162**	**(2562)**
	Fairchild	F100415	
	Hitachi	HM100415	
	IDT	**IDT71982**	**(2803)**
	Performance	P4C1982	
MBM100422	Fairchild	F100422	
	Fujitsu	MB8118	
		MBM100422A	
	Hitachi	HM100422	
	National	DM100422	
		NMC5295	
	NEC	μPB100422	
MBM100422A			
	Fairchild	F100422	
	Fujitsu	MB8118	
		MBM100422	
	Hitachi	HM100422	
	National	DM100422	
		NMC5295	
	NEC	μPB100422	
MBM100470A			
	AMD	AM100470	
	NEC	μPB100470	
MBM100474	AMD	AM100474	
	Fairchild	F100474	
	Fujitsu	MBM100474A	
	Hitachi	100474	
		HM100474	
	NEC	μPB100474	
MBM100474A			
	AMD	AM100474	
	Fairchild	F100474	
	Fujitsu	MBM100474	
	Hitachi	100474	
		HM100474	
	NEC	μPB100474	
♦ MBM100480	AMD	AM100480	
	Hitachi	HM100480	
	NEC	μPB100480	
MBM100484	AMD	AM100484	
	Hitachi	HM100484	
	NEC	μPB100484	
MBM100490	Hitachi	HM100490	
	SMC	HDC9224	
MBM10415	AMD	AM10415	
	Fujitsu	MBM100470A	
	Hitachi	HM2110	
		HM2112	
	Motorola	**MCM10146**	**(2918)**
	National	DM10415	
	Siemens	GXB10415	
MBM10422A	National	DM10422	
	NEC	μPB10422	
MBM10470A	AMD	AM10470	
	Hitachi	HM10470	
	Motorola	MCM10470	
	National	DM10470	
	NEC	μPB10470	
MBM10474A	AMD	AM10474	
	Fairchild	F10474	
	Hitachi	HM10474	
	Motorola	MCM10474	
	National	DM10474	
	NEC	μPB10474	
MBM10480	AMD	AM10480	
	Fairchild	F10480	
	Hitachi	HM10480	
	NEC	μPB10480	
MBM10484	Fairchild	F10484	
	Hitachi	HM10484	
	NEC	μPB10484	
MBM10490	Hitachi	HM10490	
MBM2147	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
♦ MBM2147H	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
♦ MBM2147H	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
♦ MBM2147H	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
♦ MBM2147H	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ MBM2147H			(Cont'd)
	Thomson	ET2147	
	Toshiba	TMM3150	
♦ MBM2148	AMD	AM2148	
		AM2149	
♦ MBM2148	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
♦ MBM2148	**Harris**	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
♦ MBM2148	National	NMC2148	
	Thomson	ET2148	
	UMC	UM2148	
♦ MBM2149	AMD	AM2148	
		AM2149	
♦ MBM2149	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
♦ MBM2149	**Harris**	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
♦ MBM2149	National	NMC2148	
	Thomson	ET2148	
	UMC	UM2148	
MBM27128	AMD	AM27128A	
	Fujitsu	MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
MBM27128A	AMD	AM27128A	
	Fujitsu	MBM27128	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
♦ MBM2716	**Harris**	**HM6616**	**(2768)**
	Hitachi	HN462716	
	National	MM2716	
	OKI	MSM2716	
	SGS	M2716	
	Thomson	ET2716	
MBM27256	**Fujitsu**	**MBM27C256**	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MBM27256	GIM		(Cont'd)
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
MBM27256-17			
	AMD	AM27256-17	
	GIM	27256-17	
MBM27256-20			
	AMD	AM27256-20	
	GIM	27256-20	
	Intel	27256-20	
	Toshiba	27256-20	
MBM27256-25			
	AMD	27256-25	
	GIM	27256-25	
	Hitachi	HN27256-25	
	Intel	27256-25	
MBM27256-30			
	AMD	AM27256-30	
	GIM	27256-30	
	Hitachi	HN27256-30	
	Intel	27256-30	
MBM27512	AMD	AM27512	
	Fujitsu	MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
MBM27512-20			
	GIM	27512-20	
	Intel	**27512-20**	**(2862)**
	Mitsubishi	M27512-20	
	Toshiba	VT27C512-20	
MBM27512-25			
	AMD	AM27512-25	
	GIM	27512-25	
	Hitachi	HN27512-25	
	Intel	**27512-25**	**(2862)**
	Mitsubishi	M27512-25	
	Toshiba	VT27C512-25	
MBM27512-412			
	AMD	AM27512-30	
	GIM	27512-30	
	Intel	**27512-30**	**(2862)**
	Mitsubishi	M27512-30	
MBM2764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Fujitsu Microelectronics, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MBM2764	Hitachi	(Cont'd)	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
MBM27C1000			
	AMD	AM27C1024	
	Fujitsu	MBM27C1024	
	Hitachi	HN27C301G	
	Mitsubishi	M5M27C101K	
	NEC	μPD27C1000	
		μPD27C1024	
	Toshiba	TC571001	
MBM27C1024			
	AMD	AM27C1024	
	Fujitsu	MBM27C1000	
	Hitachi	HN27C301G	
	Mitsubishi	M5M27C101K	
	NEC	μPD27C1000	
		μPD27C1024	
	Toshiba	TC571001	
MBM27C256	Fujitsu	MBM27256	
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
MBM27C256A			
	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
MBM27C512	AMD	AM27512	
	Fujitsu	MBM27512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
MBM27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
MBM28C64	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
MBM28C64		(Cont'd)	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
MBM28C65	AMD	AM9864	
MBM7124	Signetics	S82S147	
♦ MBM8114	AMD	AM9114	
		AM9124	
♦ MBM8114	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
♦ MBM8114	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
♦ MBM8114	OKI	MSM2114	
		MSM5114	
♦ MBM8114	**S-MOS**	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
♦ MBM8114	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
♦ MBM8114	UMC	UM6114	
MBM8418	Fujitsu	MB8418	
	Hitachi	HM6117	
	NEC	μPD449	
	S-MOS	**SRM2018**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
	Toshiba	TC5518	
		TC5518B	
MBM93419	Fairchild	F93419	
P51C68	Hitachi	P51C68	
	Intel	MB2168	
	Siliconix	SI9553	
	Sprague	**UCN5853**	**(3203)**
	Supertex	HV5306	
	TI	P51C68	
		SN75553	
P51C69	Commodore	MPS2332	
	Fairchild	F3532	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
TH22568	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
TH22568		(Cont'd)	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	

GE/Intersil

6508	Fujitsu	8401	
	GE/Intersil	IM6508-1	
	Harris	**HM6508**	**(2704, 2762)**
	National	6508	
		74C929	
		NM2102	
	Toshiba	5508	
A561	AD	AD507	
	Burr-Brown	**3508**	**(2535)**
	Datel	**AM462-1**	**(2577)**
		AM462-2	**(2577)**
	Harris	**HA2620**	**(2706, 2737, 2747)**
		HA2622	**(2706, 2768)**
		HA2625	
AD101	AMD	LM101	
	AD	AD101	
	Fairchild	μA101	
	LinearTech	LM101	
	Motorola	LM101	
	Raytheon	LM101	
	SGS	LS101	
	SiliconG	SG101	
	Thomson	LM101	
AD301	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
AD308	AD	AD308	
	Burr-Brown	3500	
		3501	
	Fairchild	μA308	
	GE/Intersil	LM308	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
GE/Intersil			**(Cont'd)**
AD308			(Cont'd)
	Motorola	**LM308**	**(2919, 2958)**
	National	LM308	
	Raytheon	LM308	
AD503	AD	AD0042	
		AD503	
	GE/Intersil	LH0042	
	National	LH0042	
AD590	AD	AD590	
AD7520	AD	AD7520	
	Datel	**DACHA10B**	**(2576)**
	Maxim	AD7520	
	MicroPwr	MP7520	
	National	AD7520	
		DAC1020	
		DAC1021	
		DAC1022	
AD7521	AD	AD7521	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	**DACHA12B**	**(2576)**
	HybridSys	DAC331-12	
	Maxim	AD7521	
	MicroPwr	MP7521	
	National	AD7521	
		DAC1220	
		DAC1221	
		DAC1222	
	PMI	AD7521	
AD7523	AD	AD7523	
	Datel	**DAC7523**	**(2576)**
	Maxim	AD7523	
	MicroPwr	MP7523	
AD7524	AD	AD7524	
	Maxim	AD7524	
	MicroPwr	MP7524	
	PMI	**PM7524**	**(2973, 2976)**
AD7530	AD	AD7530	
	Maxim	AD7530	
	MicroPwr	MP7530	
AD7533	AD	AD7533	
	Datel	**DAC7533**	**(2576)**
	Maxim	AD7533	
	MicroPwr	MP7533	
		MP7633	
	National	AD7533	
	PMI	**PM7533**	**(2974, 2976)**
AD7541	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	AD7641	
	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
AD7641	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
♦ ADC0801	National	ADC0801	
	TI	ADC0801	
ADC0802	National	ADC0802	
	TI	ADC0802	
ADC0803	Datel	ADC830	
	National	ADC0803	
	Signetics	ADC0803	
	TI	ADC0803	
ADC0804	National	ADC0804	
	TI	ADC0804	
AS7531	AD	AD7531	
		AD8531	
	Burr-Brown	**DAC7541A**	**(2541)**
	Maxim	AD7531	
	MicroPwr	MP7531	
	PMI	PM7531	
D125	Siliconix	D125	
	TeledyneC	CDR125	
DG118	Siliconix	DG172	
DG123	Siliconix	DG123	
DG125	Siliconix	DG125	
DG126	National	AH0126	
	Siliconix	DG126	
DG129	National	AH0129	
	Siliconix	DG129	
DG133	National	AH0133	
	Siliconix	DG133	
DG134	National	AH0134	
	Siliconix	DG134	
DG139	National	AH0139	
	Siliconix	DG139	
DG140	National	AH0140	
	Siliconix	DG140	
DG141	National	AH0141	
	Siliconix	DG141	
DG142	National	AH0142	
	Siliconix	DG142	
DG143	National	AH0143	
	Siliconix	DG143	
DG144	National	AH0144	
	Siliconix	DG144	
DG145	National	AH0145	
	Siliconix	DG145	
DG146	National	AH0146	
	Siliconix	DG146	
DG151	National	AH0151	
DG152	National	AH0152	
DG153	National	AH0153	
DG154	National	AH0154	
		AM0154	
DG161	National	AH0161	
DG162	National	AH0162	
DG163	National	AH0163	
		AM0163	
DG164	National	AH0164	
		AM0164	
DG180	Siliconix	DG180	
DG181	**GE/Intersil**	**IH5048**	**(2679)**
	Harris	**HI381**	**(2707)**
		HI5048	**(2707, 2737)**
	Maxim	DG381A	
		IH5048	
	Siliconix	DG181	
		DG381A	
DG182	Siliconix	DG182	
DG184	**GE/Intersil**	**IH5049**	**(2680)**
	Harris	**HI384**	**(2707)**
		HI5049	**(2707, 2737, 2747)**
	Maxim	DG384A	
		IH5049	
	Siliconix	DG184	
		DG384A	
DG185	**GE/Intersil**	**IH5045**	**(2680)**
	Harris	**HI5045**	**(2707, 2737, 2747)**
	Maxim	IH5045	
	Siliconix	DG185	
		DG5045	
	TI	TL185	
DG186	Siliconix	DG186	
DG187	**GE/Intersil**	**IH5050**	**(2680)**
	Harris	**HI387**	**(2707)**
		HI5050	**(2707, 2737, 2747)**
	Maxim	DG387A	
		IH5050	
	Siliconix	DG187	
		DG387A	
DG188	**GE/Intersil**	**IH5042**	**(2680)**
	Harris	**HI5042**	**(2707, 2737)**
	Maxim	IH5042	
	Siliconix	DG188	
		DG5042	
DG189	Siliconix	DG189	
DG190	**GE/Intersil**	**IH5051**	**(2680)**
	Harris	**HI5051**	**(2707, 2737, 2747)**
DG190			(Cont'd)
	Maxim	IH5051	
		IH5052	
	Siliconix	DG190	
DG191	**GE/Intersil**	**IH5043**	**(2680)**
	Harris	**HI5043**	**(2707, 2737, 2747)**
	Maxim	IH5043	
	Siliconix	DG191	
		DG243	
		DG5043	
DG200	AD	ADG200	
	GE/Intersil	IH200	
		IH5200	
	Harris	**HI200**	**(2707, 2737, 2747)**
	PMI	SW05	
	Siliconix	DG200A	
DG201	AD	ADG201	
	GE/Intersil	**DG201A**	**(2679)**
		IH201	
		IH5201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	DG201A	
		MAX331	
	MicroPwr	MP201	
	National	LF11201	
		LF13201	
	PMI	**SW201**	**(2975)**
	Siliconix	DG201A	
DG201A	AD	ADG201	
	GE/Intersil	**DG201**	**(2679)**
		IH201	
		IH5201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	DG201A	
		MAX331	
	MicroPwr	MP201	
	National	LF11201	
		LF13201	
	PMI	**SW201**	**(2975)**
	Siliconix	DG201A	
DG211	Siliconix	DG211	
DG212	Maxim	DG212	
G118	Siliconix	G118	
G119	Siliconix	G119	
♦ HA2520	AD	AD509	
	Burr-Brown	**3507**	**(2535)**
	Harris	**HA2520**	**(2705, 2737, 2747)**
	TeledyneP	1322	
ICL6108	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	**IH6108**	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
ICL6109	**GE/Intersil**	**IH6208**	**(2681)**
	Harris	**HI509**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX359	
		MAX369	
	MicroPwr	MP7509DI	
	National	LF11509	
		LF13509	
	PMI	**MUX24**	**(2975)**
	Siliconix	DG509A	
	TeledyneP	4553	
ICL7106	Maxim	ICL7106	
	TeledyneS	TSC7106	
ICL7107	Maxim	ICL7107	
	TeledyneS	TSC7107	
ICL7109	**Datel**	**ADC7109**	**(2575)**
	Maxim	ICL7109	
	TeledyneS	TSC7109	
ICL7116	Maxim	ICL7116	
	TeledyneS	TSC7116	
ICL7117	Maxim	ICL7117	
		ICL7126	
	TeledyneS	TSC7117	
ICL7126	Maxim	ICL7126	
	Samsung	KS7126	
	TeledyneS	TSC7126	
ICL7129	Maxim	ICL7129	
ICL7135	Maxim	ICL7135	
	Siliconix	SI7135	
	TeledyneS	TSC7135	
ICL7136	Maxim	ICL7136	
ICL7137	Maxim	ICL7137	
ICL7211	GE/RCA	CD22104	
	Hughes	HLCD7211	
	TeledyneS	TSC7211	
ICL7555	Exar	XRL555	
	Maxim	ICL7555	
ICL7556	Exar	XRL556	
	Maxim	ICL7556	
ICL7611	Maxim	ICL7611	
ICL7612	Maxim	ICL7612	
ICL7614	Maxim	ICL7614	
ICL7616	Maxim	ICL7616	
ICL7621	Maxim	ICL7621	
	PMI	**OP220**	**(2970, 2972)**
		OP221	**(2970, 2972)**
	TI	TLC252	
		TLC272	
ICL7622	Maxim	ICL7622	
ICL7631	Maxim	ICL7631	
ICL7632	Maxim	ICL7632	
ICL7641	Maxim	ICL7641	
	TI	TLC254	
		TLC274	
ICL7642	Maxim	ICL7642	
♦ ICL7650	**Datel**	**AM7650**	**(2577)**
	LinearTech	LTC1052	
		LTC7652	
♦ ICL7650	Maxim	ICL7650	
		ICL7652	
♦ ICL7650	Siliconix	SI7135	
♦ ICL7652	LinearTech	LTC1052	
	Maxim	ICL7652	
	Siliconix	SI7652	
♦ ICL7660	**Datel**	**VI7660**	**(2577)**
	LinearTech	LTC1044	
	Maxim	ICL7660	
	Siliconix	SI7660	
	TI	LTC1044	
♦ ICL7663	Maxim	ICL7663	
♦ ICL7664	Maxim	ICL7664	
♦ ICL7665	Maxim	ICL7665	
ICL8007	AD	AD8007	
ICL8013	AD	AD530	
		AD533	
	Burr-Brown	4203	
		MPY100	**(2539)**
ICL8021	**GE/Intersil**	**ICL7611**	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
	Thomson	μA776	
ICL8023	AD	AD558	
	Ferranti	ZN558	
	SiliconG	SG1253	
	SiliconSys	SSI6270	
ICL8038	Exar	XR8038	
ICL8069	AD	AD589	
	Ferranti	ZN423	
	Gennum	LM185-1	
		LM385-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM113	
		LM313	

(Continued)

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
GE/Intersil			**(Cont'd)**
ICL8069			(Cont'd)
	TeledyneP	TSC9491	
	TeledyneS	9491	
		TSC9491	
ICL8211	Maxim	MAX8211	
ICL8212	Maxim	MAX8212	
ICL8240	Exar	XR2240	
	Fairchild	UA238	
		μA2240	
	TI	μA2240	
ICM7211	GE/RCA	CD22104	
	Hughes	H7211	
	Maxim	ICM7211	
	TeledyneS	TSC7211	
ICM7212	Maxim	ICM7212	
	TeledyneS	TSC7212	
ICM7217	Maxim	ICM7217	
ICM7224	Maxim	ICM7224	
ICM7225	Maxim	ICM7225	
ICM7231	Maxim	ICM7231	
ICM7232	Maxim	ICM7232	
ICM7233	Maxim	ICM7233	
	Micrel	MIC7233	
ICM7234	Maxim	ICM7234	
ICM7240	Exar	XR2240	
	Maxim	ICM7240	
ICM7250	Maxim	ICM7250	
ICM7260	Maxim	ICM7260	
ICM7555	AdvLinear	ALD1502	
		ALD1504	
		ALD555	
		ALD555-1	
	GE/Intersil	**ICM7555M**	**(2670)**
	Maxim	ICM7555	
	NEC	μPD555	
	TI	TLC555	
ICM7555M	AdvLinear	ALD1502	
		ALD1504	
		ALD555	
		ALD555-1	
	GE/Intersil	**ICM7555**	**(2670)**
	Maxim	ICM7555	
	NEC	μPD555	
	TI	TLC555	
ICM7556	AdvLinear	ALD2502	
		ALD2504	
	GE/Intersil	**ICM7556M**	**(2670)**
	Maxim	ICM7556	
	NEC	μPD556	
	TI	TLC552C	
		TLC552M	
		TLC556C	
		TLC556M	
ICM7556M	AdvLinear	ALD2502	
		ALD2504	
	GE/Intersil	**ICM7556**	**(2670)**
	Maxim	ICM7556	
	NEC	μPD556	
	TI	TLC552C	
		TLC552M	
		TLC556C	
		TLC556M	
IH200	AD	ADG200	
	GE/Intersil	**DG200**	**(2679)**
		IH5200	
	Harris	**HI200**	**(2707, 2737, 2747)**
	PMI	SW05	
	Siliconix	DG200A	
IH201	AD	ADG201	
	GE/Intersil	**DG201**	**(2679)**
		DG201A	**(2679)**
		IH5201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	DG201A	
		MAX331	
	MicroPwr	MP201	
	National	LF11201	
		LF13201	
	PMI	**SW201**	**(2975)**
	Siliconix	DG201A	
IH5009	National	AH5009	
		AM9709	
		AM97C09	
IH5010	National	AH5010	
		AM9710	
IH5011	National	AH5011	
		AM9711	
IH5012	National	AH5012	
		AM9712	
IH5013	National	AH5013	
IH5014	National	AH5014	
IH5015	National	AH5015	
IH5016	National	AH5016	
IH5040	**Harris**	**HI5040**	**(2707, 2737)**
	Maxim	IH5040	
	Siliconix	DG5040	
IH5041	**Harris**	**HI5041**	**(2707, 2737)**
	Maxim	IH5041	
	Siliconix	DG5041	
IH5042	**GE/Intersil**	**DG188**	**(2680)**
	Harris	**HI5042**	**(2707, 2737)**
	Maxim	IH5042	
	Siliconix	DG188	
		DG5042	
IH5043	**GE/Intersil**	**DG191**	**(2680)**
	Harris	**HI5043**	**(2707, 2737, 2747)**
	Maxim	IH5043	
	Siliconix	DG191	
		DG243	
		DG5043	
IH5044	**Harris**	**HI5044**	**(2707, 2737, 2747)**
	Maxim	IH5044	
	Siliconix	DG5044	
IH5045	**GE/Intersil**	**DG185**	**(2680)**
	Harris	**HI5045**	**(2707, 2737, 2747)**
	Maxim	IH5045	
	Siliconix	DG185	
		DG5045	
	TI	TL185	
IH5046	**Harris**	**HI5046**	**(2707, 2737, 2747)**
	Maxim	IH5046	
IH5047	**Harris**	**HI5047**	**(2707, 2737, 2747)**
IH5048	**GE/Intersil**	**DG181**	**(2680)**
	Harris	**HI381**	**(2707)**
		HI5048	**(2707, 2737)**
	Maxim	DG381A	
		IH5048	
	Siliconix	DG181	
		DG381A	
IH5049	**GE/Intersil**	**DG184**	**(2680)**
	Harris	**HI384**	**(2707)**
		HI5049	**(2707, 2737, 2747)**
	Maxim	DG384A	
		IH5049	
	Siliconix	DG184	
		DG384A	
IH5050	**GE/Intersil**	**DG187**	**(2680)**
	Harris	**HI387**	**(2707)**
		HI5050	**(2707, 2737, 2747)**
	Maxim	DG387A	
		IH5050	
	Siliconix	DG187	
		DG387A	
IH5051	**GE/Intersil**	**DG190**	**(2680)**
	Harris	**HI5051**	**(2707, 2737, 2747)**
	Maxim	IH5051	
		IH5052	
	Siliconix	DG190	
IH5108	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	**MX808**	**(2577)**
	Harris	**HI508A**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		HI508A	
		MAX358	
	MicroPwr	MP7508DI	
IH5140	**GE/RCA**	**CD22212**	**(2637)**
	Maxim	IH5140	
	SiliconSys	SSIK212	
	Siliconix	DG5140	
IH5141	**GE/RCA**	**CD22202**	**(2636)**
	Maxim	IH5141	
	SiliconSys	SSI202	
	Siliconix	DG5141	
IH5142	Maxim	IH5142	
	Siliconix	DG5142	
IH5143	Maxim	IH5143	
	Siliconix	DG5143	
IH5144	**GE/RCA**	**CD22223**	**(2637)**
	Maxim	IH5144	
	SiliconSys	SSI223	
	Siliconix	DG5144	
IH5145	Maxim	IH5145	
	Siliconix	DG5145	
IH5148	Maxim	IH5148	
	Mitsubishi	M5M44C258	
	OKI	MSM514257	
	TI	**TMS44C257**	**(3259)**
IH5200	AD	ADG200	
	GE/Intersil	**DG200**	**(2679)**
		IH200	
	Harris	**HI200**	**(2707, 2737, 2747)**
	PMI	SW05	
	Siliconix	DG200A	
IH5201	AD	ADG201	
	GE/Intersil	**DG201**	**(2679)**
		DG201A	**(2679)**
		IH201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	DG201A	
		MAX331	
	MicroPwr	MP201	
	National	LF11201	
		LF13201	
	PMI	**SW201**	**(2975)**
	Siliconix	DG201A	
IH5208	**Burr-Brown**	**MPC4D**	**(2543)**
	Harris	**HI509A**	**(2703, 2738, 2748)**
	Maxim	HI509A	
		MAX359	
	TeledyneP	4553	
IH5341	Maxim	IH5341	
IH5352	Maxim	IH5352	
IH6108	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	ICL6108	
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
IH6116	AD	AD7506	
	Datel	**MV1606**	**(2577)**
		MX1606	**(2577)**
	Harris	**HI506**	**(2703, 2738, 2748)**
	MicroPwr	MP7506	
	Motorola	MC7506	
	PMI	**MUX16**	**(2975)**
	Siliconix	DG506A	
IH6208	GE/Intersil	ICL6109	
	Harris	**HI509**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX359	
		MAX369	
	MicroPwr	MP7509DI	
	National	LF11509	
		LF13509	
	PMI	**MUX24**	**(2975)**
	Siliconix	DG509A	
	TeledyneP	4553	
IH6216	AD	AD7507	
	Datel	**MVD807**	**(2577)**
		MXD807	**(2577)**
	Harris	**HI507**	**(2703, 2738, 2748)**
	MicroPwr	MP7507	
	PMI	**MUX28**	**(2975)**
	Siliconix	DG507A	
	TeledyneP	4551	
IM29C128	**Calmos**	**CA29C128**	**(2553)**
♦ IM5623	AMD	27S21	
		AM27S21	
♦ IM5623	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
♦ IM5623	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
♦ IM6504	AMD	AM2141	
		AM9244	
♦ IM6504	**Cypress**	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
♦ IM6504	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
♦ IM6504	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
IM6508-1	Fujitsu	8401	
	GE/Intersil	6508	
	Harris	**HM6508**	**(2704, 2762)**
	National	6508	
		74C929	
		NM2102	
	Toshiba	5508	
♦ IM6514	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
♦ IM6514	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
♦ IM6514	Toshiba	TC5513	
		TC5514	
		TMM2114	
♦ IM6514	UMC	UM6104	
♦ IM6518-1	**Harris**	**HM6518**	**(2704, 2762)**
	Motorola	6518	
	National	MM74C930	
♦ IM6551	AMD	AM2101	
		AM9101	
		AM91L01	
♦ IM6551	**Harris**	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
♦ IM6551	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
♦ IM6551	Toshiba	TC5501	
♦ IM6561	**Harris**	**HM6561**	**(2704, 2763)**
	Matra-Harris	HM6561	
IM6716	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

GE/Intersil (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ LF355	LinearTech	LF355	
	Motorola	**LF355**	**(2920)**
	National	LF355	
	PMI	**OP43**	**(2970)**
		PM355	
♦ LF355	Thomson	LF355	
♦ LF356	LinearTech	LF356	
	Motorola	**LF356**	**(2920)**
	National	LF356	
	PMI	PM356	
	Thomson	LF356	
LH0042	AD	AD0042	
		AD503	
	GE/Intersil	AD503	
	National	LH0042	
LH2101	National	LH2101	
	Raytheon	LH2101	
LH2108	LinearTech	LH2108	
	National	LH2108	
	PMI	**PM2108**	**(2970, 2972)**
LH2108A	National	LH2108A	
	PMI	**PM2108A**	**(2970, 2972)**
LH2110	National	LH2110	
♦ LH2111	National	LH2111	
	Raytheon	LH2111	
LH2208A	MicroPwr	MP2208A	
	National	LH2208A	
LH2308	National	LH2308	
LH2308A	National	LH2308A	
LH2310	National	LH2310	
LH2311	National	LH2311	
LM105	Fairchild	μA105	
	National	LM105	
	SiliconG	SG105	
	Thomson	LM105	
♦ LM107	AD	AD741S	
	Burr-Brown	3500	
	LinearTech	LM107	
	National	LH741A	
		LM107	
♦ LM107	PMI	PM741	
	Raytheon	RC741	
	SiliconG	SG107	
	Thomson	LM107	
LM108	AD	AD108	
	Fairchild	μA108	
	LinearTech	LM108	
	MicroPwr	MP108	
	Motorola	**LM108**	**(2919)**
	National	LM108	
	PMI	**PM108**	**(2970)**
	SiliconSys	SSI108	
♦ LM110	National	LM110	
♦ LM111	AD	AD111	
	Fairchild	μA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
LM308	AD	AD308	
	Burr-Brown	3500	
		3501	
	Fairchild	μA308	
	GE/Intersil	AD308	
	Motorola	**LM308**	**(2919, 2958)**
	National	LM308	
	Raytheon	LM308	
♦ LM311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
♦ LM311	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
♦ LM311	National	LM2903	
		LM311	
♦ LM311	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
♦ LM311	Signetics	LM2903	
		LM311	
♦ LM311	SiliconG	SG311	
	TI	LM2903	
		LM311	
♦ LM311	Thomson	LM2903	
		LM311	
♦ LM311	Toshiba	TA75393	
LM348	Exar	XR4751	
	Fairchild	μA348	
	GoldStar	**GL348**	**(2700)**
	Motorola	**LM348**	**(2923, 2958)**
		MC4741	**(2923, 2959)**
	National	LM348	
	Raytheon	HA4741	
	TI	LM348	
LM4250	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
	Thomson	μA776	
LM723	Fairchild	μA723	
		μA723M	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	μA723	
	SiliconG	SG723	
	TI	μA723	
		μA723M	
	Thomson	SFC2723	
		μA723	
NE555	Exar	XR555	
	Fairchild	μA555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
NE592-8	TI	NE592-8	
SE555	Exar	XR555M	
	Motorola	MC1555	
	Raytheon	RM555	
	Signetics	SE555	
	TI	SE555	
		SE555M	
SE592	Motorola	SE592	
	Signetics	SE592	
	TI	SE592	
μA733	Fairchild	μA733	
	Hitachi	HA17733	
	Motorola	**MC1733**	**(2920)**
		NE592	**(2960)**
	National	LM733	
	Signetics	μA733	
	SiliconG	SG1401	
μA733	TI	μA733	
		μA733M	

GE/RCA Solid State

Manufacturer Device	Replacement Source	Device	IC Master Page
54HCT374	CTI	54HCT374	
	GE/RCA	**CD54HCT374**	**(2631)**
	Micrel	MIC54HCT374	
		MICHCT374	
	Mitel	MD54HCT374	
	Motorola	MC54HCT374	
	National	MM54HCT374	
	Sprague	SS54HCT374	
	Supertex	SI54HCT374	
	TI	SN54HCT374	
CA081	**PMI**	**OP16**	**(2971)**
	Thomson	LF351	
		TL081	
CA082	Exar	XR082	
	SGS	TL082	
	TI	HA17082	
		TL082	
	Thomson	LF353	
CA084	Exar	XR084	
	Fairchild	μAF774	
	SGS	TL084	
	TI	TL084	
♦ CA1190	SGS	TDA1190Z	
		TDA3190	
♦ CA1190	Sprague	ULN2290	
CA124	Fairchild	μA124	
	LinearTech	LT1014	
	National	LM124A	
	SiliconG	SG124	
	TI	LM124	
♦ CA1310	Exar	XR1310	
	National	LM1310	
	TI	SN76115	
	Toshiba	TA7157	
♦ CA1352	**Motorola**	**MC1352**	**(2948)**
	Sanyo	LA1352	
CA139	Fairchild	μA139	
	Motorola	**LM139**	**(2925)**
	National	LM139	
	PMI	**CMP04**	**(2975)**
		PM139	**(2975)**
	Raytheon	LM139	
	Signetics	LM139	
	TI	LM139	
CA1391	**Motorola**	**MC1391**	**(2948)**
	National	LM1391	
CA1394	National	LM1394	
CA139A	**Motorola**	**LM139A**	**(2925)**
	National	LM139A	
	PMI	**CMP04**	**(2975)**
		PM139A	**(2975)**
	TI	LM139A	
CA1458	Fairchild	UA1458HC	
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	μPC1458	
		μPC251	
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
♦ CA1524	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	μA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	
♦ CA1524	National	LM1524	
	SGS	SG1524	
		UC1524A	
♦ CA1524	SiliconG	SG1524	
		SG1524B	
♦ CA1524	**Unitrode**	**UC1524**	**(3323)**
		UC1524A	**(3323)**
CA158A	LinearTech	LT1013	
	Motorola	**LM158**	**(2922)**
	National	LM158A	
	Raytheon	RM4139	
	Signetics	LM158	
	TI	LM158	
♦ CA2002	National	LM2002	
		LM2002A	
		LM383	
		LM383A	
♦ CA2002	Sprague	ULN3701	
		ULN3702	
♦ CA2004	National	LM2002	
		LM2002A	
		LM383	
		LM383A	
♦ CA2004	Sprague	ULN3701	
		ULN3702	
CA2111A	National	LM2111	
		LM2113	
	Signetics	N5111	
	Sprague	ULN2111	
	TI	SN76642	
		SN76643	
CA239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
		μA239	
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	
CA239A	**Motorola**	**LM239A**	**(2925, 2958)**
	National	LM239A	
	PMI	**CMP04**	**(2975)**
♦ CA2524	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	μA2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
♦ CA2524	National	LM2524	
	SGS	SG2524	
		UC2524A	
♦ CA2524	SiliconG	SG2524	
		SG2524B	
♦ CA2524	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
CA258A	**Motorola**	**LM258**	**(2922, 2958)**
	National	LM258A	
	PMI	**OP221**	**(2970, 2972)**
	Signetics	LM258	
	TI	LM258	
	Thomson	LM258	
CA2904	**Motorola**	**LM2904**	**(2922, 2958)**
	SGS	LM2904	
	TI	LM2904	
	Thomson	LM2904	
	Toshiba	TA75358	
CA3011	Motorola	MC1590	
	National	LM3011	
♦ CA3012	GE/RCA	CA3011	
	Motorola	MC1590	
	National	LM3011	
CA3018	National	LM3018	
	Thomson	SFC2018	
CA3019	National	LM3019	
CA301A	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**LM301**	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CA301A			(Cont'd)
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
♦ CA3036	Thomson	SFC2036	
♦ CA3038	Fairchild	μA709	
	Motorola	**MC1709**	**(2919)**
	National	LM1709	
		LM709	
♦ CA3038	NEC	μPC55	
	TI	μ709	
		μA709	
♦ CA3038	Toshiba	TA7502	
♦ CA3045	Hitachi	HA1127	
CA3046	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3146**	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
♦ CA3049	National	DM54ALS1002	
		DM54AS162	
♦ CA3049	SiliconG	SG3049	
CA3054	Fairchild	μA3054	
	Motorola	**CA3054**	**(2948)**
	National	LM3054	
	Sprague	ULN2054	
	Thomson	SFC2054	
CA3059	**Motorola**	**CA3059**	**(2932)**
♦ CA3060	Ferranti	ZN508	
	SiliconG	SG1253	
	SiliconSys	SSI6274	
♦ CA3064	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	LSC1008	
		M5140	
♦ CA3064	National	LM3064	
	NEC	μPC1382	
	Sanyo	LA1365	
	TI	SN76666	
	Toshiba	TA7176	
CA3065	**GoldStar**	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	LSC1008	
		M5140	
	National	LM3064	
	NEC	μPC1382	
	Sanyo	LA1365	
	TI	SN76666	
	Toshiba	TA7176	
♦ CA3066	National	LM3066	
	TI	SN76266	
♦ CA3067	TI	SN76267	
CA3070	TI	SN76242	
CA3071	TI	SN76243	
♦ CA3072	National	LM3072	
♦ CA3075	National	LM3075	
	TI	SN76675	
♦ CA3076	TI	SN76676	
CA3079	**Motorola**	**CA3079**	**(2932)**
CA3081	Sprague	ULN2081	
CA3082	Sprague	ULN2082	
CA3083	SiliconG	SG3083	
		SG3183	
	Sprague	ULN2083	
CA3086	National	LM3086	
	Plessey	SL3086	
	Sanyo	LA3086	
	SiliconG	SG3086	
		SG3886	
	Sprague	ULN2086	
	Thomson	SFC2086	
CA3089	Signetics	CA3089	
CA311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
CA3126	National	LM1829	
		LM3126	
CA3127	Plessey	SL3127	
CA3146	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
CA3162	AD	AD2020	
♦ CA3172	National	LM1848	
♦ CA3183	**GE/RCA**	**CA3083**	**(2648)**
	SiliconG	SG3083	
		SG3183	
♦ CA3183	Sprague	ULN2083	
♦ CA3195	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
♦ CA3195	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
♦ CA3195	TI	SN76111	
		SN76116	
♦ CA3199	Plessey	SP8611	
CA3219	Hitachi	HAI3007	
	IPS	3658	
	National	DS3658	
	SGS	L6222	
	TI	SN75437	
♦ CA3219A	Sprague	ULN2541	
CA3252	IPS	3669	
	National	DS3669	
	SGS	L9222	
	TI	SN75440	
♦ CA3300	Datel	ADC883	
	GE/RCA	**CA3306**	**(2651)**
	Hitachi	HA19216	
	MicroPwr	MP7682	
CA3306	Datel	ADC883	
	Hitachi	HA19216	
	MicroPwr	MP7682	
♦ CA3308	Thomson	TS8308	
CA3318	GE/RCA	CA8808	
	Hitachi	HA19209	
	MicroPwr	MP7684	
	Motorola	**MC10319**	**(2937)**
	NEC	μPD6950	
CA339	Fairchild	μA339	
	GE/RCA	**CA339A**	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
CA339			(Cont'd)
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
CA339A	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
CA3401	**Motorola**	**MC3401**	**(2923, 2959)**
	National	LM3401	
		LM3900	
	Raytheon	LM3900	
		RC3401	
	TI	LM3900	
CA3524	Cherry	CS3524	
	Exar	XR3524	
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	SG3524	
		UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
	TI	SG3524	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
CA358A	**GE/RCA**	**LM358**	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
CA5422	Fairchild	5422	
	TI	SN5422	
CA555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
CA723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**LM723**	**(2650)**
CA723			(Cont'd)
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	μA723	
	SiliconG	SG723	
	TI	μA723	
		μA723M	
	Thomson	SFC2723	
		μA723	
CA747	Fairchild	μA747	
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	μPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	μA747	
	TeledyneS	747	
	TI	μA747	
		μA747M	
♦ CA758	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
♦ CA758	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
♦ CA758	TI	SN76111	
		SN76116	
♦ CA7607	Toshiba	TA7607	
♦ CA7611	Toshiba	TA7611	
♦ CA810	Fairchild	TBA810	
	SGS	TBA810	
	Telefunken	TDA810	
CA8808	**GE/RCA**	**CA3318**	**(2651)**
	Hitachi	HA19209	
	MicroPwr	MP7684	
	Motorola	**MC10319**	**(2937)**
	NEC	μPD6950	
CD22100	Motorola	MC1452100	
	SGS	M22100	
	SiliconSys	SSI22100	
CD22101	SiliconSys	SSI22101	
CD22102	SiliconSys	SSI22102	
CD22104	GE/Intersil	ICL7211	
	Hughes	HLCD7211	
	TeledyneS	TSC7211	
CD22202	**GE/Intersil**	**IH5141**	**(2680)**
	Maxim	IH5141	
	SiliconSys	SSI202	
	Siliconix	DG5141	
CD22203	Atmel	27HC641	
		AT27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C263	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GIM	27HC641	
	ICT	27CX642	
	Sharp	**LH5749**	**(2994)**
		LH5762	**(2994)**
	SiliconSys	SSI203	
	Waferscale	**WS57C49**	**(3376)**
CD22204	Fairchild	93Z459	
	Signetics	N82S100	
	SiliconSys	SSI204	
CD22212	AMD	AM93L422A	
	Fairchild	93L422A	
	SiliconSys	SSIK212	
CD22221	National	DS55470	
	SiliconG	SG55470	
	SiliconSys	SSIK221	
	TI	SN55470	
		SNJ55470	
CD22223	Fairchild	F100175	
	Signetics	**100175**	**(3020)**
	SiliconSys	SSI223	
CD22301	SiliconSys	SSI22301	
♦ CD22416	Motorola	MC14416	
♦ CD22419	Motorola	MC14419	

(Continued)

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4000	Motorola	MC14000	
	National	CD4000	
	SGS	HCC/HCF4000	
	Signetics	HEF400	
	Solitron	CM4000	
	Sprague	SCL4000	
♦ CD4000A	**GE/RCA**	**CD4000**	**(2633)**
	Motorola	MC14000	
	National	CD4000	
	SGS	HCC/HCF4000	
	Signetics	HEF400	
	Solitron	CM4000	
	Sprague	SCL4000	
CD4001	Fairchild	F4001	
	Motorola	MC14001	
	National	CD4001	
		MM74C02	
	OKI	MSM4001	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
CD4002	Fairchild	F4002	
	Motorola	MC14002	
	National	CD4002	
	SGS	HCC/HCF4002	
	Signetics	HEF4002	
	Solitron	CM4002	
	Sprague	SCL4002	
	Toshiba	**TC4002**	**(3308)**
CD4006	Fairchild	F4006	
	National	CD4006	
	SGS	HCC/HCF4006	
	Signetics	HEF4006	
	Solitron	CM4006	
	Sprague	SCL4006	
	Toshiba	**TC4006**	**(3308)**
♦ CD4006A	Fairchild	F4006	
	GE/RCA	**CD4006**	**(2634)**
	National	CD4006	
	SGS	HCC/HCF4006	
	Signetics	HEF4006	
	Solitron	CM4006	
	Sprague	SCL4006	
	Toshiba	**TC4006**	**(3308)**
CD4006B	Fairchild	F4006B	
	Motorola	MC14006	
	National	CD4006	
CD4007	Fairchild	F4007	
	Motorola	MC14007	
	National	CD4007	
	SGS	HCC/HCF4007	
	Signetics	HEF4007	
	Solitron	CM4007	
	Sprague	SCL4007	
	Toshiba	**TC4007**	**(3308)**
CD4008	Fairchild	F4008	
	Motorola	MC14008	
	National	CD4008	
		MM74C83	
	SGS	HCC/HCF4008	
	Signetics	HEF4008	
	Solitron	CM4008	
	Sprague	SCL4008	
	Toshiba	**TC4008**	**(3308)**
♦ CD4008A	Fairchild	F4008	
	GE/RCA	**CD4008**	**(2636)**
	Motorola	MC14008	
	National	CD4008	
		MM74C83	
♦ CD4008A	SGS	HCC/HCF4008	
	Signetics	HEF4008	
	Solitron	CM4008	
	Sprague	SCL4008	
	Toshiba	**TC4008**	**(3308)**
CD4009	Motorola	MC14009	
	National	CD4009	
	SGS	HCC/HCF4009	
	Solitron	CM4009	
	Sprague	SCL4009	
	Toshiba	**TC4009**	**(3308)**
CD4010	Motorola	MC14010	
	National	CD4010	
	SGS	HCC/HCF4010	
	Solitron	CM4010	
	Sprague	SCL4010	
	Toshiba	**TC4010**	**(3308)**
♦ CD40100	SGS	HCC/HCF40100	
♦ CD40101	Fairchild	F4531	
	Motorola	MC14531	
	SGS	HCC/HCF40101	
	Signetics	HEF4531	
	Sprague	SCL4531	
	Toshiba	**TC4531**	**(3308)**
♦ CD40102	SGS	HCC/HCF40102	
♦ CD40103	SGS	HCC/HCF40103	
♦ CD40104	SGS	HCC/HCF40104	
♦ CD40105	SGS	HCC/HCF40105	
CD40106	Fairchild	F400014	
		F40014	
	Motorola	MC14106	
		MC14584	
	National	CD40106	
		CD4584	
		MM54C14	
		MM74C14	
	SGS	HCC/HCF40106	
	Signetics	HEF40106	
	Sprague	SCL4584	
♦ CD40107	SGS	HCC/HCF40107	
	Toshiba	TC40107	
♦ CD40108	Motorola	MC14580	
	SGS	HCC/HCF40108	
CD4011	Fairchild	F4011	
	Motorola	MC14011	
	National	CD4011	
		MM74C00	
	OKI	MSM4011	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
♦ CD40110	**Cypress**	**CY7C264**	**(2565)**
	SGS	HCC/HCF40110	
	Signetics	**N82HS641**	**(3182)**
CD4012	Fairchild	F4012	
	Motorola	MC14012	
	National	CD4012	
	SGS	HCC/HCF4012	
	Signetics	HEF4012	
	Solitron	CM4012	
	Sprague	SCL4012	
	Toshiba	**TC4012**	**(3308)**
CD4013	Fairchild	F4013	
	Motorola	MC14013	
	National	CD4013	
		MM74C74	
	OKI	MSM4013	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
	Signetics	HEF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
CD4014	Fairchild	F4014	
	Motorola	MC14014	
	National	CD4014	
	SGS	HCC/HCF4014	
	Signetics	HEF4014	
	Solitron	CM4014	
	Sprague	SCL4014	
	Toshiba	**TC4014**	**(3308)**
♦ CD4014A	Fairchild	F4014	
	GE/RCA	**CD4014**	**(2634)**
	Motorola	MC14014	
	National	CD4014	
	SGS	HCC/HCF4014	
	Signetics	HEF4014	
	Solitron	CM4014	
	Sprague	SCL4014	
	Toshiba	**TC4014**	**(3308)**
CD4015	Fairchild	F4015	
	Motorola	MC14015	
	National	CD4015	
		MM74C164	
	OKI	MSM4015	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
CD4016	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4066**	**(2635)**
	Motorola	MC14016	
		MC14066	
CD4016			(Cont'd)
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
CD40160	Fairchild	F40160	
	Motorola	MC14160	
	National	CD40160	
	Sprague	SCL4160	
CD40161	Fairchild	F40161	
	Motorola	MC14161	
	National	CD40161	
	Sprague	SCL4161	
CD40162	Fairchild	F40162	
	Motorola	MC14162	
	National	CD40162	
	Sprague	SCL4162	
CD40163	Fairchild	F40163	
	Motorola	MC14163	
	National	CD40163	
	Sprague	SCL4163	
CD4017	Fairchild	F4017	
	Motorola	MC14017	
	National	CD4017	
	SGS	HCC/HCF4017	
	Signetics	HEF4017	
	Solitron	CM4017	
	Sprague	SCL4017	
	Toshiba	**TC4017**	**(3308)**
CD40174B	Fairchild	F40174B	
	Motorola	MC14174	
	National	CD40174B	
CD40175	Motorola	MC40175	
CD4018	Fairchild	F4018	
	Motorola	MC14018	
	National	CD4018	
	SGS	HCC/HCF4018	
	Signetics	HEF4018	
	Solitron	CM4018	
	Sprague	SCL4018	
	Toshiba	**TC4018**	**(3308)**
CD40181	Motorola	MC14581	
	National	74C181	
	SGS	HCC/HCF40181	
	Sprague	SCL4581	
CD40182	Fairchild	F4582	
	Motorola	MC14582	
	National	74C182	
	SGS	HCC/HCF40182	
	Sprague	SCL4582	
CD4019	Fairchild	F4019	
	National	CD4019	
	OKI	MSM4019	
	Sanyo	LC4019	
	SGS	HCC/HCF4019	
	Signetics	HEF4019	
	Solitron	CM4019	
	Sprague	SCL4019	
	Toshiba	**TC4019**	**(3308)**
CD40192	Fairchild	F4029	
	GE/RCA	**CD4029**	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
CD40193	Fairchild	F40193	
	National	CD40193	
		MM54C193	
		MM74C193	
	SGS	HCC/HCF40193	
	Signetics	HEF40193	
	Sprague	SCL4193	
	Toshiba	**TC40193**	**(3308)**
CD40194	Fairchild	F40194	
	Motorola	MC14194	
	SGS	HCC/HCF40194	
	Signetics	HEF40194	
CD4020	Fairchild	F4020	
	Motorola	MC14020	
	National	CD4020	
	SGS	HCC/HCF4020	
	Signetics	HEF4020	
	Solitron	CM4020	
	Sprague	SCL4020	
	Toshiba	**TC4020**	**(3308)**
♦ CD40208	SGS	HCC/HCF40208	
CD4021	Fairchild	F4021	
	Motorola	MC14021	
	National	CD4021	
	SGS	HCC/HCF4021	
	Signetics	HEF4021	
	Sprague	SCL4021	
	Toshiba	**TC4021**	**(3308)**
CD4022	Fairchild	F4022	
	Motorola	MC14022	
	National	CD4022	
	SGS	HCC/HCF4022	
	Signetics	HEF4022	
	Solitron	CM4022	
	Sprague	SCL4022	
	Toshiba	**TC4022**	**(3308)**
CD4023	Fairchild	F4023	
	Motorola	MC14023	
	National	CD4023	
		MM74C10	
	SGS	HCC/HCF4023	
	Signetics	HEF4023	
	Solitron	CM4023	
	Sprague	SCL4023	
	Toshiba	**TC4023**	**(3308)**
CD4024	Fairchild	F4024	
	Motorola	MC14024	
	National	CD4024	
	SGS	HCC/HCF4024	
	Signetics	HEF4024	
	Solitron	CM4024	
	Sprague	SCL4024	
	Toshiba	**TC4024**	**(3308)**
CD4025	Fairchild	F4025	
	Motorola	MC14025	
	National	CD4025	
	SGS	HCC/HCF4025	
	Signetics	HEF4025	
	Solitron	CM4025	
	Sprague	SCL4025	
	Toshiba	**TC4025**	**(3308)**
♦ CD40257	SGS	HCC/HCF40257	
♦ CD4026	SGS	HCC/HCF4026	
	Solitron	CM4026	
	Sprague	SCL4026	
♦ CD4026A	SGS	HCC/HCF4026	
	Solitron	CM4026	
	Sprague	SCL4026	
CD4027	Fairchild	F4027	
	Motorola	MC14027	
	National	CD4027	
		MM74C76	
	OKI	MSM4027	
	Sanyo	LC4027	
	SGS	HCC/HCF4027	
	Signetics	HEF4027	
	Solitron	CM4027	
	Sprague	SCL4027	
CD4028	Fairchild	F4028	
	Motorola	MC14028	
	National	CD4028	
		MM74C42	
	OKI	MSM4028	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	
	Solitron	CM4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
CD4029	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4029			(Cont'd)
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
CD4030	Fairchild	F4030	
	National	CD4030	
	SGS	HCC/HCF4030	
	Signetics	HEF4030	
	Solitron	CM4030	
	Sprague	SCL4030	
	Toshiba	**TC4030**	**(3308)**
CD4031	Fairchild	F4031	
	National	CD4031	
	SGS	HCC/HCF4031	
	Signetics	HEF4731	
♦ CD4031A	Fairchild	F4031	
	GE/RCA	**CD4031**	**(2634)**
	National	CD4031	
	SGS	HCC/HCF4031	
	Signetics	HEF4731	
CD4031B	Motorola	MC14557	
	National	CD4031B	
CD4032	Motorola	MC14032	
	SGS	HCC/HCF4032	
	Solitron	CM4032	
	Toshiba	**TC4032**	**(3308)**
♦ CD4032A	**GE/RCA**	**CD4032**	**(2636)**
	Motorola	MC14032	
	SGS	HCC/HCF4032	
	Solitron	CM4032	
	Toshiba	**TC4032**	**(3308)**
CD4033	SGS	HCC/HCF4033	
	Solitron	CM4033	
	Sprague	SCL4033	
♦ CD4033A	**GE/RCA**	**CD4033**	**(2635)**
	SGS	HCC/HCF4033	
	Solitron	CM4033	
	Sprague	SCL4033	
CD4034	Fairchild	F4034	
	Motorola	MC14034	
	National	CD4034	
	SGS	HCC/HCF4034	
	Solitron	CM4034	
	Sprague	SCL4034	
	Toshiba	**TC4034**	**(3308)**
♦ CD4034A	Fairchild	F4034	
	GE/RCA	**CD4034**	**(2634, 2636)**
	Motorola	MC14034	
	National	CD4034	
	SGS	HCC/HCF4034	
	Solitron	CM4034	
	Sprague	SCL4034	
	Toshiba	**TC4034**	**(3308)**
CD4035	Fairchild	F4035	
	Motorola	MC14035	
	SGS	HCC/HCF4035	
	Signetics	HEF4035	
	Solitron	CM4035	
	Toshiba	TC4035	
♦ CD4035A	Fairchild	F4035	
	GE/RCA	**CD4035**	**(2634)**
	Motorola	MC14035	
	SGS	HCC/HCF4035	
	Signetics	HEF4035	
	Solitron	CM4035	
	Toshiba	TC4035	
CD4037	Solitron	CM4037	
CD4038	Motorola	MC14038	
	SGS	HCC/HCF4038	
	Solitron	CM4038	
	Toshiba	**TC4038**	**(3308)**
CD4039	Solitron	CM4039	
	Toshiba	**TC4039**	**(3308)**
CD4040	Fairchild	F4040	
	Motorola	MC14040	
	National	CD4040	
	SGS	HCC/HCF4040	
	Signetics	HEF4040	
	Solitron	CM4040	
	Sprague	SCL4040	
	Toshiba	**TC4040**	**(3308)**
CD4041	Fairchild	F4041	
	National	CD4041	
	SGS	HCC/HCF4041	
	Signetics	HEF4041	
	Solitron	CM4041	
	Sprague	SCL4041	
CD4042	Fairchild	F4042	
	Motorola	MC14042	
	National	CD4042	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4042			(Cont'd)
	SGS	HCC/HCF4042	
	Signetics	HEF4042	
	Solitron	CM4042	
	Sprague	SCL4042	
	Toshiba	**TC4042**	**(3308)**
CD4043	Motorola	MC14043	
	National	CD4043	
	SGS	HCC/HCF4043	
	Signetics	HEF4043	
	Solitron	CM4043	
	Sprague	SCL4043	
	Toshiba	**TC4043**	**(3308)**
CD4044	Fairchild	F4044	
	Motorola	MC14044	
	National	CD4044	
	SGS	HCC/HCF4044	
	Signetics	HEF4044	
	Solitron	CM4044	
	Toshiba	**TC4044**	**(3308)**
♦ CD4045	Fairchild	F4521	
	Motorola	MC14521	
	SGS	HCC/HCF4045	
	Signetics	HEF4521	
	Solitron	CM4045	
	Sprague	SCL4445	
	Toshiba	**TC4521**	**(3308)**
♦ CD4045A	Fairchild	F4521	
	Motorola	MC14521	
	SGS	HCC/HCF4045	
	Signetics	HEF4521	
	Solitron	CM4045	
	Sprague	SCL4445	
	Toshiba	**TC4521**	**(3308)**
CD4046	Fairchild	F4046	
	Motorola	MC14046	
	National	CD4046	
	SGS	HCC/HCF4046	
	Solitron	CM4046	
	Sprague	SCL4046	
CD4047	Fairchild	F4047	
	National	CD4047	
	SGS	HCC/HCF4047	
	Signetics	HEF4047	
	Solitron	CM4047	
	Sprague	SCL4047	
	Toshiba	**TC4047**	**(3308)**
CD4048	National	CD4048	
	SGS	HCC/HCF4048	
	Solitron	CM4048	
	Sprague	SCL4402	
CD4049	Fairchild	F4049	
	Motorola	MC14049	
	National	CD4049	
	OKI	MSM4049	
	Sanyo	LC4049	
	SGS	HCC/HCF4049	
	Signetics	HEF4049	
	Solitron	CM4049	
	Sprague	SCL4049	
	Toshiba	**TC4049**	**(3308)**
CD4050	Fairchild	F4050	
	Motorola	MC14050	
	National	CD4050	
	SGS	HCC/HCF4050	
	Signetics	HEF4050	
	Solitron	CM4050	
	Sprague	SCL4050	
	Toshiba	**TC4050**	**(3308)**
CD4051	Fairchild	F4051	
	Motorola	MC14051	
	National	CD4051	
	SGS	HCC/HCF4051	
	Signetics	HEF4051	
	Solitron	CM4051	
	Sprague	SCL4051	
	Toshiba	**TC4051**	**(3308)**
CD4052	Fairchild	F4052	
	Motorola	MC14052	
	SGS	HCC/HCF4052	
	Signetics	HEF4052	
CD4053	Fairchild	F4053	
	Motorola	MC14053	
	National	CD4053	
	SGS	HCC/HCF4053	
	Signetics	HEF4053	
	Solitron	CM4053	
	Sprague	SCL4053	
	Toshiba	**TC4053B**	**(3308)**
CD4054	SGS	HCC/HCF4054	
	Toshiba	**TC4054**	**(3308)**

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4055	SGS	HCC/HCF4055	
	Toshiba	**TC4055**	**(3308)**
♦ CD4057	**GE/RCA**	**CD40181**	**(2636)**
	Motorola	MC14581	
	National	74C181	
	SGS	HCC/HCF40181	
	Sprague	SCL4581	
♦ CD4059	Motorola	MC14569	
	Signetics	HEF4059	
CD4060	Motorola	MC14060	
	National	CD4060	
	SGS	HCC/HCF4060	
	Signetics	HEF4060	
	Sprague	SCL4060	
♦ CD4062A	Motorola	MC14562B	
CD4063	SGS	HCC/HCF4063	
	Toshiba	**TC4063**	**(3308)**
CD4066	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
♦ CD4067	Fairchild	F4067	
	Motorola	MC14067	
	SGS	HCC/HCF4067	
	Signetics	HEF4067	
CD4068	Fairchild	F4068	
	Motorola	MC14068	
	SGS	HCC/HCF4068	
	Signetics	HEF4068	
	Solitron	CM4068	
	Sprague	SCL4068	
	Toshiba	**TC4068**	**(3308)**
CD4069	Fairchild	F4069	
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
CD4070	Fairchild	F4070	
	Motorola	MC14070	
	National	CD4070	
		MM74C86	
	SGS	HCC/HCF4070	
	Signetics	HEF4070	
	Solitron	CM4070	
	Sprague	SCL4070	
CD4071	Fairchild	F4071	
	Motorola	MC14071	
	National	CD4071	
		MM74C32	
	OKI	MSM4071	
	Sanyo	LC4071	
	SGS	HCC/HCF4071	
	Signetics	HEF4071	
	Solitron	CM4071	
	Sprague	SCL4071	
CD4072	Fairchild	F4072	
	Motorola	MC14072	
	National	CD4072	
	SGS	HCC/HCF4072	
	Signetics	HEF4072	
	Sprague	SCL4072	
	Toshiba	TC4072	
CD4073	Fairchild	F4073	
	Motorola	MC14073	
	National	CD4073	
	SGS	HCC/HCF4073	
	Signetics	HEF4073	
	Solitron	CM4073	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4073			(Cont'd)
	Sprague	SCL4073	
	Toshiba	TC4073	
CD4075	Fairchild	F4075	
	Motorola	MC14075	
	National	CD4075	
	SGS	HCC/HCF4075	
	Signetics	HEF4075	
	Solitron	CM4075	
	Sprague	SCL4075	
	Toshiba	TC4075	
CD4076	Fairchild	F4076	
	Motorola	MC14076	
	National	CD4076	
		MM54C173	
		MM74C173	
	SGS	HCC/HCF4076	
	Signetics	HEF4076	
	Solitron	CM4076	
	Sprague	SCL4076	
	Toshiba	**TC4076**	**(3308)**
CD4077	Fairchild	F4077	
	Motorola	MC14077	
	National	CD4077	
	SGS	HCC/HCF4077	
	Signetics	HEF4077	
	Solitron	CM4077	
	Sprague	SCL4077	
CD4078	Fairchild	F4078	
	Motorola	MC14078	
	SGS	HCC/HCF4078	
	Signetics	HEF4078	
	Solitron	CM4078	
	Sprague	SCL4078	
	Toshiba	**TC4078**	**(3308)**
CD4081	Fairchild	F4081	
	Motorola	MC14081	
	National	CD4081	
		MM74C08	
	OKI	MSM4081	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
CD4082	Fairchild	F4082	
	Motorola	MC14082	
	National	CD4082	
	SGS	HCC/HCF4082	
	Signetics	HEF4082	
	Sprague	SCL4082	
	Toshiba	TC4082	
♦ CD4085B	National	CD4085B	
CD4086B	Motorola	MC14506	
	SGS	HCC/HCF4086	
	Signetics	HEF4086B	
CD4089	National	CD4089	
	SGS	HCC/HCF4089	
CD4093B	Fairchild	F4093B	
	Motorola	MC14093	
	National	CD4093B	
CD4094B	Motorola	MC14094	
♦ CD4095	SGS	HCC/HCF4095	
♦ CD4096	SGS	HCC/HCF4096	
♦ CD4097	Fairchild	F4097	
	Motorola	MC14097	
	SGS	HCC/HCF4097	
♦ CD4098	Fairchild	F4528	
	Motorola	MC14528	
	National	CD4528	
		MM74C221	
♦ CD4098	SGS	HCC/HCF4098	
	Signetics	HEF4528	
	Toshiba	**TC4528**	**(3308)**
CD4099B	Motorola	MC14099	
		MC14099B	
	National	CD4099B	
CD4502	Motorola	MC14502	
	SGS	HCC/HCF4502	
	Signetics	HEF4502	
	Sprague	SCL4502	
CD4503	Fairchild	F40097B	
	Motorola	MC14503	
	National	CD4503	
	SGS	HCF4503	
	Toshiba	TC4503	
CD4508	Motorola	MC14508	
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4508	Signetics	(Cont'd)	
		HEF4508	
		N82147	
	Sprague	SCL4508	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
CD4510	Fairchild	F4510	
	Motorola	MC14510	
	National	CD4510	
	SGS	HCC/HCF4510	
	Signetics	HEF4510	
	Solitron	CM4510	
	Sprague	SCL4510	
	Toshiba	**TC4510**	**(3308)**
CD4511	Fairchild	F4511	
	Motorola	MC14511	
	National	CD4511	
	NEC	μPD4511	
	SGS	HCC/HCF4511	
	Signetics	HEF4511	
	Solitron	CM4511	
	Sprague	SCL4511	
	Toshiba	**TC4511**	**(3308)**
CD4512	Fairchild	F4512	
	Motorola	MC14512	
	National	CD4512	
	SGS	HCC/HCF4512	
	Sprague	SCL4512	
	Toshiba	**TC4512**	**(3308)**
CD4514	Fairchild	F4514	
	Motorola	MC14514	
	National	CD4514	
	SGS	HCC/HCF4514	
	Signetics	HEF4514	
	Solitron	CM4514	
	Sprague	SCL4514	
	Toshiba	**TC4514**	**(3308)**
CD4515	Fairchild	F4515	
	Motorola	MC14515	
	National	CD4515	
	SGS	HCC/HCF4515	
	Signetics	HEF4515	
	Solitron	CM4515	
	Sprague	SCL4515	
	Toshiba	**TC4515**	**(3308)**
CD4516	Fairchild	F4516	
	Motorola	MC14516	
	National	CD4516	
	SGS	HCC/HCF4516	
	Signetics	HEF4516	
	Solitron	CM4516	
	Sprague	SCL4516	
	Toshiba	**TC4516**	**(3308)**
CD4517	Motorola	MC14517	
	SGS	HCC/HCF4517	
	Signetics	HEF4517	
	Sprague	SCL4517	
CD4518	Fairchild	F4518	
	Motorola	MC14518	
	National	CD4518	
	SGS	HCC/HCF4518	
	Signetics	HEF4518	
	Solitron	CM4518	
	Sprague	SCL4518	
	Toshiba	**TC4518**	**(3308)**
♦ CD4519	Hitachi	HD4519	
	Motorola	MC14519	
	National	CD4519	
	Signetics	HEF4519	
CD4520	Fairchild	F4520	
	Motorola	MC14520	
	National	CD4520	
	OKI	MSM4520	
	Sanyo	LC4520	
	SGS	HCC/HCF4520	
	Signetics	HEF4520	
	Solitron	CM4520	
	Sprague	SCL4520	
	Toshiba	**TC4520**	**(3308)**
♦ CD4522	Fairchild	F4522	
	Motorola	MC14522B	
	National	CD4522	
	Sprague	SCL4522	
CD4527	Fairchild	F4527	
	Motorola	MC14527	
	National	CD4527	
	SGS	HCC/HCF4527	
	Signetics	HEF4527	
	Sprague	SCL4527	
	Toshiba	**TC4527**	**(3308)**
CD4532	Fairchild	F4532	
	Motorola	MC14532	
	SGS	HCC/HCF4532	
	Signetics	HEF4532	
	Sprague	SCL4532	
	Toshiba	**TC4532**	**(3308)**
CD4536	Motorola	MC14536	
CD4541	Motorola	MC14541	
	Signetics	HEF4591	
CD4543	Fairchild	F4543	
	Motorola	MC14543	
		MC14543B	
	National	CD4543	
	Signetics	HEF4543	
	Toshiba	**TC4543**	**(3308)**
CD4555	Fairchild	F4555	
	Motorola	MC14555	
	SGS	HCC/HCF4555	
	Signetics	HEF4555	
	Sprague	SCL4555	
	Toshiba	**TC4555**	**(3308)**
CD4556	Fairchild	F4556	
	Motorola	MC14556	
	SGS	HCC/HCF4556	
	Signetics	HEF4556	
	Sprague	SCL4556	
	Toshiba	**TC4556**	**(3308)**
CD4585	Fairchild	F40085	
	Motorola	MC14585	
	National	MM74C85	
	SGS	HCC/HCF4585	
	Signetics	HEF4585	
	Sprague	SCL4585	
	Toshiba	**TC4585**	**(3308)**
♦ CD4724	Fairchild	F4724	
CD54AC00	Fairchild	54AC00	
	Ferranti	REF12	
	LinearTech	LM385-1	
	National	LM385-1	
CD54AC02	Fairchild	54AC02	
CD54AC04	Fairchild	54AC04	
CD54AC08	Fairchild	54AC08	
CD54AC109	Fairchild	54AC109	
CD54AC138	Fairchild	54AC138	
CD54AC139	Fairchild	54AC139	
CD54AC14	Fairchild	54AC14	
CD54AC151	Fairchild	54AC151	
CD54AC153	Fairchild	54AC153	
CD54AC157	Fairchild	54AC157	
CD54AC158	Fairchild	54AC158	
	Lattice	GAL20V8	
CD54AC161	Fairchild	54AC161	
	Lattice	GAL20V8	
CD54AC163	Fairchild	54AC163	
	Lattice	GAL20V8	
CD54AC174	Fairchild	54AC174	
	Lattice	GAL20V8	
	National	PAL20R4	
CD54AC175	Fairchild	54AC175	
CD54AC191	Fairchild	54AC191	
CD54AC20	Fairchild	54AC20	
CD54AC240	Fairchild	54AC240	
CD54AC241	Fairchild	54AC241	
CD54AC244	Fairchild	54AC245	
	GE/RCA	CD54AC245	
CD54AC245	Fairchild	54AC245	
	GE/RCA	CD54AC244	
CD54AC251	Fairchild	54AC251	
CD54AC253	Fairchild	54AC253	
CD54AC257	Fairchild	54AC257	
CD54AC258	Fairchild	54AC258	
CD54AC273	Fairchild	54AC273	
CD54AC299	Fairchild	54AC299	
CD54AC32	Fairchild	54AC32	
CD54AC323	Fairchild	54AC323	
CD54AC373	Fairchild	54AC373	
CD54AC374	Fairchild	54AC374	
CD54AC540	Fairchild	54AC540	
CD54AC541	Fairchild	54AC541	
CD54AC563	Fairchild	54AC563	
CD54AC564	Fairchild	54AC564	
CD54AC573	Fairchild	54AC573	
CD54AC574	Fairchild	54AC574	
CD54AC646	Fairchild	54AC646	
CD54AC648	Fairchild	54AC648	
CD54AC74	Fairchild	54AC74	
CD54AC86	Fairchild	54AC86	
CD54ACT00	Fairchild	54ACT00	
CD54ACT04	Fairchild	54ACT04	
CD54ACT08	Fairchild	54ACT08	
CD54ACT109	Fairchild	54ACT109	
CD54ACT138	Fairchild	54ACT138	
CD54ACT139	Fairchild	54ACT139	
CD54ACT151	Fairchild	54ACT151	
CD54ACT157	Fairchild	54ACT157	
CD54ACT158	Fairchild	54ACT158	
CD54ACT161	Fairchild	54ACT161	
CD54ACT163	Fairchild	54ACT163	
CD54ACT174	Fairchild	54ACT174	
CD54ACT175	Fairchild	54ACT175	
CD54ACT240	Fairchild	54ACT240	
CD54ACT244	Fairchild	54ACT244	
CD54ACT245	Fairchild	54ACT245	
CD54ACT251	Fairchild	54ACT251	
CD54ACT252	Fairchild	54ACT253	
CD54ACT257	Fairchild	54ACT257	
CD54ACT258	Fairchild	54ACT258	
CD54ACT273	Fairchild	54ACT273	
CD54ACT299	Fairchild	54ACT299	
CD54ACT32	Fairchild	54ACT32	
CD54ACT323	Fairchild	54ACT323	
CD54ACT373	Fairchild	54ACT373	
CD54ACT374	Fairchild	54ACT374	
CD54ACT533	Fairchild	54ACT533	
CD54ACT534	Fairchild	54ACT534	
CD54ACT563	Fairchild	54ACT563	
CD54ACT564	Fairchild	54ACT564	
	TI	SN74F251	
CD54ACT573	Fairchild	54ACT573	
CD54ACT574	Fairchild	54ACT574	
CD54ACT74	Fairchild	54ACT74	
CD54HC00	Motorola	MC54HC00	
	National	MM54HC00	
	Signetics	54HC00	
	Sprague	SS54HC00	
	TI	SN54HC00	
CD54HC02	Motorola	MC54HC02	
	National	MM54HC02	
	Signetics	54HC02	
	TI	SN54HC02	
CD54HC03	Motorola	54HC03	
	National	MM54HC03	
	TI	SN54HC03	
CD54HC04	Motorola	MC54HC04	
	National	MM54HC04	
	Signetics	54HC04	
	TI	SN54HC04	
CD54HC08	Motorola	MC54HC08	
	National	MM54HC08	
	Signetics	54HC08	
	TI	SN54HC08	
CD54HC10	Motorola	MC54HC10	
	National	MM54HC10	
	Signetics	54HC10	
	TI	SN54HC10	
CD54HC107	Motorola	MC54HC107	
	National	MM54HC107	
	Signetics	54HC107	
	TI	SN54HC107	
CD54HC109	Motorola	MC54HC109	
	National	MM54HC109	
	Signetics	54HC109	
	TI	SN54HC109	
CD54HC11	Motorola	MC54HC11	
	National	MM54HC11	
	Signetics	54HC11	
	TI	SN54HC11	
CD54HC112	Motorola	MC54HC112	
	National	MM54HC112	
	Signetics	54HC112	
	TI	SN54HC112	
CD54HC123	Motorola	MC54HC123	
	National	MM54HC123	
	Signetics	54HC123	
CD54HC125	Fairchild	54HC125	
	GE/RCA	CDHC125	
	Motorola	MC54HC125	
	National	MM54HC125	
	TI	SN54HC125	
CD54HC126	TI	SN54HC126	
CD54HC132	Fairchild	54HC132	
	Motorola	MC54HC132	
	National	MM54HC132	
	Signetics	54HC132	
	TI	SN54HC132	
♦ CD54HC133	Motorola	MC54HC133	
	National	MM54HC133	
	Signetics	54HC133	
	TI	SN54HC133	
CD54HC137	Motorola	MC54HC137	
	National	MM54HC137	
	Sprague	SN54HC137	
		SS54HC137	
	TI	SN54HC137	
CD54HC138	Motorola	MC54HC138	
	National	MM54HC138	
	Signetics	54HC138	
	Sprague	SS54HC138	
	TI	SN54HC138	
CD54HC139	Motorola	MC54HC139	
	National	MM54HC139	
	Signetics	54HC139	
	Sprague	SS54HC139	
	TI	SN54HC139	
CD54HC14	Motorola	MC54HC14	
	National	MM54HC14	
	Signetics	54HC14	
	TI	SN54HC14	
CD54HC147	Motorola	MC54HC147	
	National	MM54HC147	
	Signetics	54HC147	
CD54HC151	Motorola	MC54HC151	
	National	MM54HC151	
	Signetics	54HC151	
	TI	SN54HC151	
CD54HC153	Motorola	MC54HC153	
	National	MM54HC153	
	Signetics	54HC153	
	TI	SN54HC153	
CD54HC154	Motorola	MC54HC154	
	National	MM54HC154	
	Signetics	54HC154	
CD54HC157	Motorola	MC54HC157	
	Signetics	54HC157	
	TI	SN54HC157	
CD54HC158	Motorola	MC54HC158	
	National	MM54HC158	
	Signetics	54HC158	
	TI	SN54HC158	
CD54HC160	Motorola	MC54HC160	
	National	MM54HC160	
	Signetics	54HC160	
	TI	SN54HC160	
CD54HC161	Motorola	MC54HC161	
	National	MM54HC161	
	Signetics	54HC161	
	TI	SN54HC161	
CD54HC162	Motorola	MC54HC162	
	National	MM54HC162	
	Signetics	54HC162	
	TI	SN54HC162	
CD54HC163	Motorola	MC54HC163	
	National	MM54HC163	
	Signetics	54HC163	
CD54HC164	Motorola	MC54HC164	
	National	MM54HC164	
	Signetics	54HC164	
	TI	SN54HC164	
CD54HC165	Motorola	MC54HC165	
	National	MM54HC165	
	Signetics	54HC165	
	TI	SN54HC165	
CD54HC166	Motorola	MC54HC166	
	Signetics	54HC166	
	TI	SN54HC166	
CD54HC173	Motorola	MC54HC173	
	National	MM54HC173	
	Signetics	54HC173	
	TI	SN54HC173	
CD54HC174	Motorola	MC54HC174	
	National	MM54HC174	
	Signetics	54HC174	
	TI	SN54HC174	
CD54HC175	Motorola	MC54HC175	
	National	MM54HC175	
	Signetics	54HC175	
	TI	SN54HC175	
CD54HC181	Motorola	MC54HC181	
CD54HC182	Motorola	MC54HC182	
CD54HC190	Motorola	MC54HC190	
	TI	SN54HC190	
CD54HC191	Signetics	54HC191	
	TI	SN54HC191	
CD54HC192	Motorola	MC54HC192	
	National	MM54HC192	
	Signetics	54HC192	
	TI	SN54HC192	
CD54HC193	Motorola	MC54HC193	
	National	MM54HC193	
	Signetics	54HC193	
	TI	SN54HC193	
CD54HC194	Motorola	MC54HC194	
	National	MM54HC194	
	Signetics	54HC194	
	TI	SN54HC194	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD54HC195	Motorola	MC54HC195	
	National	MM54HC195	
	Signetics	54HC195	
	TI	SN54HC195	
CD54HC20	Motorola	MC54HC20	
	National	MM54HC20	
	Signetics	54HC20	
	TI	SN54HC20	
CD54HC21	TI	SN54HC21	
CD54HC221	Motorola	MC54HC221	
	National	MM54HC221	
	Signetics	54HC221	
CD54HC237	Motorola	MC54HC237	
	National	MM54HC237	
	Sprague	SN54HC237	
	TI	SN54HC237	
CD54HC238	Signetics	54HC238	
	Sprague	SS54HC238	
	TI	SN54HC238	
CD54HC240	Motorola	MC54HC240	
	National	MM54HC240	
	Signetics	54HC240	
	Sprague	SS54HC240	
	Supertex	SI54HC240	
	TI	SN54HC240	
CD54HC241	Motorola	MC54HC241	
	National	MM54HC241	
	Signetics	54HC241	
	Sprague	SS54HC241	
	Supertex	SI54HC241	
	TI	SN54HC241	
CD54HC242	Motorola	MC54HC242	
	National	MM54HC242	
	Signetics	54HC242	
	TI	SN54HC242	
CD54HC243	Fairchild	54HC243	
	Motorola	MC54HC243	
	National	MM54HC243	
	Signetics	54HC243	
	TI	SN54HC243	
CD54HC244	Motorola	MC54HC244	
	National	MM54HC244	
	Signetics	54HC244	
	Sprague	SS54HC244	
	Supertex	SI54HC244	
	TI	SN54HC244	
CD54HC245	Motorola	MC54HC245	
	National	MM54HC245	
	Signetics	54HC245	
	Sprague	SS54HC245	
	TI	SN54HC245	
CD54HC251	Motorola	MC54HC251	
	National	MM54HC251	
	Signetics	54HC251	
	TI	SN54HC251	
CD54HC253	Motorola	MC54HC253	
	National	MM54HC253	
	Signetics	54HC253	
	TI	SN54HC253	
CD54HC257	Motorola	MC54HC257	
	National	MM54HC257	
	Signetics	54HC257	
	TI	SN54HC257	
CD54HC258	TI	SN54HC258	
CD54HC259	Motorola	MC54HC259	
	National	MM54HC259	
	Signetics	54HC259	
	TI	SN54HC259	
CD54HC27	Motorola	MC54HC27	
	National	MM54HC27	
	Signetics	54HC27	
	TI	SN54HC27	
CD54HC273	CTI	54HC273	
	Motorola	MC54HC273	
	Signetics	54HC273	
	TI	SN54HC273	
CD54HC280	Motorola	MC54HC280	
	National	MM54HC280	
	Signetics	54HC280	
	TI	SN54HC280	
CD54HC283	Motorola	MC54HC283	
CD54HC297	Signetics	54HC297	
CD54HC299	Motorola	MC54HC299	
	National	MM54HC299	
	Signetics	54HC299	
CD54HC30	Motorola	MC54HC30	
	National	MM54HC30	
	Signetics	54HC30	
	TI	SN54HC30	
CD54HC32	Motorola	MC54HC32	
	National	MM54HC32	
	Signetics	54HC32	
	TI	SN54HC32	
CD54HC354	Motorola	MC54HC354	
	National	MM54HC354	
	Signetics	54HC354	
CD54HC356	Motorola	MC54HC356	
	National	MM54HC356	
	Signetics	54HC356	
CD54HC365	Motorola	MC54HC365	
	National	MM54HC365	
	Signetics	54HC365	
	TI	SN54HC365	
CD54HC366	Motorola	MC54HC366	
	National	MM54HC366	
	Signetics	54HC366	
	TI	SN54HC366	
CD54HC367	Motorola	MC54HC367	
	National	MM54HC367	
	Signetics	54HC367	
	TI	SN54HC367	
CD54HC368	Motorola	MC54HC368	
	National	MM54HC368	
	Signetics	54HC368	
	TI	SN54HC368	
CD54HC373	Motorola	MC54HC373	
	National	MM54HC373	
	Signetics	54HC373	
	Sprague	SS54HC373	
	Supertex	SI54HC373	
	TI	SN54HC373	
CD54HC374	Motorola	MC54HC374	
	National	MM54HC374	
	Signetics	54HC374	
	Sprague	SS54HC374	
	Supertex	SI54HC374	
	TI	SN54HC374	
CD54HC377	Motorola	MC54HC377	
	Signetics	54HC377	
	TI	SN54HC377	
CD54HC390	Motorola	MC54HC390	
	National	MM54HC390	
	Signetics	54HC390	
	TI	SN54HC390	
CD54HC393	Motorola	MC54HC393	
	National	MM54GC393	
	Signetics	54HC393	
	TI	SN54HC393	
CD54HC4002	Motorola	MC54HC4002	
	National	MM54HC4002	
	Signetics	54HC4002	
	TI	SN54HC4002	
CD54HC40104	Signetics	54HC40104	
CD54HC40105	Signetics	54HC40105	
CD54HC4016	Motorola	MC54HC4016	
	National	MM54HC4016	
	TI	SN54HC4016	
CD54HC4017	Motorola	MC54HC4017	
	National	MM54HC4017	
	Signetics	54HC4017	
CD54HC4020	National	MM54HC4020	
	Signetics	54HC4020	
CD54HC4024	Motorola	MC54HC4024	
	Signetics	54HC4024	
CD54HC404	Motorola	MC54HC404	
	National	MM54HC404	
	TI	SN54HC404	
CD54HC4040	Motorola	MC54HC4040	
	National	MM54HC4040	
	Signetics	54HC4040	
CD54HC4046	Motorola	MC54HC4046	
CD54HC4049	Motorola	MC54HC4049	
	National	MM54HC4049	
	Signetics	54HC4049	
CD54HC4050	Motorola	MC54HC4050	
	National	MM54HC4050	
	Signetics	54HC4050	
CD54HC4051	Motorola	MC54HC4051	
	Signetics	54HC4051	
CD54HC4052	Motorola	MC54HC4052	
	Signetics	54HC4052	
CD54HC4053	Motorola	MC54HC4053	
	Signetics	54HC4053	
CD54HC4060	Motorola	MC54HC4060	
	National	MM54HC4060	
	Signetics	54HC4060	
CD54HC4066	Motorola	MC54HC4066	
	National	MM54HC4066	
	TI	SN54HC4066	
CD54HC4075	Motorola	MC54HC4075	
	National	MM54HC4075	
	TI	SN54HC4075	
CD54HC42	Motorola	MC54HC42	
	National	MM54HC42	
	Signetics	54HC42	
	TI	SN54HC42	
CD54HC4351	Motorola	MC54HC4351	
CD54HC4352	Motorola	MC54HC4352	
CD54HC4353	Motorola	MC54HC4353	
CD54HC4514	Motorola	MC54HC4514	
	National	MM54HC4514	
	Signetics	54HC4514	
CD54HC4520	Signetics	54HC4520	
CD54HC4538	Motorola	MC54HC4538	
	National	MM54HC4538	
	Signetics	54HC4538	
CD54HC4543	Motorola	MC54HC4543	
CD54HC533	Motorola	MC54HC533	
	National	MM54HC533	
	Signetics	54HC533	
	Sprague	SS54HC533	
	TI	SN54HC533	
CD54HC534	Motorola	MC54HC534	
	National	MM54HC534	
	Signetics	54HC534	
	Sprague	SS54HC534	
	TI	SN54HC534	
CD54HC540	Motorola	MC54HC540	
	Signetics	54HC540	
	Sprague	SS54HC540	
	TI	SN54HC540	
CD54HC541	Signetics	54HC541	
	Sprague	SS54HC541	
	TI	SN54HC541	
CD54HC563	National	MM54HC563	
	Signetics	54HC563	
	Sprague	SS54HC563	
	TI	SN54HC563	
CD54HC564	Motorola	MC54HC564	
	National	MM54HC564	
	Signetics	54HC564	
	Sprague	SS54HC564	
	TI	SN54HC564	
CD54HC573	Motorola	MC54HC573	
	National	MM54HC573	
	Signetics	54HC573	
	Sprague	SS54HC573	
	TI	SN54HC573	
CD54HC574	Motorola	MC54HC574	
	National	MM54HC574	
	Signetics	54HC574	
	Sprague	SS54HC574	
	TI	SN54HC574	
CD54HC640	Motorola	MC54HC640	
	National	MM54HC640	
	Signetics	54HC640	
	Sprague	SS54HC640	
	TI	SN54HC640	
CD54HC643	Motorola	MC54HC643	
	National	MM54HC643	
	Signetics	54HC643	
	TI	SN54HC643	
♦ CD54HC645	National	MM54HC645	
	Signetics	54HC645	
	Sprague	SS54HC645	
	TI	SN54HC645	
CD54HC646	Motorola	MC54HC646	
	National	MM54HC646	
	Signetics	54HC646	
CD54HC648	Motorola	MC54HC648	
	National	MM54HC648	
	Signetics	54HC648	
CD54HC670	Signetics	54HC670	
CD54HC688	Fairchild	54HC688	
	Motorola	MC54HC688	
	National	MM54HC688	
	Signetics	54HC688	
	TI	SN54HC688	
CD54HC73	Motorola	MC54HC73	
	National	MM54HC73	
	Signetics	54HC73	
CD54HC74	Motorola	MC54HC74	
	National	MM54HC74	
	Signetics	54HC74	
	TI	SN54HC74	
CD54HC75	Motorola	MC54HC75	
	National	MM54HC75	
	Signetics	54HC75	
	TI	SN54HC75	
CD54HC85	Motorola	MC54HC85	
	National	MM54HC85	
	Signetics	54HC85	
CD54HC86	Motorola	MC54HC86	
	National	MM54HC86	
	Signetics	54HC86	
	TI	SN54HC86	
CD54HCT00	Motorola	MC54HCT00	
	Signetics	54HCT00	
CD54HCT02	Signetics	54HCT02	
CD54HCT03	Motorola	MC54HCT03	
CD54HCT04	Fairchild	54HCT04	
	Motorola	MC54HCT04	
	National	MM54HCT04	
	Signetics	54HCT04	
	TI	SN54HCT04	
CD54HCT08	Signetics	54HCT08	
CD54HCT10	Signetics	54HCT10	
CD54HCT107	Signetics	54HCT107	
CD54HCT109	Signetics	54HCT109	
CD54HCT11	Signetics	54HCT11	
CD54HCT112	Signetics	54HCT112	
CD54HCT123	Signetics	54HCT123	
CD54HCT125	Motorola	MC54HCT125	
CD54HCT126	Motorola	MC54HCT126	
CD54HCT132	Signetics	54HCT132	
♦ CD54HCT133	Signetics	54HCT133	
CD54HCT137	CTI	54HCT137	
	Supertex	54HCT137	
	TI	SN54HCT137	
CD54HCT138	CTI	54HCT138	
	Mitel	MD54HCT138	
	Motorola	MC54HCT138	
	National	MM54HCT138	
	Signetics	54HCT138	
	Sprague	SS54HCT138	
	Supertex	54HCT138	
	TI	SN54HCT138	
CD54HCT139	CTI	54HCT139	
	Mitel	MD54HCT139	
	National	MM54HCT139	
	Signetics	54HCT139	
	Sprague	SS54HCT139	
	Supertex	54HCT139	
CD54HCT14	Signetics	54HCT14	
CD54HCT147	Signetics	54HCT147	
CD54HCT151	Signetics	54HCT151	
CD54HCT153	Signetics	54HCT153	
CD54HCT154	Signetics	54HCT154	
CD54HCT157	Motorola	MC54HCT157	
	Signetics	54HCT157	
CD54HCT158	Motorola	MC54HCT158	
	Signetics	54HCT158	
CD54HCT160	Signetics	54HCT160	
CD54HCT161	Signetics	54HCT161	
CD54HCT162	Signetics	54HCT162	
CD54HCT163	Signetics	54HCT163	
CD54HCT164	Signetics	54HCT164	
CD54HCT165	Signetics	54HCT165	
CD54HCT166	Signetics	54HCT166	
CD54HCT173	Signetics	54HCT173	
CD54HCT174	Signetics	54HCT174	
CD54HCT175	Signetics	54HCT175	
CD54HCT191	Signetics	54HCT191	
CD54HCT192	Signetics	54HCT192	
CD54HCT193	Signetics	54HCT193	
CD54HCT194	Signetics	54HCT194	
CD54HCT195	Signetics	54HCT195	
CD54HCT20	Signetics	54HCT20	
CD54HCT221	Signetics	54HCT221	
CD54HCT237	CTI	54HCT237	
	Supertex	54HCT237	
	TI	SN54HCT237	
CD54HCT238	CTI	54HCT238	
	Signetics	54HCT238	
	Sprague	SS54HCT238	
	TI	SN54HCT238	
CD54HCT240	CTI	54HCT240	
	Hitachi	HD54HCT240	
	Micrel	MC54HCT240	
		MIC54HCT240	
	Mitel	MD54HCT240	
	Motorola	MC54HCT240	
	National	MM54HCT240	
	Signetics	54HCT240	
	Supertex	SI54HCT240	
	TI	SN54HCT240	
CD54HCT241	CTI	54HCT241	
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD54HCT241	Motorola	(Cont'd)	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256 (3259)	
	Vitelic	V51C256	
		V51C257	
CD54HCT242	Signetics	54HCT242	
CD54HCT243	Signetics	54HCT243	
CD54HCT244	CTI	54HCT244	
	Micrel	MIC54HCT244	
	Mitel	MD54HCT244	
	Motorola	MC54HCT244	
	National	MM54HCT244	
	Signetics	54HCT244	
	Sprague	SS54HCT244	
	Supertex	SI54HCT244	
	TI	SN54HCT244	
CD54HCT245	CTI	54HCT245	
	Mitel	MD54HCT245	
	Motorola	MC54HCT245	
	National	MM54HCT245	
	Signetics	54HCT245	
	Sprague	SS54HCT245	
	Supertex	54HCT245	
	TI	SN54HCT245	
CD54HCT251	Signetics	54HCT251	
CD54HCT253	Signetics	54HCT253	
CD54HCT257	Motorola	MC54HCT257	
	Signetics	54HCT257	
CD54HCT258	Motorola	MC54HCT258	
CD54HCT259	Signetics	54HCT259	
CD54HCT27	Signetics	54HCT27	
CD54HCT273	Signetics	54HCT273	
CD54HCT280	Signetics	54HCT280	
CD54HCT297	Signetics	54HCT297	
CD54HCT299	Signetics	54HCT299	
CD54HCT30	Signetics	54HCT30	
CD54HCT32	Signetics	54HCT32	
CD54HCT354	Signetics	54HCT354	
CD54HCT356	Signetics	54HCT356	
CD54HCT365	Signetics	54HCT365	
CD54HCT366	Signetics	54HCT366	
CD54HCT367	Signetics	54HCT367	
CD54HCT368	Signetics	54HCT368	
CD54HCT373	CTI	54HCT373	
	Micrel	MIC54HCT373	
	Mitel	MD54HCT373	
	Motorola	MC54HCT373	
	National	MM54HCT373	
	Signetics	54HCT373	
	Sprague	SS54HCT373	
	Supertex	SI54HCT373	
	TI	SN54HCT373	
CD54HCT374	CTI	54HCT374	
	GE/RCA	54HCT374	
	Micrel	MIC54HCT374	
		MICHCT374	
	Mitel	MD54HCT374	
	Motorola	MC54HCT374	
	National	MM54HCT374	
	Sprague	SS54HCT374	
	Supertex	SI54HCT374	
	TI	SN54HCT374	
CD54HCT377	Signetics	54HCT377	
CD54HCT390	Signetics	54HCT390	
CD54HCT393	Signetics	54HCT393	
CD54HCT4002			
	Signetics	54HCT4002	
CD54HCT40104			
	Signetics	54HCT40104	
CD54HCT40105			
	Signetics	54HCT40105	
CD54HCT4017			
	Signetics	54HCT4017	
CD54HCT4020			
	Signetics	54HCT4020	
CD54HCT4024			
	Signetics	54HCT4024	
CD54HCT4040			
	Signetics	54HCT4040	
CD54HCT4049			
	Signetics	54HCT4049	
CD54HCT4050			
	Signetics	54HCT4050	
CD54HCT4051			
	Signetics	54HCT4051	
CD54HCT4052			
	Signetics	54HCT4052	
CD54HCT4053			
	Signetics	54HCT4053	
CD54HCT4060			
	Signetics	54HCT4060	
CD54HCT42	Signetics	54HCT42	
CD54HCT4511			
	Signetics	54HCT4511	
CD54HCT4514			
	Signetics	54HCT4514	
CD54HCT4520			
	Signetics	54HCT4520	
CD54HCT4538			
	Signetics	54HCT4538	
CD54HCT533	CTI	54HCT533	
	Motorola	MC54HCT533	
	Signetics	54HCT533	
	Sprague	SS54HCT533	
CD54HCT534	CTI	54HCT534	
	Motorola	MC54HCT534	
	Signetics	54HCT534	
	Sprague	SS54HCT534	
CD54HCT540	CTI	54HCT540	
	Mitel	MD54HCT540	
	Motorola	MC54HCT540	
	National	MM54HCT540	
	Signetics	54HCT540	
	Sprague	SS54HCT540	
	Supertex	54HCT540	
	TI	SN54HCT540	
CD54HCT541	CTI	54HCT541	
	Mitel	MD54HCT541	
	Motorola	MC54HCT541	
	National	MM54HCT541	
	Signetics	54HCT541	
	Sprague	SS54HCT541	
	Supertex	54HCT541	
	TI	SN54HCT541	
CD54HCT563	CTI	54HCT563	
	Signetics	54HCT563	
	Sprague	SS54HCT563	
CD54HCT564	CTI	54HCT564	
	Signetics	54HCT564	
	Sprague	SS54HCT564	
CD54HCT573	CTI	54HCT573	
	Mitel	MD54HCT573	
	Signetics	54HCT573	
	Sprague	SS54HCT573	
CD54HCT574	CTI	54HCT574	
	Mitel	MD54HCT574	
	Signetics	54HCT574	
	Sprague	SS54HCT574	
CD54HCT640	Motorola	MC54HCT640	
	Signetics	54HCT640	
	Sprague	SS54HCT640	
CD54HCT643	Motorola	MC54HCT643	
	Signetics	54HCT643	
♦ CD54HCT645	Signetics	54HCT645	
	Sprague	SS54HCT645	
CD54HCT646	Signetics	54HCT646	
CD54HCT648	Signetics	54HCT648	
CD54HCT670	Signetics	54HCT670	
CD54HCT688	Signetics	54HCT688	
CD54HCT73	Signetics	54HCT73	
CD54HCT74	Signetics	54HCT74	
CD54HCT75	Signetics	54HCT75	
♦ CD54HCT76	Signetics	54HCT76	
CD54HCT85	Signetics	54HCT85	
CD54HCT86	Signetics	54HCT86	
CD54HCU04	Motorola	MC54HCU04	
	Signetics	54HCU04	
CD74AC00	Fairchild	CD74AC00	
CD74AC02	Fairchild	CD74AC02	
CD74AC04	Fairchild	CD74AC04	
CD74AC08	Fairchild	CD74AC08	
CD74AC10	Fairchild	CD74AC10	
CD74AC109	Fairchild	CD74AC109	
CD74AC138	Fairchild	CD74AC138	
CD74AC139	Fairchild	CD74AC139	
CD74AC151	Fairchild	CD74AC151	
CD74AC153	Fairchild	CD74AC153	
CD74AC157	Fairchild	CD74AC157	
CD74AC158	Fairchild	CD74AC158	
CD74AC161	Fairchild	CD74AC161	
CD74AC163	Fairchild	CD74AC163	
CD74AC174	Fairchild	CD74AC174	
CD74AC175	Fairchild	CD74AC175	
CD74AC191	Fairchild	CD74AC191	
CD74AC20	Fairchild	CD74AC20	
CD74AC244	Fairchild	74AC244	
CD74AC245	Fairchild	74AC245	
CD74AC251	Fairchild	74AC251	
CD74AC253	Fairchild	74AC253	
CD74AC257	Fairchild	74AC257	
CD74AC258	Fairchild	74AC258	
CD74AC273	Fairchild	74AC273	
CD74AC299	Fairchild	74AC299	
		CD74AC299	
CD74AC32	Fairchild	CD74AC32	
CD74AC323	Fairchild	74AC323	
CD74AC373	Fairchild	74AC373	
CD74AC374	Fairchild	74AC374	
CD74AC540	Fairchild	74AC540	
CD74AC541	Fairchild	74AC541	
CD74AC563	Fairchild	74AC563	
CD74AC564	Fairchild	74AC564	
CD74AC573	Fairchild	74AC573	
CD74AC574	Fairchild	74AC574	
CD74AC646	Fairchild	74AC546	
		74AC646	
CD74AC648	Fairchild	74AC648	
CD74AC74	Fairchild	CD74AC74	
CD74AC86	Fairchild	CD74AC86	
CD74ACT00	Fairchild	74ACT00	
CD74ACT04	Fairchild	74ACT04	
CD74ACT08	Fairchild	74ACT08	
CD74ACT109	Fairchild	74ACT109	
		74ACT175	
CD74ACT138	Fairchild	74ACT138	
CD74ACT139	Fairchild	74ACT139	
CD74ACT151	Fairchild	74ACT151	
		74F653	
	Motorola	MC74F653	
	TI	SN74F653	
CD74ACT153	Fairchild	74ACT153	
CD74ACT157	Fairchild	74ACT157	
CD74ACT158	Fairchild	74ACT158	
CD74ACT161	Fairchild	74ACT161	
CD74ACT163	Fairchild	74ACT163	
CD74ACT173	Fairchild	74ACT173	
CD74ACT240	Fairchild	74ACT240	
CD74ACT241	Fairchild	74ACT241	
CD74ACT244	Fairchild	74ACT244	
CD74ACT245	Fairchild	74ACT245	
CD74ACT257	Fairchild	74ACT257	
CD74ACT258	Fairchild	74ACT258	
CD74ACT273	Fairchild	74ACT273	
CD74ACT299	Fairchild	74ACT299	
CD74ACT32	Fairchild	74ACT32	
CD74ACT323	Fairchild	74ACT323	
CD74ACT373	Fairchild	74ACT373	
CD74ACT374	Fairchild	74ACT374	
CD74ACT533	Fairchild	74ACT533	
CD74ACT534	Fairchild	74ACT534	
CD74ACT563	Fairchild	74ACT563	
CD74ACT564	Fairchild	74ACT564	
CD74ACT573	Fairchild	74ACT573	
CD74ACT574	Fairchild	74ACT574	
CD74ACT74	Fairchild	74ACT74	
CD74HC00	Hitachi	HD74HC00	
	Motorola	MC74HC00	
	National	MM74HC00	
	SGS	M74HC00	
	Signetics	**74HC00 (3003)**	
	TI	SN74HC00	
	Toshiba	TC40H000	
CD74HC02	Hitachi	HD74HC02	
	Motorola	MC74HC02	
	National	MM74HC02	
	SGS	M74HC02	
	Signetics	**74HC02 (3003)**	
	TI	SN74HC02	
	Toshiba	TC40H002	
CD74HC03	Motorola	MC74HC03	
	National	MM74HC03	
	SGS	M74HC03	
	TI	SN74HC03	
	Toshiba	**TC74HC03 (3307)**	
CD74HC04	Hitachi	HD74HC04	
	Motorola	MC74HC04	
	National	MM74HC04	
	SGS	M74HC04	
	TI	SN74HC04	
	Toshiba	TC40H004	
CD74HC08	Hitachi	HD74HC08	
	Motorola	MC74HC08	
	National	MM74HC08	
	SGS	M74HC08	
	Signetics	**74HC08 (3003)**	
	TI	SN74HC08	
CD74HC10	Hitachi	HD74HC10	
	Motorola	MC74HC10	
	National	MM74HC10	
	SGS	M74HC10	
	Signetics	**74HC10 (3003)**	
	TI	SN74HC10	
	Toshiba	TC40H010	
CD74HC107	Hitachi	HD74HC107	
	Motorola	MC74HC107	
	National	MM74HC107	
	SGS	M74HC107	
	Signetics	**74HC107 (3003)**	
	TI	SN74HC107	
	Toshiba	TC40H107	
CD74HC109	Hitachi	HD74HC109	
	Motorola	MC74HC109	
	National	MM74HC109	
	SGS	M74HC109	
	Signetics	**74HC109 (3003)**	
	TI	SN74HC109	
	Toshiba	**TC74HC109 (3307)**	
CD74HC11	Hitachi	HD74HC11	
	Motorola	MC74HC11	
	National	MM74HC11	
	SGS	M74HC11	
	Signetics	**74HC11 (3003)**	
	TI	SN74HC11	
	Toshiba	TC40H011	
CD74HC112	Hitachi	HD74HC112	
	Motorola	MC74HC112	
	National	MM74HC112	
	SGS	M74HC112	
	Signetics	**74HC112 (3003)**	
	TI	SN74HC112	
CD74HC125	Hitachi	HD74HC125	
	Motorola	MC74HC125	
	National	MM74HC125	
	SGS	M74HC125	
	TI	SN74HC125	
	Toshiba	**TC74HC125 (3307)**	
CD74HC126	Hitachi	HD74HC126	
	Motorola	MC74HC126	
	National	MM74HC126	
	SGS	M74HC126	
	Toshiba	**TC74HC126 (3307)**	
CD74HC132	Hitachi	HD74HC132	
	Motorola	MC74HC132	
	National	MM74HC132	
	SGS	M74HC132	
	Signetics	**74HC132 (3003)**	
	TI	SN74HC132	
CD74HC138	Hitachi	HD74HC138	
	Motorola	MC74HC138	
	National	MM74HC138	
	SGS	M74HC138	
	Signetics	**74HC138 (3003)**	
	Sprague	SS74HC138	
	TI	SN74HC138	
CD74HC139	Hitachi	HD74HC139	
	National	MM74HC139	
	SGS	M74HC139	
	Signetics	**74HC139 (3003)**	
	Sprague	SS74HC139	
	TI	SN74HC139	
	Toshiba	TC40H139	
CD74HC14	Hitachi	HD74HC14	
	Motorola	MC74HC14	
	National	MM74HC14	
	SGS	M74HC14	
	Signetics	**74HC14 (3003)**	
	TI	SN74HC14	
CD74HC147	Hitachi	HD74HC147	
	Motorola	MC74HC147	
	National	MM74HC147	
	SGS	M74HC147	
	Signetics	**74HC147 (3003)**	
	TI	SN74HC147	
CD74HC151	Hitachi	HD74HC151	
	Motorola	MC74HC151	
	National	MM74HC151	
	SGS	M74HC151	
	Signetics	**74HC151 (3003)**	
	TI	SN74HC151	
	Universal	US74HC151	
CD74HC153	Hitachi	HD74HC153	
	Motorola	MC74HC153	
	National	MM74HC153	
	SGS	M74HC153	
	Signetics	**74HC153 (3003)**	
	TI	SN74HC153	
	Toshiba	TC40H153	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD74HC154	Hitachi	HD74HC154	
	Motorola	MC74HC154	
	National	MM74HC154	
	SGS	M74HC154	
	Signetics	**74HC154**	**(3003)**
	TI	SN74HC154	
CD74HC157	Hitachi	HD74HC157	
	Motorola	MC74HC157	
	National	MM74HC157	
	SGS	M74HC157	
	Signetics	**74HC157**	**(3003)**
	TI	SN74HC157	
	Toshiba	TC40H157	
CD74HC158	Hitachi	HD74HC158	
	Motorola	MC74HC158	
	National	MM74HC158	
	SGS	M74HC158	
	Signetics	**74HC158**	**(3003)**
	TI	SN74HC158	
	Toshiba	TC40H158	
CD74HC160	Motorola	MC74HC160	
	National	MM74HC160	
	SGS	M74HC160	
	Signetics	**74HC160**	**(3003)**
	TI	SN74HC160	
CD74HC161	Hitachi	HD74HC161	
	Motorola	MC74HC161	
	National	MM74HC161	
	SGS	M74HC161	
	Signetics	**74HC161**	**(3003)**
	TI	SN74HC161	
CD74HC162	Hitachi	HD74HC162	
	Motorola	MC74HC162	
	National	MM74HC162	
	SGS	M74HC162	
	Signetics	**74HC162**	**(3003)**
	TI	SN74HC162	
CD74HC163	Hitachi	HD74HC163	
	Motorola	MC74HC163	
	National	MM74HC163	
	SGS	M74HC163	
	Signetics	**74HC163**	**(3003)**
	TI	SN74HC163	
CD74HC164	Hitachi	HD74HC164	
	Motorola	MC74HC164	
	National	MM74HC164	
	SGS	M74HC164	
	Signetics	**74HC164**	**(3003)**
	TI	SN74HC164	
CD74HC165	Hitachi	HD74HC165	
	Motorola	MC74HC165	
	National	MM74HC165	
	SGS	M74HC165	
	Signetics	**74HC165**	**(3003)**
	TI	SN74HC165	
CD74HC166	SGS	M74HC166	
	Signetics	**74HC166**	**(3003)**
	TI	SN74HC166	
CD74HC173	Hitachi	HD74HC173	
	Motorola	MC74HC173	
	National	MM74HC173	
	SGS	M74HC173	
	Signetics	**74HC173**	**(3003)**
	TI	SN74HC173	
CD74HC174	Hitachi	HD74HC174	
	Motorola	MC74HC174	
	National	MM74HC174	
	SGS	M74HC174	
	Signetics	**74HC174**	**(3003)**
	TI	SN74HC174	
	Toshiba	TC40H174	
CD74HC175	Hitachi	HD74HC175	
	Motorola	MC74HC175	
	National	MM74HC175	
	SGS	M74HC175	
	Signetics	**74HC175**	**(3003)**
	TI	SN74HC175	
	Toshiba	TC40H175	
CD74HC181	SGS	M74HC181	
CD74HC182	SGS	M74HC182	
CD74HC190	Hitachi	HD74HC190	
	Motorola	MC74HC190	
	SGS	M74HC190	
	Signetics	**74HC190**	**(3003)**
		PC74HC190	
		PCF74HC190	
	TI	SN74HC190	
	Toshiba	**TC74HC190**	**(3307)**
CD74HC191	Hitachi	HD74HC191	
	Motorola	MC74HC191	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD74HC191			(Cont'd)
	SGS	M74HC191	
	Signetics	**74HC191**	**(3003)**
	TI	SN74HC191	
CD74HC192	Hitachi	HD74HC192	
	Motorola	MC74HC192	
	National	MM74HC192	
	SGS	M74HC192	
	Signetics	**74HC192**	**(3003)**
	TI	SN74HC192	
	Toshiba	TC40H192	
CD74HC193	Hitachi	HD74HC193	
	Motorola	MC74HC193	
	National	MM74HC193	
	SGS	M74HC193	
	Signetics	**74HC193**	**(3003)**
	TI	SN74HC193	
	Toshiba	TC40H193	
CD74HC194	Hitachi	HD74HC194	
	Motorola	MC74HC194	
	National	MM74HC194	
	SGS	M74HC194	
	Signetics	**74HC194**	**(3003)**
	TI	SN74HC194	
CD74HC195	Hitachi	HD74HC195	
	Motorola	MC74HC195	
	National	MM74HC195	
	SGS	M74HC195	
	Signetics	**74HC195**	**(3003)**
	TI	SN74HC195	
CD74HC20	Hitachi	HD74HC20	
	Motorola	MC74HC20	
	National	MM74HC20	
	SGS	M74HC20	
	Signetics	**74HC20**	**(3003)**
	TI	SN74HC20	
	Toshiba	TC40H020	
CD74HC221	Motorola	MC74HC221A	
	National	MM74HC221	
	SGS	M74HC221	
	Signetics	**74HC221**	**(3003)**
CD74HC238	SGS	M74HC238	
	Signetics	**74HC238**	**(3003)**
	Sprague	SS74HC238	
	TI	SN74HC238	
CD74HC240	Hitachi	HD74HC240	
	Mitel	MD74HC240	
	Motorola	MC74HC240	
	National	MM74HC240	
	SGS	M74HC240	
	Signetics	**74HC240**	**(3003)**
	Sprague	SS74HC240	
	Supertex	SI74HC240	
	TI	SN74HC240	
	Toshiba	TC40H240	
CD74HC241	Hitachi	HD74HC241	
	Mitel	MD74HC241	
	Motorola	MC74HC241	
	National	MM74HC241	
	SGS	M74HC241	
	Signetics	**74HC241**	**(3003)**
	Sprague	SS74HC241	
	Supertex	SI74HC241	
	TI	SN74HC241	
CD74HC242	Hitachi	HD74HC242	
	Motorola	MC74HC242	
	National	MM74HC242	
	SGS	M74HC242	
	Signetics	**74HC242**	**(3003)**
	TI	SN74HC242	
CD74HC243	Hitachi	HD74HC243	
	Motorola	MC74HC243	
	National	MM74HC243	
	SGS	M74HC243	
		M74HC245	
	Signetics	**74HC243**	**(3003)**
	TI	SN74HC243	
CD74HC244	Hitachi	HD74HC244	
	Mitel	MD74HC244	
	Motorola	MC74HC244	
	National	MM74HC244	
	SGS	M74HC244	
	Signetics	**74HC244**	**(3003)**
	Sprague	SS74HC244	
	Supertex	SI74HC244	
	TI	SN74HC244	
CD74HC245	Hitachi	HD74HC245	
	Motorola	MC74HC245	
	National	MM74HC245	
	Signetics	**74HC245**	**(3003)**
	Sprague	SS74HC245	
	TI	SN74HC245	

Manufacturer Device	Replacement Source	Device	IC Master Page
CD74HC251	Hitachi	HD74HC251	
	Motorola	MC74HC251	
	National	MM74HC251	
	SGS	M74HC251	
	Signetics	**74HC251**	**(3003)**
	TI	SN74HC251	
CD74HC253	Hitachi	HD74HC253	
	Motorola	MC74HC253	
	National	MM74HC253	
	SGS	M74HC253	
	Signetics	**74HC253**	**(3003)**
	TI	SN74HC253	
CD74HC257	Hitachi	HD74HC257	
	Motorola	MC74HC257	
	National	MM74HC257	
	SGS	M74HC257	
	Signetics	**74HC257**	**(3003)**
	TI	SN74HC257	
CD74HC258	Hitachi	HD74HC258	
	TI	SN74HC258	
	Toshiba	**TC74HC258**	**(3307)**
CD74HC259	Hitachi	HD74HC259	
	Motorola	MC74HC259	
	National	MM74HC259	
	Signetics	**74HC259**	**(3003)**
	TI	SN74HC259	
CD74HC27	Hitachi	HD74HC27	
	Motorola	MC74HC27	
	National	MM74HC27	
	SGS	M74HC27	
	Signetics	**74HC27**	**(3003)**
	TI	SN74HC27	
	Toshiba	TC40H027	
	Universal	US74HC27	
CD74HC273	CTI	74HC273	
	Hitachi	HD74HC273	
	Motorola	MC74HC273	
	SGS	M74HC273	
	Signetics	**74HC273**	**(3003)**
	TI	SN74HC273	
CD74HC280	Hitachi	HD74HC280	
	Motorola	MC74HC280	
	National	MM74HC280	
	SGS	M74HC280	
	Signetics	**74HC280**	**(3003)**
	TI	SN74HC280	
CD74HC283	Motorola	MC74HC283	
	SGS	M74HC283	
CD74HC297	**Signetics**	**74HC297**	**(3003)**
CD74HC299	Motorola	MC74HC299	
	National	MM74HC299	
	SGS	M74HC299	
	Signetics	**74HC299**	**(3003)**
CD74HC30	Hitachi	HD74HC30	
	Motorola	MC74HC30	
	National	MM74HC30	
	SGS	M74HC30	
	Signetics	**74HC30**	**(3003)**
	TI	SN74HC30	
CD74HC32	Hitachi	HD74HC32	
	Motorola	MC74HC32	
	National	MM74HC32	
	SGS	M74HC32	
	Signetics	**74HC32**	**(3003)**
	TI	SN74HC32	
	Toshiba	TC40H032	
CD74HC354	Hitachi	HD74HC354	
	Motorola	MC74HC354	
	National	MM74HC354	
	SGS	M74HC354	
	Signetics	**74HC354**	**(3003)**
	TI	SN74HC354	
CD74HC356	Hitachi	HD74HC356	
	Motorola	MC74HC356	
	National	MM74HC356	
	SGS	M74HC356	
	Signetics	**74HC356**	**(3003)**
	TI	SN74HC356	
CD74HC365	Hitachi	HD74HC365	
	Motorola	MC74HC365	
	National	MM74HC365	
	SGS	M74HC365	
	TI	SN74HC365	
CD74HC366	Hitachi	HD74HC366	
	Motorola	MC74HC366	
	National	MM74HC366	
	SGS	M74HC366	
	Signetics	**74HC366**	**(3003)**
	TI	SN74HC366	
CD74HC367	Hitachi	HD74HC367	
	Motorola	MC74HC367	
	National	MM74HC367	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD74HC367			(Cont'd)
	SGS	M74HC367	
	Signetics	**74HC367**	**(3003)**
	TI	SN74HC367	
CD74HC368	Hitachi	HD74HC368	
	Motorola	MC74HC368	
	National	MM74HC368	
	SGS	M74HC368	
	Signetics	**74HC368**	**(3003)**
	TI	SN74HC368	
CD74HC373	Hitachi	HD74HC373	
	Mitel	MD74HC373	
	Motorola	MC74HC373	
	National	MM74HC373	
	SGS	M74HC373	
	Signetics	**74HC373**	**(3003)**
	Sprague	SS74HC373	
	Supertex	SI74HC373	
	TI	SN74HC373	
CD74HC374	Hitachi	HD74HC374	
	Mitel	MD74HC374	
	Motorola	MC74HC374	
	National	MM74HC374	
	SGS	M74HC374	
	Signetics	**74HC374**	**(3003)**
	Sprague	SS74HC374	
	TI	SN74HC374	
CD74HC377	Hitachi	HD74HC377	
	Motorola	MC74HC377	
	SGS	M74HC377	
	Signetics	**74HC377**	**(3003)**
	TI	SN74HC377	
CD74HC390	Hitachi	HD74HC390	
	Motorola	MC74HC390	
	National	MM74HC390	
	SGS	M74HC390	
	Signetics	**74HC390**	**(3003)**
	TI	SN74HC390	
CD74HC393	Hitachi	HD74HC393	
	Motorola	MC74HC393	
	National	MM74HC393	
	SGS	M74HC393	
	Signetics	**74HC393**	**(3003)**
	TI	SN74HC393	
CD74HC4002	Motorola	MC74HC4002	
	National	MM74HC4002	
	SGS	M74HC4002	
	Signetics	**74HC4002**	**(3003)**
	TI	SN74HC4002	
CD74HC40104			
	Signetics	**74HC40104**	**(3003)**
CD74HC40105			
	Signetics	**74HC40105**	**(3003)**
CD74HC4016	Motorola	MC74HC4016	
CD74HC4017	Motorola	MC74HC4017	
	National	MM74HC4017	
	SGS	M74HC4017	
	Signetics	**74HC4017**	**(3003)**
	TI	SN74HC4017	
CD74HC4020	Hitachi	HD74HC4020	
	Motorola	MC74HC4020	
	National	MM74HC4020	
	SGS	M74HC4020	
	Signetics	**74HC4020**	**(3003)**
	TI	SN74HC4020	
CD74HC4024	Hitachi	HD74HC4024	
	Motorola	MC74HC4024	
	SGS	M74HC4024	
	Signetics	**74HC4024**	**(3003)**
	TI	SN74HC4024	
CD74HC4040	Hitachi	HD74HC4040	
	Motorola	MC74HC4040	
	National	MM74HC4040	
	SGS	M74HC4040	
	Signetics	**74HC4040**	**(3003)**
	TI	SN74HC4040	
CD74HC4046	Motorola	MC74HC4046	
	Signetics	**74HC4046**	**(3003)**
CD74HC4049	Motorola	MC74HC4049	
	National	MM74HC4049	
	SGS	M74HC4049	
	Signetics	**74HC4049**	**(3003)**
	TI	SN74HC4049	
CD74HC4050	Motorola	MC74HC4050	
		MC84HC4050	
	SGS	M74HC4050	
	Signetics	PC74HC4050	
	Toshiba	**TC74HC4050**	**(3307)**
CD74HC4051	Motorola	MC74HC4051	
	SGS	M74HC4051	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD74HC4051			(Cont'd)
	Signetics	**74HC4051**	**(3003)**
	TI	SN74HC4051	
CD74HC4052	Motorola	MC74HC4052	
	SGS	M74HC4052	
	Signetics	**74HC4052**	**(3003)**
	TI	SN74HC4052	
CD74HC4053	Motorola	MC74HC4053	
	SGS	M74HC4053	
	Signetics	**74HC4053**	**(3003)**
	TI	SN74HC4053	
CD74HC4060	Motorola	MC74HC4060	
	National	MM74HC4060	
	SGS	M74HC4060	
	Signetics	**74HC4060**	**(3003)**
	TI	SN74HC4060	
CD74HC4067	Panasonic	MN74HC4067	
	Signetics	74HC4067	
CD74HC4075	Motorola	MC74HC4075	
	National	MM74HC4075	
	Signetics	74HC4075	
	TI	SN74HC4075	
	Toshiba	**TC74HC4075**	**(3307)**
CD74HC4094	**Cypress**	**CY7C186**	**(2562)**
	IDT	**IDT7164**	**(2802)**
	Matra-Harris	HM62641	
	Mitsubishi	AM99C88	
	Motorola	MCM61L64	
	Performance	P4C164	
	SGS	M74HC4094	
	Signetics	PC74HC4094	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5585	
	Vitelic	V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
CD74HC42	Hitachi	HD74HC42	
	Motorola	MC74HC42	
	National	MM74HC42	
	SGS	M74HC42	
	Signetics	**74HC42**	**(3003)**
	TI	SN74HC42	
CD74HC423	Motorola	MC74HC423A	
	SGS	M74HC423	
	Signetics	**74HC423**	**(3003)**
CD74HC4316	Motorola	MC74HC4316	
CD74HC4351	Motorola	MC74HC4351	
CD74HC4353	Motorola	MC74HC4353	
CD74HC4511	SGS	M74HC4511	
CD74HC4514	Hitachi	HD74HC4514	
	Motorola	MC74HC4514	
	National	MM74HC4514	
	SGS	M74HC4514	
	Signetics	**74HC4514**	**(3003)**
	TI	SN74HC4514	
CD74HC4515	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
CD74HC4518	**Cypress**	**CY7C171**	**(2562)**
	IDT	**IDT71681**	**(2802)**
	SGS	M74HC4518	
	Signetics	PC74HC4518	
CD74HC4520	SGS	M74HC4520	
	Signetics	**74HC4520**	**(3003)**
CD74HC4538	Motorola	MC74HC4538	
	National	MM74HC4538	
	SGS	M74HC4538	
	Signetics	**74HC4538**	**(3003)**
CD74HC4543	**Cypress**	**CY7C172**	**(2562, 2564)**
	IDT	**IDT71682**	**(2802)**
	Motorola	MC74HC4543	
	National	MM74HC4543	
	Performance	P4C1682	
	SGS	M74HC4543	
	Signetics	PC74HC4543	
	Toshiba	**TC74HC4543**	**(3307)**
CD74HC533	Hitachi	HD74HC533	
	Motorola	MC74HC533	
	National	MM74HC533	
	SGS	M74HC533	
	Signetics	**74HC533**	**(3003)**
	Sprague	SS74HC533	
	TI	SN74HC533	
CD74HC534	Hitachi	HD74HC534	
	Motorola	MC74HC534	
	National	MM74HC534	
	SGS	M74HC534	
	Signetics	**74HC534**	**(3003)**
	Sprague	SS74HC534	
	TI	SN74HC534	
CD74HC540	Hitachi	HD74HC540	
	Motorola	MC74HC540	
	SGS	M74HC540	
	Signetics	**74HC540**	**(3003)**
	Sprague	SS74HC540	
	TI	SN74HC540	
	Toshiba	**TC74HC540**	**(3307)**
CD74HC541	Hitachi	HD74HC541	
	Motorola	MC74HC541	
	SGS	M74HC541	
	Signetics	**74HC541**	**(3003)**
	Sprague	SS74HC541	
	TI	SN74HC541	
CD74HC563	Hitachi	HD74HC563	
	Motorola	MC74HC563	
	National	MM74HC563	
	SGS	M74HC563	
	Signetics	**74HC563**	**(3003)**
	Sprague	SS74HC563	
	TI	SN74HC563	
CD74HC564	Hitachi	HD74HC564	
	Motorola	MC74HC564	
	National	MM74HC564	
	SGS	M74HC564	
	Signetics	**74HC564**	**(3003)**
	Sprague	SS74HC564	
	TI	SN74HC564	
CD74HC573	Hitachi	HD74HC573	
	Motorola	MC74HC573	
	National	MM74HC573	
	SGS	M74HC573	
	Signetics	**74HC573**	**(3003)**
	Sprague	SS74HC573	
	TI	SN74HC573	
	Toshiba	**TC74HC573**	**(3307)**
CD74HC574	Hitachi	HD74HC574	
	Motorola	MC74HC574	
	National	MM74HC574	
	SGS	M74HC574	
	Signetics	**74HC574**	**(3003)**
	Sprague	SS74HC574	
	TI	SN74HC574	
CD74HC597	Hitachi	HD74HC597	
	Motorola	MC74HC597	
	National	MM74HC597	
	SGS	M74HC597	
	Signetics	PC74HC597	
	TI	SNN74HC597	
	Toshiba	**TC74HC597**	**(3307)**
CD74HC640	Hitachi	HD74HC640	
	Motorola	MC74HC640	
	National	MM74HC640	
	Signetics	**74HC640**	**(3003)**
	Sprague	SS74HC640	
	TI	SN74HC640	
CD74HC643	Hitachi	HD74HC643	
	Motorola	MC74HC643	
	National	MM74HC643	
	SGS	M74HC643	
	Signetics	**74HC643**	**(3003)**
	Sprague	SS74HC643	
	TI	SN74HC643	
♦ CD74HC645	National	MM74HC645	
	Sprague	SS74HC645	
	TI	SN74HC645	
CD74HC646	Hitachi	HD74HC646	
	Motorola	MC74HC646	
	National	MM74HC646	
CD74HC646			(Cont'd)
	SGS	M74HC646	
	Signetics	**74HC646**	**(3003)**
	TI	SN74HC646	
CD74HC648	Hitachi	HD74HC648	
	Motorola	MC74HC648	
	National	MM74HC648	
	Signetics	**74HC648**	**(3003)**
	TI	SN74HC648	
CD74HC670	SGS	M74HC670	
	Signetics	**74HC670**	**(3003)**
	TI	SN74HC670	
CD74HC688	Motorola	MC74HC688	
	National	MM74HC688	
	SGS	M74HC688	
	Signetics	**74HC688**	**(3003)**
	TI	SN74HC688	
	Toshiba	**TC74HC688**	**(3307)**
CD74HC7266	Motorola	MC74HC7266	
	National	MM74HC7266	
	Signetics	PC74HC7266	
	TI	SN74HC7266	
	Toshiba	**TC74HC7266**	**(3307)**
CD74HC73	Hitachi	HD74HC73	
	Motorola	MC74HC73	
	National	MM74HC73	
	SGS	M74HC73	
	Signetics	**74HC73**	**(3003)**
	TI	SN74HC73	
	Toshiba	**TC74HC73**	**(3307)**
CD74HC74	Hitachi	HD74HC74	
	Motorola	MC74HC74	
	National	MM74HC74	
	SGS	M74HC74	
	Signetics	**74HC74**	**(3003)**
	TI	SN74HC74	
	Toshiba	TC40H074	
CD74HC75	Hitachi	HD74HC75	
	Motorola	MC74HC75	
	National	MM74HC75	
	SGS	M74HC75	
	Signetics	**74HC75**	**(3003)**
	TI	SN74HC75	
	Toshiba	**TC74HC75**	**(3307)**
CD74HC85	Motorola	MC74HC85	
	National	MM74HC85	
	SGS	M74HC85	
	Signetics	**74HC85**	**(3003)**
	TI	SN74HC85	
CD74HC86	Hitachi	HD74HC86	
	Motorola	MC74HC86	
	National	MM74HC86	
	SGS	M74HC86	
	Signetics	**74HC86**	**(3003)**
	TI	SN74HC86	
CD74HCT00	**Signetics**	**74HCT00**	**(3003)**
CD74HCT02	**Signetics**	**74HCT02**	**(3003)**
CD74HCT04	Motorola	MC74HCT04	
	SGS	M74HCT04	
CD74HCT08	**Signetics**	**74HCT08**	**(3003)**
CD74HCT10	**Signetics**	**74HCT10**	**(3003)**
CD74HCT107	**Signetics**	**74HCT107**	**(3003)**
	Universal	US74HCT107	
CD74HCT109	**Signetics**	**74HCT109**	**(3003)**
CD74HCT11	**Signetics**	**74HCT11**	**(3003)**
CD74HCT112	**Signetics**	**74HCT112**	**(3003)**
CD74HCT123	**Signetics**	**74HCT123**	**(3003)**
CD74HCT125	Hitachi	HD74HCT125	
	TI	SN74HCT125	
CD74HCT126	Hitachi	HD74HCT126	
	TI	SN74HCT126	
CD74HCT132	**Signetics**	**74HCT132**	**(3003)**
CD74HCT137	CTI	74HCT137	
	Plessey	MV74HCT137	
	SGS	M74HCT137	
	Supertex	74HCT137	
	TI	SN74HCT137	
	Toshiba	TC74HCT137	
CD74HCT138	**Signetics**	**74HCT138**	**(3003)**
CD74HCT139	CTI	74HCT139	
	GE/RCA	**CD74HCT273**	**(2631)**
	Signetics	**74HCT273**	**(3003)**
	Sprague	SS74HCT139	
CD74HCT14	**Signetics**	**74HCT14**	**(3003)**
CD74HCT147	**Signetics**	**74HCT147**	**(3003)**
CD74HCT151	**Signetics**	**74HCT151**	**(3003)**
CD74HCT153	**Signetics**	**74HCT153**	**(3003)**
CD74HCT154	**Signetics**	**74HCT154**	**(3003)**
CD74HCT157	**Signetics**	**74HCT157**	**(3003)**
CD74HCT158	**Signetics**	**74HCT158**	**(3003)**
CD74HCT160	National	MM74HCT160	
	Signetics	**74HCT160**	**(3003)**
CD74HCT161	**Signetics**	**74HCT161**	**(3003)**
CD74HCT162	**Signetics**	**74HCT162**	**(3003)**
CD74HCT163	**Signetics**	**74HCT163**	**(3003)**
CD74HCT164	**Signetics**	**74HCT164**	**(3003)**
CD74HCT165	**Signetics**	**74HCT165**	**(3003)**
CD74HCT166	**Signetics**	**74HCT166**	**(3003)**
CD74HCT173	**Signetics**	**74HCT173**	**(3003)**
CD74HCT174	**Signetics**	**74HCT174**	**(3003)**
CD74HCT175	**Signetics**	**74HCT175**	**(3003)**
CD74HCT190	**Signetics**	**74HCT190**	**(3003)**
CD74HCT191	**Signetics**	**74HCT191**	**(3003)**
CD74HCT192	**Signetics**	**74HCT192**	**(3003)**
CD74HCT193	**Signetics**	**74HCT193**	**(3003)**
CD74HCT194	**Signetics**	**74HCT194**	**(3003)**
CD74HCT195	**Signetics**	**74HCT195**	**(3003)**
CD74HCT20	**Signetics**	**74HCT20**	**(3003)**
CD74HCT221	**Signetics**	**74HCT221**	**(3003)**
CD74HCT237	Plessey	MV74HCT237	
	Supertex	74HCT237	
	TI	SN74HCT237	
CD74HCT238	CTI	74HCT238	
	Plessey	MV74HCT238	
	Signetics	**74HCT238**	**(3003)**
	Sprague	SS74HCT238	
	TI	SN74HCT238	
CD74HCT240	CTI	74HCT240	
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
CD74HCT241	CTI	74HCT241	
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
CD74HCT242	Hitachi	HD74HCT242	
	Micrel	MIC74HCT242	
	Signetics	**74HCT242**	**(3003)**
	TI	SN74HCT242	
CD74HCT243	Hitachi	HD74HCT243	
	Micrel	MIC74HCT243	
	Signetics	**74HCT243**	**(3003)**
	TI	SN74HCT243	
CD74HCT244	CTI	74HCT244	
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
CD74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
CD74HCT251	**Signetics**	**74HCT251**	**(3003)**
CD74HCT253	**Signetics**	**74HCT253**	**(3003)**
CD74HCT257	**Signetics**	**74HCT257**	**(3003)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD74HCT259	**Signetics**	**74HCT259**	**(3003)**
CD74HCT27	**Signetics**	**74HCT27**	**(3003)**
CD74HCT273	CTI	74HCT139	
	GE/RCA	**CD74HCT139**	**(2632)**
	Signetics	**74HCT273**	**(3003)**
	Sprague	SS74HCT139	
CD74HCT280	**Signetics**	**74HCT280**	**(3003)**
CD74HCT297	**Signetics**	**74HCT297**	**(3003)**
CD74HCT299	**Signetics**	**74HCT299**	**(3003)**
CD74HCT30	**Signetics**	**74HCT30**	**(3003)**
CD74HCT32	**Signetics**	**74HCT32**	**(3003)**
CD74HCT354	**Signetics**	**74HCT354**	**(3003)**
CD74HCT356	**Signetics**	**74HCT356**	**(3003)**
CD74HCT365	**Signetics**	**74HCT365**	**(3003)**
CD74HCT366	**Signetics**	**74HCT366**	**(3003)**
CD74HCT367	**Signetics**	**74HCT367**	**(3003)**
CD74HCT368	**Signetics**	**74HCT368**	**(3003)**
CD74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
CD74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
CD74HCT377	**Signetics**	**74HCT377**	**(3003)**
CD74HCT390	**Signetics**	**74HCT390**	**(3003)**
CD74HCT393	Signetics	PCF74HCT393	
CD74HCT4002			
	Signetics	**74HCT4002**	**(3003)**
CD74HCT40104			
	Signetics	**74HCT40104**	**(3003)**
CD74HCT40105			
	Signetics	**74HCT40105**	**(3003)**
CD74HCT4017			
	Signetics	**74HCT4017**	**(3003)**
CD74HCT4020			
	Signetics	**74HCT4020**	**(3003)**
CD74HCT4024			
	Signetics	**74HCT4024**	**(3003)**
CD74HCT4040			
	Signetics	**74HCT4040**	**(3003)**
CD74HCT4049			
	Signetics	**74HCT4049**	**(3003)**
CD74HCT4050			
	Signetics	**74HCT4050**	**(3003)**
CD74HCT4051			
	Signetics	**74HCT4051**	**(3003)**
CD74HCT4052			
	Signetics	**74HCT4052**	**(3003)**
CD74HCT4053			
	Signetics	**74HCT4053**	**(3003)**
CD74HCT4060			
	Signetics	**74HCT4060**	**(3003)**
CD74HCT42	**Signetics**	**74HCT42**	**(3003)**
CD74HCT423	**Signetics**	**74HCT423**	**(3003)**
CD74HCT4511			
	Signetics	**74HCT4511**	**(3003)**
CD74HCT4514			
	Signetics	**74HCT4514**	**(3003)**
CD74HCT4538			
	Signetics	**74HCT4538**	**(3003)**
CD74HCT4543			
	Signetics	**74HCT4543**	**(3003)**
CD74HCT533	CTI	74HCT533	
	Hitachi	HD74HCT533	
	Micrel	MIC74HCT533	
	Motorola	MC74HCT533	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD74HCT533			(Cont'd)
	Plessey	MV74HCT533	
	Signetics	**74HCT533**	**(3003)**
	Sprague	SS74HCT533	
	TI	SN74HCT533	
CD74HCT534	CTI	74HCT534	
	Hitachi	HD74HCT534	
	Micrel	MIC74HCT534	
	Motorola	MC74HCT534	
	Plessey	MV74HCT534	
	Signetics	**74HCT534**	**(3003)**
	Sprague	SS74HCT534	
	TI	SN74HCT534	
CD74HCT540	CTI	74HCT540	
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
CD74HCT541	CTI	74HCT541	
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
CD74HCT563	CTI	74HCT563	
	Hitachi	HD74HCT563	
	Micrel	MIC74HCT563	
	Plessey	MV74HCT563	
	SGS	M74HCT563	
	Signetics	**74HCT563**	**(3003)**
	Sprague	SS74HCT563	
	TI	SN74HCT563	
	Toshiba	TC74HCT563	
CD74HCT564	CTI	74HCT564	
	Hitachi	HD74HCT564	
	Micrel	MIC74HCT564	
	Plessey	MV74HCT564	
		MV74HCT573	
	SGS	M74HCT564	
	Signetics	**74HCT564**	**(3003)**
	Sprague	SS74HCT564	
	TI	SN74HCT564	
CD74HCT573	CTI	74HCT573	
	Hitachi	HD74HCT573	
	Micrel	MIC74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Signetics	**74HCT573**	**(3003)**
	Sprague	SS74HCT573	
	Supertex	74HCT573	
	TI	SN74HCT573	
	Toshiba	TC74HCT573	
CD74HCT574	CTI	74HCT574	
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
CD74HCT640	Hitachi	HD74HCT640	
	Motorola	MC74HCT640	
	SGS	M74HCT640	
	Signetics	**74HCT640**	**(3003)**
	Sprague	SS74HCT640	
	TI	SN74HCT640	
	Toshiba	TC74HCT640	
CD74HCT643	Hitachi	HD74HCT643	
	Motorola	MC74HCT643	
	SGS	M74HCT643	
	Signetics	**74HCT643**	**(3003)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD74HCT643			(Cont'd)
	TI	SN74HCT643	
	Toshiba	TC74HCT643	
♦ CD74HCT645	Signetics	75HCT645	
	Sprague	SS74HCT645	
	TI	SN74HCT645	
CD74HCT646	Hitachi	HD74HCT646	
	Signetics	**74HCT646**	**(3003)**
	TI	SN74HCT646	
	Toshiba	TC74HCT646	
CD74HCT648	Hitachi	HD74HCT648	
	Signetics	**74HCT648**	**(3003)**
	TI	SN74HCT648	
	Toshiba	TC74HCT648	
CD74HCT670	**Signetics**	**74HCT670**	**(3003)**
CD74HCT688	**Signetics**	**74HCT688**	**(3003)**
CD74HCT73	**Signetics**	**74HCT73**	**(3003)**
CD74HCT74	**Signetics**	**74HCT74**	**(3003)**
CD74HCT75	**Signetics**	**74HCT75**	**(3003)**
♦ CD74HCT76	Signetics	74HCT76	
	TI	SN74HC76	
CD74HCT85	**Signetics**	**74HCT85**	**(3003)**
CD74HCT86	**Signetics**	**74HCT86**	**(3003)**
CDHC125	Fairchild	54HC125	
	GE/RCA	**CD54HC125**	**(2631)**
	Motorola	MC54HC125	
	National	MM54HC125	
	TI	SN54HC125	
♦ CDM5104	AMD	AM2141	
		AM9244	
♦ CDM5104	**Cypress**	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
♦ CDM5104	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
♦ CDM5104	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
CDM5167	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
♦ CDM52356	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
♦ CDM52356	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
♦ CDM52356	**S-MOS**	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
♦ CDM52356	Signetics	23256	
		23256A	
♦ CDM52356	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
♦ CDM52356	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
♦ CDM53128	AMD	AM92128	
	GIM	RO9128	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ CDM53128			(Cont'd)
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
♦ CDM53128	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
♦ CDM53128	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
♦ CDM53256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
♦ CDM53256	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
♦ CDM53256	**S-MOS**	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
♦ CDM53256	Signetics	23256	
		23256A	
♦ CDM53256	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
♦ CDM53256	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
♦ CDM5332	Amperex	AM9233	
	Commodore	MPS2333	
	Fairchild	F3533	
	GIM	RO3-9333	
	Gould	S2333	
	Signetics	2332	
	Supertex	23C32	
♦ CDM5333	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
♦ CDM5333	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
♦ CDM5333	Signetics	2332	
		2632A	
♦ CDM5333	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
♦ CDM5333	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
♦ CDM5365	Fairchild	F3568	
		F3569	
		F3570	
♦ CDM5365	GIM	RO3-9365	
		RO9864	
♦ CDM5365	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
♦ CDM5365	National	MM52264	
		NM52264	
♦ CDM5365	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
♦ CDM5365	Supertex	23SC64	
		23SC64/A	
		CM6400	
♦ CDM5365	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CDM6116	Fujitsu	MB8416	
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	5117	
		M5M8725	
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
		MK6116	
	Toshiba	TC5516	
		TC5517	
		TC5517A	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	
CDM6116A	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	µPD4016	
		µPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CDM6116A			(Cont'd)
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
♦ CDM6117	Fujitsu	MB8417	
	S-MOS	**SRM2017**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
♦ CDM6117	Toshiba	TC5516A	
♦ CDM6117A	AMD	AM9128	
		AM9218	
♦ CDM6117A	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ CDM6117A	Fujitsu	MB8128	
		MB8416	
♦ CDM6117A	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ CDM6117A	Hitachi	HM6116	
		HM6166	
♦ CDM6117A	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ CDM6117A	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ CDM6117A	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ CDM6117A	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ CDM6117A	National	MMC2116	
	NEC	µPD4016	
		µPD446	
♦ CDM6117A	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ CDM6117A	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ CDM6117A	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ CDM6117A	Stantel-STC	STC6116	
		STC6166	
♦ CDM6117A	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ CDM6117A	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ CDM6117A	Vitelic	V61C16	
		V62C16	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ CDM6118	Fujitsu	MB8418	
		MBM8418	
♦ CDM6118	Hitachi	HM6117	
	NEC	µPD449	
	S-MOS	**SRM2018**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
♦ CDM6118	Toshiba	TC5518	
		TC5518B	
♦ CDM6118A	AMD	AM9128	
		AM9218	
♦ CDM6118A	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ CDM6118A	Fujitsu	MB8128	
		MB8416	
♦ CDM6118A	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ CDM6118A	Hitachi	HM6116	
		HM6166	
♦ CDM6118A	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ CDM6118A	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ CDM6118A	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ CDM6118A	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ CDM6118A	National	MMC2116	
	NEC	µPD4016	
		µPD446	
♦ CDM6118A	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ CDM6118A	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ CDM6118A	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ CDM6118A	Stantel-STC	STC6116	
		STC6166	
♦ CDM6118A	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ CDM6118A	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ CDM6118A	Vitelic	V61C16	
		V62C16	
♦ CDM6164	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
♦ CDM6164	**Cypress**	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
♦ CDM6164	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
♦ CDM6164	**GE/RCA**	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ CDM6164			(Cont'd)
	Hitachi	HM6264	
		HM6464	
		MB6264	
♦ CDM6164	Hyundai	HY6264	
		HY62C64	**(2770)**
♦ CDM6164	**Inmos**	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
♦ CDM6164	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
♦ CDM6164	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
♦ CDM6164	National	NMC6164	
	NEC	µPD4364	
		µPD4464	
♦ CDM6164	OKI	MSM5164	
		MSM5165	
		MSM5188	
♦ CDM6164	Performance	P4C164	
		P4C188	
♦ CDM6164	**S-MOS**	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
♦ CDM6164	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
♦ CDM6164	Vitelic	V61C62	
		V62C64	
♦ CDM6164	**VLSI Tech**	**VT20C98**	**(3352)**
CDM62256	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GoldStar	GM76C256	
	Hitachi	HM62256P	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
	Lattice	256K8	
	Mitel	M5M5256	
	NEC	µPD43256	
	S-MOS	**SRM20256C**	**(3201)**
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
		TC55416	
	Vitelic	V62C256	
CDM6264	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

GE/RCA Solid State (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CDM6264			(Cont'd)
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
♦ CDP1823	Hughes	HCMP1823	
♦ CDP1824	Hughes	HCMP1824	
♦ CDP1831	Hughes	HCMP1831	
♦ CDP1832	Hughes	HCMP1832	
♦ CDP1833	Hughes	HCMP1833	
♦ CDP1834	Hughes	HCMP1834	
♦ CDP1835	Hughes	HCMP1835	
♦ CDP1837	Hughes	HCMP1837	
♦ CDP1852	Hughes	HCMP1852	
♦ CDP1853	Hughes	HCMP1853	
♦ CDP1855	Hughes	HCMP1855	
CDP1856	Hughes	HCMP1856	
♦ CDP1857	Hughes	HCMP1857	
♦ CDP1858	Hughes	HCMP1858	
♦ CDP1859	Hughes	HCMP1859	
CDP6805	Motorola	MC146805	
CDP6818	Dallas	DS1287	
	Hitachi	HD146818	
		HD146818A	
	Motorola	**MC146818**	**(2902)**
		MC146818A	**(2902)**
CDP6823	**Motorola**	**MC146823**	**(2902)**
♦ CDP6848	Motorola	MC6848	
CDP68HC05 CDP68HC68T1	Motorola	MC1468HC05	
	Motorola	MC68HC68T1	
LM301	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
LM311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
	LinearTech	LM311	
LM311			(Cont'd)
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM339	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
LM358	**GE/RCA**	**CA358A**	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
LM723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	μA723	
	SiliconG	SG723	
	TI	μA723	
		μA723M	
	Thomson	SFC2723	
		μA723	
♦ MC74HC564	**GE/RCA**	**CD74HC564**	**(2631)**
	Hitachi	HD74HC564	
	Motorola	MC74HC564	
	National	MM74HC564	
	SGS	M74HC564	
	Signetics	**74HC564**	**(3003)**
	Sprague	SS74HC564	
	TI	SN74HC564	
♦ MWS5101	AMD	AM2101	
		AM9101	
		AM91L01	
♦ MWS5101	**Harris**	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
♦ MWS5101	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
♦ MWS5101	Toshiba	TC5501	
♦ MWS5514	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
♦ MWS5514	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
♦ MWS5514	Toshiba	TC5513	
		TC5514	
		TMM2114	
♦ MWS5514	UMC	UM6104	
PA50800	LSI Logic	LL5080	
	Toshiba	TC15G008	
PA51400	LSI Logic	LL5140	
	Toshiba	TC15G014	
PA52200	LSI Logic	LL5220	
	Toshiba	TC15G022	
PA53200	LSI Logic	LL5320	
	Toshiba	TC15G032	
PA54200	LSI Logic	LL5420	
	Toshiba	TC15G042	
PA56000	LSI Logic	LL5600	
	Toshiba	TC15G060	

General Instrument Microelectronics

Manufacturer Device	Replacement Source	Device	IC Master Page
27256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
27256-1	AMD	AM27256-1	
27256-15	Intel	27256-15	
	Toshiba	27256-15	
27256-17	AMD	AM27256-17	
	Fujitsu	MBM27256-17	
27256-2	AMD	AM27256-2	
	Intel	27256-2	
27256-20	AMD	AM27256-20	
	Fujitsu	MBM27256-20	
	Intel	27256-20	
	Toshiba	27256-20	
27256-25	AMD	27256-25	
	Fujitsu	MBM27256-25	
	Hitachi	HN27256-25	
	Intel	27256-25	
27256-3	AMD	AM27256-3	
	Intel	27256-3	
	NEC	μPD27256-3	
27256-30	AMD	AM27256-30	
	Fujitsu	MBM27256-30	
	Hitachi	HN27256-30	
	Intel	27256-30	
27256-4	AMD	AM27256-4	
27256-5	Intel	27256-5	
27512-2	**Intel**	**27512-2**	**(2862)**
	Mitsubishi	M27512-2	
27512-20	Fujitsu	MBM27512-20	
	Intel	**27512-20**	**(2862)**
	Mitsubishi	M27512-20	
	Toshiba	VT27C512-20	
27512-200V05	**Intel**	**27512-200V05**	**(2862)**
	Mitsubishi	M27512-200V05	
27512-200V10	**Intel**	**27512-2000V10**	**(2862)**
	Mitsubishi	M27512-200V10	
27512-25	AMD	AM27512-25	
	Fujitsu	MBM27512-25	
	Hitachi	HN27512-25	
	Intel	**27512-25**	**(2862)**
	Mitsubishi	M27512-25	
	Toshiba	VT27C512-25	
27512-3	AMD	AM27512-3	
	Intel	**27512-3**	**(2862)**
	Mitsubishi	M27512-3	
27512-30	AMD	AM27512-30	
	Fujitsu	MBM27512-412	
	Intel	**27512-30**	**(2862)**
	Mitsubishi	M27512-30	
27C128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
27C256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

General Instrument Microelectronics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
27C256			(Cont'd)
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
27C256-	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
27C512	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
27C512-170V05			
	Intel	**27512-170V05**	**(2862)**
	Mitsubishi	M27512-170V05	
27C512-45	AMD	AM27512-45	
27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
27C64	OKI		(Cont'd)
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
27HC64	Atmel	27HC64	
		AT27HC64	
	GoldStar	**GL3620**	**(2699)**
		GM27HC64	**(2692)**
	ICT	27CX641	
	Sanyo	LA7620	
	Sharp	**LH5763**	**(2994)**
	Waferscale	**WS57C64**	**(3376)**
27HC641	Atmel	27HC641	
		AT27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C263	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GE/RCA	**CD22203**	**(2636)**
	ICT	27CX642	
	Sharp	**LH5749**	**(2994)**
		LH5762	**(2994)**
	SiliconSys	SSI203	
	Waferscale	**WS57C49**	**(3376)**
28C04	Atmel	2804	
	SEEQ	**2804**	**(2991)**
	Xicor	2804	
		X2804	**(3389, 3405)**
28C16	EXEL	XL2816	
		XL2816A	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	Intel	2816B	
	National	NMC9816A	
	Samsung	KM2816A	
	SEEQ	**2816**	**(2991)**
		2816A	**(2991)**
		M2816A	
	Xicor	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**
28C17	AMD	AM2817A	
	EXEL	XL2817A	
	National	NMC9817	
	Samsung	KM2817A	
	SEEQ	**2817A**	**(2991)**
		DQ2817A	
28C64	AMD	AM28645	
	EXEL	XL2865A	
	Motorola	28C64	
	NCR	NCR5264	
	Samsung	KM2865A	
	SEEQ	DQ2864	
28CP256A	AMD	28C256	
	Atmel	28C256	
	SEEQ	28256	
		28C256	**(2991)**
	Xicor	**X28256**	**(3393, 3412)**
		X28C256	**(3394, 3413)**
28CP64	National	NMC98C64A	
AY3-8913	NCR	NCR8489	
	TI	SN76489	
		SN76489A	
AY31015	SMC	COM8017	
AY5-8116	SMC	COM8116	
	Western	WD1943	
AY5-8136	SMC	COM8136	
	Western	WD1945	
AY53600	SMC	KR9600	
DSP32010	**TI**	**TMS32010**	**(3221)**
DSP320C10	**TI**	**TMS320C10**	**(3221)**

Manufacturer Device	Replacement Source	Device	IC Master Page
ER3400	Hughes	HNVM3104A	
ER5911	**Hyundai**	**HY93C46**	**(2770)**
	National	COP495	
		NMC9346	
	NCR	59346	
		NCR59308	
	SGS	M9346	
	Sierra	SC22011	
ER59256	National	COP494	
		NMC9306	
♦ PIC1650A	Plessey	PIC1650A	
♦ PIC1654	Plessey	PIC1654	
♦ PIC1655A	Plessey	PIC1655A	
	SiliconG	SG75450B	
♦ PIC1656	Plessey	PIC1656	
♦ PIC1670	Plessey	PIC1670	
PIC7000	TI	TMS7000	
PIC7020	TI	TMS7020	
PIC7040	TI	TMS7040	
PIC7041	TI	TMS7041	
R09256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
RO3-9332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
RO3-9333	Amperex	AM9233	
	Commodore	MPS2333	
	Fairchild	F3533	
	Gould	S2333	
	Signetics	2332	
	Supertex	23C32	
RO3-9364	Hitachi	HN48364	
	Mitsubishi	M58334	
	National	MM52164	
	NEC	μPD2364	
	Rockwell	R2364A	
	Signetics	2664	
		26S64	

Manufacturer Device	Replacement Source	Device	IC Master Page
RO3-9365	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
RO91000	Fujitsu	MB831000	
		MB831124	
	Hitachi	HN62301	
	NEC	μPD23C1000	
	Toshiba	**TC531000**	**(3305)**
	VLSI Tech	VT23C1024	
RO9128	AMD	AM92128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
RO9256	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
♦ RO9580	Fujitsu	MB7118	
	Signetics	N82LS135	
	TI	28L22	
RO9864	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
♦ ROC5120	NCR	NCR23C512	
	NEC	μPD23C512	
	VLSI Tech	**VT23512**	**(3362)**

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

General Instrument Microelectronics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
WS57C256	AMD	AM90C256	
	MicronTech	MT1256	
	Motorola	MCM6256	
		MCM6257	
		MCM64256	
	TI	SMJ32010	
		SMJ4256	**(3220)**
	Thomson	MK45H56	
	Vitelic	V51C256	
		V51C257	

Gennum Corporation

Manufacturer Device	Replacement Source	Device	IC Master Page
LM185-1	AD	AD589	
	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM385-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM113	
		LM313	
	TeledyneP	TSC9491	
	TeledyneS	9491	
		TSC9491	
LM385-1	AD	AD589	
	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM185-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM113	
		LM313	
	TeledyneP	TSC9491	
	TeledyneS	9491	
		TSC9491	
LS2842	Cherry	CS2842	
LT1007	TI	LT1007	
LT1009	TI	LT1009	
LT1011	TI	LT1011	
LT1011A	TI	LT1011A	
LT1037	TI	LT1037	
LTC104A	TI	LTC1044	
LTC7660	TI	LTC7660	
REF01	AD	AD581	
		ADREF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
REF02	AD	ADREF02	
	Maxim	REF02	
	MicroPwr	MPREF02	
	PMI	**REF02**	**(2975)**
	Raytheon	REF02	

GoldStar Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
GD75188	Exar	XR1488	
	Fairchild	MC1488	
		µA212A	
		µA750	
	Hitachi	HD75188	
	National	DS1488	
	Signetics	MC1488	
		MC1489	
	SiliconG	SG75188	
		SG75788	
	TI	MC1488	
		MC1489	
		SN75188	
		SN75189	
GD75189	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		µA212A	
		µA750	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
GD75189			(Cont'd)
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG2501A	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
GL1170	Fairchild	µA7327	
	SGS	TDA1170	
	Sprague	ULN2270	
	Telefunken	TDA1170	
GL3120	Sanyo	LA7520	
GL3130	Sanyo	LA7530	
GL3201	GE/RCA	CA3065	
	Hitachi	HA1125	
	Motorola	LSC1008	
		M5140	
	National	LM3064	
	NEC	µPC1382	
	Sanyo	LA1365	
	TI	SN76666	
	Toshiba	TA7176	
GL3230	Toshiba	TA7360	
GL324	Fairchild	µA2902	
		µA324	
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	µPC324	
		µPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
GL3273	**Motorola**	**MC3373**	**(2948)**
	NCR	NCR6500-12	
	Rockwell	**R6500-12**	**(2988)**
		R6500-13	**(2988)**
		R6500-15	**(2988)**
GL3361	Signetics	TDA3561	
GL339	Fairchild	µA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	µPC137	
		µPC177	
		µPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
GL348	Exar	XR4751	
	Fairchild	µA348	
	GE/Intersil	LM348	
	Motorola	**LM348**	**(2923, 2958)**
		MC4741	**(2923, 2959)**
	National	LM348	
	Raytheon	HA4741	
	TI	LM348	
GL358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
GL358			(Cont'd)
	National	LM358	
		LM358A	
	NEC	µPC1251	
		µPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
GL3620	Atmel	27HC64	
		AT27HC64	
	GIM	27HC64	
	GoldStar	**GM27HC64**	**(2692)**
	ICT	27CX641	
	Sanyo	LA7620	
	Sharp	**LH5763**	**(2994)**
	Waferscale	**WS57C64**	**(3376)**
GL3711	Sanyo	LA7911	
GL3812	Toshiba	TA7717	
GL3813	NEC	µPC139362	
GL3920	Toshiba	TA7778	
GL393	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	µPC277	
		µPC393	
	SGS	LM393	
	TI	LM393	
	Toshiba	TA75393	
GL4558	Exar	XR4558	
	Fairchild	µA4558	
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	µPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
GL4559	CMD Micro	G65SC51	
	Raytheon	RC4136	
	TI	RC4136	
GL5229	Mitel	MS1162	
GL5501	Sanyo	LA3220	
GL5808	Sanyo	LA1260	
GL5901	SGS	TDA1220	
GL6801	RIFA	PBL3535	
	TRW-LSI	MPY008H	
		MPY08H	
		TMC208K	
GL6901	MMI	M2064-33	
	RIFA	PBL3726	
	Xilinx	**XC2064-33**	**(4346)**
GL7805	Fairchild	µA7805	
	Gould	µA7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
		LM7805	
	Samsung	MC7805	
	SiliconG	SG7805	
		SG7805A	
	TI	µA7805	
	Toshiba	TA78005	
		TA79005	
	Unitrode	**UC7805**	**(3325)**
GL7806	Gould	S8975	
		µA7806	
	Hitachi	HA17806	
	Mitel	MT8975	
	National	µA7806	
GL7808	Fairchild	µA7808	
	Gould	µA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
GL7808			(Cont'd)
	National	LM7808	
	NEC	µPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	µA7808	
	Thomson	µA7808	
	Toshiba	TA78008	
GL7809	Fairchild	µA7809	
	Gould	µA7809	
	Hitachi	HA17809	
	Motorola	MC7809	
	National	LM7809	
	NEC	µPC7809	
	TI	µA7809	
	Toshiba	TA78009	
GL7812	Gould	S8970	
	Hitachi	HA17812	
	Mitel	MT8970	
	National	µA7812	
GL7815	Fairchild	µA7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	
		LM340T-15	
		LM78L15	
	NEC	µPC78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	SN75555	
		µA78L15	
	Toshiba	TA78L015	
GL7824	Fairchild	µA7824	
	Gould	µA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	µPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
		µA7824	
	Thomson	µA7824	
	Toshiba	TA78024	
GL7905	Fairchild	µA79M05	
	Gould	µA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	µPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	µA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
GL7909	Fairchild	µA7909	
	Gould	µA7909	
	National	LM7909	
	NEC	µPC7909	
	SGS	L7909	
	TI	µA7909	
	Toshiba	TA7900	
		TA79009	
GL7912	Fairchild	µA7912	
		µA79M12	
	GoldStar	GL7824	
	Gould	µA7824	
		µA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	µPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

GoldStar Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
GL7912			(Cont'd)
	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
GL7915	Fairchild	μA7915	
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
GL7924	Fairchild	74LS195A	
		μA7924	
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
GLC555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
GLC556	National	LM556	
	NCR	NCR65C00-1	
	NEC	μPC556	
	Rockwell	**R65C10**	**(2988)**
	TI	NE556	
GM231024	**Cypress**	**PALC16R4**	**(4217)**
	Hitachi	HM62301	
	Mitel	M5M231000	
	MMI	PALC16R4Q-25	
	NEC	μPD231000	
	Toshiba	TC53100	
GM27HC64	Atmel	27HC64	
		AT27HC64	
	GIM	27HC64	
	GoldStar	**GL3620**	**(2699)**
	ICT	27CX641	
	Sanyo	LA7620	
	Sharp	**LH5763**	**(2994)**
	Waferscale	**WS57C64**	**(3376)**
GM3043	NEC	μPC393C	
		μPD1943	
GM3054/7	Fairchild	μA3054/7	
	MMI	M2064-50	
	Xilinx	**XC2064-50**	**(4346)**
GM5370	MMI	M2064-70	
	Thomson	MK5370	
	Xilinx	**XC2064-70**	**(4346)**
GM5371	MMI	M2018-33	
	Thomson	MK5371	
	Xicor	XC2018-33	
GM5372	MMI	M2018-50	
	Xicor	XC2018-50	
GM5373	MMI	M2018-70	
	Thomson	MK5373	
	Xicor	XC2018-70	
GM5375	**Cypress**	**PALC16L8**	**(4217)**
	MMI	PALC16L8Q-25	
	Thomson	MK5375	
GM5376	**Cypress**	**PALC16R8**	**(4217)**
	MMI	PALC16R8Q-25	
	Thomson	MK5376	
GM5380	National	TP5380	
GM62300	Mitel	MT8812	
	SGS	M093	
♦ GM7164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
♦ GM7164	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
♦ GM7164	Hitachi	HM4864	
		HM4864A	
♦ GM7164	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
♦ GM7164	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
♦ GM7164	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
♦ GM7164	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
♦ GM7164	Vitelic	V51C64	
GM7616	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
GM76C164	AMD	AM2168	
		AM9968	
		AM99CL68	
	Fairchild	F1620	
	Fujitsu	MB8168	
		MB81C69	
	Hitachi	HM6168	
		HM6268	
	Inmos	IMS1420	
		IMS1421	
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Matra-Harris	HM65682	
		HMI65769	
	Motorola	MCM1423	
		MCM6168	
		MCM6288	
	NEC	μPD4314	
	S-MOS	SRM2274	
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
	Thomson	**MK41H68**	**(3265)**
	Toshiba	TMM2068	
	Vitelic	V61C62	
		V61C68	
GM76C164			(Cont'd)
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C69	**(3349)**
GM76C256	Cypress	PALC46R6	
	Fujitsu	HB84256	
	MMI	PAL16R6Q-25	
GM76C28	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
GM76C64	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
GM76C64			(Cont'd)
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
GM76C88	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
GM7C1024	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	

(Continued)

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

GoldStar Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
GM7C1024			(Cont'd)
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
Z8400	**GoldStar**	**Z8430**	**(2691)**
	NEC	μPD780	
	SGS	Z80ACPU	
		Z80ACTC	
		Z8400	
		Z84C00	
	Sharp	LH0080	
	Thomson	MK3880	
	Toshiba	**TMPZ84C00**	**(3306)**
	Zilog	**Z8400**	**(3417)**
		Z84C00	**(3417)**
Z8420	SGS	Z80PIO	
		Z8420	
	Sharp	LH0081	
	Zilog	**Z80-PIO**	**(3418)**
		Z8420	**(3417)**
Z8430	SGS	Z80ACTC	
		Z80CTC	
		Z8430	
	Sharp	LH0082	
	Zilog	**Z80-CTC**	**(3418)**
		Z8430	**(3417)**
Z8440	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8441	
		Z8442	
	Sharp	LH0084	
		LH0085	
		LH0086	
	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
Z8470	SGS	Z80ADART	
		Z80DART	
		Z8470	
	Zilog	**Z80-DART**	**(3418)**
		Z8470	**(3417)**

Gould Inc.

18CP210	ICT	18CP210	
18CV8	ICT	18CV8	
22CP210	ICT	22CP210	
22CV10	ICT	22CV10	
7720	NEC	μPD7720A	
GA1000D	Thomson	GA1000D	
GA2000D	Thomson	GA2000D	
GA3000D	Thomson	GA3000D	
GA4000D	Thomson	GA4000D	
♦ S1602	Fairchild	F6850	
	Hitachi	HD6850	
	Motorola	**MC6850**	**(2902)**
	Thomson	EF6850	
S23128	AMD	AM92128	
	GIM	RO9128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
S23128			(Cont'd)
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
S23256	GIM	RO9256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
S2333	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
S2364	Hitachi	HN48364	
	NCR	NCR2364	
	OKI	MSM3864	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**
	Sharp	LH2364A	
	Signetics	2364	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
S25089	ITT	SBA5089	
	National	TP5089	
	Samsung	MK5089	
	Sharp	LR4089	
	Stantel-STC	STC5089	
	TI	TCM5089	
	Thomson	MK5089	
	UMC	UM5089	
S2560	SGS	M2560	
♦ S2560A	SGS	M2560A	
S2569	SGS	M2569	
♦ S2688	National	MM5837	
S3506	Plessey	MV3506	
S3507	Plessey	MV3507	
S35212	EG&G-Reticon		
		R5632	
		RM5632A	**(2590)**
	Exar	**XR2126**	**(2605)**
		XR2127	**(2605)**
	Gould	S35212A	
	Hitachi	HA17815	
	Mitel	MT35212A	
	National	μA7815	
	Sierra	SC11000	
		SC11005	
S35212A	EG&G-Reticon		
		R5632	
		RM5632A	**(2590)**
	Exar	**XR2126**	**(2605)**
		XR2127	**(2605)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
S35212A			(Cont'd)
	Gould	S35212	
	Hitachi	HA17815	
	Mitel	MT35212A	
	National	μA7815	
	Sierra	SC11000	
		SC11005	
S35213	Mitel	MT35213	
S3525A	SiliconSys	SSI3525	
♦ S3525B	Gould	S3525A	
	SiliconSys	SSI3525	
S3530	Mitel	MT3530	
S4520	**Holt**	**HI8012**	**(2769)**
S4534	**Sprague**	**UCN5810**	**(3203, 3205)**
	TI	TL4810	
		UCN4810A	
S4535	**Sprague**	**UCN5818**	**(3203, 3205)**
	TI	SN75518	
♦ S5101	AMD	AM2101	
		AM9101	
		AM91L01	
♦ S5101	**Harris**	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
♦ S5101	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
♦ S5101	Toshiba	TC5501	
♦ S6364	Fairchild	F3568	
		F3569	
		F3570	
♦ S6364	GIM	RO3-9365	
		RO9864	
♦ S6364	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
♦ S6364	National	MM52264	
		NM52264	
♦ S6364	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
♦ S6364	Supertex	23SC64	
		23SC64/A	
		CM6400	
♦ S6364	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
♦ S6501	AMD	AM2101	
		AM9101	
		AM91L01	
♦ S6501	**Harris**	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
♦ S6501	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
♦ S6501	Toshiba	TC5501	
♦ S6516	AMD	AM9128	
		AM9218	
♦ S6516	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ S6516	Fujitsu	MB8128	
		MB8416	
♦ S6516	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ S6516	Hitachi	HM6116	
		HM6166	
♦ S6516	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ S6516			(Cont'd)
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ S6516	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ S6516	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ S6516	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ S6516	National	MMC2116	
	NEC	μPD4016	
		μPD446	
♦ S6516	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ S6516	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ S6516	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ S6516	Stantel-STC	STC6116	
		STC6166	
♦ S6516	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ S6516	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ S6516	Vitelic	V61C16	
		V62C16	
S6551	Commodore	MP6551	
		MPS6551	
	Harris	**HM6551**	**(2704, 2763)**
	National	6551	
		74C920	
	Rockwell	**R6551**	**(2990)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	5101	
S65SC51	Mitel	MD65SC51B	
♦ S6801	Hitachi	HD6801	
	Thomson	EF6801	
♦ S6802	Fairchild	F6802	
	Hitachi	HD6802	
	Motorola	**MC6802**	**(2902)**
	Thomson	EF6802	
♦ S6805	Hitachi	HD6805	
	Motorola	MC6805	
	Thomson	EF6805	
♦ S6808	Fairchild	F6808	
	Motorola	MC6808	
♦ S6809	Hitachi	HD6809	
		HD68B09	
♦ S6809	**Motorola**	**MC6809**	**(2902)**
	Thomson	EF6809	
♦ S6810	Fairchild	F6810	
	Hitachi	HD6810	
		HD68A10	
♦ S6810	Motorola	MC6810	
		MCM6810	**(2902)**
S6821	Fairchild	F6821	
	Hitachi	HD6821	
		HD68A21	
		HD68B21	
	Mitel	MD68SC21	
	Motorola	**MC6821**	**(2902)**
	Thomson	EF6821	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Gould Inc.			**(Cont'd)**
♦ S68364	NCR	NCR2365	
	NEC	μPD2364E	
	Signetics	2364	
		2664	
♦ S68364	VLSI Tech	VT2365	
♦ S6840	Fairchild	F6840	
	Hitachi	HD6840	
	Mitel	MD68SC40	
	Motorola	**MC6840**	**(2902)**
	Thomson	EF6840	
♦ S6846	Fairchild	F6846	
	Hitachi	HD6846	
♦ S684SE	Fairchild	F6845	
	Hitachi	HD6845	
	Motorola	**MC6845**	**(2903)**
♦ S6852	Fairchild	F6852	
	Hitachi	HD6852	
	Motorola	**MC6852**	**(2902)**
♦ S6854	Fairchild	F6854	
	Thomson	EF6854	
♦ S68A00	Motorola	MC68A00	
♦ S68A10	Motorola	MC68A10	
♦ S68A21	Motorola	MC68A21	
♦ S68A332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
♦ S68A332	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
♦ S68A332	Signetics	2332	
		2632A	
♦ S68A332	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
♦ S68A332	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
♦ S68A364	Gould	S2364	
	Hitachi	HN48364	
	NCR	NCR2364	
	OKI	MSM3864	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**
	Sharp	LH2364A	
	Signetics	2364	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
♦ S68A50	Motorola	MC68A50	
♦ S68A54	Motorola	MC68A54	
♦ S68B00	Motorola	MC68B00	
♦ S68B10	Motorola	MC68B10	
♦ S68B21	Motorola	MC68B21	
♦ S68B50	Motorola	MC68B50	
♦ S68B54	Motorola	MC68B54	
♦ S68SC49B	Mitel	MD68SC49B	
S7720	NEC	μPD7720	
S8940	GoldStar	GL7808	
	Gould	μA7808	
	Hitachi	HA17808	
	Mitel	MT8940	
	Motorola	**MC7808**	**(2927)**
	National	μA7808	
S8970	GoldStar	GL7812	
	Hitachi	HA17812	
	Mitel	MT8970	
	National	μA7812	
S8975	GoldStar	GL7806	
	Gould	μA7806	
	Hitachi	HA17806	
	Mitel	MT8975	
	National	μA7806	
S8978	Hitachi	HA17807	
	Mitel	MT8978	
	National	μA7807	
S8980	Mitel	MT8980	
S8981	GoldStar	GL7805	
	Gould	μA7805	
	Hitachi	HA17805	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
S8981			(Cont'd)
	Mitel	MT8981	
	National	μA7805	
♦ UA1	CalDevices	HC3100	
♦ UA2	CalDevices	HC4100	
♦ UA3	CalDevices	HC5400	
♦ UA4	CalDevices	HC7700	
♦ UA5	CalDevices	HC10000	
♦ UA6	CalDevices	HC12600	
μA7805	Fairchild	μA7805	
	GoldStar	GL7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
		LM7805	
	Samsung	MC7805	
	SiliconG	SG7805	
		SG7805A	
	TI	μA7805	
	Toshiba	TA78005	
		TA79005	
	Unitrode	**UC7805**	**(3325)**
μA7806	GoldStar	GL7806	
	Gould	S8975	
	Hitachi	HA17806	
	Mitel	MT8975	
	National	μA7806	
μA7808	Fairchild	μA7808	
	GoldStar	GL7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	NEC	μPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	μA7808	
	Thomson	μA7808	
	Toshiba	TA78008	
μA7809	Fairchild	μA7809	
	GoldStar	GL7809	
	Hitachi	HA17809	
	Motorola	MC7809	
	National	LM7809	
	NEC	μPC7809	
	TI	μA7809	
	Toshiba	TA78009	
μA7815	Fairchild	μA78L15	
	GoldStar	GL7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
μA7824	Fairchild	μA7824	
	GoldStar	GL7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	μPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
		μA7824	
	Thomson	μA7824	
	Toshiba	TA78024	
μA7905	Fairchild	μA79M05	
	GoldStar	**GL7905**	**(2701)**
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
μA7905			(Cont'd)
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	μPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	μA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
μA7909	Fairchild	μA7909	
	GoldStar	**GL7909**	**(2701)**
	National	LM7909	
	NEC	μPC7909	
	SGS	L7909	
	TI	μA7909	
	Toshiba	TA7900	
		TA79009	
μA7912	Fairchild	μA7912	
		μA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	μA7824	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	μPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
μA7915	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
μA7924	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	

Harris Semiconductor

29C51C	Intel	29C51C	
♦ 76161	AMD	27S191	
		AM27S191	
♦ 76161	**Cypress**	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
♦ 76161	Fairchild	932511	
		93Z511	
♦ 76161	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 76161			(Cont'd)
	Motorola	76161	
		MCM76101	
♦ 76161	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
♦ 76161	Signetics	82S191	
		N82S191	
		N82S191A	
♦ 76161	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
♦ 76161	**Waferscale**	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
♦ 7649	AMD	27S29	
	Fairchild	LF157A	
	National	545472	
		74S472	
		LF157A	
		LF351	
		LF353	
♦ 7649	**PMI**	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
♦ 76641	AMD	27S49	
		AM27S49	
♦ 76641	**Cypress**	**CY7C264**	**(2565)**
	Fairchild	32Z565	
		93Z565	
		93Z665	
♦ 76641	Fujitsu	7144H	
		MB7144	
♦ 76641	Raytheon	29VP864	
♦ 7681	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
♦ 7681	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ 7681	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ 7681	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ 7681	Signetics	N82S181	
		S82S181	
♦ 7681	TI	28586-60	
		28S86-60	
		JBP28L86A	
80C86	Intel	80C86	
80C88	Intel	80C88	
82C37	AMD	8237	
	Calmos	**CA82C37**	**(2553)**
	Intel	8037	
	NEC	μPD8237	
	OKI	MSM82C37	
82C37A	AMD	AM8237A	
		AM9517A-4	
	Intel	8237A-4	
82C54	**Calmos**	**CA82C54**	**(2553)**
	Intel	8254	
		82C54	
	NEC	μPD71054	
	OKI	82C54	
	S-MOS	SMC82C54AC	
82C55	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55A**	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Harris Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
82C55A	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
82C59	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59A**	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
82C59A	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
82C82	Fujitsu	MBL8282	
	Intel	8282	
		82C82	
	MMI	82C82	
	NEC	μPB8282	
		μPD71082	
	OKI	82C82	
82C83H	Intel	8283	
		82C83	
	MMI	82C83	
	NEC	μPD71083	
	OKI	82C83	
82C84	**Calmos**	**CA82C84**	**(2553)**
	Fujitsu	MBL8284	
	Harris	**82C84A**	**(2734, 2768, 4249)**
	Intel	8284	
		82C84	
		82C84A	
	NEC	μPB8284	
		μPD71084	
		μPD8284	
	OKI	MSM82C84	
82C84A	**Calmos**	**CA82C84**	**(2553)**
	Fujitsu	MBL8284	
	Harris	**82C84**	**(2734, 2768, 4249)**
	Intel	8284	
		82C84	
		82C84A	
	NEC	μPB8284	
		μPD71084	
		μPD8284	
	OKI	MSM82C84	
82C86H	AMD	DP8304	
	Fujitsu	MBL8286	
	Intel	8286	
		82C86	
	MMI	82C86	
	National	DP8304	
	NEC	μPB8286	
		μPD71086	
	OKI	82C86	
82C87H	AMD	8287	
	Intel	8287	
		82C87	
	MMI	82C87	
	NEC	μPD8287	
		μPS71087	
	OKI	82C87	
82C88	AMD	8288	
	Calmos	**CA82C88**	**(2553)**
	Fujitsu	MBL8288	
	Intel	8288	
		82C88	
	NEC	μPB8288	
		μPD71088	
		μPD8288	
	OKI	82C88	
		MSM82C88	
82C89	Fujitsu	MBL8289	
	Intel	8289	
	NEC	μPB8289	
HA10	**Exar**	**XR1010**	**(2602)**
	LinearTech	LT1060	
	Maxim	MF10	
	MicroLinear	ML2110	
HA21458	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	**HA5102**	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	μPC1458	
		μPC251	
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
HA2475	AD	AD583	
	Datel	**SHMIC-1**	**(2577)**
	PMI	**SMP10**	**(2975)**
		SMP11	**(2975)**
	TeledyneP	4856	
HA2500	**Elantec**	**EHA2500**	**(2593)**
HA2502	Datel	AM450-2M	
	Elantec	**EHA2502**	**(2593)**
HA2505	AD	AD540	
	Datel	**AM450-2**	**(2577)**
	Elantec	**EHA2505**	**(2593)**
HA2510	**Elantec**	**EHA2510**	**(2593)**
HA2512	**Elantec**	**EHA2512**	**(2593)**
HA2515	**Elantec**	**EHA2515**	**(2593)**
HA2520	AD	AD509	
	Burr-Brown	**3507**	**(2535)**
	TeledyneP	1322	
HA2522	Datel	AM452-2M	
	Elantec	**EHA2522**	**(2594)**
HA2525	**Burr-Brown**	**3507**	**(2535)**
	Datel	AM452	
	Intronics	A560	
HA2539	**Harris**	**HA5190**	**(2707, 2737, 2747)**
	Signetics	**NE5539**	**(3087)**
	TeledyneP	1342	
HA2540	**Harris**	**HA5190**	**(2707, 2737, 2747)**
	TeledyneP	1341	
HA2542	AD	ADLH0032	
		HOS-060	
		HOS050	
		MOS050	
	Elantec	**ELH0032**	**(2593)**
	Micra	MC0032	
	National	LH0032	
	TeledyneC	LH0032	
	TeledyneP	0032	
HA2600	**Elantec**	**EHA2600**	**(2594)**
	Hitachi	HA17741	
	Motorola	**MC1556**	**(2921)**
		ML1556	
	Signetics	SE556	
	TeledyneP	1326	
	TI	MC1556	
		SE556M	
HA2602	Datel	AM460-2M	
	Elantec	**EHA2602**	**(2594)**
HA2605	Burr-Brown	3506	
	Datel	**AM460-2**	**(2577)**
	Elantec	**EHA2605**	**(2594)**
	Motorola	**MC1456**	**(2920)**
	TI	MC1456	
HA2620	AD	AD507	
	Burr-Brown	**3508**	**(2535)**
	Datel	**AM462-1**	**(2577)**
		AM462-2	**(2577)**
	GE/Intersil	A561	
	Harris	**HA2622**	**(2706, 2768)**
		HA2625	
HA2622	AD	AD507	
	Burr-Brown	**3508**	**(2535)**
	Datel	**AM462-1**	**(2577)**
		AM462-2	**(2577)**
	GE/Intersil	A561	
	Harris	**HA2620**	**(2706, 2737, 2747)**
		HA2625	
HA2625	AD	AD507	
	Burr-Brown	**3508**	**(2535)**
	Datel	**AM462-1**	**(2577)**
		AM462-2	**(2577)**
	GE/Intersil	A561	
	Harris	**HA2620**	**(2706, 2737, 2747)**
		HA2622	**(2706, 2768)**
HA2640	Datel	AM464-2M	
	Motorola	**MC1536**	**(2921)**
	National	LM143	
		LM1536	
	SiliconG	SG143	
		SG1536	
HA2645	**Datel**	**AM464-2**	**(2577)**
	Motorola	**MC1436**	**(2920, 2958)**
	National	LM1436	
		LM343	
	SiliconG	SG1436	
		SG343	
	TeledyneP	1332	
♦ HA2700	Datel	AM470-2	
		AM470-2C	
		AM470-2M	
♦ HA2700	TeledyneP	1323	
♦ HA2704	Datel	AM470-2	
		AM470-2C	
		AM470-2M	
♦ HA2704	TeledyneP	1323	
♦ HA2705	Datel	AM470-2	
		AM470-2C	
		AM470-2M	
♦ HA2705	TeledyneP	1323	
HA2720	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
	Thomson	μA776	
HA4741	Exar	XR4741	
	Fairchild	μA148	
	Harris	MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
		RM4158	
	TI	LM148	
HA5002	Elantec	EL2002	
		EL2003	**(2591, 2595)**
		ELH0002	**(2592)**
HA5002			(Cont'd)
	Hytek	HY0002	
	LinearTech	LT1010	
	Micra	MC0002	
		MC0021	
	National	LH0002	
	OEI	9910	
	TeledyneC	LH0002	
HA5033	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
HA5101	**Datel**	**AM453-2M**	**(2577)**
	Raytheon	**RM5534**	**(2979)**
	Signetics	SE5534	
		SE5534A	
HA5102	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	μPC1458	
		μPC251	
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
HA5104	**PMI**	**OP470**	**(2971)**
HA5112	**Harris**	**HA5114**	**(2706, 2737, 2747)**
		MA2650	
	Raytheon	RC4157	
HA5114	**Harris**	**HA5112**	**(2706, 2737, 2747)**
		MA2650	
	Raytheon	RC4157	
HA5127	AD	AD510	
		AD517	
	Burr-Brown	OP27	
		OPA27	**(2532)**
	Harris	HAOP27	
	LinearTech	LT1007	
		OP27	
	Maxim	OP27	
	PMI	OP27	
		OP27	**(2970)**
	Raytheon	**RC714**	**(2979)**
	TI	LT1007	
HA5130	AD	AD517	
		OP07	
	Fairchild	μA714	
	Harris	**HA5135**	**(2706)**
	LinearTech	LT1001	
		OP07	
	Maxim	MAX400	
		OP07	
	Micra	MC0021	
	MicroPwr	MPOP07	
	Raytheon	**OP07**	**(2979)**
	TI	OP07D	
HA5135	TI	μA714	
HA5137	**Burr-Brown**	**OPA37**	**(2532)**
	Harris	HAOP37	
		MA5147	
	LinearTech	LT1037	
		OP37	
	Maxim	OP37	
	PMI	OP37	
		OP37	**(2970)**

(Continued)

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Harris Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HA5137			(Cont'd)
	TI	LT1037	
HA5160	TeledyneP	1344	
HA5162	TeledyneP	1345	
HA5170	AD	AD547	
	National	LH0052	
	PMI	**OP41**	**(2970)**
		OP43	**(2970)**
HA5180	Burr-Brown	3527	
	PMI	**OP43**	**(2970)**
	TeledyneP	1346	
HA5180A	TeledyneP	1347	
HA5190	**Harris**	**HA2540**	**(2737, 2747, 2752)**
	TeledyneP	1341	
HA5320	**Burr-Brown**	**SHC5320**	**(2543)**
	Datel	SHM20	
	TeledyneP	4866	
HAOP27	AD	AD510	
		AD517	
	Burr-Brown	OP27	
		OPA27	**(2532)**
	Harris	**HA5127**	**(2737, 2747, 2768)**
	LinearTech	LT1007	
		OP27	
	Maxim	OP27	
	PMI	OP27	
		OP27	**(2970)**
	Raytheon	**RC714**	**(2979)**
	TI	LT1007	
HAOP37	**Burr-Brown**	**OPA37**	**(2532)**
	Harris	**HA5137**	**(2737, 2747, 2768)**
		MA5147	
	LinearTech	LT1037	
		OP37	
	Maxim	OP37	
	PMI	OP37	
		OP37	**(2970)**
	TI	LT1037	
♦ HC3530	Gould	S3530	
	Mitel	MT3530	
HC5510	Intel	2910	
	TI	TCM4110	
HC5511	TI	TCM2911	
HC5512	TI	TMC2912	
HD4702	Fairchild	F4702	
HI1818A	**Datel**	**MVD409**	**(2577)**
	Harris	**HI1828A**	**(2703, 2738, 2748)**
HI1828A	**Datel**	**MVD409**	**(2577)**
	Harris	**HI1818A**	**(2703, 2738, 2748)**
♦ HI1840	AD	AD7506	
	Datel	**MV1606**	**(2577)**
		MX1606	**(2577)**
♦ HI1840	**GE/Intersil**	**IH6116**	**(2681)**
	Harris	**HI506**	**(2703, 2738, 2748)**
	MicroPwr	MP7506	
	Motorola	MC7506	
	PMI	**MUX16**	**(2975)**
	Siliconix	DG506A	
HI200	AD	ADG200	
	GE/Intersil	**DG200**	**(2679)**
		IH200	
		IH5200	
	PMI	SW05	
	Siliconix	DG200A	
HI201	AD	ADG201	
	GE/Intersil	**DG201**	**(2679)**
		DG201A	**(2679)**
		IH201	
		IH5201	
	Maxim	DG201A	
		MAX331	
	MicroPwr	MP201	
	National	LF11201	
		LF13201	
	PMI	**SW201**	**(2975)**
	Siliconix	DG201A	
HI300	Maxim	DG300A	
	Siliconix	DG300A	
HI301	Maxim	DG301A	
	Siliconix	DG301A	
HI302	Maxim	DG302A	
	MicroPwr	MP302	
	Siliconix	DG302A	
HI303	Maxim	DG303A	
	MicroPwr	MP303	
	Siliconix	DG303A	
HI304	Maxim	DG304A	
	Siliconix	DG304A	
HI305	Siliconix	DG305A	
HI306	Maxim	DG306A	
	Siliconix	DG306A	
HI307	Maxim	DG307A	
	Siliconix	DG307A	
HI381	**GE/Intersil**	**DG181**	**(2680)**
		IH5048	**(2679)**
	Harris	**HI5048**	**(2707, 2737)**
	Maxim	DG381A	
		IH5048	
	Siliconix	DG181	
		DG381A	
HI384	**GE/Intersil**	**DG184**	**(2680)**
		IH5049	**(2680)**
	Harris	**HI5049**	**(2707, 2737, 2747)**
	Maxim	DG384A	
		IH5049	
	Siliconix	DG184	
		DG384A	
HI387	**GE/Intersil**	**DG187**	**(2680)**
		IH5050	**(2680)**
	Harris	**HI5050**	**(2707, 2737, 2747)**
	Maxim	DG387A	
		IH5050	
	Siliconix	DG187	
		DG387A	
HI390	Maxim	DG390A	
	Siliconix	DG390A	
HI5040	**GE/Intersil**	**IH5040**	**(2679)**
	Maxim	IH5040	
	Siliconix	DG5040	
HI5041	**GE/Intersil**	**IH5041**	**(2680)**
	Maxim	IH5041	
	Siliconix	DG5041	
HI5042	**GE/Intersil**	**DG188**	**(2680)**
		IH5042	**(2680)**
	Maxim	IH5042	
	Siliconix	DG188	
		DG5042	
HI5043	**GE/Intersil**	**DG191**	**(2680)**
		IH5043	**(2680)**
	Maxim	IH5043	
	Siliconix	DG191	
		DG243	
		DG5043	
HI5044	**GE/Intersil**	**IH5044**	**(2680)**
	Maxim	IH5044	
	Siliconix	DG5044	
HI5045	**GE/Intersil**	**DG185**	**(2680)**
		IH5045	**(2680)**
	Maxim	IH5045	
	Siliconix	DG185	
		DG5045	
	TI	TL185	
HI5046	**GE/Intersil**	**IH5046**	**(2680)**
	Maxim	IH5046	
HI5047	**GE/Intersil**	**IH5047**	**(2680)**
HI5048	**GE/Intersil**	**DG181**	**(2680)**
		IH5048	**(2679)**
	Harris	**HI381**	**(2707)**
	Maxim	DG381A	
		IH5048	
	Siliconix	DG181	
		DG381A	
HI5049	**GE/Intersil**	**DG184**	**(2680)**
		IH5049	**(2680)**
	Harris	**HI384**	**(2707)**
	Maxim	DG384A	
		IH5049	
	Siliconix	DG184	
		DG384A	
HI5050	**GE/Intersil**	**DG187**	**(2680)**
		IH5050	**(2680)**
	Harris	**HI387**	**(2707)**
	Maxim	DG387A	
		IH5050	
	Siliconix	DG187	
		DG387A	
HI5051	**GE/Intersil**	**DG190**	**(2680)**
		IH5051	**(2680)**
	Maxim	IH5051	
		IH5052	
	Siliconix	DG190	
HI506	AD	AD7506	
	Datel	**MV1606**	**(2577)**
		MX1606	**(2577)**
	GE/Intersil	**IH6116**	**(2681)**
	MicroPwr	MP7506	
	Motorola	MC7506	
	PMI	**MUX16**	**(2975)**
	Siliconix	DG506A	
HI506A	TeledyneP	4552	
HI507	AD	AD7507	
	Datel	**MVD807**	**(2577)**
		MXD807	**(2577)**
	GE/Intersil	**IH6216**	**(2681)**
	MicroPwr	MP7507	
	PMI	**MUX28**	**(2975)**
	Siliconix	DG507A	
	TeledyneP	4551	
HI507A	**Burr-Brown**	**MPC8D**	**(2543)**
	TeledyneP	4551	
HI508	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
HI508A	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	**MX808**	**(2577)**
	GE/Intersil	**IH5108**	**(2681)**
	Maxim	DG509A	
		HI508A	
		MAX358	
	MicroPwr	MP7508DI	
HI509	GE/Intersil	ICL6109	
		IH6208	**(2681)**
	Maxim	DG509A	
		MAX359	
		MAX369	
	MicroPwr	MP7509DI	
	National	LF11509	
		LF13509	
	PMI	**MUX24**	**(2975)**
	Siliconix	DG509A	
	TeledyneP	4553	
HI509A	**Burr-Brown**	**MPC4D**	**(2543)**
	GE/Intersil	**IH5208**	**(2681)**
	Maxim	HI509A	
		MAX359	
	TeledyneP	4553	
HI516	**Burr-Brown**	**MPC800**	**(2543)**
	Datel	**MX1616**	**(2577)**
HI518	Burr-Brown	MPC801	
HI562A	AD	AD562	
	Datel	**DAC562**	**(2576)**
	PMI	**PM562**	**(2974)**
HI565A	AD	AD565A	
		AD565J	
	Fairchild	μA565	
	Maxim	AD565A	
	MicroNet	MN565A	
	TeledyneP	TP565A	
HI5685	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
HI5687	AD	ADDAC87	
	Burr-Brown	DAC851	
		DAC87	**(2542, 2544)**
HI5687			(Cont'd)
	Datel	DAC687	
		DAC87	
	HybridSys	DAC335	
		HSDAC87	
	MicroNet	MNDAC87	
HI574	AD	AD574	
	Burr-Brown	**ADC574A**	**(2541)**
	Datel	**ADC574A**	**(2575)**
	HybridSys	HS574	
	Intech	**ADC574**	**(2799)**
	Maxim	MAX574	
	MCE	MCE574	
	MicroNet	MN574A	
	MicroPwr	MP574	
	TeledyneP	TP574A	
HI674A	**AD**	**AD674**	**(2411)**
	Burr-Brown	ADC674A	
	GoldStar	GL7824	
	Gould	μA7824	
	Hitachi	HA17824	
	National	μA7824	
HI7541	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
	HybridSys	DAC331	
		HS7541	
	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
♦ HM6503	Rockwell	R6503	
HM6504	AMD	AM2141	
		AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Hitachi	4315	
		6147	
	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
HM6508	Fujitsu	8401	
	GE/Intersil	6508	
		IM6508-1	
	National	6508	
		74C929	
		NM2102	
	Toshiba	5508	
HM6514	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
HM6516	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Harris Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM6516			(Cont'd)
	Harris	**HM65162**	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
HM65162	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM65162	Mitsubishi		(Cont'd)
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
HM6518	Motorola	6518	
	National	MM74C930	
HM65262	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
HM6551	Commodore	MP6551	
		MPS6551	
	Gould	S6551	
	National	6551	
		74C920	
	Rockwell	**R6551**	**(2990)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	5101	
HM6561	Matra-Harris	HM6561	
HM6564	Matra-Harris	HM6564	
♦ HM65642	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
♦ HM65642	**Cypress**	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
♦ HM65642	Fujitsu	MB81C78	
		MB81C78A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ HM65642	Fujitsu		(Cont'd)
		MB8464	
		MB8464A	
		MB8B464	
♦ HM65642	**GE/RCA**	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
♦ HM65642	Hyundai	HY6264	
		HY62C64	**(2770)**
♦ HM65642	**Inmos**	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
♦ HM65642	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
♦ HM65642	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
♦ HM65642	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
♦ HM65642	OKI	MSM5164	
		MSM5165	
		MSM5188	
♦ HM65642	Performance	P4C164	
		P4C188	
♦ HM65642	**S-MOS**	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
♦ HM65642	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
♦ HM65642	Vitelic	V61C62	
		V62C64	
♦ HM65642	**VLSI Tech**	**VT20C98**	**(3352)**
HM6616	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
♦ HM7602	AMD	AM27S18	
	Fujitsu	MB7111	
	National	DM74S188	
	Signetics	N82S23	
	TI	28SA030-25	
♦ HM7603	AMD	27S19	
		AM27LS19	
		AM27S19	
♦ HM7603	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
♦ HM7603	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
♦ HM7603	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
♦ HM7603	TI	JBP38S030	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ HM7610	Fujitsu	MB7113	
	National	DM74S387	
♦ HM7610-2	AMD	AM27S20	
	MMI	5300-1	
		53S140	
		63S140	
♦ HM7610-2	National	DM54S387	
	Signetics	N82S126	
		S82S126	
♦ HM7610-2	TI	34SA10-25	
♦ HM7611	AMD	27S21	
		AM27S21	
♦ HM7611	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
♦ HM7611	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
♦ HM7611-2	MMI	53S141	
	National	DM54S287	
	Signetics	S82S129	
♦ HM76161	AMD	27S191	
		AM27S191	
♦ HM76161	**Cypress**	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
♦ HM76161	Fairchild	932511	
		93Z511	
♦ HM76161	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
♦ HM76161	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
♦ HM76161	Signetics	82S191	
		N82S191	
		N82S191A	
♦ HM76161	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
♦ HM76161	**Waferscale**	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
♦ HM76165	AMD	27S41	
		AM27S41	
		AM27S41A	
♦ HM76165	Fujitsu	MB7134	
		MB7152	
♦ HM76165	MMI	53S1641	
		63S1641	
		63S1641A	
♦ HM76165	National	87S195	
		DM77S195	
		DM87S195	
♦ HM76165	Signetics	82HS195	
		N82HS195	
		N82HS195A	
♦ HM76165	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
♦ HM7620	AMD	AM27S12	
	Fujitsu	MB7115	
	MMI	63S240	
	National	74S570	
		DM74S570	
♦ HM7620	Signetics	N82S130	
		S82S130	
♦ HM7621	AMD	AM27S13	
	Fujitsu	MB7116	
	MMI	63S241	
	National	74S571A	
		DM74S571	
♦ HM7621	Signetics	N82S131	
♦ HM76321	AMD	27S43	
		AM27S43	
♦ HM76321	Fujitsu	MB7142	
	MMI	53S3281	
		63S3281	
♦ HM76321	National	77S321	
		87S321	
		DM87S321	
♦ HM76321	**Raytheon**	**29671**	**(2985)**
	Waferscale	**WS57C43**	**(3376)**
♦ HM7640	AMD	AM27S30	
	National	DM74S475	
		DM77S475	
		DM87S475	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Harris Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ HM7641	AMD	AM27S31	
	MMI	63S485	
	National	74S474	
		DM74S474	
♦ HM7641	Signetics	N82S141	
♦ HM7642-2	AMD	AM27S32	
	Fairchild	93452	
	Fujitsu	MB7121	
	Hitachi	HN25044	
	MMI	5352-1	
	National	DM54S572	
♦ HM7643	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
♦ HM7643	National	74S573	
		DM74S573	
♦ HM7643	NEC	μPB426	
	Signetics	N82S137	
♦ HM7643-2	MMI	53S441	
	Motorola	MCM7643M	
	National	DM54S573	
		DM54S573A	
♦ HM7643-2	Signetics	S82S137	
♦ HM7643A	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
♦ HM7643A	National	74S573	
		DM74S573	
♦ HM7643A	NEC	μPB426	
	Signetics	N82S137	
♦ HM7647R	AMD	AM27S15	
	Signetics	N82S115	
♦ HM7649	AMD	AM27S29	
	Fujitsu	MB7124	
	MMI	635481	
		63S481	
♦ HM7649	National	DM74S472	
	Raytheon	**29623**	**(2985)**
	Signetics	N825147A	
		N82S147	
♦ HM7681-2	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
♦ HM7681-2	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ HM7681-2	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ HM7681-2	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ HM7681-2	Signetics	N82S181	
		S82S181	
♦ HM7681-2	TI	28586-60	
		28S86-60	
		JBP28L86A	
♦ HM7684	AMD	AM27S184	
	National	DM87S184	
♦ HM7685	AMD	27S185	
		AM2725S291	
		AM27S185	
♦ HM7685	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
♦ HM7685	**Raytheon**	**29651**	**(2985)**
		29651A	**(2985)**
♦ HM7685	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
♦ HM7685-2	National	DM77S185	
	Raytheon	**29651AM**	**(2985)**
	Signetics	S82S185	
♦ HM7686	National	DM87S186	
HN65262	Matra-Harris	HN65262	
HPL16LC8	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HPL16LC8			(Cont'd)
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
HPL16RC4	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
HPL16RC6	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	
	Fairchild	16RP6B	
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
HPL16RC8	Cypress	CYPAL16R8	
	Lattice	GAL16V8	
	MMI	PAL16R8	
		PAL16R8A	
	National	DMPAL16R8	
	Sprague	SPL16RC8	
	TI	SN74PAL16R8A	
		TIBPAL16R8-15	**(4320)**
		TIBPAL16R8-20	**(4320)**
		TIBPAL16R8-25	**(4320)**
		TIBPAL16R8-30	**(4320)**
HS81C55	AMD	8155	
	Intel	8155	
	NEC	μPD8155	
	Toshiba	**TMP8155**	**(3306)**
HS81C56	AMD	8156	
	Intel	8156	
	NEC	μPD8156	
MA2650	**Harris**	**HA5112**	**(2706, 2737, 2747)**
		HA5114	**(2706, 2737, 2747)**
	Raytheon	RC4157	
MA5104	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MA5104			(Cont'd)
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
		RM4158	
	TI	LM148	
MA5147	**Burr-Brown**	**OPA37**	**(2532)**
	Harris	**HA5137**	**(2737, 2747, 2768)**
		HAOP37	
	LinearTech	LT1037	
		OP37	
	Maxim	OP37	
	PMI	OP37	
		OP37	**(2970)**
	TI	LT1037	
P80C31	AMD	P80C31	
	Fujitsu	MBL80C31	
	Intel	80C31	
		P80C31	
	OKI	M80C31	
	Siemens	SAB80C31	
	Signetics	SC80C31	

Hitachi America, Ltd.

100474	AMD	AM100474	
	Fairchild	F100474	
	Fujitsu	MBM100474	
		MBM100474A	
	Hitachi	HM100474	
	NEC	μPB100474	
4315	AMD	AM2141	
		AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	6147	
	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
6147	AMD	AM2141	
		AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
6148	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
D51C68	Fujitsu	D51C68	
	Siliconix	SI9552	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
D51C68			(Cont'd)
	Sprague	**UCN5852**	**(3203)**
	Supertex	HV5222	
	TI	D51C68	
		SN75552	
D51C69	Fujitsu	D51C69	
	Intel	TMS2168	
	Siliconix	SI9554	
	Sprague	**UCN5854**	**(3203)**
	Supertex	HV5308	
	TI	D51C69	
		SN75554	
HA1125	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Motorola	LSC1008	
		M5140	
	National	LM3064	
	NEC	μPC1382	
	Sanyo	LA1365	
	TI	SN76666	
	Toshiba	TA7176	
♦ HA1156	Exar	XR1310	
	National	LM1310	
	TI	SN76115	
	Toshiba	TA7157	
HA1197	Sanyo	LA1240	
HA1199	Sprague	ULN2249	
♦ HA12402	Sprague	ULN2204	
	Telefunken	TDA1083	
		U417B	
♦ HA12402	Toshiba	TA7613	
♦ HA1364	SGS	TDA1190Z	
		TDA3190	
♦ HA1364	Sprague	ULN2290	
HA1393	AMD	29520/1	
		29520/1A	
	AD	AD3445	
	Maxim	AD3554	
	MMI	29C520/1	
	Sprague	ULN3793	
HA17008	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
HA17012	AD	AD580	
	Maxim	AD580	
	SiliconG	SG1503	
HA17080	TI	TL080	
HA17083	Exar	XR083	
	TI	TL083	
HA17185	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Hitachi America, Ltd. (Cont'd)			
HA17185			(Cont'd)
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
HA17301	**Motorola**	**LM2900**	**(2924)**
		MC3301	**(2924)**
	National	LM2900	
		LM3301	
	Raytheon	LM2900	
		RC3301	
	TI	LM2900	
HA17324	Fairchild	μA324	
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Motorola	**MC33174**	**(2924, 2959)**
	National	LM324	
	PMI	**OP421**	**(2970, 2972)**
	Samsung	LM324	
	SGS	LM324	
	SiliconG	SG324	
	Thomson	LM324	
	Toshiba	TA79502	
HA17358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
HA17393	**GoldStar**	**GL393**	**(2700)**
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	μPC277	
		μPC393	
	SGS	LM393	
	TI	LM393	
	Toshiba	TA75393	
HA17408	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
HA17458	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HA17458			(Cont'd)
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
HA17524	NEC	μPC1042	
HA17555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
HA17558	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
HA17723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	μA723	
	SiliconG	SG723	
	TI	μA723	
		μA723M	
	Thomson	SFC2723	
		μA723	
HA17733	Fairchild	μA733	
	GE/Intersil	μA733	
	Motorola	**MC1733**	**(2920)**
		NE592	**(2960)**
	National	LM733	
	Signetics	μA733	
	SiliconG	SG1401	
	TI	μA733	
		μA733M	
HA17741	AD	AD741	
	Fairchild	μA741M	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	μPC151	
		μPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HA17741			(Cont'd)
	SGS	LM741	
		LS141	
	Signetics	μA741	
	SiliconG	SG741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
HA17747	Fairchild	μA747	
	GE/RCA	**CA747**	**(2645)**
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	μPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	μA747	
	TeledyneS	747	
	TI	μA747	
		μA747M	
HA17805	GoldStar	GL7805	
	Gould	S8981	
		μA7805	
	Mitel	MT8981	
	National	μA7805	
HA17806	GoldStar	GL7806	
	Gould	S8975	
		μA7806	
	Mitel	MT8975	
	National	μA7806	
HA17807	Gould	S8978	
	Mitel	MT8978	
	National	μA7807	
HA17808	GoldStar	GL7808	
	Gould	S8940	
		μA7808	
	Mitel	MT8940	
	Motorola	**MC7808**	**(2927)**
	National	μA7808	
HA17809	Fairchild	μA7809	
	GoldStar	GL7809	
	Gould	μA7809	
	Motorola	MC7809	
	National	LM7809	
	NEC	μPC7809	
	TI	μA7809	
	Toshiba	TA78009	
HA17812	GoldStar	GL7812	
	Gould	S8970	
	Mitel	MT8970	
	National	μA7812	
HA17815	EG&G-Reticon		
		R5632	
		RM5632A	**(2590)**
	Exar	**XR2126**	**(2605)**
		XR2127	**(2605)**
	Gould	S35212	
		S35212A	
	Mitel	MT35212A	
	National	μA7815	
	Sierra	SC11000	
		SC11005	
HA17818	National	μA7818	
	SMC	FDC9229	
	VDA	V3829	
	VLSI Tech	V86	
HA17824	**AD**	**AD674**	**(2411)**
	Burr-Brown	ADC674A	
	GoldStar	GL7824	
	Gould	μA7824	
	Harris	**HI674A**	**(2703, 2738, 2745)**
	National	μA7824	
HA17902	Fairchild	μA2902	
		μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	μPC324	
		μPC451	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HA17902			(Cont'd)
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
♦ HA1902	Motorola	MC7524	
	National	DS75S24	
	Signetics	7524	
HA19209	**GE/RCA**	**CA3318**	**(2651)**
		CA8808	
	MicroPwr	MP7684	
	Motorola	**MC10319**	**(2937)**
	NEC	μPD6950	
HA19216	Datel	ADC883	
	GE/RCA	**CA3306**	**(2651)**
	MicroPwr	MP7682	
HAI3007	**GE/RCA**	**CA3219**	**(2650)**
	IPS	3658	
	National	DS3658	
	SGS	L6222	
	TI	SN75437	
HB561003	Dense-Pac	DPD42569	
	Hitachi	HB561009	
	MicronTech	MT9259	
	Mitsubishi	MH25609A	
	NEC	MC41256A9	
	OKI	MSC2304KS9	
		MSC2304YS9	
	TI	TM4256EL9	
		TM4256GU9	
HB561004A	**Dense-Pac**	**DPD44256**	**(2581)**
	Fujitsu	MB85203	
		MB85204	
	MicronTech	MT4259	
	NEC	MC41256A4	
	TI	TM4256EC4	
HB561008B	**Dense-Pac**	**DPD42568**	**(2581)**
	MicronTech	MT8259	
	Mitsubishi	MH25608A	
	NEC	MC41256A8	
	OKI	MSC2304KS8	
		MSC2304YS8	
	TI	TM4256FL8	
		TM4256GU8	
HB561009	Dense-Pac	DPD42569	
	Hitachi	HB561003	
	MicronTech	MT9259	
	Mitsubishi	MH25609A	
	NEC	MC41256A9	
	OKI	MSC2304KS9	
		MSC2304YS9	
	TI	TM4256EL9	
		TM4256GU9	
HB56A19	NEC	MC421000	
	TI	TX4C1024	
	Toshiba	THM81000	
		THM91000	
HD100112	Fairchild	F100112	
	Signetics	**100112**	**(3020)**
	Sprague	SPL16LC6	
HD100123	Fairchild	F100123	
	Signetics	**100123**	**(3020)**
♦ HD100124	Fairchild	F100124	
	Signetics	**100124**	**(3020)**
HD100125	Fairchild	F100125	
	Signetics	**100125**	**(3020)**
HD100130	Fairchild	F100130	
HD100131	Fairchild	F100131	
	Signetics	**100131**	**(3020)**
HD100136	Fairchild	F100136	
	Signetics	**100136**	**(3020)**
HD100141	Fairchild	F100141	
	Signetics	**100141**	**(3020)**
HD100142	Fairchild	F100142	
HD100145	Fairchild	F100145	
	Signetics	**100145**	**(3020)**
HD100150	Fairchild	F100150	
	Signetics	**100150**	**(3020)**
HD100151	Fairchild	F100151	
	Signetics	**100151**	**(3020)**
HD100156	Fairchild	F100156	
HD100164	Fairchild	F100164	
	Signetics	**100164**	**(3020)**
HD100165	Cypress	CUPLDC20G10	
	Fairchild	F100165	
	Hitachi	HM6288	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Hitachi America, Ltd. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD100165			(Cont'd)
	MMI	PAL20L8	
		PAL20L8B	
	National	PAL20L8	
	Signetics	**100165**	**(3020)**
	Sprague	SPL20LC8	
	TI	PAL20L8	
		TIBPAL20L8-20 (3217, 4320)	
	Toshiba	TC55416	
HD100166	Cypress	CUPLDC20G10	
	Fairchild	F100166	
	MMI	PAL20R8	
		PAL20R8B	
	National	PAL20R8	
	Sprague	SPL20RC8	
	TI	PAL20R8	
		TIBPAL20R8-20 (3217, 4320)	
HD100170	Cypress	CUPLDC20G10	
	Fairchild	F100170	
	MMI	PAL20R6	
		PAL20R6B	
	Signetics	**100170**	**(3020)**
	Sprague	SPL20RC6	
	TI	PAL20R6	
		TIBPAL20R6-20 (3217, 4320)	
HD100171	Fairchild	F100171	
	Signetics	**100171**	**(3020)**
HD100179	Cypress	CUPLDC20G10	
	Fairchild	F100179	
	MMI	PAL20R4	
		PAL20R4B	
	Sprague	SPL20RC4	
	TI	PAL20R4	
		TIBPAL20R4-20 (3217, 4320)	
HD100180	**Cypress**	**CY7C510**	**(2569)**
	Fairchild	F100180	
	Hitachi	HD100179	
	LSI Logic	**L64010**	**(2868)**
	Signetics	**100180**	**(3020)**
	Waferscale	WS59610	
HD100181	**Cypress**	**CY7C164**	**(2562)**
	Fairchild	F100181	
	IDT	**IDT7188**	**(2802)**
	Signetics	**100181**	**(3020)**
	TI	SMJ64C64	
	Vitelic	V61C62	
	VLSI Tech	CT64KS4	
HD100182	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	F100182	
	Hitachi	HM6789	
	Inmos	IMS1629	
	IDT	**IDT6198**	**(2802)**
		IDT7198	**(2802)**
	Motorola	MCM6290	
	NEC	μPD4363	
	Performance	P4C198	
	Vitelic	V61C62	
HD100183	**Cypress**	**CY7C161**	**(2562)**
	Fairchild	F100183	
	IDT	**IDT71981**	**(2802)**
	Performance	P4C1981	
HD10101	Motorola	MC10101	
	Signetics	**10101**	**(3021)**
HD10102	Motorola	MC10102	
	Signetics	**10102**	**(3021)**
HD10104	Motorola	MC10104	
	Signetics	**10104**	**(3021)**
HD10105	Motorola	MC10105	
	Signetics	**10105**	**(3021)**
HD10106	Motorola	MC10106	
	Signetics	**10106**	**(3021)**
HD10107	Motorola	MC10107	
	Signetics	**10107**	**(3021)**
HD10109	Motorola	MC10109	
	Signetics	**10109**	**(3021)**
HD10110	Motorola	MC10110	
	Signetics	**10110**	**(3021)**
HD10111	Motorola	MC10111	
	Signetics	**10111**	**(3021)**
HD10116	Motorola	MC10116	
	National	DM10116	
	Signetics	**10116**	**(3021)**
HD10117	Motorola	MC10117	
	Signetics	**10117**	**(3021)**
HD10118	Motorola	MC10118	
	Signetics	**10118**	**(3021)**
HD10119	Motorola	MC10119	
	Signetics	**10119**	**(3021)**
HD10121	Motorola	MC10121	
	Signetics	**10121**	**(3021)**
HD10124	Motorola	MC10124	
	Signetics	**10124**	**(3021)**
HD10125	Motorola	MC10125	
	Signetics	**10125**	**(3021)**
HD10130	Motorola	MC10130	
	Signetics	**10130**	**(3021)**
HD10131	Motorola	MC10131	
	Signetics	**10131**	**(3021)**
HD10132	Motorola	MC10132	
	Signetics	**10132**	**(3021)**
HD10133	Motorola	MC10133	
	Signetics	**10133**	**(3021)**
HD10134	Motorola	MC10134	
	Signetics	**10134**	**(3021)**
HD10136	Motorola	MC10136	
	Signetics	**10136**	**(3021)**
HD10148	**Motorola**	**MCM10148**	**(2918)**
	TI	SN10148	
HD10160	Motorola	MC10160	
	Signetics	**10160**	**(3021)**
HD10161	Motorola	MC10161	
	Signetics	**10161**	**(3021)**
HD10162	Motorola	MC10162	
	Signetics	**10162**	**(3021)**
HD10164	Motorola	MC10164	
	Signetics	**10164**	**(3021)**
	TI	SN10164	
HD10165	Motorola	MC10165	
	Signetics	**10165**	**(3021)**
HD10174	Motorola	MC10174	
	Signetics	**10174**	**(3021)**
	TI	SN10174	
HD10175	Motorola	MC10175	
	Signetics	**10175**	**(3021)**
HD10179	Motorola	MC10179	
	Signetics	**10179**	**(3021)**
HD10180	Motorola	MC10180	
	Signetics	**10180**	**(3021)**
HD10181	Motorola	MC10181	
	Signetics	**10181**	**(3021)**
♦ HD14001	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
	Motorola	MC14001	
	National	CD4001	
		MM74C02	
♦ HD14001	OKI	MSM4001	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
♦ HD14002	Fairchild	F4002	
	GE/RCA	**CD4002**	**(2633)**
	Motorola	MC14002	
	National	CD4002	
	SGS	HCC/HCF4002	
	Signetics	HEF4002	
	Solitron	CM4002	
	Sprague	SCL4002	
	Toshiba	**TC4002**	**(3308)**
♦ HD14006	Fairchild	F4006	
	GE/RCA	**CD4006**	**(2634)**
	National	CD4006	
	SGS	HCC/HCF4006	
	Signetics	HEF4006	
	Solitron	CM4006	
	Sprague	SCL4006	
	Toshiba	**TC4006**	**(3308)**
♦ HD14007	Fairchild	F4007	
	GE/RCA	**CD4007**	**(2633)**
	Motorola	MC14007	
	National	CD4007	
	SGS	HCC/HCF4007	
	Signetics	HEF4007	
	Solitron	CM4007	
	Sprague	SCL4007	
	Toshiba	**TC4007**	**(3308)**
♦ HD14008	Fairchild	F4008	
	GE/RCA	**CD4008**	**(2636)**
	Motorola	MC14008	
	National	CD4008	
		MM74C83	
♦ HD14008	SGS	HCC/HCF4008	
	Signetics	HEF4008	
	Solitron	CM4008	
	Sprague	SCL4008	
	Toshiba	**TC4008**	**(3308)**
♦ HD14009	**GE/RCA**	**CD4009**	**(2633)**
	Motorola	MC14009	
	National	CD4009	
	SGS	HCC/HCF4009	
	Solitron	CM4009	
	Sprague	SCL4009	
	Toshiba	**TC4009**	**(3308)**
♦ HD14010	**GE/RCA**	**CD4010**	**(2633)**
	Motorola	MC14010	
	National	CD4010	
	SGS	HCC/HCF4010	
	Solitron	CM4010	
	Sprague	SCL4010	
	Toshiba	**TC4010**	**(3308)**
♦ HD14011	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	Motorola	MC14011	
	National	CD4011	
		MM74C00	
♦ HD14011	OKI	MSM4011	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
♦ HD14012	Fairchild	F4012	
	GE/RCA	**CD4012**	**(2633)**
	Motorola	MC14012	
	National	CD4012	
	SGS	HCC/HCF4012	
	Signetics	HEF4012	
	Solitron	CM4012	
	Sprague	SCL4012	
	Toshiba	**TC4012**	**(3308)**
♦ HD14013	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	CD4013	
		MM74C74	
♦ HD14013	OKI	MSM4013	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
	Signetics	HEF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
♦ HD14014	Fairchild	F4014	
	GE/RCA	**CD4014**	**(2634)**
	Motorola	MC14014	
	National	CD4014	
	SGS	HCC/HCF4014	
	Signetics	HEF4014	
	Solitron	CM4014	
	Sprague	SCL4014	
	Toshiba	**TC4014**	**(3308)**
♦ HD14015	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	CD4015	
		MM74C164	
♦ HD14015	OKI	MSM4015	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
♦ HD14016	Fairchild	F4016	
		F4066	
♦ HD14016	**GE/RCA**	**CD4016**	**(2635)**
		CD4066	**(2635)**
♦ HD14016	Motorola	MC14016	
		MC14066	
♦ HD14016	National	CD4016	
		CD4066	
♦ HD14016	Sanyo	LC4016	
		LC4066	
♦ HD14016	SGS	HCC/HCF4016	
		HCC/HCF4066	
♦ HD14016	Signetics	HEF4016	
		HEF4066	
♦ HD14016	Solitron	CM4016	
		CM4066	
		HCF4016	
♦ HD14016	Sprague	SCL4016	
		SCL4066	
♦ HD14016	**Toshiba**	**TC4016**	**(3308)**
		TC4066	**(3308)**
♦ HD14018	Fairchild	F4018	
	GE/RCA	**CD4018**	**(2635)**
	Motorola	MC14018	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ HD14018			(Cont'd)
	National	CD4018	
	SGS	HCC/HCF4018	
	Signetics	HEF4018	
	Solitron	CM4018	
	Sprague	SCL4018	
	Toshiba	**TC4018**	**(3308)**
♦ HD14020	Fairchild	F4020	
	GE/RCA	**CD4020**	**(2634)**
	Motorola	MC14020	
	National	CD4020	
	SGS	HCC/HCF4020	
	Signetics	HEF4020	
	Solitron	CM4020	
	Sprague	SCL4020	
	Toshiba	**TC4020**	**(3308)**
♦ HD14021	Fairchild	F4021	
	GE/RCA	**CD4021**	**(2634)**
	Motorola	MC14021	
	National	CD4021	
	SGS	HCC/HCF4021	
	Signetics	HEF4021	
	Sprague	SCL4021	
	Toshiba	**TC4021**	**(3308)**
♦ HD14022	Fairchild	F4022	
	GE/RCA	**CD4022**	**(2635)**
	Motorola	MC14022	
	National	CD4022	
	SGS	HCC/HCF4022	
	Signetics	HEF4022	
	Solitron	CM4022	
	Sprague	SCL4022	
	Toshiba	**TC4022**	**(3308)**
♦ HD14023	Fairchild	F4023	
	GE/RCA	**CD4023**	**(2633)**
	Motorola	MC14023	
	National	CD4023	
		MM74C10	
♦ HD14023	SGS	HCC/HCF4023	
	Signetics	HEF4023	
	Solitron	CM4023	
	Sprague	SCL4023	
	Toshiba	**TC4023**	**(3308)**
♦ HD14024	Fairchild	F4024	
	GE/RCA	**CD4024**	**(2634)**
	Motorola	MC14024	
	National	CD4024	
	SGS	HCC/HCF4024	
	Signetics	HEF4024	
	Solitron	CM4024	
	Sprague	SCL4024	
	Toshiba	**TC4024**	**(3308)**
♦ HD14025	Fairchild	F4025	
	GE/RCA	**CD4025**	**(2633)**
	Motorola	MC14025	
	National	CD4025	
	SGS	HCC/HCF4025	
	Signetics	HEF4025	
	Solitron	CM4025	
	Sprague	SCL4025	
	Toshiba	**TC4025**	**(3308)**
♦ HD14027	Fairchild	F4027	
	GE/RCA	**CD4027**	**(2634)**
	Motorola	MC14027	
	National	CD4027	
		MM74C76	
♦ HD14027	OKI	MSM4027	
	Sanyo	LC4027	
	SGS	HCC/HCF4027	
	Signetics	HEF4027	
	Solitron	CM4027	
	Sprague	SCL4027	
♦ HD14028	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	CD4028	
		MM74C42	
♦ HD14028	OKI	MSM4028	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	
	Solitron	CM4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
♦ HD14032	**GE/RCA**	**CD4032**	**(2636)**
	Motorola	MC14032	
	SGS	HCC/HCF4032	
	Solitron	CM4032	
	Toshiba	**TC4032**	**(3308)**
♦ HD14034	Fairchild	F4034	
	GE/RCA	**CD4034**	**(2634, 2636)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Hitachi America, Ltd. (Cont'd)			
♦ HD14034			(Cont'd)
	Motorola	MC14034	
	National	CD4034	
	SGS	HCC/HCF4034	
	Solitron	CM4034	
	Sprague	SCL4034	
	Toshiba	**TC4034**	**(3308)**
♦ HD14035	Fairchild	F4035	
	GE/RCA	**CD4035**	**(2634)**
	Motorola	MC14035	
	SGS	HCC/HCF4035	
	Signetics	HEF4035	
	Solitron	CM4035	
	Toshiba	TC4035	
♦ HD14038	**GE/RCA**	**CD4038**	**(2636)**
	Motorola	MC14038	
	SGS	HCC/HCF4038	
	Solitron	CM4038	
	Toshiba	**TC4038**	**(3308)**
♦ HD14040	Fairchild	F4040	
	GE/RCA	**CD4040**	**(2634)**
	Motorola	MC14040	
	National	CD4040	
	SGS	HCC/HCF4040	
	Signetics	HEF4040	
	Solitron	CM4040	
	Sprague	SCL4040	
	Toshiba	**TC4040**	**(3308)**
♦ HD14042	Fairchild	F4042	
	GE/RCA	**CD4042**	**(2634)**
	Motorola	MC14042	
	National	CD4042	
	SGS	HCC/HCF4042	
	Signetics	HEF4042	
	Solitron	CM4042	
	Sprague	SCL4042	
	Toshiba	**TC4042**	**(3308)**
♦ HD14043	**GE/RCA**	**CD4043**	**(2634)**
	Motorola	MC14043	
	National	CD4043	
	SGS	HCC/HCF4043	
	Signetics	HEF4043	
	Solitron	CM4043	
	Sprague	SCL4043	
	Toshiba	**TC4043**	**(3308)**
♦ HD14044	Fairchild	F4044	
	GE/RCA	**CD4044**	**(2634)**
	Motorola	MC14044	
	National	CD4044	
	SGS	HCC/HCF4044	
	Signetics	HEF4044	
	Solitron	CM4044	
	Toshiba	**TC4044**	**(3308)**
♦ HD14046	Fairchild	F4046	
	GE/RCA	**CD4046**	**(2635)**
	Motorola	MC14046	
	National	CD4046	
	SGS	HCC/HCF4046	
	Solitron	CM4046	
	Sprague	SCL4046	
♦ HD14049	Fairchild	F4049	
	GE/RCA	**CD4049**	**(2633)**
	Motorola	MC14049	
	National	CD4049	
	OKI	MSM4049	
	Sanyo	LC4049	
	SGS	HCC/HCF4049	
	Signetics	HEF4049	
	Solitron	CM4049	
	Sprague	SCL4049	
	Toshiba	**TC4049**	**(3308)**
♦ HD14050	Fairchild	F4050	
	GE/RCA	**CD4050**	**(2633)**
	Motorola	MC14050	
	National	CD4050	
	SGS	HCC/HCF4050	
	Signetics	HEF4050	
	Solitron	CM4050	
	Sprague	SCL4050	
	Toshiba	**TC4050**	**(3308)**
♦ HD14051	Fairchild	F4051	
	GE/RCA	**CD4051**	**(2635)**
	Motorola	MC14051	
	National	CD4051	
	SGS	HCC/HCF4051	
	Signetics	HEF4051	
	Solitron	CM4051	
	Sprague	SCL4051	
	Toshiba	**TC4051**	**(3308)**
♦ HD14052	**Harris**	**HI1828A**	**(2703, 2738, 2748)**
	National	CD4052	
	Solitron	CM4052	
	Sprague	SCL4052	
	Toshiba	**TC4052**	**(3308)**
♦ HD14053	Fairchild	F4053	
	GE/RCA	**CD4053**	**(2635)**
	Motorola	MC14053	
	National	CD4053	
	SGS	HCC/HCF4053	
	Signetics	HEF4053	
	Solitron	CM4053	
	Sprague	SCL4053	
	Toshiba	**TC4053B**	**(3308)**
♦ HD14066	Fairchild	F4016	
		F4066	
♦ HD14066	**GE/RCA**	**CD4016**	**(2635)**
		CD4066	**(2635)**
♦ HD14066	Motorola	MC14016	
		MC14066	
♦ HD14066	National	CD4016	
		CD4066	
♦ HD14066	Sanyo	LC4016	
		LC4066	
♦ HD14066	SGS	HCC/HCF4016	
		HCC/HCF4066	
♦ HD14066	Signetics	HEF4016	
		HEF4066	
♦ HD14066	Solitron	CM4016	
		CM4066	
		HCF4016	
♦ HD14066	Sprague	SCL4016	
		SCL4066	
♦ HD14066	**Toshiba**	**TC4016**	**(3308)**
		TC4066	**(3308)**
♦ HD14068	Fairchild	F4068	
	GE/RCA	**CD4068**	**(2633)**
	Motorola	MC14068	
	SGS	HCC/HCF4068	
	Signetics	HEF4068	
	Solitron	CM4068	
	Sprague	SCL4068	
	Toshiba	**TC4068**	**(3308)**
♦ HD14069	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
		MM74C04	
♦ HD14069	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
♦ HD14069	**Toshiba**	**TC4069**	**(3308)**
♦ HD14070	Fairchild	F4070	
	GE/RCA	**CD4070**	**(2633, 2636)**
	Motorola	MC14070	
	National	CD4070	
		MM74C86	
♦ HD14070	SGS	HCC/HCF4070	
	Signetics	HEF4070	
	Solitron	CM4070	
	Sprague	SCL4070	
♦ HD14071	Fairchild	F4071	
	GE/RCA	**CD4071**	**(2633)**
	Motorola	MC14071	
	National	CD4071	
		MM74C32	
♦ HD14071	OKI	MSM4071	
	Sanyo	LC4071	
	SGS	HCC/HCF4071	
	Signetics	HEF4071	
	Solitron	CM4071	
	Sprague	SCL4071	
♦ HD14072	Fairchild	F4072	
	GE/RCA	**CD4072**	**(2633)**
	Motorola	MC14072	
	National	CD4072	
	SGS	HCC/HCF4072	
	Signetics	HEF4072	
	Sprague	SCL4072	
	Toshiba	TC4072	
♦ HD14073	Fairchild	F4073	
	GE/RCA	**CD4073**	**(2633)**
	Motorola	MC14073	
	National	CD4073	
	SGS	HCC/HCF4073	
♦ HD14073			(Cont'd)
	Signetics	HEF4073	
	Solitron	CM4073	
	Sprague	SCL4073	
	Toshiba	TC4073	
♦ HD14075	Fairchild	F4075	
	GE/RCA	**CD4075**	**(2633)**
	Motorola	MC14075	
	National	CD4075	
	SGS	HCC/HCF4075	
	Signetics	HEF4075	
	Solitron	CM4075	
	Sprague	SCL4075	
	Toshiba	TC4075	
♦ HD14076	Fairchild	F4076	
	GE/RCA	**CD4076**	**(2634)**
	Motorola	MC14076	
	National	CD4076	
		MM54C173	
		MM74C173	
♦ HD14076	SGS	HCC/HCF4076	
	Signetics	HEF4076	
	Solitron	CM4076	
	Sprague	SCL4076	
	Toshiba	**TC4076**	**(3308)**
♦ HD14077	Fairchild	F4077	
	GE/RCA	**CD4077**	**(2633, 2636)**
	Motorola	MC14077	
	National	CD4077	
	SGS	HCC/HCF4077	
	Signetics	HEF4077	
	Solitron	CM4077	
	Sprague	SCL4077	
♦ HD14078	Fairchild	F4078	
	GE/RCA	**CD4078**	**(2633)**
	Motorola	MC14078	
	SGS	HCC/HCF4078	
	Signetics	HEF4078	
	Solitron	CM4078	
	Sprague	SCL4078	
	Toshiba	**TC4078**	**(3308)**
♦ HD14081	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	CD4081	
		MM74C08	
♦ HD14081	OKI	MSM4081	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
♦ HD14082	Fairchild	F4082	
	GE/RCA	**CD4082**	**(2633)**
	Motorola	MC14082	
	National	CD4082	
	SGS	HCC/HCF4082	
	Signetics	HEF4082	
	Sprague	SCL4082	
	Toshiba	TC4082	
♦ HD14175	Fairchild	F40175	
	Motorola	MC14175	
	National	CD40175	
		MM54C175	
		MM74C175	
♦ HD14175	Signetics	HEF40175	
	Toshiba	**TC40175**	**(3308)**
♦ HD14194	Fairchild	F40194	
	GE/RCA	**CD40194**	**(2634)**
	Motorola	MC14194	
	SGS	HCC/HCF40194	
	Signetics	HEF40194	
HD14443	Fairchild	μA9708	
	Hitachi	HD14447	
	Motorola	**MC14443**	**(2937)**
		MC14447	**(2937)**
HD14447	Fairchild	μA9708	
	Hitachi	HD14443	
	Motorola	**MC14443**	**(2937)**
		MC14447	**(2937)**
♦ HD14502	**GE/RCA**	**CD4502**	**(2633)**
	Motorola	MC14502	
	SGS	HCC/HCF4502	
	Signetics	HEF4502	
	Sprague	SCL4502	
♦ HD14503	Fairchild	F40097B	
	GE/RCA	**CD4503**	**(2633)**
	Motorola	MC14503	
	National	CD4503	
♦ HD14503			(Cont'd)
	SGS	HCF4503	
	Toshiba	TC4503	
♦ HD14508	**GE/RCA**	**CD4508**	**(2634)**
	Motorola	MC14508	
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**
		HEF4508	
		N82147	
♦ HD14508	Sprague	SCL4508	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
♦ HD14510	Fairchild	F4510	
	GE/RCA	**CD4510**	**(2635)**
	Motorola	MC14510	
	National	CD4510	
	SGS	HCC/HCF4510	
	Signetics	HEF4510	
	Solitron	CM4510	
	Sprague	SCL4510	
	Toshiba	**TC4510**	**(3308)**
♦ HD14511	Fairchild	F4511	
	GE/RCA	**CD4511**	**(2635)**
	Motorola	MC14511	
	National	CD4511	
	NEC	μPD4511	
	SGS	HCC/HCF4511	
	Signetics	HEF4511	
	Solitron	CM4511	
	Sprague	SCL4511	
	Toshiba	**TC4511**	**(3308)**
♦ HD14512	Fairchild	F4512	
	GE/RCA	**CD4512**	**(2635)**
	Motorola	MC14512	
	National	CD4512	
	SGS	HCC/HCF4512	
	Sprague	SCL4512	
	Toshiba	**TC4512**	**(3308)**
♦ HD14514	Fairchild	F4514	
	GE/RCA	**CD4514**	**(2633)**
	Motorola	MC14514	
	National	CD4514	
	SGS	HCC/HCF4514	
	Signetics	HEF4514	
	Solitron	CM4514	
	Sprague	SCL4514	
	Toshiba	**TC4514**	**(3308)**
♦ HD14515	Fairchild	F4515	
	GE/RCA	**CD4515**	**(2633)**
	Motorola	MC14515	
	National	CD4515	
	SGS	HCC/HCF4515	
	Signetics	HEF4515	
	Solitron	CM4515	
	Sprague	SCL4515	
	Toshiba	**TC4515**	**(3308)**
♦ HD14516	Fairchild	F4516	
	GE/RCA	**CD4516**	**(2635)**
	Motorola	MC14516	
	National	CD4516	
	SGS	HCC/HCF4516	
	Signetics	HEF4516	
	Solitron	CM4516	
	Sprague	SCL4516	
	Toshiba	**TC4516**	**(3308)**
♦ HD14517	**GE/RCA**	**CD4517**	**(2634)**
	Motorola	MC14517	
	SGS	HCC/HCF4517	
	Signetics	HEF4517	
	Sprague	SCL4517	
♦ HD14518	Fairchild	F4518	
	GE/RCA	**CD4518**	**(2635)**
	Motorola	MC14518	
	National	CD4518	
	SGS	HCC/HCF4518	
	Signetics	HEF4518	
	Solitron	CM4518	
	Sprague	SCL4518	
	Toshiba	**TC4518**	**(3308)**
♦ HD14519	Hitachi	HD4519	
	Motorola	MC14519	
	National	CD4519	
	Signetics	HEF4519	
♦ HD14520	Fairchild	F4520	
	GE/RCA	**CD4520**	**(2635)**
	Motorola	MC14520	
	National	CD4520	
	OKI	MSM4520	
	Sanyo	LC4520	
	SGS	HCC/HCF4520	
	Signetics	HEF4520	

(Continued)

(Continued)

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Hitachi America, Ltd. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ HD14520			(Cont'd)
	Solitron	CM4520	
	Sprague	SCL4520	
	Toshiba	**TC4520**	**(3308)**
♦ HD14526	Fairchild	F4526	
	Motorola	MC14526	
	National	CD4526	
	Signetics	HEF4526	
	Sprague	SCL4526	
	Toshiba	**TC4526**	**(3308)**
♦ HD14527	Fairchild	F4527	
	GE/RCA	**CD4527**	**(2636)**
	Motorola	MC14527	
	National	CD4527	
	SGS	HCC/HCF4527	
	Signetics	HEF4527	
	Sprague	SCL4527	
	Toshiba	**TC4527**	**(3308)**
♦ HD14528	Fairchild	F4528	
	Motorola	MC14528	
	National	CD4528	
		MM74C221	
♦ HD14528	SGS	HCC/HCF4098	
	Signetics	HEF4528	
	Toshiba	**TC4528**	**(3308)**
♦ HD14531	Fairchild	F4531	
	Motorola	MC14531	
	SGS	HCC/HCF40101	
	Signetics	HEF4531	
	Sprague	SCL4531	
	Toshiba	**TC4531**	**(3308)**
♦ HD14532	Fairchild	F4532	
	GE/RCA	CD4532	
	Motorola	MC14532	
	SGS	HCC/HCF4532	
	Signetics	HEF4532	
	Sprague	SCL4532	
	Toshiba	**TC4532**	**(3308)**
♦ HD14534	Motorola	MC14534	
	Signetics	HEF4534	
♦ HD14539	Fairchild	F4539	
	Motorola	MC14539	
	Signetics	HEF4539	
♦ HD14543	Fairchild	F4543	
	GE/RCA	**CD4543**	**(2635)**
	Motorola	MC14543	
		MC14543B	
♦ HD14543	National	CD4543	
	Signetics	HEF4543	
	Toshiba	**TC4543**	**(3308)**
♦ HD14553	Fairchild	F4553	
	Motorola	MC14553	
♦ HD14555	Fairchild	F4555	
	GE/RCA	**CD4555**	**(2633, 2635)**
	Motorola	MC14555	
	SGS	HCC/HCF4555	
	Signetics	HEF4555	
	Sprague	SCL4555	
	Toshiba	**TC4555**	**(3308)**
♦ HD14557	Fairchild	F4557	
	Motorola	MC14557	
	Signetics	HEF4557	
♦ HD14558	**GE/RCA**	**CD4055**	**(2635)**
♦ HD14560	Motorola	MC14560	
	Toshiba	**TC4560**	**(3308)**
♦ HD14561	Motorola	MC14561	
	Toshiba	**TC4561**	**(3308)**
♦ HD14566	Motorola	MC14566	
♦ HD14568	Motorola	MC14568	
♦ HD14569	Motorola	MC14569	
	Signetics	HEF4059	
♦ HD14572	Motorola	MC14572	
	Toshiba	**TC4572**	**(3308)**
♦ HD14580	Motorola	MC14580	
	SGS	HCC/HCF40108	
♦ HD14581	**GE/RCA**	**CD40181**	**(2636)**
	Motorola	MC14581	
	National	74C181	
	SGS	HCC/HCF40181	
	Sprague	SCL4581	
♦ HD14582	Fairchild	F4582	
	GE/RCA	**CD40182**	**(2636)**
	Motorola	MC14582	
	National	74C182	
	SGS	HCC/HCF40182	
	Sprague	SCL4582	
♦ HD14583	Fairchild	F4583	
	Motorola	MC14583	
	Toshiba	**TC4583**	**(3308)**
♦ HD14584	Fairchild	F400014	
		F40014	
♦ HD14584	**GE/RCA**	**CD40106**	**(2633)**
	Motorola	MC14106	
		MC14584	
♦ HD14584	National	CD40106	
		CD4584	
		MM54C14	
		MM74C14	
♦ HD14584	SGS	HCC/HCF40106	
	Signetics	HEF40106	
	Sprague	SCL4584	
♦ HD14585	Fairchild	F40085	
	GE/RCA	**CD4585**	**(2636)**
	Motorola	MC14585	
	National	MM74C85	
	SGS	HCC/HCF4585	
	Signetics	HEF4585	
	Sprague	SCL4585	
	Toshiba	**TC4585**	**(3308)**
HD146818	Dallas	DS1287	
	GE/RCA	**CDP6818**	**(2642)**
	Hitachi	HD146818A	
	Motorola	**MC146818**	**(2902)**
		MC146818A	**(2902)**
HD146818A	Dallas	DS1287	
	GE/RCA	**CDP6818**	**(2642)**
	Hitachi	HD146818	
	Motorola	**MC146818**	**(2902)**
		MC146818A	**(2902)**
HD268T26	**Motorola**	**MC6880A**	**(2951)**
		MC8T26	**(2951)**
	Signetics	N8T26	
HD4519	Motorola	MC14519	
	National	CD4519	
	Signetics	HEF4519	
HD54HC620	Motorola	MC54HC620	
	TI	SN54HC620	
HD54HCT240	CTI	54HCT240	
	GE/RCA	**CD54HCT240**	**(2631)**
	Micrel	MC54HCT240	
		MIC54HCT240	
	Mitel	MD54HCT240	
	Motorola	MC54HCT240	
	National	MM54HCT240	
	Signetics	54HCT240	
	Supertex	SI54HCT240	
	TI	SN54HCT240	
HD6301	Hitachi	HD6303	
HD6303	Hitachi	HD6301	
HD6800	Fairchild	F6800A	
	Hitachi	HD68A00	
		HD68B00	
	Motorola	MC6800	
	Thomson	EF6800	
HD68000	**Motorola**	**MC68000**	**(2896)**
	Rockwell	**R68000**	**(2987, 2989)**
	Signetics	SCN68000	
	Thomson	**TS68000**	**(3281)**
HD6801	Thomson	EF6801	
HD6802	Fairchild	F6802	
	Motorola	**MC6802**	**(2902)**
	Thomson	EF6802	
HD6803	Thomson	EF6803	
HD6805	Motorola	MC6805	
	Thomson	EF6805	
♦ HD6808	Fairchild	F6808	
	Motorola	MC6808	
HD6809	Hitachi	HD68B09	
	Motorola	**MC6809**	**(2902)**
	Thomson	EF6809	
HD6810	Fairchild	F6810	
	Hitachi	HD68A10	
	Motorola	MC6810	
		MCM6810	**(2902)**
HD6821	Fairchild	F6821	
	Gould	S6821	
	Hitachi	HD68A21	
		HD68B21	
	Mitel	MD68SC21	
	Motorola	**MC6821**	**(2902)**
	Thomson	EF6821	
HD6840	Fairchild	F6840	
	Mitel	MD68SC40	
	Motorola	**MC6840**	**(2902)**
	Thomson	EF6840	
HD6843	Motorola	MC6843	
HD6844	**Motorola**	**MC6844**	**(2902)**
HD6845	Fairchild	F6845	
	Motorola	**MC6845**	**(2903)**
HD68450	**Motorola**	**MC68450**	**(2897)**
HD6845A	Fairchild	F6845A	
	Motorola	**MC6845A**	**(2903)**
HD6846	Fairchild	F6846	
HD6850	Fairchild	F6850	
	Motorola	**MC6850**	**(2902)**
	Thomson	EF6850	
HD6852	Fairchild	F6852	
	Motorola	**MC6852**	**(2902)**
HD68A00	Fairchild	F6800A	
	Hitachi	HD6800	
		HD68B00	
	Motorola	MC6800	
	Thomson	EF6800	
HD68A10	Fairchild	F6810	
	Hitachi	HD6810	
	Motorola	MC6810	
		MCM6810	**(2902)**
HD68A21	Fairchild	F6821	
	Gould	S6821	
	Hitachi	HD6821	
		HD68B21	
	Mitel	MD68SC21	
	Motorola	**MC6821**	**(2902)**
	Thomson	EF6821	
HD68B00	Fairchild	F6800A	
	Hitachi	HD6800	
		HD68A00	
	Motorola	MC6800	
	Thomson	EF6800	
HD68B09	Hitachi	HD6809	
	Motorola	**MC6809**	**(2902)**
	Thomson	EF6809	
HD68B21	Fairchild	F6821	
	Gould	S6821	
	Hitachi	HD6821	
		HD68A21	
	Mitel	MD68SC21	
	Motorola	**MC6821**	**(2902)**
	Thomson	EF6821	
♦ HD7400	Fairchild	7400	
	National	DM7400	
	Signetics	**7400**	**(3003)**
	TI	SN7400	
	Toshiba	TC7400	
♦ HD7401	Fairchild	7401	
	National	DM7401	
	TI	SN7401	
♦ HD7402	Fairchild	7402	
	National	DM7402	
	Signetics	**7402**	**(3003)**
	TI	SN7402	
♦ HD7403	Fairchild	7403	
	National	DM7403	
	Signetics	**7403**	**(3003)**
	TI	SN7403	
♦ HD7404	Fairchild	7404	
	National	DM7404	
	Signetics	**7404**	**(3003)**
	TI	SN7404	
	Toshiba	TC7404	
♦ HD7405	Fairchild	7405	
	National	DM7405	
	Signetics	**7405**	**(3003)**
	TI	SN7405	
♦ HD7406	Fairchild	7406	
	National	DM7406	
	Signetics	**7406**	**(3003)**
	TI	SN7406	
HD7407	Fairchild	7407	
	National	DM7407	
	Signetics	**7407**	**(3003)**
	TI	SN7407	
♦ HD7408	Fairchild	7408	
	National	DM7408	
	Signetics	**7408**	**(3003)**
	TI	SN7408	
♦ HD7409	Fairchild	7409	
	National	DM7409	
	TI	SN7409	
♦ HD7410	Fairchild	7410	
	National	DM7410	
	Signetics	**7410**	**(3003)**
	TI	SN7410	
	Toshiba	TC7410	
♦ HD74107	National	DM74107	
	Signetics	**74107**	**(3003)**
	TI	SN74107	
HD7411	Fairchild	7411	
	National	DM7411	
	Signetics	**7411**	**(3003)**
♦ HD7412	TI	SN7412	
♦ HD74121	Fairchild	74121	
	National	DM74121	
	Signetics	**74121**	**(3003)**
	TI	SN74121	
♦ HD74125	Fairchild	74125	
	National	DM74125	
		DM8093	
♦ HD74125	**Signetics**	**74125**	**(3003)**
	TI	SN74125	
♦ HD74126	National	DM74126	
		DM8094	
♦ HD74126	**Signetics**	**74126**	**(3003)**
	TI	SN74126	
♦ HD7413	National	DM7413	
	Signetics	**7413**	**(3003)**
	TI	SN7413	
♦ HD74132	Fairchild	74132	
	National	DM74132	
	Signetics	**74132**	**(3003)**
	TI	SN74132	
♦ HD74136	Fairchild	74136	
	TI	SN74136	
♦ HD7414	Fairchild	7414	
	National	DM7414	
	Signetics	**7414**	**(3003)**
	TI	SN7414	
♦ HD74141	Fairchild	93141	
	Hitachi	HD7441	
	National	DM74141	
		DM7441	
♦ HD74141	Signetics	74141	
		7441	
♦ HD74145	Fairchild	74145	
	National	DM74145	
	Signetics	**74145**	**(3003)**
	TI	SN74145	
♦ HD74147	**GE/RCA**	**CD4508**	**(2634)**
	Motorola	MC14508	
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**
		HEF4508	
		N82147	
♦ HD74147	Sprague	SCL4508	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
♦ HD74148	National	DM74148	
		DM8318	
♦ HD74148	**Signetics**	**74148**	**(3003)**
		N82148	
♦ HD74148	TI	SN74148	
♦ HD74150	Fairchild	74150	
	National	DM74150	
	Signetics	**74150**	**(3003)**
	TI	SN74150	
♦ HD74153	Fairchild	74153	
	National	DM74153	
	Signetics	**74153**	**(3003)**
	TI	SN74153	
♦ HD74156	National	DM74156	
	Signetics	**74156**	**(3003)**
	TI	SN74156	
♦ HD74157	National	DM74157	
	Signetics	**74157**	**(3003)**
	TI	SN74157	
♦ HD7416	Fairchild	7416	
	National	DM7416	
	Signetics	**7416**	**(3003)**
	TI	SN7416	
♦ HD74160	National	DM74160	
	Signetics	**74160**	**(3003)**
	TI	SN74160	
♦ HD74161	Fairchild	74161	
	National	DM74161	
	Signetics	**74161**	**(3003)**
	TI	SN74161	
♦ HD74162	National	DM74162	
	TI	SN74162	
♦ HD74163	Fairchild	74163	
	National	DM74163	
	Signetics	**74163**	**(3003)**
	TI	SN74163	
♦ HD74166	Fairchild	74166	
	National	DM74166	
	Signetics	**74166**	**(3003)**
	TI	SN74166	
♦ HD7417	Fairchild	7417	
	National	DM7417	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Hitachi America, Ltd. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ HD7417			(Cont'd)
	Signetics	**7417**	**(3003)**
	TI	SN7417	
HD74170	Fairchild	74170	
	National	DM74170	
	Signetics	**74170**	**(3003)**
	TI	SN74170	
♦ HD74174	Fairchild	74174	
	National	DM74174	
	Signetics	**74174**	**(3003)**
	TI	SN74174	
♦ HD74175	Fairchild	74175	
	National	DM74175	
	TI	SN74175	
♦ HD74180	Fairchild	74180	
	National	DM74180	
	Signetics	**74180**	**(3003)**
	TI	SN74180	
HD74181	National	DM74181	
	Raytheon	RC9341	
	Signetics	**74181**	**(3003)**
♦ HD74182	National	DM74182	
♦ HD74190	National	DM74190	
	Signetics	**74190**	**(3003)**
	TI	SN74190	
♦ HD74191	National	DM74191	
	Signetics	**74191**	**(3003)**
	TI	SN74191	
♦ HD74194	National	DM74194	
	Signetics	**74194**	**(3003)**
	TI	SN74194	
♦ HD74198	National	DM74198	
	Signetics	74198	
	TI	SN74198	
♦ HD7420	Fairchild	7420	
		9004	
♦ HD7420	National	DM7420	
		DM9004C	
♦ HD7420	**Signetics**	**7420**	**(3003)**
	TI	SN7420	
	Toshiba	TC7420	
♦ HD7422	TI	SN7422	
♦ HD7426	Fairchild	μA75451	
	National	DM7426	
		DM8810	
♦ HD7426	**Signetics**	**7426**	**(3003)**
	TI	SN7426	
♦ HD7427	Fairchild	7427	
	National	DM7427	
	Signetics	**7427**	**(3003)**
	TI	SN7427	
♦ HD7430	Fairchild	7430	
	National	DM7430	
	Signetics	**7430**	**(3003)**
	TI	SN7430	
♦ HD7432	Fairchild	7432	
	National	DM7432	
	Signetics	**7432**	**(3003)**
	TI	SN7432	
♦ HD7437	Fairchild	7437	
	National	DM7437	
	Signetics	**7437**	**(3003)**
	TI	SN7437	
♦ HD7438	Fairchild	7438	
	National	DM7438	
	Signetics	**7438**	**(3003)**
	TI	SN7438	
♦ HD7440	Fairchild	7440	
	National	DM7440	
	Signetics	**7440**	**(3003)**
	TI	SN7440	
HD7441	Fairchild	93141	
	National	DM74141	
		DM7441	
	Signetics	74141	
		7441	
♦ HD7442	Fairchild	7442	
	National	DM7442	
		DM8842	
♦ HD7442	**Signetics**	**7442**	**(3003)**
	TI	SN7442A	
♦ HD7443	TI	SN7443A	
♦ HD7445	Fairchild	7445	
	Signetics	**7445**	**(3003)**
	TI	SN7445	
♦ HD7446	TI	SN7446A	
♦ HD7450	Fairchild	7450	
	National	DM7450	
	Signetics	**7450**	**(3003)**
	TI	SN7450	
HD7451	Fairchild	7451	
	National	DM7451	
	Signetics	**7451**	**(3003)**
	TI	SN7451	
♦ HD7453	National	DM7453	
♦ HD7454	National	DM7454	
	TI	SN7454	
♦ HD7460	National	DM7460	
HD7470	National	DM7470	
	TI	SN7470	
♦ HD7472	National	DM7472	
♦ HD7473	Fairchild	7473	
	National	DM7473	
	Signetics	**7473**	**(3003)**
	TI	SN7473	
♦ HD7474	Fairchild	7474	
	National	DM7474	
	Signetics	**7474**	**(3003)**
	TI	SN7474	
♦ HD7475	Fairchild	7475	
	National	DM7475	
	Signetics	**7475**	**(3003)**
	TI	SN7475	
♦ HD7476	Fairchild	7476	
	National	DM7476	
	Signetics	**7476**	**(3003)**
	TI	SN7476	
HD7482	National	DM7482	
♦ HD7485	Fairchild	7485	
	National	DM7485	
	Signetics	**7485**	**(3003)**
	TI	SN7485	
♦ HD7486	Fairchild	7486	
	National	DM7486	
	Signetics	**7486**	**(3003)**
	TI	SN7486	
♦ HD7489	Fairchild	7489	
	National	DM7489	
		DM74S289	
		DM8589	
		MM74S289	
♦ HD7489	Signetics	74S289	
		N82S25	
HD7494	**Signetics**	**7494**	**(3003)**
♦ HD7496	National	DM7496	
	Signetics	**7496**	**(3003)**
	TI	SN7496	
HD74HC00	**GE/RCA**	**CD74HC00**	**(2631)**
	Motorola	MC74HC00	
	National	MM74HC00	
	SGS	M74HC00	
	Signetics	**74HC00**	**(3003)**
	TI	SN74HC00	
	Toshiba	TC40H000	
HD74HC01	TI	SN74HC01	
HD74HC02	**GE/RCA**	**CD74HC02**	**(2631)**
	Motorola	MC74HC02	
	National	MM74HC02	
	SGS	M74HC02	
	Signetics	**74HC02**	**(3003)**
	TI	SN74HC02	
	Toshiba	TC40H002	
HD74HC04	**GE/RCA**	**CD74HC04**	**(2631)**
	Motorola	MC74HC04	
	National	MM74HC04	
	SGS	M74HC04	
	TI	SN74HC04	
	Toshiba	TC40H004	
HD74HC08	**GE/RCA**	**CD74HC08**	**(2631)**
	Motorola	MC74HC08	
	National	MM74HC08	
	SGS	M74HC08	
	Signetics	**74HC08**	**(3003)**
	TI	SN74HC08	
HD74HC09	TI	SN74HC09	
HD74HC10	**GE/RCA**	**CD74HC10**	**(2631)**
	Motorola	MC74HC10	
	National	MM74HC10	
	SGS	M74HC10	
	Signetics	**74HC10**	**(3003)**
	TI	SN74HC10	
	Toshiba	TC40H010	
HD74HC107	**GE/RCA**	**CD74HC107**	**(2631)**
	Motorola	MC74HC107	
	National	MM74HC107	
	SGS	M74HC107	
	Signetics	**74HC107**	**(3003)**
	TI	SN74HC107	
	Toshiba	TC40H107	
HD74HC109	**GE/RCA**	**CD74HC109**	**(2631)**
	Motorola	MC74HC109	
	National	MM74HC109	
	SGS	M74HC109	
	Signetics	**74HC109**	**(3003)**
	TI	SN74HC109	
	Toshiba	**TC74HC109**	**(3307)**
HD74HC11	**GE/RCA**	**CD74HC11**	**(2631)**
	Motorola	MC74HC11	
	National	MM74HC11	
	SGS	M74HC11	
	Signetics	**74HC11**	**(3003)**
	TI	SN74HC11	
	Toshiba	TC40H011	
HD74HC112	**GE/RCA**	**CD74HC112**	**(2631)**
	Motorola	MC74HC112	
	National	MM74HC112	
	SGS	M74HC112	
	Signetics	**74HC112**	**(3003)**
	TI	SN74HC112	
HD74HC113	Motorola	MC74HC113	
	National	MM74HC113	
	SGS	M74HC113	
	TI	SN74HC113	
HD74HC114	TI	SN74HC114	
HD74HC123	Motorola	MC74HC123A	
	National	MM74HC123	
	SGS	M74HC123	
	Signetics	**74HC123**	**(3003)**
	TI	SN74HC123	
HD74HC125	**GE/RCA**	**CD74HC125**	**(2631)**
	Motorola	MC74HC125	
	National	MM74HC125	
	SGS	M74HC125	
	TI	SN74HC125	
	Toshiba	**TC74HC125**	**(3307)**
HD74HC126	**GE/RCA**	**CD74HC126**	**(2631)**
	Motorola	MC74HC126	
	National	MM74HC126	
	SGS	M74HC126	
	Toshiba	**TC74HC126**	**(3307)**
HD74HC132	**GE/RCA**	**CD74HC132**	**(2631)**
	Motorola	MC74HC132	
	National	MM74HC132	
	SGS	M74HC132	
	Signetics	**74HC132**	**(3003)**
	TI	SN74HC132	
HD74HC137	Motorola	MC74HC137	
	National	MM74HC137	
	SGS	M74HC137	
	Toshiba	**TC74HC137**	**(3307)**
HD74HC138	**GE/RCA**	**CD74HC138**	**(2632)**
	Motorola	MC74HC138	
	National	MM74HC138	
	SGS	M74HC138	
	Signetics	**74HC138**	**(3003)**
	Sprague	SS74HC138	
	TI	SN74HC138	
HD74HC139	**GE/RCA**	**CD74HC139**	**(2632)**
	National	MM74HC139	
	SGS	M74HC139	
	Signetics	**74HC139**	**(3003)**
	Sprague	SS74HC139	
	TI	SN74HC139	
	Toshiba	TC40H139	
HD74HC14	**GE/RCA**	**CD74HC14**	**(2631)**
	Motorola	MC74HC14	
	National	MM74HC14	
	SGS	M74HC14	
	Signetics	**74HC14**	**(3003)**
	TI	SN74HC14	
HD74HC147	**GE/RCA**	**CD74HC147**	**(2632)**
	Motorola	MC74HC147	
	National	MM74HC147	
	SGS	M74HC147	
	Signetics	**74HC147**	**(3003)**
	TI	SN74HC147	
HD74HC148	SGS	M74HC148	
	TI	SN74HC148	
	Toshiba	**TC74HC148**	**(3307)**
HD74HC151	**GE/RCA**	**CD74HC151**	**(2632)**
	Motorola	MC74HC151	
	National	MM74HC151	
	SGS	M74HC151	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD74HC151			(Cont'd)
	Signetics	**74HC151**	**(3003)**
	TI	SN74HC151	
	Universal	US74HC151	
HD74HC152	TI	SN74HC152	
HD74HC153	**GE/RCA**	**CD74HC153**	**(2632)**
	Motorola	MC74HC153	
	National	MM74HC153	
	SGS	M74HC153	
	Signetics	**74HC153**	**(3003)**
	TI	SN74HC153	
	Toshiba	TC40H153	
HD74HC154	**GE/RCA**	**CD74HC154**	**(2632)**
	Motorola	MC74HC154	
	National	MM74HC154	
	SGS	M74HC154	
	Signetics	**74HC154**	**(3003)**
	TI	SN74HC154	
HD74HC157	**GE/RCA**	**CD74HC157**	**(2632)**
	Motorola	MC74HC157	
	National	MM74HC157	
	SGS	M74HC157	
	Signetics	**74HC157**	**(3003)**
	TI	SN74HC157	
	Toshiba	TC40H157	
HD74HC158	**GE/RCA**	**CD74HC158**	**(2632)**
	Motorola	MC74HC158	
	National	MM74HC158	
	SGS	M74HC158	
	Signetics	**74HC158**	**(3003)**
	TI	SN74HC158	
	Toshiba	TC40H158	
HD74HC161	**GE/RCA**	**CD74HC161**	**(2632)**
	Motorola	MC74HC161	
	National	MM74HC161	
	SGS	M74HC161	
	Signetics	**74HC161**	**(3003)**
	TI	SN74HC161	
HD74HC162	**GE/RCA**	**CD74HC162**	**(2632)**
	Motorola	MC74HC162	
	National	MM74HC162	
	SGS	M74HC162	
	Signetics	**74HC162**	**(3003)**
	TI	SN74HC162	
HD74HC163	**GE/RCA**	**CD74HC163**	**(2632)**
	Motorola	MC74HC163	
	National	MM74HC163	
	SGS	M74HC163	
	Signetics	**74HC163**	**(3003)**
	TI	SN74HC163	
HD74HC164	**GE/RCA**	**CD74HC164**	**(2631)**
	Motorola	MC74HC164	
	National	MM74HC164	
	SGS	M74HC164	
	Signetics	**74HC164**	**(3003)**
	TI	SN74HC164	
HD74HC165	**GE/RCA**	**CD74HC165**	**(2631)**
	Motorola	MC74HC165	
	National	MM74HC165	
	SGS	M74HC165	
	Signetics	**74HC165**	**(3003)**
	TI	SN74HC165	
HD74HC173	**GE/RCA**	**CD74HC173**	**(2631)**
	Motorola	MC74HC173	
	National	MM74HC173	
	SGS	M74HC173	
	Signetics	**74HC173**	**(3003)**
	TI	SN74HC173	
HD74HC174	**GE/RCA**	**CD74HC174**	**(2631)**
	Motorola	MC74HC174	
	National	MM74HC174	
	SGS	M74HC174	
	Signetics	**74HC174**	**(3003)**
	TI	SN74HC174	
	Toshiba	TC40H174	
HD74HC175	**GE/RCA**	**CD74HC175**	**(2631)**
	Motorola	MC74HC175	
	National	MM74HC175	
	SGS	M74HC175	
	Signetics	**74HC175**	**(3003)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Hitachi America, Ltd. (Cont'd)			
HD74HC175			(Cont'd)
	TI	SN74HC175	
	Toshiba	TC40H175	
HD74HC190	**GE/RCA**	**CD74HC190**	**(2632)**
	Motorola	MC74HC190	
	SGS	M74HC190	
	Signetics	**74HC190**	**(3003)**
		PC74HC190	
		PCF74HC190	
	TI	SN74HC190	
	Toshiba	**TC74HC190**	**(3307)**
HD74HC191	**GE/RCA**	**CD74HC191**	**(2632)**
	Motorola	MC74HC191	
	SGS	M74HC191	
	Signetics	**74HC191**	**(3003)**
	TI	SN74HC191	
HD74HC192	**GE/RCA**	**CD74HC192**	**(2632)**
	Motorola	MC74HC192	
	National	MM74HC192	
	SGS	M74HC192	
	Signetics	**74HC192**	**(3003)**
	TI	SN74HC192	
	Toshiba	TC40H192	
HD74HC193	**GE/RCA**	**CD74HC193**	**(2632)**
	Motorola	MC74HC193	
	National	MM74HC193	
	SGS	M74HC193	
	Signetics	**74HC193**	**(3003)**
	TI	SN74HC193	
	Toshiba	TC40H193	
HD74HC194	**GE/RCA**	**CD74HC194**	**(2631)**
	Motorola	MC74HC194	
	National	MM74HC194	
	SGS	M74HC194	
	Signetics	**74HC194**	**(3003)**
	TI	SN74HC194	
HD74HC195	**GE/RCA**	**CD74HC195**	**(2631)**
	Motorola	MC74HC195	
	National	MM74HC195	
	SGS	M74HC195	
	Signetics	**74HC195**	**(3003)**
	TI	SN74HC195	
HD74HC20	**GE/RCA**	**CD74HC20**	**(2631)**
	Motorola	MC74HC20	
	National	MM74HC20	
	SGS	M74HC20	
	Signetics	**74HC20**	**(3003)**
	TI	SN74HC20	
	Toshiba	TC40H020	
HD74HC21	Motorola	MC74HC21	
	SGS	M74HC21	
	TI	SN74HC21	
	Toshiba	**TC74HC21**	**(3307)**
HD74HC221	TI	SN74HC221	
HD74HC240	**GE/RCA**	**CD74HC240**	**(2631)**
	Mitel	MD74HC240	
	Motorola	MC74HC240	
	National	MM74HC240	
	SGS	M74HC240	
	Signetics	**74HC240**	**(3003)**
	Sprague	SS74HC240	
	Supertex	SI74HC240	
	TI	SN74HC240	
	Toshiba	TC40H240	
HD74HC241	**GE/RCA**	**CD74HC241**	**(2631)**
	Mitel	MD74HC241	
	Motorola	MC74HC241	
	National	MM74HC241	
	SGS	M74HC241	
	Signetics	**74HC241**	**(3003)**
	Sprague	SS74HC241	
	Supertex	SI74HC241	
	TI	SN74HC241	
HD74HC242	**GE/RCA**	**CD74HC242**	**(2631)**
	Motorola	MC74HC242	
	National	MM74HC242	
	SGS	M74HC242	
	Signetics	**74HC242**	**(3003)**
	TI	SN74HC242	
HD74HC243	**GE/RCA**	**CD74HC243**	**(2631)**
	Motorola	MC74HC243	
	National	MM74HC243	
	SGS	M74HC243	
		M74HC245	
	Signetics	**74HC243**	**(3003)**
	TI	SN74HC243	
HD74HC244	**GE/RCA**	**CD74HC244**	**(2631)**
	Mitel	MD74HC244	
	Motorola	MC74HC244	
	National	MM74HC244	
	SGS	M74HC244	
	Signetics	**74HC244**	**(3003)**
	Sprague	SS74HC244	
	Supertex	SI74HC244	
	TI	SN74HC244	
HD74HC245	**GE/RCA**	**CD74HC245**	**(2631)**
	Motorola	MC74HC245	
	National	MM74HC245	
	Signetics	**74HC245**	**(3003)**
	Sprague	SS74HC245	
	TI	SN74HC245	
HD74HC251	**GE/RCA**	**CD74HC251**	**(2632)**
	Motorola	MC74HC251	
	National	MM74HC251	
	SGS	M74HC251	
	Signetics	**74HC251**	**(3003)**
	TI	SN74HC251	
HD74HC253	**GE/RCA**	**CD74HC253**	**(2632)**
	Motorola	MC74HC253	
	National	MM74HC253	
	SGS	M74HC253	
	Signetics	**74HC253**	**(3003)**
	TI	SN74HC253	
HD74HC257	**GE/RCA**	**CD74HC257**	**(2632)**
	Motorola	MC74HC257	
	National	MM74HC257	
	SGS	M74HC257	
	Signetics	**74HC257**	**(3003)**
	TI	SN74HC257	
HD74HC258	**GE/RCA**	**CD74HC258**	**(2632)**
	TI	SN74HC258	
	Toshiba	**TC74HC258**	**(3307)**
HD74HC259	**GE/RCA**	**CD74HC259**	**(2632)**
	Motorola	MC74HC259	
	National	MM74HC259	
	Signetics	**74HC259**	**(3003)**
	TI	SN74HC259	
HD74HC266	Motorola	MC74HC266	
	National	MM74HC266	
	SGS	M74HC266	
	Signetics	74HC266	
	TI	SN74HC266	
HD74HC27	**GE/RCA**	**CD74HC27**	**(2631)**
	Motorola	MC74HC27	
	National	MM74HC27	
	SGS	M74HC27	
	Signetics	**74HC27**	**(3003)**
	TI	SN74HC27	
	Toshiba	TC40H027	
	Universal	US74HC27	
HD74HC273	CTI	74HC273	
	GE/RCA	**CD74HC273**	**(2631)**
	Motorola	MC74HC273	
	SGS	M74HC273	
	Signetics	**74HC273**	**(3003)**
	TI	SN74HC273	
HD74HC280	**GE/RCA**	**CD74HC280**	**(2632)**
	Motorola	MC74HC280	
	National	MM74HC280	
	SGS	M74HC280	
	Signetics	**74HC280**	**(3003)**
	TI	SN74HC280	
HD74HC298	SGS	M74HC298	
	TI	SN74HC298	
HD74HC299	TI	SN74HC299	
HD74HC30	**GE/RCA**	**CD74HC30**	**(2631)**
	Motorola	MC74HC30	
	National	MM74HC30	
	SGS	M74HC30	
	Signetics	**74HC30**	**(3003)**
	TI	SN74HC30	
HD74HC32	**GE/RCA**	**CD74HC32**	**(2631)**
	Motorola	MC74HC32	
	National	MM74HC32	
	SGS	M74HC32	
	Signetics	**74HC32**	**(3003)**
	TI	SN74HC32	
	Toshiba	TC40H032	
HD74HC354	**GE/RCA**	**CD74HC354**	**(2632)**
	Motorola	MC74HC354	
	National	MM74HC354	
	SGS	M74HC354	
	Signetics	**74HC354**	**(3003)**
	TI	SN74HC354	
HD74HC356	**GE/RCA**	**CD74HC356**	**(2632)**
	Motorola	MC74HC356	
	National	MM74HC356	
	SGS	M74HC356	
	Signetics	**74HC356**	**(3003)**
	TI	SN74HC356	
HD74HC365	**GE/RCA**	**CD74HC365**	**(2631)**
	Motorola	MC74HC365	
	National	MM74HC365	
	SGS	M74HC365	
	TI	SN74HC365	
HD74HC366	**GE/RCA**	**CD74HC366**	**(2631)**
	Motorola	MC74HC366	
	National	MM74HC366	
	SGS	M74HC366	
	Signetics	**74HC366**	**(3003)**
	TI	SN74HC366	
HD74HC367	**GE/RCA**	**CD74HC367**	**(2631)**
	Motorola	MC74HC367	
	National	MM74HC367	
	SGS	M74HC367	
	Signetics	**74HC367**	**(3003)**
	TI	SN74HC367	
HD74HC368	**GE/RCA**	**CD74HC368**	**(2631)**
	Motorola	MC74HC368	
	National	MM74HC368	
	SGS	M74HC368	
	Signetics	**74HC368**	**(3003)**
	TI	SN74HC368	
HD74HC373	**GE/RCA**	**CD74HC373**	**(2632)**
	Mitel	MD74HC373	
	Motorola	MC74HC373	
	National	MM74HC373	
	SGS	M74HC373	
	Signetics	**74HC373**	**(3003)**
	Sprague	SS74HC373	
	Supertex	SI74HC373	
	TI	SN74HC373	
HD74HC374	**GE/RCA**	**CD74HC374**	**(2631)**
	Mitel	MD74HC374	
	Motorola	MC74HC374	
	National	MM74HC374	
	SGS	M74HC374	
	Signetics	**74HC374**	**(3003)**
	Sprague	SS74HC374	
	TI	SN74HC374	
HD74HC375	SGS	M74HC375	
	TI	SN74HC375	
	Toshiba	**TC74HC375**	**(3307)**
HD74HC377	**GE/RCA**	**CD74HC377**	**(2631)**
	Motorola	MC74HC377	
	SGS	M74HC377	
	Signetics	**74HC377**	**(3003)**
	TI	SN74HC377	
HD74HC390	**GE/RCA**	**CD74HC390**	**(2632)**
	Motorola	MC74HC390	
	National	MM74HC390	
	SGS	M74HC390	
	Signetics	**74HC390**	**(3003)**
	TI	SN74HC390	
HD74HC393	**GE/RCA**	**CD74HC393**	**(2632)**
	Motorola	MC74HC393	
	National	MM74HC393	
	SGS	M74HC393	
	Signetics	**74HC393**	**(3003)**
	TI	SN74HC393	
HD74HC4020	**GE/RCA**	**CD74HC4020**	**(2632)**
	Motorola	MC74HC4020	
HD74HC4020			(Cont'd)
	National	MM74HC4020	
	SGS	M74HC4020	
	Signetics	**74HC4020**	**(3003)**
	TI	SN74HC4020	
HD74HC4024	**GE/RCA**	**CD74HC4024**	**(2632)**
	Motorola	MC74HC4024	
	SGS	M74HC4024	
	Signetics	**74HC4024**	**(3003)**
	TI	SN74HC4024	
HD74HC4040	**GE/RCA**	**CD74HC4040**	**(2632)**
	Motorola	MC74HC4040	
	National	MM74HC4040	
	SGS	M74HC4040	
	Signetics	**74HC4040**	**(3003)**
	TI	SN74HC4040	
HD74HC42	**GE/RCA**	**CD74HC42**	**(2632)**
	Motorola	MC74HC42	
	National	MM74HC42	
	SGS	M74HC42	
	Signetics	**74HC42**	**(3003)**
	TI	SN74HC42	
HD74HC423	TI	SN74HC423	
	Toshiba	**TC74HC423**	**(3307)**
HD74HC4514	**GE/RCA**	**CD74HC4514**	**(2632)**
	Motorola	MC74HC4514	
	National	MM74HC4514	
	SGS	M74HC4514	
	Signetics	**74HC4514**	**(3003)**
	TI	SN74HC4514	
HD74HC490	TI	SN74HC490	
HD74HC51	Motorola	MC74HC51	
	National	MM74HC51	
	TI	SN74HC51	
	Toshiba	**TC74HC51**	**(3307)**
HD74HC533	**GE/RCA**	**CD74HC533**	**(2632)**
	Motorola	MC74HC533	
	National	MM74HC533	
	SGS	M74HC533	
	Signetics	**74HC533**	**(3003)**
	Sprague	SS74HC533	
	TI	SN74HC533	
HD74HC534	**GE/RCA**	**CD74HC534**	**(2631)**
	Motorola	MC74HC534	
	National	MM74HC534	
	SGS	M74HC534	
	Signetics	**74HC534**	**(3003)**
	Sprague	SS74HC534	
	TI	SN74HC534	
HD74HC540	**GE/RCA**	**CD74HC540**	**(2631)**
	Motorola	MC74HC540	
	SGS	M74HC540	
	Signetics	**74HC540**	**(3003)**
	Sprague	SS74HC540	
	TI	SN74HC540	
	Toshiba	**TC74HC540**	**(3307)**
HD74HC541	**GE/RCA**	**CD74HC541**	**(2631)**
	Motorola	MC74HC541	
	SGS	M74HC541	
	Signetics	**74HC541**	**(3003)**
	Sprague	SS74HC541	
	TI	SN74HC541	
HD74HC563	**GE/RCA**	**CD74HC563**	**(2632)**
	Motorola	MC74HC563	
	National	MM74HC563	
	SGS	M74HC563	
	Signetics	**74HC563**	**(3003)**
	Sprague	SS74HC563	
	TI	SN74HC563	
HD74HC564	**GE/RCA**	**CD74HC564**	**(2631)**
	Motorola	MC74HC564	
	National	MM74HC564	
	SGS	M74HC564	
	Signetics	**74HC564**	**(3003)**
	Sprague	SS74HC564	
	TI	SN74HC564	
HD74HC573	**GE/RCA**	**CD74HC573**	**(2632)**
	Motorola	MC74HC573	
	National	MM74HC573	
	SGS	M74HC573	
	Signetics	**74HC573**	**(3003)**
	Sprague	SS74HC573	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Hitachi America, Ltd. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD74HC573			(Cont'd)
	TI	SN74HC573	
	Toshiba	**TC74HC573**	**(3307)**
HD74HC574	**GE/RCA**	**CD74HC574**	**(2631)**
	Motorola	MC74HC574	
	National	MM74HC574	
	SGS	M74HC574	
	Signetics	**74HC574**	**(3003)**
	Sprague	SS74HC574	
	TI	SN74HC574	
HD74HC590	SGS	M74HC590	
	TI	SN74HC590	
HD74HC592	TI	SN74HC592	
HD74HC593	TI	SN74HC593	
HD74HC595	**Cypress**	**CY7C164**	**(2562)**
	Inmos	**IMS1620**	**(2787)**
	Motorola	MC74HC595	
		MCM6288	
		MCM62L88	
	Performance	P4C188	
	SGS	M74HC595	
	TI	SMJ64C64	
		SN74HC595	
	Toshiba	TC55416	
	Vitelic	V61C62	
	VLSI Tech	CT64KS4	
HD74HC597	**GE/RCA**	**CD74HC597**	**(2631)**
	Motorola	MC74HC597	
	National	MM74HC597	
	SGS	M74HC597	
	Signetics	PC74HC597	
	TI	SNN74HC597	
	Toshiba	**TC74HC597**	**(3307)**
HD74HC620	Motorola	MC74HC620	
	National	MM74HC620	
	TI	SN74HC620	
	Toshiba	**TC74HC620**	**(3307)**
HD74HC623	Motorola	MC74HC623	
	National	MM74HC623	
	TI	SN74HC623	
	Toshiba	**TC74HC623**	**(3307)**
HD74HC640	**GE/RCA**	**CD74HC640**	**(2631)**
	Motorola	MC74HC640	
	National	MM74HC640	
	Signetics	**74HC640**	**(3003)**
	Sprague	SS74HC640	
	TI	SN74HC640	
HD74HC643	**GE/RCA**	**CD74HC643**	**(2631)**
	Motorola	MC74HC643	
	National	MM74HC643	
	SGS	M74HC643	
	Signetics	**74HC643**	**(3003)**
	Sprague	SS74HC643	
	TI	SN74HC643	
HD74HC646	**GE/RCA**	**CD74HC646**	**(2631)**
	Motorola	MC74HC646	
	National	MM74HC646	
	SGS	M74HC646	
	Signetics	**74HC646**	**(3003)**
	TI	SN74HC646	
HD74HC648	**GE/RCA**	**CD74HC648**	**(2631)**
	Motorola	MC74HC648	
	National	MM74HC648	
	Signetics	**74HC648**	**(3003)**
	TI	SN74HC648	
HD74HC651	Motorola	MC74HC651	
	TI	SN74HC651	
	Toshiba	**TC74HC651**	**(3307)**
HD74HC652	Motorola	MC74HC652	
	TI	SN74HC652	
	Toshiba	**TC74HC652**	**(3307)**
HD74HC73	**GE/RCA**	**CD74HC73**	**(2631)**
	Motorola	MC74HC73	
	National	MM74HC73	
	SGS	M74HC73	
	Signetics	**74HC73**	**(3003)**
	TI	SN74HC73	
	Toshiba	**TC74HC73**	**(3307)**
HD74HC74	**GE/RCA**	**CD74HC74**	**(2631)**
	Motorola	MC74HC74	
	National	MM74HC74	
	SGS	M74HC74	
	Signetics	**74HC74**	**(3003)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD74HC74			(Cont'd)
	TI	SN74HC74	
	Toshiba	TC40H074	
HD74HC75	**GE/RCA**	**CD74HC75**	**(2632)**
	Motorola	MC74HC75	
	National	MM74HC75	
	SGS	M74HC75	
	Signetics	**74HC75**	**(3003)**
	TI	SN74HC75	
	Toshiba	**TC74HC75**	**(3307)**
HD74HC76	Motorola	MC74HC76	
	National	MM74HC76	
	SGS	M74HC76	
	TI	SN74HC76	
	Toshiba	TC40H076	
HD74HC77	National	MM74HC77	
	TI	SN74HC77	
	Toshiba	**TC74HC77**	**(3307)**
HD74HC78	TI	SN74HC78	
HD74HC86	**GE/RCA**	**CD74HC86**	**(2631)**
	Motorola	MC74HC86	
	National	MM74HC86	
	SGS	M74HC86	
	Signetics	**74HC86**	**(3003)**
	TI	SN74HC86	
HD74HCT125	**GE/RCA**	**CD74HCT125**	**(2631)**
	TI	SN74HCT125	
HD74HCT126	**GE/RCA**	**CD74HCT126**	**(2631)**
	TI	SN74HCT126	
HD74HCT138	CTI	74HCT138	
	GE/RCA	**CD74HCT138**	**(2632)**
	Mitel	MD74HCT138	
	National	MM74HCT138	
	Plessey	MV74HCT138	
	SGS	M74HCT138	
	Signetics	**74HCT138**	**(3003)**
	Sprague	SS74HCT138	
	TI	SN74HCT138	
	Toshiba	TC74HCT138	
HD74HCT240	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
HD74HCT241	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
HD74HCT242	**GE/RCA**	**CD74HCT242**	**(2631)**
	Micrel	MIC74HCT242	
	Signetics	**74HCT242**	**(3003)**
	TI	SN74HCT242	
HD74HCT243	**GE/RCA**	**CD74HCT243**	**(2631)**
	Micrel	MIC74HCT243	
	Signetics	**74HCT243**	**(3003)**
	TI	SN74HCT243	
HD74HCT244	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD74HCT244			(Cont'd)
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
HD74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
HD74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
HD74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
HD74HCT533	CTI	74HCT533	
	GE/RCA	**CD74HCT533**	**(2632)**
	Micrel	MIC74HCT533	
	Motorola	MC74HCT533	
	Plessey	MV74HCT533	
	Signetics	**74HCT533**	**(3003)**
	Sprague	SS74HCT533	
	TI	SN74HCT533	
HD74HCT534	CTI	74HCT534	
	GE/RCA	**CD74HCT534**	**(2631)**
	Micrel	MIC74HCT534	
	Motorola	MC74HCT534	
	Plessey	MV74HCT534	
	Signetics	**74HCT534**	**(3003)**
	Sprague	SS74HCT534	
	TI	SN74HCT534	
HD74HCT540	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
HD74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD74HCT541			(Cont'd)
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
HD74HCT563	CTI	74HCT563	
	GE/RCA	**CD74HCT563**	**(2632)**
	Micrel	MIC74HCT563	
	Plessey	MV74HCT563	
	SGS	M74HCT563	
	Signetics	**74HCT563**	**(3003)**
	Sprague	SS74HCT563	
	TI	SN74HCT563	
	Toshiba	TC74HCT563	
HD74HCT564	CTI	74HCT564	
	GE/RCA	**CD74HCT564**	**(2631)**
	Micrel	MIC74HCT564	
	Plessey	MV74HCT564	
		MV74HCT573	
	SGS	M74HCT564	
	Signetics	**74HCT564**	**(3003)**
	Sprague	SS74HCT564	
	TI	SN74HCT564	
HD74HCT573	CTI	74HCT573	
	GE/RCA	**CD74HCT573**	**(2632)**
	Micrel	MIC74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Signetics	**74HCT573**	**(3003)**
	Sprague	SS74HCT573	
	Supertex	74HCT573	
	TI	SN74HCT573	
	Toshiba	TC74HCT573	
HD74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
HD74HCT620	Motorola	MC74HC597	
		MC74HCT620	
	SGS	M74HCT620	
	TI	SN74HCT620	
HD74HCT623	Motorola	MC74HCT623	
	TI	SN74HCT623	
HD74HCT640	**GE/RCA**	**CD74HCT640**	**(2631)**
	Motorola	MC74HCT640	
	SGS	M74HCT640	
	Signetics	**74HCT640**	**(3003)**
	Sprague	SS74HCT640	
	TI	SN74HCT640	
	Toshiba	TC74HCT640	
HD74HCT643	**GE/RCA**	**CD74HCT643**	**(2631)**
	Motorola	MC74HCT643	
	SGS	M74HCT643	
	Signetics	**74HCT643**	**(3003)**
	TI	SN74HCT643	
	Toshiba	TC74HCT643	
HD74HCT646	**GE/RCA**	**CD74HCT646**	**(2631)**
	Signetics	**74HCT646**	**(3003)**
	TI	SN74HCT646	
	Toshiba	TC74HCT646	
HD74HCT648	**GE/RCA**	**CD74HCT648**	**(2631)**
	Signetics	**74HCT648**	**(3003)**
	TI	SN74HCT648	
	Toshiba	TC74HCT648	
HD74HCT651	TI	SN74HCT651	
	Toshiba	TC74HCT651	
HD74HCT652	TI	SN74HCT652	
	Toshiba	TC74HCT652	
HD74LS00	Fairchild	74LS00	
	Motorola	SN74LS00	
	National	DM74LS00	
	Panasonic	DN74LS00	
	SGS	T74LS00	
	Signetics	**74LS00**	**(3003)**
	TI	SN74LS00	
HD74LS01	Fairchild	74LS01	
	Motorola	SN74LS01	

(Continued)

ALT. SOURCE DIRECTORY

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Hitachi America, Ltd. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD74LS01			(Cont'd)
	National	DM74LS01	
	Panasonic	DN74LS01	
	Signetics	**74LS01**	**(3003)**
	TI	SN74LS01	
HD74LS02	Fairchild	74LS02	
	Motorola	SN74LS02	
	National	DM74LS02	
	Panasonic	DN74LS02	
	SGS	T74LS02	
	Signetics	**74LS02**	**(3003)**
	TI	SN74LS02	
HD74LS03	Fairchild	74LS03	
	Motorola	SN74LS03	
	National	DM74LS03	
	Panasonic	DN74LS03	
	SGS	T74LS03	
	TI	SN74LS03	
HD74LS04	Fairchild	74LS04	
	Motorola	SN74LS04	
	National	DM74LS04	
	Panasonic	DN74LS04	
	SGS	T74LS04	
	Signetics	**74LS04**	**(3003)**
	TI	SN74LS04	
HD74LS05	Fairchild	74LS05	
	Motorola	SN74LS05	
	National	DM74LS05	
	Panasonic	DN74LS05	
	SGS	T74LS05	
	Signetics	**74LS05**	**(3003)**
	TI	SN74LS05	
HD74LS08	Fairchild	74LS08	
	Motorola	SN74LS08	
	National	DM74LS08	
	Panasonic	DN74LS08	
	SGS	T74LS08	
	Signetics	**74LS08**	**(3003)**
	TI	SN74LS08	
HD74LS09	Fairchild	74LS09	
	Motorola	SN74LS09	
	National	DM74LS09	
	Panasonic	DN74LS09	
	SGS	T74LS09	
	TI	SN74LS09	
HD74LS10	Fairchild	74LS10	
	Motorola	SN74LS10	
	National	DM74LS10	
	Panasonic	DN74LS10	
	SGS	T74LS10	
	Signetics	**74LS10**	**(3003)**
	TI	SN74LS10	
HD74LS109	Fairchild	74LS109	
	Motorola	SN74LS109	
	National	DM74LS109	
	Panasonic	DN74LS109	
	SGS	T74LS109	
	Signetics	**74LS109**	**(3003)**
	TI	SN74LS109A	
HD74LS11	Fairchild	74LS11	
	Motorola	SN74LS11	
	National	DM74LS11	
	Panasonic	DN74LS11	
	SGS	T74LS11	
	Signetics	**74LS11**	**(3003)**
	TI	SN74LS11	
HD74LS112	Fairchild	74LS112	
	Motorola	SN74LS112A	
	National	DM74LS112	
	Panasonic	DN74LS112	
	SGS	T74LS112	
	Signetics	**74LS112**	**(3003)**
	TI	SN74LS112A	
HD74LS113	Motorola	SN74LS113A	
	National	DM74LS113	
	Panasonic	DN74LS113	
	SGS	T74LS113	
	Signetics	**74LS113**	**(3003)**
	TI	SN74LS113A	
HD74LS114	Motorola	SN74LS114A	
	National	DM74LS114	
	Panasonic	DN74LS114	
	SGS	T74LS114	
	TI	SN74LS114A	
HD74LS12	Motorola	SN74LS12	
	National	DM74LS12	
	Panasonic	DN74LS12	
	Signetics	74LS12	
	TI	SN74LS12	
♦ HD74LS122	Motorola	SN74LS122	
	National	DM74LS122	
	TI	SN74LS122	
HD74LS123	Motorola	SN74LS123	
	National	DM74LS123	
	Panasonic	DN74LS123	
	TI	SN74LS123	
HD74LS13	Fairchild	74LS13	
	Motorola	SN74LS13	
	National	DM74LS13	
	Panasonic	DN74LS13	
	SGS	T74LS13	
	Signetics	**74LS13**	**(3003)**
	TI	SN74LS13	
HD74LS132	Fairchild	74LS132	
	Motorola	SN74LS132	
	National	DM74LS132	
	Panasonic	DN74LS132	
	SGS	T74LS132	
	Signetics	**74LS132**	**(3003)**
	TI	SN74LS132	
HD74LS136	Fairchild	74LS136	
	Motorola	SN74LS136	
	National	DM74LS136	
	Panasonic	DN74LS136	
	SGS	T74LS136	
	Signetics	**74LS136**	**(3003)**
	TI	SN74LS136	
HD74LS138	Fairchild	74LS138	
	Motorola	SN74LS138	
	National	DM74LS138	
	Panasonic	DN74LS138	
	SGS	T74LS138	
	Signetics	**74LS138**	**(3003)**
	TI	SN74LS138	
HD74LS139	Fairchild	74LS139	
	Motorola	SN74LS139	
	National	DM74LS139	
	Panasonic	DN74LS139	
	SGS	T74LS139	
	Signetics	**74LS139**	**(3003)**
	TI	SN74LS139A	
HD74LS14	Fairchild	74LS14	
	Motorola	SN74LS14	
	National	DM74LS14	
	Panasonic	DN74LS14	
	Signetics	**74LS14**	**(3003)**
	TI	SN74LS14	
HD74LS148	Motorola	SN74LS148	
	TI	SN74LS148	
♦ HD74LS15	Fairchild	74LS15	
	Motorola	SN74LS15	
	National	DM74LS15	
	Panasonic	DN74LS15	
	SGS	T74LS15	
	TI	SN74LS15	
HD74LS151	Fairchild	74LS151	
	Hitachi	HD74LS151A	
	Motorola	SN74LS151	
	National	DM74LS151	
	Panasonic	DN74LS151	
	SGS	T74LS151	
	Signetics	**74LS151**	**(3003)**
	TI	SN74LS151	
HD74LS151A	Fairchild	74LS151	
	Hitachi	HD74LS151	
	Motorola	SN74LS151	
	National	DM74LS151	
	Panasonic	DN74LS151	
	SGS	T74LS151	
	Signetics	**74LS151**	**(3003)**
	TI	SN74LS151	
HD74LS152	Signetics	74LS152	
HD74LS153	Fairchild	74LS153	
	Motorola	SN74LS153	
	National	DM74LS153	
	Panasonic	DN74LS153	
	SGS	T74LS153	
	Signetics	**74LS153**	**(3003)**
	TI	SN74LS153	
HD74LS155	Fairchild	74LS155	
	Motorola	SN74LS155	
	National	DM74LS155	
	Panasonic	DN74LS155	
	Signetics	**74LS155**	**(3003)**
	TI	SN74LS155A	
HD74LS156	Fairchild	74LS156	
	Motorola	SN74LS156	
	National	DM74LS156	
	Panasonic	DN74LS156	
	SGS	T74LS156	
HD74LS156			(Cont'd)
	Signetics	**74LS156**	**(3003)**
	TI	SN74LS156	
HD74LS157	Fairchild	74LS157	
	Motorola	SN74LS157	
	National	DM74LS157	
	Panasonic	DN74LS157	
	SGS	T74LS157	
	Signetics	**74LS157**	**(3003)**
	TI	SN74LS157	
HD74LS158	Fairchild	74LS158	
	Motorola	SN74LS158	
	National	DM74LS158	
	Panasonic	DN74LS158	
	SGS	T74LS158	
	Signetics	**74LS158**	**(3003)**
	TI	SN74LS158	
HD74LS160A	Fairchild	74LS160	
	Motorola	SN74LS160A	
	National	DM74LS160	
	Panasonic	DN74LS160A	
	SGS	T74LS160	
	Signetics	**74LS160**	**(3003)**
		74LS160A	**(3003)**
	TI	SN74LS160A	
HD74LS161A	Fairchild	74LS161A	
	Motorola	SN74LS161A	
	National	DM74LS161	
	Panasonic	DN74LS161A	
	SGS	T74LS161	
	Signetics	**74LS161A**	**(3003)**
	TI	SN74LS161A	
HD74LS162A	Fairchild	74LS162	
	Motorola	SN74LS162A	
	National	DM74LS162	
	Panasonic	DN74LS162A	
	SGS	T74LS162	
	Signetics	**74LS162A**	**(3003)**
	TI	SN74LS162A	
HD74LS163	Fairchild	74LS163	
	Hitachi	HD74LS163A	
	Motorola	SN74LS163A	
	National	DM74LS163	
	Panasonic	DN74LS163A	
	SGS	T74LS163	
	Signetics	**74LS163A**	**(3003)**
	TI	SN74LS163A	
HD74LS163A	Fairchild	74LS163	
	Hitachi	HD74LS163	
	Motorola	SN74LS163A	
	National	DM74LS163	
	Panasonic	DN74LS163A	
	SGS	T74LS163	
	Signetics	**74LS163A**	**(3003)**
	TI	SN74LS163A	
HD74LS164	Fairchild	74LS164	
	Motorola	SN74LS164A	
	National	DM74LS164	
	Panasonic	DN74LS164	
	SGS	T74LS164	
	Signetics	**74LS164**	**(3003)**
		74LS164A	**(3003)**
	TI	SN74LS164	
HD74LS169	Fairchild	74LS169	
	Motorola	SN74LS169	
	National	DM74LS169	
	SGS	T74LS169	
	Signetics	**74LS169A**	**(3003)**
	TI	SN74LS169	
HD74LS174	Fairchild	74LS174	
	Motorola	SN74LS174	
	National	DM74LS174	
	Panasonic	DN74LS174	
	SGS	T74LS174	
	Signetics	**74LS174**	**(3003)**
	TI	SN74LS174	
HD74LS181	Fairchild	74LS181	
	Motorola	SN74LS181	
	SGS	T74LS181	
	Signetics	**74LS181**	**(3003)**
	TI	SN74LS181	
HD74LS183A	Fairchild	74LS83A	
	Hitachi	HD74LS83A	
	Motorola	SN74LS83A	
	National	DM74LS83A	
	Panasonic	DN74LS83A	
	SGS	T74LS83	
	Signetics	**74LS83**	**(3003)**
		74LS83A	**(3003)**
	TI	SN74LS83A	
HD74LS190	Fairchild	74LS190	
	Motorola	SN74LS190	
HD74LS190			(Cont'd)
	National	DM74LS190	
	Panasonic	DN74LS190	
	SGS	T74LS190	
	TI	SN74LS190	
HD74LS191	Fairchild	74LS191	
	Motorola	SN74LS191	
	National	DM74LS191	
	Panasonic	DN74LS191	
	SGS	T74LS191	
	Signetics	**74LS191**	**(3003)**
	TI	SN74LS191	
HD74LS192	Fairchild	74LS192	
	Motorola	SN74LS192	
	National	DM74LS192	
	Panasonic	DN74LS192	
	SGS	T74LS192	
	Signetics	**74LS192**	**(3003)**
	TI	SN74LS192	
HD74LS193	Fairchild	74LS193	
	Motorola	SN74LS193	
	National	DM74LS193	
	Panasonic	DN74LS193	
	SGS	T74LS193	
	Signetics	**74LS193**	**(3003)**
	TI	SN74LS193	
HD74LS194A	Fairchild	74LS194A	
	Motorola	SN74LS194A	
	National	DM74LS194	
	Panasonic	DN74LS194A	
	SGS	T74LS194A	
	Signetics	**74LS194A**	**(3003)**
	TI	SN74LS194A	
HD74LS195A	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
HD74LS196	Fairchild	74LS196	
	Motorola	SN74LS196	
	National	DM74LS196	
	Panasonic	DN74LS196	
	SGS	T74LS196	
	Signetics	N82S80	
	TI	SN74LS196	
HD74LS197	Fairchild	74LS197	
	Motorola	SN74LS197	
	National	DM74LS197	
	Panasonic	DN74LS197	
	SGS	T74LS197	
	Signetics	**74LS197**	**(3003)**
	TI	SN74LS197	
HD74LS20	Fairchild	74LS20	
	Motorola	SN74LS20	
	National	DM74LS20	
	Panasonic	DN74LS20	
	SGS	T74LS20	
	Signetics	**74LS20**	**(3003)**
	TI	SN74LS20	
HD74LS21	Fairchild	74LS21	
	Motorola	SN74LS21	
	National	DM74LS21	
	Panasonic	DN74LS21	
	SGS	T74LS21	
	Signetics	**74LS21**	**(3003)**
	TI	SN74LS21	
HD74LS22	Motorola	SN74LS22	
	National	DM74LS22	
	Panasonic	DN74LS22	
	SGS	T74LS22	
HD74LS221	Fairchild	74LS221	
	Motorola	SN74LS221	
	National	DM74LS221	
	TI	SN74LS221	
HD74LS240	Fairchild	74LS240	
	Motorola	SN74LS240	
	Panasonic	DN74LS240	
	SGS	T74LS240	
	Signetics	**74LS240**	**(3003)**
	TI	SN74LS240	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Hitachi America, Ltd. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD74LS241	Fairchild	74LS241	
	Motorola	SN74LS241	
	Panasonic	DN74LS241	
	SGS	T74LS241	
	Signetics	**74LS241**	**(3003)**
	TI	SN74LS241	
HD74LS244	Fairchild	74LS244	
	Motorola	SN74LS244	
	Panasonic	DN74LS244	
	SGS	T74LS244	
	Signetics	**74LS244**	**(3003)**
	TI	SN74LS244	
HD74LS247	Fairchild	74LS247	
	Motorola	SN74LS247	
	National	DM74LS247	
	TI	SN74LS247	
HD74LS248	Fairchild	74LS248	
	Motorola	SN74LS248	
	National	DM74LS248	
	SGS	T74LS248	
HD74LS249	Fairchild	74LS249	
	Motorola	SN74LS249	
	National	DM74LS249	
	SGS	T74LS249	
HD74LS251	Fairchild	74LS251	
	Motorola	SN74LS251	
	National	DM74LS251	
	Panasonic	DN74LS251	
	SGS	T74LS251	
	Signetics	**74LS251**	**(3003)**
	TI	SN74LS251	
HD74LS253	Fairchild	74LS253	
	Motorola	SN74LS253	
	National	DM74LS253	
		DM8214	
	Panasonic	DN74LS253	
	SGS	T74LS253	
	Signetics	**74LS253**	**(3003)**
	TI	SN74LS253	
HD74LS257	Fairchild	74LS257A	
	Motorola	SN74LS257A	
	National	DM74LS257	
	SGS	T74LS257	
	Signetics	**74LS257**	**(3003)**
		74LS257A	**(3003)**
	TI	SN74LS257B	
HD74LS258	Fairchild	74LS258A	
	Motorola	SN74LS258A	
	National	DM74LS258	
	Panasonic	DN74LS258A	
	SGS	T74LS258	
	Signetics	**74LS258**	**(3003)**
	TI	SN74LS258B	
HD74LS26	Fairchild	74LS26	
	Motorola	SN74LS26	
	National	DM74LS26	
	Panasonic	DN74LS26	
	SGS	T74LS26	
	Signetics	**74LS26**	**(3003)**
	TI	SN74LS26	
HD74LS27	Fairchild	74LS27	
	Motorola	SN74LS27	
	National	DM74LS27	
	Panasonic	DN74LS27	
	SGS	T74LS27	
	Signetics	**74LS27**	**(3003)**
	TI	SN74LS27	
HD74LS279	Fairchild	74LS279	
	Motorola	SN74LS279	
	National	DM74LS279	
	Panasonic	DN74LS279	
	SGS	T74LS279	
	Signetics	74LS279	
	TI	SN74LS279A	
HD74LS280	Motorola	SN74LS280	
	Panasonic	DN74LS280	
	SGS	T74LS280	
	TI	SN74LS280	
HD74LS283	Fairchild	74LS283	
	Hitachi	HD74LS283A	
	Motorola	SN74LS283	
	National	DM74LS283	
	Panasonic	DN74LS283	
	SGS	T74LS283	
	Signetics	**74LS283**	**(3003)**
	TI	SN74LS283	
HD74LS283A	Fairchild	74LS283	
	Hitachi	HD74LS283	
	Motorola	SN74LS283	
	National	DM74LS283	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD74LS283A			(Cont'd)
	Panasonic	DN74LS283	
	SGS	T74LS283	
	Signetics	**74LS283**	**(3003)**
	TI	SN74LS283	
HD74LS290	Fairchild	74LS290	
	Motorola	SN74LS290	
	National	DM74LS290	
	Panasonic	DN74LS290	
	SGS	T74LS290	
	Signetics	**74LS290**	**(3003)**
	TI	SN74LS290	
HD74LS293	Fairchild	74LS293	
	Motorola	SN74LS293	
	National	DM74LS293	
	Panasonic	DN74LS293	
	SGS	T74LS293	
	Signetics	**74LS293**	**(3003)**
	TI	SN74LS293	
HD74LS298	Fairchild	74LS298	
	Motorola	SN74LS298	
	SGS	T74LS298	
	Signetics	**74LS298**	**(3003)**
	TI	SN74LS298	
HD74LS299	AMD	SN74LS299	
	Fairchild	74LS299	
	Motorola	SN74LS299	
	SGS	T74LS299	
	TI	SN74LS299	
HD74LS30	Fairchild	74LS30	
	Motorola	SN74LS30	
	National	DM74LS30	
	Panasonic	DN74LS30	
	SGS	T74LS30	
	Signetics	**74LS30**	**(3003)**
	TI	SN74LS30	
HD74LS367	Fairchild	74LS367A	
	Hitachi	HD74LS367A	
	Motorola	SN74LS367A	
	National	DM74LS367	
	Panasonic	DN74LS367A	
	SGS	T74LS367	
		T74LS367A	
	Signetics	**74LS367**	**(3003)**
		74LS367A	**(3003)**
	TI	SN74LS367A	
HD74LS367A	Fairchild	74LS367A	
	Hitachi	HD74LS367	
	Motorola	SN74LS367A	
	National	DM74LS367	
	Panasonic	DN74LS367A	
	SGS	T74LS367	
		T74LS367A	
	Signetics	**74LS367**	**(3003)**
		74LS367A	**(3003)**
	TI	SN74LS367A	
HD74LS368	Fairchild	74LS368A	
	Motorola	SN74LS368A	
	National	DM74LS368	
	Panasonic	DN74LS368A	
	SGS	T74LS368	
	Signetics	**74LS368**	**(3003)**
		74LS368A	**(3003)**
	TI	SN74LS368A	
HD74LS37	Fairchild	74LS37	
	Motorola	SN74LS37	
	National	DM74LS37	
	Panasonic	DN74LS37	
	SGS	T74LS37	
	Signetics	74LS37	
	TI	SN74LS37	
HD74LS38	Fairchild	74LS38	
	Motorola	SN74LS38	
	National	DM74LS38	
	Panasonic	DN74LS38	
	SGS	T74LS38	
	Signetics	**74LS38**	**(3003)**
	TI	SN74LS38	
HD74LS386	Motorola	SN74LS386	
	National	DM74LS386	
	Panasonic	DN74LS386	
	TI	SN74LS386A	
HD74LS40	Fairchild	74LS40	
	Motorola	SN74LS40	
	National	DM74LS40	
	Panasonic	DN74LS40	
	SGS	T74LS40	
	Signetics	**74LS40**	**(3003)**
	TI	SN74LS40	
HD74LS42	Fairchild	74LS42	
	Motorola	SN74LS42	
	National	DM74LS42	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD74LS42			(Cont'd)
	Panasonic	DN74LS42	
	SGS	T74LS42	
	Signetics	**74LS42**	**(3003)**
	TI	SN74LS42	
HD74LS47	Fairchild	74LS47	
	Motorola	SN74LS47	
	National	DM74LS47	
	SGS	T74LS47	
	TI	SN74LS47	
HD74LS48	Fairchild	74LS48	
	Motorola	SN74LS48	
	National	DM74LS48	
	SGS	T74LS48	
	Signetics	74LS48	
HD74LS49	Motorola	SN74LS49	
	National	DM74LS49	
	SGS	T74LS49	
	TI	SN74LS49	
HD74LS51	Fairchild	74LS51	
	Motorola	SN74LS51	
	National	DM74LS51	
	Panasonic	DN74LS51	
	SGS	T74LS51	
	Signetics	**74LS51**	**(3003)**
	TI	SN74LS51	
HD74LS54	Fairchild	74LS54	
	Motorola	SN74LS54	
	National	DM74LS54	
	Panasonic	DN74LS54	
	SGS	T74LS54	
	Signetics	**74LS54**	**(3003)**
	TI	SN74LS54	
HD74LS55	Fairchild	74LS55	
	Motorola	SN74LS55	
	National	DM74LS55	
	Panasonic	DN74LS55	
	SGS	T74LS55	
	TI	SN74LS55	
HD74LS73	Motorola	SN74LS73A	
	National	DM74LS73	
	Panasonic	DN74LS73	
	Signetics	**74LS73**	**(3003)**
	TI	SN74LS73A	
HD74LS74	Fairchild	74LS74	
	Hitachi	HD74LS74A	
	Motorola	SN74LS74A	
	National	DM74LS74	
	Panasonic	DN74LS74A	
	SGS	T74LS74	
	Signetics	74LS74	
	TI	SN74LS74A	
HD74LS74A	Fairchild	74LS74	
	Hitachi	HD74LS74	
	Motorola	SN74LS74A	
	National	DM74LS74	
	Panasonic	DN74LS74A	
	SGS	T74LS74	
	Signetics	74LS74	
	TI	SN74LS74A	
HD74LS75	Motorola	SN74LS75	
	National	DM74LS75	
	Panasonic	DN74LS75	
	Signetics	**74LS75**	**(3003)**
	TI	SN74LS75	
HD74LS76	Motorola	SN74LS76A	
	National	DM74LS76	
	Panasonic	DN74LS76	
	Signetics	**74LS76**	**(3003)**
	TI	SN74LS76A	
HD74LS78	Motorola	SN74LS78A	
	National	DM74LS78	
	Panasonic	DN74LS78	
	TI	SN74LS78A	
HD74LS83A	Fairchild	74LS83A	
	Hitachi	HD74LS183A	
	Motorola	SN74LS83A	
	National	DM74LS83A	
	Panasonic	DN74LS83A	
	SGS	T74LS83	
	Signetics	**74LS83**	**(3003)**
		74LS83A	**(3003)**
	TI	SN74LS83A	
HD74LS85	Fairchild	74LS85	
	Motorola	SN74LS85	
	National	DM74LS85	
	Panasonic	DN74LS85	
	Signetics	**74LS85**	**(3003)**
	TI	SN74LS85	
HD74LS86	Fairchild	74LS86	
	Motorola	SN74LS86	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HD74LS86			(Cont'd)
	Panasonic	DN74LS86	
	SGS	T74LS86	
	Signetics	**74LS86**	**(3003)**
	TI	SN74LS86A	
HD74LS91	Motorola	SN74LS91	
	TI	SN74LS91	
HD74LS92	Motorola	SN74LS92	
	National	DM74LS92	
	Panasonic	DN74LS92	
	SGS	T74LS92	
	Signetics	**74LS92**	**(3003)**
	TI	SN74LS92	
HD74LS93	Motorola	SN74LS93	
	National	DM74LS93	
	Panasonic	DN74LS93	
	SGS	T74LS93	
	Signetics	**74LS93**	**(3003)**
	TI	SN74LS93	
HD74LS95B	Fairchild	74LS95B	
	Motorola	SN74LS95B	
	National	DM74LS95B	
	Panasonic	DN74LS95B	
	SGS	T74LS95	
		T74LS95B	
	Signetics	**74LS95B**	**(3003)**
	TI	SN74LS95B	
♦ HD74S00	Fairchild	74S00	
	National	DM74S00	
	Signetics	**74S00**	**(3003)**
	TI	SN74S00	
♦ HD74S02	Fairchild	74S02	
	National	DM74S02	
	Signetics	**74S02**	**(3003)**
	TI	SN74S02	
		SN74S32	
♦ HD74S03	Fairchild	74S03	
	National	DM74S03	
	Signetics	**74S03**	**(3003)**
	TI	SN74S03	
♦ HD74S04	Fairchild	74S04	
	National	DM74S04	
	Signetics	**74S04**	**(3003)**
	TI	SN74S04	
♦ HD74S05	Fairchild	74S05	
	National	DM74S05	
	Signetics	**74S05**	**(3003)**
	TI	SN74S05	
♦ HD74S10	Fairchild	74S10	
	National	DM74S10	
	Signetics	**74S10**	**(3003)**
	TI	SN74S10	
♦ HD74S11	Fairchild	74S11	
	National	DM74S11	
	Signetics	**74S11**	**(3003)**
	TI	SN74S11	
♦ HD74S112	Fairchild	74S112	
	Motorola	SN74S112	
	National	DM74S112	
	Signetics	**74S112**	**(3003)**
	TI	SN74S112	
♦ HD74S113	National	DM74S113	
	Signetics	**74S113**	**(3003)**
	TI	SN74S113	
♦ HD74S114	National	DM74S114	
	TI	SN74S114	
♦ HD74S133	Fairchild	74S133	
	National	DM74S133	
	Signetics	**74S133**	**(3003)**
	TI	SN74S133	
♦ HD74S134	National	DM74S134	
	Signetics	**74S134**	**(3003)**
	TI	SN74S134	
♦ HD74S135	National	DM74S135	
	Signetics	**74S135**	**(3003)**
	TI	SN74S135	
♦ HD74S140	National	DM74S140	
	Signetics	**74S140**	**(3003)**
	TI	SN74S140	
♦ HD74S15	National	DM74S15	
	TI	SN74S15	
♦ HD74S182	Fairchild	74S182	
	MMI	SN74S182	
	National	DM74S182	
	Signetics	**74S182**	**(3003)**
	TI	SN74S182	
♦ HD74S189	AMD	AM27LS03	
		AM27S03	
		SN74S189	
♦ HD74S189	Cypress	27LS03M	
		CY27S03	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Hitachi America, Ltd. (Cont'd)			
♦ HD74S189	Cypress		(Cont'd)
		CY74S189	
		CY7C189	**(2562, 2564)**
♦ HD74S189	National	DM74S189	
		DM7599	
		DM8599	
♦ HD74S20	Fairchild	74S20	
	National	DM74S20	
	Signetics	**74S20**	**(3003)**
	TI	SN74S20	
♦ HD74S22	National	DM74S22	
	TI	SN74S22	
♦ HD74S251	AMD	SN74S251	
	National	DM74S251	
	Signetics	**74S251**	**(3003)**
	TI	SN74S251	
♦ HD74S280	National	DM74S280	
	Signetics	**74S280**	**(3003)**
	TI	SN74S280	
♦ HD74S289	Fairchild	7489	
	National	DM7489	
		DM74S289	
		DM8589	
		MM74S289	
♦ HD74S289	Signetics	74S289	
		N82S25	
♦ HD74S40	Fairchild	74S40	
	National	DM74S40	
	Signetics	**74S40**	**(3003)**
	TI	SN74S40	
♦ HD74S51	Fairchild	74S51	
	National	DM74S51	
	Signetics	**74S51**	**(3003)**
	TI	SN74S51	
♦ HD74S65	National	DM74S65	
	TI	SN74S65	
HD74S74	Fairchild	74S74	
	National	DM74S74	
	Signetics	**74S74**	**(3003)**
	TI	SN74S74	
♦ HD74S86	Fairchild	74S86	
	National	DM74S86	
	Signetics	**74S86**	**(3003)**
	TI	SN74S86	
HD75107A	TI	SN75107A	
HD75108A	TI	SN75108A	
♦ HD75110	Fairchild	75110	
	Motorola	**MC75S110**	**(2952)**
	National	LM75110	
	TI	SN75110A	
♦ HD75154	National	DS75154	
	TI	SN75154	
HD75188	Exar	XR1488	
	Fairchild	MC1488	
		μA212A	
		μA750	
	GoldStar	**GD75188**	**(2694)**
	National	DS1488	
	Signetics	MC1488	
		MC1489	
	SiliconG	SG75188	
		SG75788	
	TI	MC1488	
		MC1489	
		SN75188	
		SN75189	
HD75189	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		μA212A	
		μA750	
	GoldStar	**GD75189**	**(2694)**
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG2501A	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
HD75450A	SiliconG	SG75450A	
HD75451A	SiliconG	SG75451A	
		SG75451B	
	TI	SN75451B	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ HD75452	Fairchild	75452	
	National	DS75452	
	SiliconG	SG75452A	
		SG75452B	
♦ HD75452	TI	SN75452B	
♦ HD75453	Fairchild	75453	
	Motorola	MC75453	
	National	DS75453	
		LM75453	
♦ HD75453	SiliconG	SG75453A	
		SG75453B	
♦ HD75453	TI	SN75453B	
HM100415	**Cypress**	**CY7C162**	**(2562)**
	Fairchild	F100415	
	Fujitsu	MBM100415	
	IDT	**IDT71982**	**(2803)**
	Performance	P4C1982	
HM100422	Fairchild	F100422	
	Fujitsu	MB8118	
		MBM100422	
		MBM100422A	
	National	DM100422	
		NMC5295	
	NEC	μPB100422	
♦ HM100470	Inmos	IMS2800	
		IMS2801	
♦ HM100470	Motorola	MCM6256	
		MCM6257	
♦ HM100470	**TI**	**TMS4256**	**(3259)**
	Vitelic	V51C256	
		V51C257	
HM100474	AMD	AM100474	
	Fairchild	F100474	
	Fujitsu	MBM100474	
		MBM100474A	
	Hitachi	100474	
	NEC	μPB100474	
HM100480	AMD	AM100480	
	NEC	μPB100480	
HM100484	AMD	AM100484	
	Fujitsu	MBM100484	
	NEC	μPB100484	
HM100490	**Fujitsu**	**MBM100490**	**(2618)**
	SMC	HDC9224	
HM10414	AMD	AM99C641	
	Fairchild	F1600	
		F1601	
	Fujitsu	MB8171	
		MB81C71	
	Inmos	**IMS1601**	**(2786)**
	IDT	**IDT7187L**	**(2802)**
	Motorola	MCM6287	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
♦ HM10422	Fujitsu	MBM10422A	
	National	DM10422	
	NEC	μPB10422	
HM10470	AMD	AM10470	
	Fujitsu	MBM10470A	
	Motorola	MCM10470	
	National	DM10470	
	NEC	μPB10470	
HM10474	AMD	AM10474	
	Fairchild	F10474	
	Fujitsu	MBM10474A	
	Motorola	MCM10474	
	National	DM10474	
	NEC	μPB10474	
HM10480	AMD	AM10480	
	Fairchild	F10480	
	Fujitsu	MBM10480	
	NEC	μPB10480	
HM10484	Fairchild	F10484	
	Fujitsu	MBM10484	
	NEC	μPB10484	
HM10490	Fujitsu	MBM10490	
HM2110	AMD	AM10415	
	Fujitsu	MBM100470A	
		MBM10415	
	Hitachi	HM2112	
	Motorola	**MCM10146**	**(2918)**
	National	DM10415	
	Siemens	GXB10415	
HM2112	AMD	AM10415	
	Fujitsu	MBM100470A	
		MBM10415	
	Hitachi	HM2110	
	Motorola	**MCM10146**	**(2918)**
	National	DM10415	
	Siemens	GXB10415	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ HM2148	AMD	AM2148	
		AM2149	
♦ HM2148	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
♦ HM2148	**Harris**	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
♦ HM2148	National	NMC2148	
	Thomson	ET2148	
	UMC	UM2148	
HM27128	Mitel	M5L27128	
	SGS	ULN2802	
	SiliconG	SG2802	
	Sprague	**ULN2802**	**(3203)**
		ULS2802	
	Toshiba	TD62082	
		TMN27128	
HM4716	AMD	AM9016	
	Fairchild	F16K	
		F4116	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
HM4827128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
HM4827256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM4827256			(Cont'd)
	Waferscale	**WS57C256**	**(3376)**
HM482764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
HM48416	Fujitsu	MB81416	
	Inmos	IMS2620	
	Mitsubishi	M5M4416	
	NEC	μPD41416	
	TI	TMS4416	
HM4847	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM6147	
	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
HM4864	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
HM4864A	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Hitachi America, Ltd. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM4864A			(Cont'd)
	Hitachi	HM4864	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
HM50256	Fujitsu	MB81256	
	Hitachi	HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257 (3259)**	
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
HM50257	Fujitsu	MB81257	
	Mitsubishi	MSM4257	
	Motorola	MCM6256	
		MCM6257	
	NEC	μPD41257	
	Samsung	KM41257	
	TI	**TMS4256 (3259)**	
		TMS4257 (3259)	
	Toshiba	TMM41257	
	Vitelic	V51C256	
		V51C257	
HM50464	Fujitsu	MB81464	
	Hitachi	HM50465	
	Inmos	IMS2820	
	MicronTech	MT4064	
	Mitsubishi	M5M4464	
		MSM4464P	
	NEC	μPD41464	
	OKI	MSM41464	
	Samsung	KM41464	
	TI	SMJ4469	
		TMS4464 (3259)	
	Toshiba	TMM41464	
HM50465	Fujitsu	MB81464	
	Hitachi	HM50464	
	Inmos	IMS2820	
	MicronTech	MT4064	
	Mitsubishi	M5M4464	
		MSM4464P	
	NEC	μPD41464	
	OKI	MSM41464	
	Samsung	KM41464	
	TI	SMJ4469	
		TMS4464 (3259)	
	Toshiba	TMM41464	
HM511000	**Dense-Pac**	**DPD411M (2581)**	
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000 (2621)	
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM511000	Fujitsu	MB85227	(Cont'd)
		TH22568	
	GoldStar	**GM7C1024 (2692)**	
	Hitachi	HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1 (3260)**	
		TM5256	
		TMS4C1024 (3259)	
		TMS4C1025 (3259)	
		TMS4C1027 (3259)	
	Toshiba	**TC511000 (3302)**	
		TC511000C (3302)	
		TC511001C	
		TC511002	
		TMM411001C	
HM511001	**Dense-Pac**	**DPD411M (2581)**	
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000 (2621)	
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024 (2692)**	
	Hitachi	HM511000	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1 (3260)**	
		TM5256	
		TMS4C1024 (3259)	
		TMS4C1025 (3259)	
		TMS4C1027 (3259)	
	Toshiba	**TC511000 (3302)**	
		TC511000C (3302)	
		TC511001C	
		TC511002	
		TMM411001C	
HM511002	**Dense-Pac**	**DPD411M (2581)**	
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000 (2621)	
		MB81C1001	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM511002	Fujitsu	MB81C1002	(Cont'd)
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024 (2692)**	
	Hitachi	HM511000	
		HM511001	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1 (3260)**	
		TM5256	
		TMS4C1024 (3259)	
		TMS4C1025 (3259)	
		TMS4C1027 (3259)	
	Toshiba	**TC511000 (3302)**	
		TC511000C (3302)	
		TC511001C	
		TC511002	
		TMM411001C	
HM51101	**Dense-Pac**	**DPD411M (2581)**	
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000 (2621)	
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024 (2692)**	
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1 (3260)**	
		TM5256	
		TMS4C1024 (3259)	
		TMS4C1025 (3259)	
		TMS4C1027 (3259)	
	Toshiba	**TC511000 (3302)**	
		TC511000C (3302)	
		TC511001C	
		TC511002	
		TMM411001C	
HM51102	**Dense-Pac**	**DPD411M (2581)**	
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM51102	**Fujitsu**	**MB81C1000 (2621)**	(Cont'd)
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024 (2692)**	
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1 (3260)**	
		TM5256	
		TMS4C1024 (3259)	
		TMS4C1025 (3259)	
		TMS4C1027 (3259)	
	Toshiba	**TC511000 (3302)**	
		TC511000C (3302)	
		TC511001C	
		TC511002	
		TMM411001C	
HM51258	Fujitsu	MB81C258	
		MB81C4258	
	Motorola	MCM6256	
		MCM6257	
	Vitelic	V51C256	
		V51C257	
HM514256	NEC	μPD424256	
HM53461	Fujitsu	MB81461	
	Hitachi	HM53462	
		HM53464	
	Mitsubishi	M5M4C264	
		MB81461	
	NEC	μPD41254	
		μPD41264	
		μPD42264	
	Samsung	KM41464	
	TI	**TMS4461 (3259)**	
HM53462	Fujitsu	MB81461	
	Hitachi	HM53461	
		HM53464	
	Mitsubishi	M5M4C264	
		MB81461	
	NEC	μPD41254	
		μPD41264	
		μPD42264	
	Samsung	KM41464	
	TI	**TMS4461 (3259)**	
HM53464	Fujitsu	MB81461	
	Hitachi	HM53461	
		HM53462	
	Mitsubishi	M5M4C264	
		MB81461	
	NEC	μPD41254	
		μPD41264	
		μPD42264	
	Samsung	KM41464	
	TI	**TMS4461 (3259)**	
HM561002	**Dense-Pac**	**DPD411M (2581)**	
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000 (2621)	
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Hitachi America, Ltd. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM561002	Fujitsu	(Cont'd)	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		µPD411000	
		µPD411000C	
		µPD411001	
		µPD421000	
		µPD421001	
		µPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
HM561003	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		µPD411000	
		µPD411000C	
		µPD411001	
		µPD421000	
		µPD421001	
		µPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
HM58064	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HN58064	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM58064			(Cont'd)
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	µPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
HM6116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	µPD4016	
		µPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
HM6117	Fujitsu	MB8418	
		MBM8418	
	NEC	µPD449	
	S-MOS	**SRM2018**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
	Toshiba	TC5518	
		TC5518B	
HM6147	Cypress	CY2147	
		CY7C147	**(2562, 2564)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM6147			(Cont'd)
	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
	NEC	µPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
HM6147H	AMD	AM2147	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Intel	2147H	
	Matra-Harris	HN65747	
	National	NMC2147H	
HM6166	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	µPD4016	
		µPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	

Manufacturer Device	Replacement Source	Device	IC Master Page
HM6167	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	µPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
HM6167H	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	µPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
HM6168	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6268	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	µPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Hitachi America, Ltd. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM6168			(Cont'd)
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
HM62256	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
HM62256P	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
HM62301	**Cypress**	**PALC16R4**	**(4217)**
	GoldStar	**GM231024**	**(2692)**
	Mitel	M5M231000	
	MMI	PALC16R4Q-25	
	NEC	μPD231000	
	Toshiba	TC53100	
HM6264	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6464	
		MB6264	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM6264			(Cont'd)
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
HM6267	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
HM6268	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM6268			(Cont'd)
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
HM6287	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
HM6288	Cypress	CUPLDC20G10	
	Fairchild	F100165	
	Hitachi	HD100165	
	MMI	PAL20L8	
		PAL20L8B	
	National	PAL20L8	
	Signetics	**100165**	**(3020)**
	Sprague	SPL20LC8	
	TI	PAL20L8	
		TIBPAL20L8-20	**(3217, 4320)**
	Toshiba	TC55416	
HM64456	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
HM6464	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM6464			(Cont'd)
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
HM65256	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	GoldStar	GM76C256	
	Hitachi	HM62256P	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	NEC	μPD42832	
	Toshiba	TC51832	
		TMM41832	
HM66204	EDI	88128	
	NEC	MC120	
HM66204-100			
	EDI	EDI8M8128C100	
	IDT	**IDT8M824S-100**	**(2803, 2848)**
HM66204-120			
	EDI	EDI8M8128C120	
	IDT	**IDT8M824S-120**	**(2803, 2848)**
HM66204-150			
	EDI	EDI8M8128C150	
	IDT	**IDT8M824S-150**	**(2803, 2848)**
HM6787	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Hitachi America, Ltd. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM6787			(Cont'd)
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
HM6789	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	F100182	
	Hitachi	HD100182	
	Inmos	IMS1629	
	IDT	**IDT6198**	**(2802)**
		IDT7198	**(2802)**
	Motorola	MCM6290	
	NEC	μPD4363	
	Performance	P4C198	
	Vitelic	V61C62	
HN25044	AMD	AM27S32	
	Fairchild	93452	
	Fujitsu	MB7121	
	MMI	5352-1	
	National	DM54S572	
HN25045	AMD	AM27S33	
	Fujitsu	MB7122	
	MMI	5353-1	
		63S441	
	National	74S573	
		DM74S573	
	NEC	μPB426	
	Signetics	N82S137	
HN25085	AMD	27S185	
		AM2725S291	
		AM27S185	
	Fujitsu	MB7128	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**
	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
♦ HN25088	AMD	AM27S180	
	Fujitsu	MB7131	
	National	DM87S180	
		DM87S229	
HN25089	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
HN25168	AMD	AM27S190	
	Fujitsu	MB7137	
	National	DM77S190	
		DM87S190	
HN25169	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HN25169			(Cont'd)
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
HN25169S	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
HN27128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
HN27256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-	
		R09256	
		R09256	
	Hitachi	HM4827256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**

Manufacturer Device	Replacement Source	Device	IC Master Page
HN27256-25	AMD	27256-25	
	Fujitsu	MBM27256-25	
	GIM	27256-25	
	Intel	27256-25	
HN27256-30	AMD	AM27256-30	
	Fujitsu	MBM27256-30	
	GIM	27256-30	
	Intel	27256-30	
HN27512	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
HN27512-25	AMD	AM27512-25	
	Fujitsu	MBM27512-25	
	GIM	27512-25	
	Intel	**27512-25**	**(2862)**
	Mitsubishi	M27512-25	
	Toshiba	VT27C512-25	
HN2764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
HN27C1016	**Fujitsu**	**MBM27C1001**	**(2620)**
	Mitsubishi	M5M27C100K	
	NEC	μPD27C1001	
	Toshiba	**TC571000**	**(3304)**
HN27C128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HN27C128			(Cont'd)
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
HN27C256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-	
		R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
HN27C301G	AMD	AM27C1024	
	Fujitsu	MBM27C1000	
		MBM27C1024	
	Mitsubishi	M5M27C101K	
	NEC	μPD27C1000	
		μPD27C1024	
	Toshiba	TC571001	
HN27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
HN462532	National	MM2532	
		NMC2532	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Hitachi America, Ltd. (Cont'd)			
HN462532	National		(Cont'd)
		TDA2530	
		TDA2532	
	Plessey	TDA2530	
HN462716	**Harris**	**HM6616**	**(2768)**
	National	MM2716	
	OKI	MSM2716	
	SGS	M2716	
	Thomson	ET2716	
HN462732	AMD	AM2732	
	Intel	2732	
		2732A	
		M2732	
	National	MM2732	
		NMC2732	
	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
HN46332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
HN4827128P	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
HN482764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HN482764			(Cont'd)
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
HN482764P	Intel	P2764	
	NEC	2764C	
	Toshiba	TMM2464	
HN48364	Gould	S2364	
	NCR	NCR2364	
	OKI	MSM3864	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**
	Sharp	LH2364A	
	Signetics	2364	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
HN58064	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
HN613128	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
HN613128P	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
HN613256	GIM	RO9256	
	Gould	S23256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HN613256			(Cont'd)
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
HN61364	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
HN62301	Fujitsu	MB831000	
		MB831124	
	GIM	RO91000	
	NEC	μPD23C1000	
	Toshiba	**TC531000**	**(3305)**
	VLSI Tech	VT23C1024	
HN6288	AMD	AM99C164	
		AM99C165	
	GoldStar	**GM76C164**	**(2692)**
	Inmos	**IMS1620**	**(2787)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR4K4	
		SR64K4	
	Motorola	MCM6288	
		MCM62L88	
	NEC	μPD4362	
	Performance	P4C188	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
MB6264	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MB6264			(Cont'd)
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
P51C68	Fujitsu	P51C68	
	Intel	MB2168	
	Siliconix	SI9553	
	Sprague	**UCN5853**	**(3203)**
	Supertex	HV5306	
	TI	P51C68	
		SN75553	
P51C69	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
TDA2002	NEC	μPC2002	
	SGS	TDA2002	

Holt Inc.

HI8012	Gould	S4520	
HI8573	Motorola	MC14573	
HI8574	**Motorola**	**MC14574**	**(2925)**
HI8575	**Motorola**	**MC14575**	**(2925)**

Hughes Aircraft, Solid State Products

H7211	**GE/Intersil**	**ICM7211**	**(2671)**
	GE/RCA	CD22104	
	Maxim	ICM7211	
	TeledyneS	TSC7211	
HCMP1856	GE/RCA	CDP1856	
HLCD0438	Gould	S4521	
	National	MM58438	
HLCD0538	National	MM58538	
HLCD0539	National	MM58539	
HLCD0540	National	MM58540	
HLCD0548	National	MM58548	
HLCD7211	GE/Intersil	ICL7211	
	GE/RCA	CD22104	
	TeledyneS	TSC7211	
HNVM3104A	GIM	ER3400	

Hybrid Systems

ADC542	Burr-Brown	ADC82	
	HybridSys	HSADC82	
ADC581	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Hybrid Systems (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
ADC581			(Cont'd)
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADC581B	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
DAC331	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
	Harris	HI7541	
	HybridSys	HS7541	
	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
DAC331-12	AD	AD7521	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	**DACHA12B**	**(2576)**
	GE/Intersil	**AD7521**	**(2668)**
	Maxim	AD7521	
	MicroPwr	MP7521	
	National	AD7521	
		DAC1220	
		DAC1221	
		DAC1222	
	PMI	AD7521	
DAC335	AD	ADDAC87	
	Burr-Brown	DAC851	
		DAC87	**(2542, 2544)**
	Datel	DAC687	
		DAC87	
	Harris	**HI5687**	**(2703)**
	HybridSys	HSDAC87	
	MicroNet	MNDAC87	
DAC346	AD	AD370	
		AD371	
	HybridSys	DAC347	
		DAC356	
	MicroNet	MN370	
		MN371	
DAC347	AD	AD370	
		AD371	
	HybridSys	DAC346	
		DAC356	
	MicroNet	MN370	
		MN371	
DAC349	MicroNet	MN3349	
DAC356	AD	AD370	
		AD371	
	HybridSys	DAC346	
		DAC347	
	MicroNet	MN370	
		MN371	
DAC397-12	HyComp	DA4000	
	ILC-DDC	ADH030	
DAC9356	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
DAC9377	MicroPwr	MP9377	
HS2020	MicroNet	MN2020	
HS3020	MicroNet	MN3020	
HS3120	MicroPwr	MP7622	
	Siliconix	MP7622	
HS3140	Datel	DACHA14	
HS346	AD	AD346	
	Intech	**SH347**	**(2799)**
	MicroNet	MN346	
		MN347	
HS3860	AD	AD3860	
	MicroNet	MN3860	
HS5131	MicroNet	MN5131	
HS5150	MicroNet	MN5150	
HS5210	AD	AD5210	
	Datel	ADC5210	
	Intech	ADC5210	
	MicroNet	MN5210	
HS5216	**Datel**	**ADC5216**	**(2575)**
	MicroNet	MN5216	
HS5250	MicroNet	MN5250	
HS5251	MicroNet	MN5251	
HS5252	MicroNet	MN5252	
HS5253	MicroNet	MN5253	
HS574	AD	AD574	
	Burr-Brown	**ADC574A**	**(2541)**
	Datel	**ADC574A**	**(2575)**
	Harris	**HI574**	**(2703, 2738, 2744)**
	Intech	**ADC574**	**(2799)**
	Maxim	MAX574	
	MCE	MCE574	
	MicroNet	MN574A	
	MicroPwr	MP574	
	TeledyneP	TP574A	
HS7541	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
	Harris	HI7541	
	HybridSys	DAC331	
	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
HSADC82	Burr-Brown	ADC82	
	HybridSys	ADC542	
HSADC85	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
HSADC85			(Cont'd)
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
HSADC85C	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
HSDAC80	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
HSDAC87	AD	ADDAC87	
	Burr-Brown	DAC851	
		DAC87	**(2542, 2544)**
	Datel	DAC687	
		DAC87	
	Harris	**HI5687**	**(2703)**
	HybridSys	DAC335	
	MicroNet	MNDAC87	
MN5214	AD	AD5214	
	Datel	**ADC5214**	**(2575)**
	MicroNet	MN5214	
	TeledyneP	TP5214	
MUX201	AD	AD7503	
	Datel	**MV808**	**(2577)**
	MicroPwr	MP7503	
R675-3	AD	AD2702	
	HyComp	HC2702	
		HC2712	
R675-4	AD	AD2700	
	HyComp	HC2700	
		HC2710	
	Maxim	AD2700	
R675-5	AD	AD2701	
	HyComp	HC2701	
		HC2710	
	Maxim	AD2701	

HyComp

Manufacturer Device	Replacement Source	Device	IC Master Page
DA4000	HybridSys	DAC397-12	
	ILC-DDC	ADH030	
HC1437	TeledyneP	1437	
HC2711	AD	AD2710	
	HyComp	HC201	
	Maxim	AD2710	

Hytek Microsystems

Manufacturer Device	Replacement Source	Device	IC Master Page
HY0002	Elantec	EL2002	
		EL2003	**(2591, 2595)**
		ELH0002	**(2592)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	LinearTech	LT1010	
	Micra	MC0002	
		MC0021	
	National	LH0002	
	OEI	9910	
	TeledyneC	LH0002	

Hyundai Electronics America

Manufacturer Device	Replacement Source	Device	IC Master Page
HY27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
HY6116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Hyundai Electronics America (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HY6116	Mitsubishi		(Cont'd)
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
HY61C16	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	5117	
		M5M8725	
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
		MK6116	
	Toshiba	TC5516	
		TC5517	
		TC5517A	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	
HY61C67	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HY61C67			(Cont'd)
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
HY6264	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	**HY62C64**	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
HY62C256	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HY62C256			(Cont'd)
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
HY62C64	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
HY93C46	GIM	ER5911	
	National	COP495	
		NMC9346	
	NCR	59346	
		NCR59308	
	SGS	M9346	
	Sierra	SC22011	

ILC Data Device Corporation

Manufacturer Device	Replacement Source	Device
♦ AD00401	MicroNet	MN5243
♦ ADC4454	Datel	ADCEH12
	Intech	ADC1202
ADH030	HybridSys	DAC397-12
	HyComp	DA4000
ADH050	MicroNet	MN050
♦ ADH8585-1	AD	ADADC84
		ADADC85
		ADADC85S
		ADADC87

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ ADH8585-1	**Burr-Brown**	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
♦ ADH8585-1	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
♦ ADH8585-1	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
♦ ADH8585-1	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
♦ ADH8585-1	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
BUS63102	**CTI**	**CT3231M**	**(2554)**
		CT3232M	**(2554)**
	ILC-DDC	BUS8554	
BUS63105	**CTI**	**CT1487M**	**(2554)**
BUS63115	**CTI**	**CT1487MI**	**(2554)**
BUS63117	**CTI**	**CT1589MI**	**(2554)**
BUS63125	**CTI**	**CT1487D**	**(2554)**
BUS63127	**CTI**	**CT1589D**	**(2554)**
BUS63135	**CTI**	**CT1487DI**	**(2554)**
	TRW-LSI	MPY016K	
BUS63137	**CTI**	**CT1589DI**	**(2554)**
BUS8554	**CTI**	**CT3231M**	**(2554)**
		CT3232M	**(2554)**
	ILC-DDC	BUS63102	
♦ DACSL	AD	AD3860	
	HybridSys	HS3860	
	MicroNet	MN3860	
DDC1250	AD	HDS1250	
♦ DDC5101	**Datel**	**ADC5101**	**(2575)**
	MicroNet	MN5101	
♦ DDC5210	AD	AD5210	
	Datel	ADC5210	
	HybridSys	HS5210	
	Intech	ADC5210	
	MicroNet	MN5210	
♦ DDC5211	AD	AD5211	
	Datel	**ADC5211**	**(2575)**
	MicroNet	MN5211	
♦ DDC5212	AD	AD5212	
	Datel	**ADC5212**	**(2575)**
	MicroNet	MN5212	
♦ DDC5216	**Datel**	**ADC5216**	**(2575)**
	HybridSys	HS5216	
	MicroNet	MN5216	
DDC5240	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
♦ DDCADC85	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
♦ DDCADC85	**Burr-Brown**	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
♦ DDCADC85	Datel	ADC84	
		ADC85	
		ADC87	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

ILC Data Device Corporation (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ DDCADC85	Datel		(Cont'd)
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
♦ DDCADC85	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
♦ DDCADC85	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
♦ DDCADC85	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
♦ DDCADC87	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
♦ DDCADC87	**Burr-Brown**	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
♦ DDCADC87	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
♦ DDCADC87	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
♦ DDCADC87	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
♦ DDCADC87	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
THA05203	Burr-Brown	SCH804	
		SHC804	**(2543)**
	Datel	**SHM4860**	**(2577)**
	TeledyneP	TP4860	

Inmos Corporation

Manufacturer Device	Replacement Source	Device	IC Master Page
IMS1400	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	**IMS1403**	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
IMS1403	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IMS1403			(Cont'd)
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
IMS1420	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
IMS1421	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IMS1421			(Cont'd)
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
IMS1423	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
IMS1424	AMD	AM2168	
		AM9968	
		AM99CL68	
	Fairchild	F1620	
	Fujitsu	MB8168	
		MB81C69	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HM6168	
		HM6268	
	Inmos	IMS1420	
		IMS1421	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Matra-Harris	HM65682	
		HMI65769	
	Motorola	MCM1423	
		MCM6168	
		MCM6288	
	NEC	μPD4314	
	S-MOS	SRM2274	
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
	Thomson	**MK41H68**	**(3265)**
	Toshiba	TMM2068	
	Vitelic	V61C62	
		V61C68	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C69	**(3349)**
IMS1433	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IMS1433	Mitsubishi		(Cont'd)
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
IMS1600	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1601**	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
IMS1601	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
IMS1620	AMD	AM99C164	
		AM99C165	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Inmos Corporation (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
IMS1620			(Cont'd)
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	IDT	**IDT6198**	**(2802)**
	Lattice	SR4K4	
		SR64K4	
	Motorola	MCM6288	
		MCM62L88	
	NEC	μPD4362	
	Performance	P4C188	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
IMS1624	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	54LS152	
	Hitachi	HM6789	
	IDT	**IDT6198**	**(2802)**
	Lattice	SR64E4	
	Motorola	MCM6290	
	NEC	μPD4363	
	SGS	T54LS152	
	Toshiba	TC55417	
	Vitelic	V61C62	
IMS1629	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	F100182	
	Hitachi	HD100182	
		HM6789	
	IDT	**IDT6198**	**(2802)**
		IDT7198	**(2802)**
	Motorola	MCM6290	
	NEC	μPD4363	
	Performance	P4C198	
	Vitelic	V61C62	
IMS1630	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IMS1630	Toshiba		(Cont'd)
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
IMS1800	Cypress	CY7C197	
	Fujitsu	**MB81C81**	**(2622)**
	IDT	**IDT71257**	**(2802)**
	Lattice	SR256K1	
	Mitsubishi	M5M5257	
IMS1820	Cypress	CY7C194	
	Fujitsu	MB81C84	
	IDT	**IDT71258**	**(2802)**
	Lattice	SR256K4	
	Mitsubishi	M5M5258	
	NEC	μPD43254	
IMS1830	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
IMS2600	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
IMS2600M	**TI**	**SMJ4164**	**(3220)**
IMS2620	Fujitsu	MB81416	
	Hitachi	HM48416	
	Mitsubishi	M5M4416	
	NEC	μPD41416	
	TI	TMS4416	
IMS2630	NEC	μPD4168	
IMS2800	Inmos	IMS2801	
	Motorola	MCM6256	
		MCM6257	
	TI	**TMS4256**	**(3259)**
	Vitelic	V51C256	
		V51C257	
IMS2801	Inmos	IMS2800	
	Motorola	MCM6256	
		MCM6257	
	TI	**TMS4256**	**(3259)**
	Vitelic	V51C256	
		V51C257	

Manufacturer Device	Replacement Source	Device	IC Master Page
IMS2820	Fujitsu	MB81464	
	Hitachi	HM50464	
		HM50465	
	MicronTech	MT4064	
	Mitsubishi	M5M4464	
		MSM4464P	
	NEC	μPD41464	
	OKI	MSM41464	
	Samsung	KM41464	
	TI	SMJ4469	
		TMS4464	**(3259)**
	Toshiba	TMM41464	

Intech Advanced Analog

0805H	AD	HDG0805	
	MicroNet	MNO805	
192	AD	MPX8	
360	AD	260	
540	AD	436	
551	AD	428	
590	AD	440	
A101	Burr-Brown	3313	
A102	TI	SN754411	
A124	AD	41J	
A128	AD	43	
A137	AD	146	
A148	AD	148	
A158	AD	142	
		44	
A185	AD	180	
A188	AD	184	
A200	Burr-Brown	3621	
A202	AD	603	
A203	AD	603	
A212	AD	603	
A221	Analogic	MP221	
A226	AD	210	
		211	
A230	AD	230	
		233	
	Burr-Brown	3293	
A233	AD	230	
		233	
A240	AD	230	
		233	
A2991	Datel	DAC112	
A3103	Analogic	MP2712	
A3177	Datel	BPM12	
		BPM210	
A401	AD	B100	
A45	AD	45	
A702	AD	422	
		429	
A730	AD	755	
	Intech	A731	
A731	AD	755	
	Intech	A730	
A733	AD	433	
A734	AD	434	
A8016	Analogic	MP8016	
A856	AD	ADC16	
A902	AD	902	
A903	AD	903	
A904	AD	904	
A905	AD	905	
A99	AD	40	
ADC1100	AD	ADC1100	
ADC1111	AD	ADC1111	
ADC1202	Datel	ADCEH12	
ADC141	AD	ADC141	
ADC171	AD	ADC171	
ADC2700	Analogic	MP2700	
ADC2800	Analogic	MP2800	
ADC2900	Analogic	MP2900	
ADC5210	AD	AD5210	
	Datel	ADC5210	
	HybridSys	HS5210	
	MicroNet	MN5210	
ADC5245	MicroNet	MN5245	
ADC5246	MicroNet	MN5246	
ADC5610	MicroNet	MN5610	
ADC574	AD	AD574	
	Burr-Brown	**ADC574A**	**(2541)**
	Datel	**ADC574A**	**(2575)**
	Harris	**HI574**	**(2703, 2738, 2744)**
	HybridSys	HS574	
	Maxim	MAX574	
	MCE	MCE574	
	MicroNet	MN574A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ADC574			(Cont'd)
	MicroPwr	MP574	
	TeledyneP	TP574A	
ADC574A	AD	574	
	MicroNet	MN574	
ADC6002A	**Datel**	**ADC500**	**(2571, 2575)**
ADC6002C	**Datel**	**ADC505BBM**	**(2575)**
ADC84	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC85**	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADC85	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC87	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
ADC87	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
		MNADC87	
AMP801	AD	5360	
♦ ASH240	Analogic	MP240	
♦ ASH270	Analogic	MP270	
CYAD10	AD	ADC10	
CYAD12	AD	ADC12	
	Datel	ADCMA12	
CYAD8	AD	ADC8	
CYDAC1136	AD	DAC1136	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

Manufacturer Device	Replacement Source	Device	IC Master Page
Intech Advanced Analog (Cont'd)			
CYDAC1138	AD	DAC1138	
CYDAC12	AD	DAC12	
CYDAC14	AD	DAC14	
	Matra-Harris	HC3054	
CYDAC16	AD	DAC16	
CYDAC198	Datel	DAC198	
CYDAC4910	Datel	DAC4910	
CYDAC4912	Datel	DAC4912	
CYDAC6912	Datel	DAC6912	
DAC88	MicroNet	MNDAC88	
DACHK	Datel	DACHK	
	MicroNet	MNDACHK	
DACHK12	**Datel**	**DACHK12**	**(2576)**
	MicroNet	DAKHK	
DACHK12BGC			
	Datel	**DACHK12BGC**	**(2576)**
DACHK12BMM			
	Datel	**DACHK12BMM**	**(2574, 2576)**
DAS5712	DataTrans	DT5712	
DAS5714	DataTrans	DT5714	
DAS5716	DataTrans	DT5716	
♦ DAS7140	MicroNet	MN7140	
♦ MDAC15	ILC-DDC	DACM14	
PS2805	Datel	UPM5	
RGB3400	Brooktree	BT103	
		Bt103	
RGBDAC3405	Fairchild	FVG450	
RGBDAC4	Brooktree	BT452	
		Bt452	
RGBDAC4T	Brooktree	Bt452	
SH346	AD	AD346	
	HybridSys	HS346	
	MicroNet	MN346	
		MN347	
SH347	AD	AD346	
	HybridSys	HS346	
	MicroNet	MN346	
		MN347	
SH376	**AD**	**HTC0300A**	**(2423)**
	MicroNet	MN0300A	
		MN376	
		MN377	
	TeledyneP	4860	
VDAC0805	MicroNet	MN0805	
VDAC1842	Brooktree	BT101	
		BT102	
		BT106	
	Fairchild	FVG101	
VDAC1850	Brooktree	BT101	
		BT102	
		BT106	
		Bt101	
	Fairchild	FVG101	
VDAC444	Brooktree	Bt444	
VDAC8308	Analogic	MP8308	
	Datel	**DAC8308**	**(2576)**
Integrated Device Technology			
EDH816H64C-70			
	EDI	EDIM1664C35	
I61A	**IDT**	**IDT54FCT861A**	**(2809)**
	VTC	**V54FCT861A**	**(3370)**
IDT164	Matra-Harris	HN65641	
IDT39C01	AMD	AM2901	
	Cypress	CY2901	
	LogicDev	L429C01	
	Waferscale	**WS5901**	**(3376)**
IDT39C03	AMD	AM29203	
IDT39C10	AMD	AM2910	
	Waferscale	**WS5910**	**(3376)**
IDT39C60	AMD	AM2960	
	Signetics	**2960**	**(3085)**
IDT49C401	AMD	AM2I4X2901	
	IMI	IMI4X2901	
	Waferscale	**WS59016**	**(3376)**
IDT54FCT240A			
	Performance	P54PCT240A	
	VTC	**V54FCT240A**	**(3370)**
IDT54FCT244A			
	Performance	P54PCT244A	
	VTC	**V54FCT244A**	**(3370)**
IDT54FCT245A			
	Performance	P54PCT245A	
	VTC	**V54FCT245A**	**(3370)**
IDT54FCT273	VTC	V54FCT273	
IDT54FCT373A			
	Performance	P54PCT373A	
	VTC	**V54FCT373A**	**(3370)**
IDT54FCT374A			
	Performance	P54PCT374A	
	VTC	**V54FCT374A**	**(3370)**
IDT54FCT521	VTC	V54FCT521	
IDT54FCT533A			
	Performance	P54PCT533A	
	VTC	**V54FCT533A**	**(3370)**
IDT54FCT534A			
	VTC	**V54FCT534A**	**(3370)**
IDT54FCT573	**VTC**	**V54FCT573**	**(3370)**
IDT54FCT574	**VTC**	**V54FCT574**	**(3370)**
IDT54FCT640A			
	Performance	P54PCT640A	
	VTC	**V54FCT640A**	**(3370)**
IDT54FCT645A			
	Performance	P54PCT645A	
	VTC	**V54FCT645A**	**(3370)**
IDT54FCT821A			
	VTC	**V54FCT821A**	**(3370)**
IDT54FCT822A			
	VTC	**V54FCT822A**	**(3370)**
IDT54FCT823A			
	VTC	**V54FCT823A**	**(3370)**
IDT54FCT824A			
	VTC	**V54FCT824A**	**(3370)**
IDT54FCT825A			
	VTC	**V54FCT825A**	**(3370)**
IDT54FCT826A			
	VTC	**V54FCT826A**	**(3370)**
IDT54FCT827A			
	VTC	**V54FCT827A**	**(3370)**
IDT54FCT828A			
	VTC	**V54FCT828A**	**(3370)**
		V54FCT864A	**(3370)**
IDT54FCT841A			
	VTC	**V54FCT841A**	**(3370)**
IDT54FCT842A			
	VTC	**V54FCT842A**	**(3370)**
IDT54FCT843A			
	VTC	**V54FCT843A**	**(3370)**
IDT54FCT844A			
	VTC	**V54FCT844A**	**(3370)**
IDT54FCT845A			
	VTC	**V54FCT845A**	**(3370)**
IDT54FCT846A			
	VTC	**V54FCT846A**	**(3370)**
IDT54FCT861A			
	IDT	I61A	
	VTC	**V54FCT861A**	**(3370)**
IDT54FCT862A			
	VTC	**V54FCT862A**	**(3370)**
IDT54FCT863A			
	VTC	**V54FCT863A**	**(3370)**
♦ IDT54HCT138	CTI	54HCT138	
	GE/RCA	**CD54HCT138**	**(2632)**
	Mitel	MD54HCT138	
	Motorola	MC54HCT138	
	National	MM54HCT138	
	Signetics	54HCT138	
	Sprague	SS54HCT138	
	Supertex	54HCT138	
	TI	SN54HCT138	
♦ IDT54HCT139	CTI	54HCT139	
	GE/RCA	**CD54HCT139**	**(2632)**
	Mitel	MD54HCT139	
	National	MM54HCT139	
	Signetics	54HCT139	
	Sprague	SS54HCT139	
	Supertex	54HCT139	
IDT6116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
IDT6120	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6169**	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
IDT6120 (Cont'd)			
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
IDT6166	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	5117	
		M5M8725	
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
		MK6116	
	Toshiba	TC5516	
		TC5517	
		TC5517A	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	
IDT6167	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
IDT6169	AMD	AM2169	
		AM99CL68	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Integrated Device Technology (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
IDT6169			(Cont'd)
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120**	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
IDT6198	AMD	AM99C164	
		AM99C165	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	Inmos	**IMS1620**	**(2787)**
	Lattice	SR4K4	
		SR64K4	
	Motorola	MCM6288	
		MCM62L88	
	NEC	μPD4362	
	Performance	P4C188	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
IDT7112	AD	ADSP1012	
	IDT	**IDT7212**	**(2806)**
	IMI	MPY12IMI	
	LogicDev	LMU12	
	TRW-LSI	MPY012H	
IDT71256	**Dense-Pac**	**DPS41288**	**(2580)**
		DPS412S88	
	EDI	EDH8M8128	
		EDI8M8128	
	IDT	**IDT7M856S**	**(2803)**
		IDT8M824	**(2803, 2848)**
	NEC	MC-120	
IDT71256S	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	

Manufacturer Device	Replacement Source	Device	IC Master Page
IDT71257	Cypress	CY7C197	
	Fujitsu	**MB81C81**	**(2622)**
	Inmos	**IMS1800**	**(2790)**
	Lattice	SR256K1	
	Mitsubishi	M5M5257	
IDT71258	Cypress	CY7C194	
	Fujitsu	MB81C84	
	Inmos	**IMS1820**	**(2791)**
	Lattice	SR256K4	
	Mitsubishi	M5M5258	
	NEC	μPD43254	
IDT7130	**Cypress**	**CY7C130**	**(2561, 2564)**
IDT7132	**Cypress**	**CY7C132**	**(2562, 2564)**
	VLSI Tech	**VT7132**	**(3359)**
IDT7140	**Cypress**	**CY7C140**	**(2564)**
IDT7142	**Cypress**	**CY7C142**	**(2564)**
	VLSI Tech	**VT7142**	**(3359)**
IDT7164	**Cypress**	**CY7C186**	**(2562)**
	GE/RCA	**CD74HC4094**	**(2631)**
	Matra-Harris	HM62641	
	Mitsubishi	AM99C88	
	Motorola	MCM61L64	
	Performance	P4C164	
	SGS	M74HC4094	
	Signetics	PC74HC4094	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5585	
	Vitelic	V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
IDT71681	**Cypress**	**CY7C171**	**(2562)**
	GE/RCA	**CD74HC4518**	**(2632)**
	SGS	M74HC4518	
	Signetics	PC74HC4518	
IDT71682	**Cypress**	**CY7C172**	**(2562, 2564)**
	GE/RCA	**CD74HC4543**	**(2632)**
	Motorola	MC74HC4543	
	National	MM74HC4543	
	Performance	P4C1682	
	SGS	M74HC4543	
	Signetics	PC74HC4543	
	Toshiba	**TC74HC4543**	**(3307)**
IDT7187	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
IDT7187L	AMD	AM99C641	
	Fairchild	F1600	
		F1601	
	Fujitsu	MB8171	
		MB81C71	
	Hitachi	HM10414	
	Inmos	**IMS1601**	**(2786)**
	Motorola	MCM6287	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
IDT7188	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IDT7188			(Cont'd)
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
IDT7188L	Fairchild	F1621	
IDT7198	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	F100182	
	Hitachi	HD100182	
		HM6789	
	Inmos	IMS1629	
	IDT	**IDT6198**	**(2802)**
	Motorola	MCM6290	
	NEC	μPD4363	
	Performance	P4C198	
	Vitelic	V61C62	
IDT71981	**Cypress**	**CY7C161**	**(2562)**
	Fairchild	F100183	
	Hitachi	HD100183	
	Performance	P4C1981	
IDT71982	**Cypress**	**CY7C162**	**(2562)**
	Fairchild	F100415	
	Fujitsu	MBM100415	
	Hitachi	HM100415	
	Performance	P4C1982	
IDT7201	**Cypress**	**CY7C412**	**(2567)**
	Thomson	**MK4501**	**(3268)**
IDT7202	**Cypress**	**CY7C414**	**(2567)**
IDT7203	**Cypress**	**CY7C416**	**(2567)**
	Thomson	**MK4503**	**(3271)**
IDT7209	AMD	AM29C509	
	AD	ADSP1009	
	LogicDev	LMA1009	
	TRW-LSI	TDC1009	
		TMC2009	
IDT7210	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IDT7210			(Cont'd)
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
IDT721264	MMI	67C5013	
	Weitek	WTL1064	
		WTL1264	
IDT721265	**IDT**	**IDT72413**	**(2805)**
	MMI	57413	
		67413	
		67C4033	
	Weitek	WTL1065	
		WTL1265	
IDT7213	LogicDev	LMU13	
IDT7216	AD	ADSP1016	
	LogicDev	LMU16	
	LSI Logic	L64015	
	Weitek	WTL1516	
IDT7216/7	AMD	29516/7	
		29516A/7	
	AD	ADSP1016/7A	
	Cypress	**CY7C516/7**	**(2569)**
	MMI	67C7016/7	
	Sprague	UCN4801	
		UCN5801	**(3203)**
	Weitek	WTL1016/7	
		WTL2516/7D	
IDT7217	AMD	AM29517	
	Cypress	**CY7C517**	**(2569)**
	LogicDev	LMU17	
		LMU217	
	LSI Logic	**L64017**	**(2868)**
	Weitek	WTL2517	
IDT72401	**Cypress**	**CY7C401**	**(2567)**
	Fairchild	74F413	
	MMI	57401	
		67C401	
		75401	
		C57401	
		C57L401	
		C67401	
		C67L401	
	National	DM77S401	
IDT72402	**Cypress**	**CY7C402**	**(2567)**
	MMI	57402	
		67C402	
		C57402	
		C57L402	
		C67402	
		C67L402	
	National	DM77S402	
IDT72403	**Cypress**	**CY7C403**	**(2567)**
	MMI	67L4013D	
IDT72404	**Cypress**	**CY7C404**	**(2567)**
	MMI	67C4023	
IDT72413	**IDT**	**IDT721265**	**(2806, 2831)**
	MMI	57413	
		67413	
		67C4033	
	Weitek	WTL1065	
		WTL1265	
IDT7243	National	LM240-20	
	SiliconG	SG240-20	
	VLSI Tech	VL2044	
IDT74FCT240	Performance	P74PCT240	
	VTC	**V74FCT240**	**(3370)**
IDT74FCT244	Performance	P74PCT244	
	VTC	**V74FCT244**	**(3370)**
IDT74FCT245	**VTC**	**V74FCT245**	**(3370)**
IDT74FCT273	VTC	V74FCT273	
IDT74FCT374	Performance	P74PCT374	
	VTC	**V74FCT374**	**(3370)**
IDT74FCT521	VTC	V74FCT521	
IDT74FCT533	Performance	P74PCT533	
	VTC	**V74FCT533**	**(3370)**
IDT74FCT534	Performance	P74PCT534	
	VTC	**V74FCT534**	**(3370)**
IDT74FCT573	**VTC**	**V74FCT573**	**(3370)**
IDT74FCT574	**VTC**	**V74FCT574**	**(3370)**
IDT74FCT640	Performance	P74PCT640	
	VTC	**V74FCT640**	**(3370)**

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Integrated Device Technology (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
IDT74FCT645	Performance	P74PCT645	
	VTC	**V74FCT645**	**(3370)**
IDT74FCT821A			
	VTC	**V74FCT821A**	**(3370)**
IDT74FCT822A			
	VTC	**V74FCT822A**	**(3370)**
IDT74FCT823A			
	VTC	**V74FCT823A**	**(3370)**
IDT74FCT824A			
	VTC	**V74FCT824A**	**(3370)**
IDT74FCT825A			
	VTC	**V74FCT825A**	**(3370)**
IDT74FCT826A			
	VTC	**V74FCT826A**	**(3370)**
IDT74FCT827A			
	VTC	**V74FCT827A**	**(3370)**
IDT74FCT828A			
	VTC	**V74FCT828A**	**(3370)**
IDT74FCT841A			
	VTC	**V74FCT841A**	**(3370)**
IDT74FCT842A			
	VTC	**V74FCT842A**	**(3370)**
IDT74FCT843A			
	VTC	**V74FCT843A**	**(3370)**
IDT74FCT844A			
	VTC	**V74FCT844A**	**(3370)**
IDT74FCT845A			
	VTC	V74FCT845A	
IDT74FCT846A			
	VTC	**V74FCT846A**	**(3370)**
IDT74FCT861A			
	VTC	**V74FCT861A**	**(3370)**
IDT74FCT862A			
	VTC	**V74FCT862A**	**(3370)**
IDT74FCT863A			
	VTC	**V74FCT863A**	**(3370)**
IDT74FCT864A			
	VTC	**V74FCT864A**	**(3370)**
♦ IDT74HCT138	CTI	74HCT138	
	GE/RCA	**CD74HCT138**	**(2632)**
	Hitachi	HD74HCT138	
	Mitel	MD74HCT138	
	National	MM74HCT138	
	Plessey	MV74HCT138	
	SGS	M74HCT138	
	Signetics	**74HCT138**	**(3003)**
	Sprague	SS74HCT138	
	TI	SN74HCT138	
	Toshiba	TC74HCT138	
IDT74HCT139	**GE/RCA**	**CD74HCT139**	**(2632)**
	Mitel	MD74HCT139	
	National	MM74HCT139	
	Plessey	MV74HCT139	
	Signetics	**74HCT139**	**(3003)**
	Sprague	SS74HCT139	
	Supertex	74HCT139	
IDT75C18	TRW-LSI	TDC-1018	
IDT75C458	Brooktree	BT458	
IDT75C48	Brooktree	BT248	
	TRW-LSI	TDC1048	
IDT78C16A	EXEL	XL2816	
		XL2816A	
	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	Intel	2816B	
	National	NMC9816A	
	Samsung	KM2816A	
	SEEQ	**2816**	**(2991)**
		2816A	**(2991)**
		M2816A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IDT78C16A			(Cont'd)
	Xicor	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**
♦ IDT7M164	Fairchild	F1600	
		F1602	
♦ IDT7M164	Fujitsu	MB8171	
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
	Inmos	**IMS1600**	**(2785)**
	Lattice	SR64K1	
	Matra-Harris	HM62641	
	Motorola	MCM6164	
		MCM62L87	
♦ IDT7M164	Stantel-STC	STC6264	
	TI	SMJ61CD64	
		SMJ68CE64	
♦ IDT7M164	**Thomson**	**MK41H87**	**(3266)**
	Toshiba	TC5561	
	Vitelic	V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
		VT64KD1	
IDT7M4017	**Dense-Pac**	**DPS6432**	**(2580)**
IDT7M624	EDI	EDH816H64C	
IDT7M624S-30			
	EDI	EDI8M1664C25	
IDT7M624S-35			
	EDI	EDI8M1664C35	
IDT7M624S-45			
	EDI	EDI8M1664C45	
IDT7M624S-55			
	EDI	EDI8M1664C55	
IDT7M624S-85			
	EDI	EDH816H64C-70	
		EDIM1664C45	
IDT7M656	**Dense-Pac**	**DPS257**	**(2578)**
IDT7M656L-25			
	EDI	EDI8M1616C25	
		EDIM1664C-55	
IDT7M656L-35			
	EDI	EDI8M1616C35	
		EDIM1664C-70	
IDT7M656L-45			
	EDI	EDI8M1616C45	
IDT7M656L-55			
	EDI	EDI8M1616C55	
IDT7M7864	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
IDT7M856	**Dense-Pac**	**DPS32H8**	**(2579)**
		DPS41257	**(2579)**
	EDI	EDH8832	
	IDT	**IDT8M856**	**(2803, 2851)**
IDT7M856S	**Dense-Pac**	**DPS41288**	**(2580)**
		DPS412S88	
	EDI	EDH8M8128	
		EDI8M8128	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT8M824	**(2803, 2848)**
	NEC	MC-120	
IDT7M856S-100			
	EDI	EDH8832HC-10	
IDT7M856S-55			
	IDT	**IDT7M856S-60**	**(2803)**
IDT7M856S-60			
	IDT	**IDT7M856S-55**	**(2803)**
IDT7M856S-70			
	EDI	EDH8832HC-70	
	IDT	IDT7M856S70	
IDT7M856S-85			
	EDI	EDH8832HC-55	
		EDH8832HC-85	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IDT7M856S-85			(Cont'd)
	IDT	**IDT7M856S-90**	**(2803)**
IDT7M856S-90			
	EDI	EDH8832HC-55	
		EDH8832HC-85	
	IDT	**IDT7M856S-85**	**(2803)**
IDT7M856S70			
	EDI	EDH8832HC-70	
	IDT	**IDT7M856S-70**	**(2803)**
♦ IDT7M864	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
♦ IDT7M864	**Cypress**	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
♦ IDT7M864	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
♦ IDT7M864	**GE/RCA**	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
♦ IDT7M864	Hyundai	HY6264	
		HY62C64	**(2770)**
♦ IDT7M864	**Inmos**	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
♦ IDT7M864	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
♦ IDT7M864	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
♦ IDT7M864	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
♦ IDT7M864	OKI	MSM5164	
		MSM5165	
		MSM5188	
♦ IDT7M864	Performance	P4C164	
		P4C188	
♦ IDT7M864	**S-MOS**	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
♦ IDT7M864	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
♦ IDT7M864	Vitelic	V61C62	
		V62C64	
♦ IDT7M864	**VLSI Tech**	**VT20C98**	**(3352)**
IDT7M864L-120			
	EDI	EDH8808ACL-12	
IDT7M864L-150			
	EDI	EDH8808ACL-15	
		EDI8M832C55	
	IDT	**IDT8M856L-55**	**(2803, 2851)**
IDT7M864L-75			
	EDI	EDH8808ACL-70	
IDT7M864L-85			
	EDI	EDH8808ACL-85	
IDT7M9156S-35			
	EDI	EDI8F1256C35	
IDT7M9156S-45			
	EDI	EDI8F1256C45	
IDT7M9156S-55			
	EDI	EDI8F1256C55	
IDT7MB5038	Brooktree	BTLOG	
	TRW-LSI	TDC-1318	
IDT7MC156	EDI	EDH81H256C	
	Mosaid	MS1256CS	

Manufacturer Device	Replacement Source	Device	IC Master Page
IDT7MP456	EDI	EDH84H64C	
IDT8M824	**Dense-Pac**	**DPS41288**	**(2580)**
		DPS412S88	
	EDI	EDH8M8128	
		EDI8M8128	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
	NEC	MC-120	
IDT8M824S-100			
	EDI	EDI8M8128C100	
	Hitachi	HM66204-100	
IDT8M824S-120			
	EDI	EDI8M8128C120	
	Hitachi	HM66204-120	
IDT8M824S-150			
	EDI	EDI8M8128C150	
	Hitachi	HM66204-150	
IDT8M856	**Dense-Pac**	**DPS32H8**	**(2579)**
		DPS41257	**(2579)**
	EDI	EDH8832	
	IDT	**IDT7M856**	**(2803)**
IDT8M856L-100			
	EDI	EDI8M832C85	
IDT8M856L-55			
	EDI	EDH8808ACL-15	
		EDI8M832C55	
	IDT	IDT7M864L-150	
IDT8M856L-75			
	EDI	EDI8M832C70	
♦ IDT8M864	Toshiba	TMM5565	
IDT8M864L-120			
	EDI	EDH8088CL-12	
IDT8M864L-150			
	EDI	EDH8088CL-15	
IDT8M864L-75			
	EDI	EDH8088CL-70	
IDT8M864L-85			
	EDI	EDH8088CL-85	

Integrated Power Semiconductors

1844-45	SGS	UC1844-45	
	Unitrode	**UC1844-45**	**(3323)**
3658	**GE/RCA**	**CA3219**	**(2650)**
	Hitachi	HAI3007	
	National	DS3658	
	SGS	L6222	
	TI	SN75437	
3669	**GE/RCA**	**CA3252**	**(2650, 2654)**
	National	DS3669	
	SGS	L9222	
	TI	SN75440	
IP117	Fairchild	μA117	
	LinearTech	LM117	
	MCE	MCELM117	
	Motorola	**LM117**	**(2929)**
	National	LM117	
	SiliconG	SG117	
	TI	TL117	
	Thomson	LM117	
	Unitrode	**UC117**	**(3325)**
IP120-12	National	LM120-12	
	SiliconG	SG120-12	
	Unitrode	UC120-12	
IP120-15	National	LM120-15	
	SiliconG	SG120-15	
	Unitrode	UC120-15	
IP120-5	Fairchild	μA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	IPS	**IP320-5**	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	μPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	μA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
IP123	Fairchild	SH123	
		UA138	
		μA123	
	LinearTech	LM123	
		LT123	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Integrated Power Semiconductors (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
IP123			(Cont'd)
	Motorola	**LM123**	**(2927)**
		MC78T05	**(2926)**
	National	LM123	
	SiliconG	SG123	
		SG123A	
IP123-12	**IPS**	**IP323-12**	**(2854)**
	Motorola	**MC78T12**	**(2927)**
IP123-15	**IPS**	**IP323-15**	**(2854)**
	Motorola	**MC78T15**	**(2928)**
IP123-5	Fairchild	SH0323	
		SH323	
		μA323	
		μA78H05	
	IPS	**IP323**	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
IP137	LinearTech	LM137	
		LT137	
	MCE	MCELM137	
	Motorola	**LM137**	**(2929)**
	National	LM137	
	SiliconG	SG137	
		SG137A	
	Thomson	LM137	
	Unitrode	**UC137**	**(3325)**
IP138	LinearTech	LM138	
	Micropac	MLM138	
	National	LM138	
	SiliconG	SG138	
IP140-12	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP340-12**	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
IP140-15	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP340-15**	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
IP140-5	Fairchild	μA109	
	Motorola	**LM109**	**(2926)**
	National	LM109	
	SiliconG	SG109	
	Thomson	LM109	
		SFC2109	
IP150	LinearTech	LM150	
		LT150	
	Motorola	**LM150**	**(2929)**
	National	LM150	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IP150			(Cont'd)
	SiliconG	SG150	
	Unitrode	**UC150**	**(3325)**
IP1524	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	μA1524	
	LinearTech	LT1524	
		SG1524	
	National	LM1524	
	SGS	SG1524	
		UC1524A	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524**	**(3323)**
		UC1524A	**(3323)**
IP1524B	Cherry	CS1524A	
IP1525A	Cherry	CS1525A	
	Exar	**XR1525A**	**(2607)**
	LinearTech	LT1525A	
	Motorola	**SG1525A**	**(2931)**
	SGS	SG1524A	
	SiliconG	SG1525A	
	Siliconix	PWM125	
	Unitrode	**UC1525**	**(3323)**
		UC1525A	**(3323)**
IP1526	Cherry	CH1526	
	LinearTech	LT1526	
	Motorola	**SG1526**	**(2931)**
		SG3526	**(2931)**
	SiliconG	SG1526	
		SG3525	
		SG3526	
	Unitrode	**UC1526**	**(3323)**
IP1527A	Cherry	CS1527A	
	LinearTech	LT1527A	
	Motorola	**SG1527A**	**(2931)**
	SGS	SG1527A	
	SiliconG	SG1527A	
	Siliconix	PWM27	
	Unitrode	**UC1527A**	**(3323)**
IP1543	Exar	XR1543	
	SiliconG	SG1543	
	Unitrode	**UC1543**	**(3324)**
IP1544	SiliconG	SG1544	
IP1842	Cherry	CS1842	
	LinearTech	LT1842	
	SiliconG	SG1842	
	Unitrode	**UC1842**	**(3323)**
IP1843	Cherry	CS1843	
	LinearTech	LT1843	
	SiliconG	SG1843	
	Unitrode	**UC1843**	**(3323)**
IP2007	TI	SN75077	
IP2064	Mitsubishi	M54532	
	Motorola	ULN2064	
	SGS	ULN2064	
	SiliconG	SG2064	
	TI	SN75064	
		ULN2064	
	Toshiba	TD62064	
IP2065	Motorola	ULN2065	
	SGS	ULN2065	
	SiliconG	SG2065	
	Sprague	**ULN2065**	**(3203)**
	TI	SN75065	
		ULN2065	
	Toshiba	TD62064	
IP2066	Motorola	ULN2066	
	SGS	ULN2066	
	SiliconG	SG2066	
	Sprague	ULN2066	
	TI	SN75066	
		ULN2066	
IP2067	Motorola	ULN2067	
	SGS	ULN2067	
	SiliconG	SG2067	
	Sprague	ULN2067	
	TI	SN75067	
		ULN2067	
IP2068	**Motorola**	**ULN2068**	**(2954)**
	SGS	ULN2068	
	SiliconG	SG2068	
	Sprague	**ULN2068**	**(3203)**
	TI	SN75068	
		ULN2068	
IP2069	Motorola	ULN2069	
	SGS	ULN2069	
	SiliconG	SG2069	
	Sprague	**ULN2069**	**(3203)**
	TI	SN75069	
		ULN2069	

Manufacturer Device	Replacement Source	Device	IC Master Page
IP2070	TI	SN75070	
	VLSI Tech	**VT20C68**	**(3349)**
IP2074	**Motorola**	**ULN2074**	**(2954)**
	SGS	ULN2074	
	SiliconG	SG2074	
	Sprague	**ULN2074**	**(3203)**
	TI	ULN2074	
	Toshiba	TD62074	
IP2075	Motorola	ULN2075	
	SGS	ULN2075	
	SiliconG	SG2075	
	Sprague	**ULN2075**	**(3203)**
	TI	ULN2075	
IP2076	TI	SN75076	
IP217	MCE	MCELM217	
	Motorola	**LM217**	**(2929)**
	National	LM217	
	SGS	LM217	
	SiliconG	SG217	
		SG217A	
	Thomson	LM217	
	Unitrode	**UC217**	**(3325)**
IP220-12	National	LM220-12	
	SiliconG	SG220-12	
IP220-15	National	LM220-15	
	SiliconG	SG220-15	
IP223	Fairchild	SH223	
		μA223	
	Motorola	**LM223**	**(2927)**
	National	LM223	
	SiliconG	SG223	
	Thomson	LM223	
IP237	MCE	MCELM237	
	Motorola	**LM237**	**(2929)**
	National	LM237	
	SiliconG	SG237	
		SG237A	
	Unitrode	**UC237**	**(3325)**
IP238	Fairchild	μA238	
	National	LM238	
	SiliconG	SG238	
IP250	**Motorola**	**LM250**	**(2929)**
	National	LM250	
	SiliconG	SG250	
	Unitrode	**UC250**	**(3325)**
IP2524	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	μA2524	
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
IP2524B	Cherry	CS2524A	
IP2525A	Cherry	CS2525A	
	Exar	**XR2525A**	**(2607)**
	LinearTech	LT2525A	
	Motorola	**SG2525A**	**(2931)**
	SiliconG	SG2525A	
	Siliconix	PWM25B	
	TI	SG2525A	
	Unitrode	**UC2525A**	**(3323)**
IP2526	Cherry	CS2526	
	LinearTech	LT2526	
	Motorola	**SG2526**	**(2931)**
	SiliconG	SG2526	
		SG2527	
	Unitrode	**UC2526**	**(3323)**
IP2527A	Cherry	CS2527A	
	Exar	**XR2527A**	**(2607)**
	LinearTech	LT2527A	
	Motorola	**SG2527A**	**(2931)**
	SiliconG	SG2527A	
	TI	SG2527A	
	Unitrode	**UC2527A**	**(3323)**
IP2543	Exar	XR2543	
	SiliconG	SG2543	
	Unitrode	**UC2543**	**(3324)**
IP2544	SiliconG	SG2544	
	Unitrode	**UC2544**	**(3324)**
IP2843	SiliconG	SG2843	
	Unitrode	**UC2843**	**(3323)**
IP293	Polycore	PL293	
	SGS	L293	
	TI	L293	
		SN754410	

Manufacturer Device	Replacement Source	Device	IC Master Page
IP317	Fairchild	μA317	
	LinearTech	LM317	
	MCE	MCELM317	
	Motorola	**LM317**	**(2929)**
	National	LM317	
	SGS	LM317	
	SiliconG	SG317	
	TI	LM317	
	Thomson	LM317	
		TDB0117	
	Unitrode	**UC317**	**(3325)**
IP320-12	Fairchild	μA7912	
		μA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	μA7824	
		μA7912	
	IPS	**IP7912**	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	μPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
IP320-15	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP7915**	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
IP320-5	Fairchild	μA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	IPS	**IP120-5**	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	μPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	μA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
IP323	Fairchild	SH0323	
		SH323	
		μA323	
		μA78H05	
	IPS	**IP123-5**	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
IP323-12	**IPS**	**IP123-12**	**(2854)**
	Motorola	**MC78T12**	**(2927)**
IP323-15	**IPS**	**IP123-15**	**(2854)**
	Motorola	**MC78T15**	**(2928)**
IP33060	**Motorola**	**MC33060**	**(2930)**
IP33063	**Motorola**	**MC33063**	**(2930)**
IP337	LinearTech	LM337	
		LT337	
	MCE	MCELM337	
	Motorola	**LM337**	**(2929)**
	National	LM337	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Integrated Power Semiconductors (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
IP337			(Cont'd)
	SiliconG	SG337	
		SG337A	
	TI	LM337	
	Thomson	LM337	
	Unitrode	**UC337**	**(3325)**
IP338	Fairchild	μA338	
	LinearTech	LM338	
		LT338	
	Micropac	MLM338	
	National	LM338	
	SiliconG	SG338	
IP340-12	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
IP340-15	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
IP34060	**Motorola**	**MC34060**	**(2930, 2960)**
IP34063	**Motorola**	**MC34063**	**(2930, 2960)**
IP350	Fairchild	μA350	
		μA78HGA	
	LinearTech	LM350	
		LT350	
	Motorola	**LM350**	**(2929)**
	National	LM350	
	SiliconG	SG350	
	TI	LM350	
	Unitrode	**UC350**	**(3325)**
IP35060	**Motorola**	**MC35060**	**(2930)**
IP35063	**Motorola**	**MC35063**	**(2930)**
IP3524	Cherry	CS3524	
	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524B**	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	SG3524	
		UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
	TI	SG3524	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
IP3525A	Cherry	CS3525A	
	Exar	**XR3525A**	**(2607)**
	LinearTech	LT3525A	
	Motorola	**SG3525A**	**(2931)**
	RIFA	RL3525A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IP3525A			(Cont'd)
	SGS	SG3525A	
	SiliconG	SG3525A	
	Siliconix	PWM25	
	TI	SG3525A	
	Unitrode	**UC3525A**	**(3323)**
IP3526	LinearTech	LT3526	
	SiliconG	SG3526	
	Unitrode	**UC3526**	**(3323)**
		UC3626	
IP3527	Cherry	CS3527	
		CS3527A	
	Exar	**XR3527A**	**(2607)**
	LinearTech	LT3527A	
	Motorola	**SG3527A**	**(2931)**
	SGS	SG3527A	
	SiliconG	SG3527A	
	TI	SG3527A	
IP3543	Exar	XR3543	
	SiliconG	SG3543	
	Unitrode	**UC3543**	**(3324)**
IP3544	SiliconG	SG3544	
	Unitrode	**UC3544**	**(3324)**
IP3843	SiliconG	SG3843	
	Unitrode	UC3843	
IP494	Cherry	CS594	
	Fujitsu	MB3759	
	TI	TL494M	
		TL594M	
	Unitrode	**UC494A**	**(3323)**
IP494A	Cherry	CS494M	
	Exar	XR494	
	Motorola	**TL494**	**(2931)**
	TI	TL494M	
		TL594M	
	Unitrode	**UC494A**	**(3323)**
IP494AC	Cherry	CS594C	
IP494C	TI	TL494C	
		TL594C	
	Unitrode	**UC494AC**	**(3323)**
IP5560	Cherry	CS5560S	
IP5560C	Cherry	CS5560N	
	Signetics	**NE5560**	**(3129)**
IP5561	Cherry	CS5561S	
	Signetics	SE5561	
IP5561C	Cherry	CS5561	
		CS5561N	
	Signetics	**NE5561**	**(3130)**
IP7805	Fairchild	μA7805	
	GoldStar	GL7805	
	Gould	μA7805	
	National	LM340-5	
		LM7805	
	Samsung	MC7805	
	SiliconG	SG7805	
		SG7805A	
	TI	μA7805	
	Toshiba	TA78005	
		TA79005	
	Unitrode	**UC7805**	**(3325)**
IP780SAC	**Motorola**	**TL780-05C**	**(2926)**
	TI	TL780-05C	
IP7812	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
IP7812AC	**Motorola**	**TL780-12C**	**(2926)**
	TI	TL780-12C	
IP7815	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
IP7815			(Cont'd)
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
IP7815AC	**Motorola**	**TL780-15C**	**(2926)**
	TI	TL780-15C	
IP7905	Fairchild	μA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	μPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	μA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
IP7912	Fairchild	μA7912	
		μA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	μA7824	
		μA7912	
	IPS	**IP320-12**	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	μPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
IP7915	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**

Intel

Manufacturer Device	Replacement Source	Device	IC Master Page
1101	AMD	AM1101ADM	
	National	MM1101	
	NCM	NCM1101Z	
	Thomson	MK6027P	
2004	NCR	NCR52004	
	Xicor	**X2004**	**(3387, 3399)**
♦ 2118	Fairchild	F100422	
	Fujitsu	MB8118	
		MBM100422	
		MBM100422A	
♦ 2118	Hitachi	HM100422	
	National	DM100422	
		NMC5295	
♦ 2118	NEC	μPB100422	
♦ 2128	AMD	AM9128	
		AM9218	
♦ 2128	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ 2128	Fujitsu	MB8128	
		MB8416	
♦ 2128	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ 2128	Hitachi	HM6116	
		HM6166	
♦ 2128	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ 2128	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ 2128	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ 2128	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ 2128	National	MMC2116	
	NEC	μPD4016	
		μPD446	
♦ 2128	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ 2128	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ 2128	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ 2128	Stantel-STC	STC6116	
		STC6166	
♦ 2128	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ 2128	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ 2128	Vitelic	V61C16	
		V62C16	
♦ 2142	**Harris**	**HM6514**	**(2704, 2762, 2768)**
	National	MM2142	
2147	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Intel			**(Cont'd)**
2147			(Cont'd)
	Thomson	ET2147	
	Toshiba	TMM3150	
2147H	AMD	AM2147	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM6147H	
	Matra-Harris	HN65747	
	National	NMC2147H	
2148H	AMD	AM2148	
		AM2149	
	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2149H	
	National	NMC2148	
	Thomson	ET2148	
	UMC	UM2148	
2149H	AMD	AM2148	
		AM2149	
	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
	National	NMC2148	
	Thomson	ET2148	
	UMC	UM2148	
♦ 2164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
♦ 2164	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
♦ 2164	Hitachi	HM4864	
		HM4864A	
♦ 2164	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
♦ 2164	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
♦ 2164	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
♦ 2164	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
♦ 2164	Vitelic	V51C64	
♦ 2164A	AMD	AM9064	
	Fairchild	F4164	
		F64K	
♦ 2164A	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
♦ 2164A	Hitachi	HM4864	
		HM4864A	
♦ 2164A	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
♦ 2164A	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
♦ 2164A	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
♦ 2164A	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
♦ 2164A	Vitelic	V51C64	
♦ 2187A	Inmos	IMS2630	
	NEC	μPD4168	
♦ 2332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
♦ 2332	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
♦ 2332	Signetics	2332	
		2632A	
♦ 2332	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
♦ 2332	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
♦ 2364A	Fairchild	F3568	
		F3569	
		F3570	
♦ 2364A	GIM	RO3-9365	
		RO9864	
♦ 2364A	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
♦ 2364A	National	MM52264	
		NM52264	
♦ 2364A	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
♦ 2364A	Supertex	23SC64	
		23SC64/A	
		CM6400	
♦ 2364A	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
♦ 27010	**Fujitsu**	**MBM27C1001**	**(2620)**
	Hitachi	HN27C1016	
	Mitsubishi	M5M27C100K	
	NEC	μPD27C1001	
	Toshiba	**TC571000**	**(3304)**
27128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
27128A	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27C128A	
		N27128A	
		P27128	
		P27128A	
27128A			(Cont'd)
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
27210	NEC	μPD27C1024	
27256	AMD	AM27256	
		AM27C256	
	Intel	**27C256**	**(2861)**
		M27256	
		M27C256	
	National	NMC27C256	
	SEEQ	**27C256**	**(2991)**
	SGS	M27256	
	TI	**SMJ27C256**	**(3220)**
	VLSI Tech	VT27C256	
	Waferscale	**WS27C256**	**(3376)**
27256-15	GIM	27256-15	
	Toshiba	27256-15	
27256-2	AMD	AM27256-2	
	GIM	27256-2	
27256-20	AMD	AM27256-20	
	Fujitsu	MBM27256-20	
	GIM	27256-20	
	Toshiba	27256-20	
27256-25	AMD	27256-25	
	Fujitsu	MBM27256-25	
	GIM	27256-25	
	Hitachi	HN27256-25	
27256-3	AMD	AM27256-3	
	GIM	27256-3	
	NEC	μPD27256-3	
27256-30	AMD	AM27256-30	
	Fujitsu	MBM27256-30	
	GIM	27256-30	
	Hitachi	HN27256-30	
27256-5	GIM	27256-5	
2732	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732A	
		M2732	
	National	MM2732	
		NMC2732	
	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
2732A	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		M2732	
	National	MM2732	
		NMC2732	
	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
27512	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	N27512	
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
27512-170V05			
	GIM	27C512-170V05	
	Mitsubishi	M27512-170V05	
27512-170V10			
	Mitsubishi	M27512-170V10	
27512-2	GIM	27512-2	
	Mitsubishi	M27512-2	
27512-20	Fujitsu	MBM27512-20	
	GIM	27512-20	
	Mitsubishi	M27512-20	
	Toshiba	VT27C512-20	
27512-2000V10			
	GIM	27512-200V10	
	Mitsubishi	M27512-200V10	
27512-200V05			
	GIM	27512-200V05	
	Mitsubishi	M27512-200V05	
27512-25	AMD	AM27512-25	
	Fujitsu	MBM27512-25	
	GIM	27512-25	
	Hitachi	HN27512-25	
	Mitsubishi	M27512-25	
	Toshiba	VT27C512-25	
27512-3	AMD	AM27512-3	
	GIM	27512-3	
	Mitsubishi	M27512-3	
27512-30	AMD	AM27512-30	
	Fujitsu	MBM27512-412	
	GIM	27512-30	
	Mitsubishi	M27512-30	
27513	Intel	N27513	
		P27513	
	Siliconix	SI9551	
	Sprague	**UCN5851**	**(3203)**
	Supertex	HV5122	
	TI	SN75551	
2764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
2764A	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	

(Continued)

(Continued)

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Intel			**(Cont'd)**
2764A			(Cont'd)
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
27C128A	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
27C256	AMD	AM27256	
		AM27C256	
	Intel	27256	
		M27256	
		M27C256	
	National	NMC27C256	
	SEEQ	**27C256**	**(2991)**
	SGS	M27256	
	TI	**SMJ27C256**	**(3220)**
	VLSI Tech	VT27C256	
	Waferscale	**WS27C256**	**(3376)**
27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
♦ 2815	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 2815			(Cont'd)
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
♦ 2815	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
♦ 2815	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
♦ 2815	**Waferscale**	**WS57C191**	**(3376)**
♦ 2816A	EXEL	XL2816	
		XL2816A	
♦ 2816A	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	Intel	2816B	
	National	NMC9816A	
	Samsung	KM2816A	
	SEEQ	**2816**	**(2991)**
		2816A	**(2991)**
		M2816A	
♦ 2816A	**Xicor**	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**
2816B	EXEL	XL2816	
		XL2816A	
	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	National	NMC9816A	
	Samsung	KM2816A	
	SEEQ	**2816**	**(2991)**
		2816A	**(2991)**
		M2816A	
	Xicor	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**
♦ 2817A	AMD	AM2817A	
	EXEL	XL2817A	
	GIM	28C17	
	National	NMC9817	
	Samsung	KM2817A	
	SEEQ	**2817A**	**(2991)**
		DQ2817A	
♦ 2864	AMD	AM9864	
	Fujitsu	MBM28C65	
♦ 2864A	AMD	AM2864A	
		AM9864	
♦ 2864A	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
♦ 2864A	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
♦ 2864A	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
♦ 2864A	**Xicor**	**X2864A**	**(3391, 3408)**
♦ 2864B	AMD	AM2864A	
		AM9864	
♦ 2864B	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
♦ 2864B	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
♦ 2864B	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 2864B	**Xicor**	**X2864A**	**(3391, 3408)**
2910	Harris	HC5510	
	TI	TCM4110	
2910A	TI	TCM2910A	
2911	TI	TMC2911A	
2912	CMD Micro	G8912B	
	Intel	ID2912	
	National	TP3040	
	Plessey	MV8912	
	TI	TCM2912C	
	Thomson	ETC5040	
2913	**AT&T**	**T7513**	**(2484)**
	Intel	29C13	
	TI	2133	
		TCM2913	
		TCM29C13	
2914	TI	TCM2914	
		TCM29C14	
2916	Intel	TCM29C16	
	TI	TCM2916	
		TCM29C16	
2917	TI	TCM2917	
		TCM29C17	
29C13	**AT&T**	**T7513**	**(2484)**
	Intel	2913	
	TI	2133	
		TCM2913	
		TCM29C13	
29C48	Matra-Harris	29C48	
29C51C	Harris	29C51C	
29C53	Matra-Harris	29C53	
♦ 3245	National	DS3245	
♦ 3404	**Signetics**	**N8T3404**	**(3022)**
♦ 3608	AMD	AM27S180	
	Fujitsu	MB7131	
	National	DM87S180	
		DM87S229	
3632-1	AMD	AM27S43A	
	Intel	82HS321	
	MMI	53S3281B	
5101	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	
5104	AMD	AM2141	
		AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
5114	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
5114			(Cont'd)
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
51C66	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
51C67	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
51C68	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Intel (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
51C68			(Cont'd)
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
51C69	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
5C031	**Apex**	**PA07**	**(2458)**
	Burr-Brown	**3571**	**(2536)**
		3572	**(2536)**
5C060	Altera	EP600	
5C090	Altera	EP900	
5C121	Altera	EP1210	
5C320	Altera	EP320	
80186	AMD	80186	
	Fujitsu	80186	
	IMI	IMI6080	
	Siemens	80186	
80188	AMD	80188	
	Fujitsu	80188	
	Siemens	80188	
♦ 8022	Toshiba	TMP8022	
8031	Matra-Harris	8031	
		8051	
8032	Intel	8052	
	Matra-Harris	8032	
		8052	
8035	National	INS8035	
	NEC	μPD8035	
	Signetics	SCN8035	
	Toshiba	**TMP8035**	**(3306)**
8037	AMD	8237	
	Calmos	**CA82C37**	**(2553)**
	Harris	**82C37**	**(2731, 2768, 4249)**
	NEC	μPD8237	
	OKI	MSM82C37	
8039	**Toshiba**	**TMP8039**	**(3306)**
8041A	NEC	μPD8041A	
8042	Mitsubishi	M5L8042	
8048	National	INS8048	
	NEC	μPD8048	
	Signetics	SCN8048	
	Toshiba	**TMP8048**	**(3306)**
8049	National	INS8049	
	NEC	μPD8049	
	Signetics	**SCN8049**	**(3076)**
	Toshiba	**TMP8049**	**(3306)**
8052	Intel	8032	
	Matra-Harris	8032	
		8052	
8085	AMD	8085A	
	Calmos	**CA80C85**	**(2553)**
	Devtek	DS8085	
	Intel	8085A	
	NEC	μPD8085	
	OKI	MSM8085	
	Toshiba	**TMP8085**	**(3306)**
		TMP8085A	**(3306)**
8085A	AMD	8085A	
	Calmos	**CA80C85**	**(2553)**
	Devtek	DS8085	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
8085A			(Cont'd)
	Intel	8085	
	NEC	μPD8085	
	OKI	MSM8085	
	Toshiba	**TMP8085**	**(3306)**
		TMP8085A	**(3306)**
8086	Matra-Harris	8086	
8088	AMD	8088	
	Fujitsu	MBL8088	
	Matra-Harris	8088	
80C31	AMD	P80C31	
	Fujitsu	MBL80C31	
	Harris	P80C31	
	Intel	P80C31	
	OKI	M80C31	
	Siemens	SAB80C31	
	Signetics	SC80C31	
80C35	**Toshiba**	**TMP80C35**	**(3306)**
80C39	Mitsubishi	M5M80C39	
	Signetics	SCC80C39	
	Toshiba	**TMP80C39**	**(3306)**
80C48	**GoldStar**	**Z8440**	**(2691)**
	NEC	μPD80C48	
	Toshiba	**TMP80C48**	**(3306)**
80C49	NEC	μPD80C49	
	Signetics	SCC80C49	
	Toshiba	**TMP80C49**	**(3306)**
80C50	NEC	μPD80C50	
	SiliconSys	SSI80C50	
	Toshiba	**TMP80C50**	**(3306)**
80C51	Fujitsu	MBL80C51	
	Intel	P80C51	
	Matra-Harris	P80C51	
	OKI	M80C51	
	Siemens	SAB80C51	
	Signetics	SC80C51	
80C86	**Harris**	**80C86**	**(2730, 2768)**
80C88	**Harris**	**80C88**	**(2730, 2768)**
8155	AMD	8155	
	Harris	HS81C55	
	NEC	μPD8155	
	Toshiba	**TMP8155**	**(3306)**
8156	AMD	8156	
	Harris	HS81C56	
	NEC	μPD8156	
8156-2	NEC	μPD8156-2	
81C28	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
81C28			(Cont'd)
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
8212	AMD	AM8212	
	Calmos	**CA82C12**	**(2553)**
	NEC	μPB8212	
	OKI	MSM82C12	
8216	National	DP8216	
		INS8216	
	NEC	μPB8216	
8224	National	DP8224	
		INS8224	
8226	Mitsubishi	M5L8226	
	National	DP8226	
		INS8226	
	NEC	μPB8226	
8228	AMD	8228	
	National	DP8228	
		INS8228	
	NEC	μPB8228	
	TI	SN74S428	
		TIM8228	
8231	AMD	AM9511A	
8237	AMD	AM9517A	
8237-5	NEC	μPD8237A	
8237A-4	AMD	AM8237A	
		AM9517A-4	
	Harris	**82C37A**	**(2731, 2768, 4249)**
8237A-5	AMD	AM9517A-5	
8243	NEC	μPD8243	
	Toshiba	**TMP8243**	**(3306)**
82501	**SEEQ**	**8023A**	**(2991)**
8253	AMD	8253	
	National	INS8253	
	NEC	μPD8253	
	Toshiba	**TMP8253**	**(3306)**
8254	**Calmos**	**CA82C54**	**(2553)**
	Harris	**82C54**	**(2731, 2768, 4249)**
	Intel	82C54	
	NEC	μPD71054	
	OKI	82C54	
	S-MOS	SMC82C54AC	
8255	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	82C55	
		82C55A	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
8255A	NEC	μPD8255A-21-5	
8257	NEC	μPD8257	
8259	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
8259			(Cont'd)
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	82C59A	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
82716	Matra-Harris	82716	
		HC3052	
	National	TP3052	
8272	NEC	μPD72066	
	Rockwell	**R6765**	**(2990)**
	SMC	FDC72C65	
		FDC765A	
8279	AMD	8279-5	
	NEC	μPD8279-5	
8282	Fujitsu	MBL8282	
	Harris	**82C82**	**(2733, 2768)**
	Intel	82C82	
	MMI	82C82	
	NEC	μPB8282	
		μPD71082	
	OKI	82C82	
8283	**Harris**	**82C83H**	**(2733, 2768)**
	Intel	82C83	
	MMI	82C83	
	NEC	μPD71083	
	OKI	82C83	
8284	**Calmos**	**CA82C84**	**(2553)**
	Fujitsu	MBL8284	
	Harris	**82C84**	**(2734, 2768, 4249)**
		82C84A	**(2734, 2768, 4249)**
	Intel	82C84	
		82C84A	
	NEC	μPB8284	
		μPD71084	
		μPD8284	
	OKI	MSM82C84	
8286	AMD	DP8304	
	Fujitsu	MBL8286	
	Harris	**82C86H**	**(2733, 2768)**
	Intel	82C86	
	MMI	82C86	
	National	DP8304	
	NEC	μPB8286	
		μPD71086	
	OKI	82C86	
8287	AMD	8287	
	Harris	**82C87H**	**(2733, 2768)**
	Intel	82C87	
	MMI	82C87	
	NEC	μPD8287	
		μPS71087	
	OKI	82C87	
8288	AMD	8288	
	Calmos	**CA82C88**	**(2553)**
	Fujitsu	MBL8288	
	Harris	**82C88**	**(2734, 2768, 4249)**
	Intel	82C88	
	NEC	μPB8288	
		μPD71088	
		μPD8288	
	OKI	82C88	
		MSM82C88	
8289	Fujitsu	MBL8289	
	Harris	**82C89**	**(2734, 2768)**
	NEC	μPB8289	
82C51	NEC	μPD71051	
	OKI	82C51	
82C54	**Calmos**	**CA82C54**	**(2553)**
	Harris	**82C54**	**(2731, 2768, 4249)**
	Intel	8254	
	NEC	μPD71054	
	OKI	82C54	
	S-MOS	SMC82C54AC	
82C55	AMD	8255	
	Calmos	**CA82C55**	**(2553)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Intel			**(Cont'd)**
82C55			(Cont'd)
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55A	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
82C55A	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
82C57	NEC	μPD71057	
	OKI	82C57	
82C59A	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
82C82	Fujitsu	MBL8282	
	Harris	**82C82**	**(2733, 2768)**
	Intel	8282	
	MMI	82C82	
	NEC	μPB8282	
		μPD71082	
	OKI	82C82	
82C83	**Harris**	**82C83H**	**(2733, 2768)**
	Intel	8283	
	MMI	82C83	
	NEC	μPD71083	
	OKI	82C83	
82C84	**Calmos**	**CA82C84**	**(2553)**
	Fujitsu	MBL8284	
	Harris	**82C84**	**(2734, 2768, 4249)**
		82C84A	**(2734, 2768, 4249)**
	Intel	8284	
		82C84A	
	NEC	μPB8284	
		μPD71084	
		μPD8284	
	OKI	MSM82C84	
82C84A	**Calmos**	**CA82C84**	**(2553)**
	Fujitsu	MBL8284	
	Harris	**82C84**	**(2734, 2768, 4249)**
		82C84A	**(2734, 2768, 4249)**
	Intel	8284	
		82C84	
	NEC	μPB8284	
		μPD71084	
		μPD8284	
	OKI	MSM82C84	

Manufacturer Device	Replacement Source	Device	IC Master Page
82C86	AMD	DP8304	
	Fujitsu	MBL8286	
	Harris	**82C86H**	**(2733, 2768)**
	Intel	8286	
	MMI	82C86	
	National	DP8304	
	NEC	μPB8286	
		μPD71086	
	OKI	82C86	
82C87	AMD	8287	
	Harris	**82C87H**	**(2733, 2768)**
	Intel	8287	
	MMI	82C87	
	NEC	μPD8287	
		μPS71087	
	OKI	82C87	
82C88	AMD	8288	
	Calmos	**CA82C88**	**(2553)**
	Fujitsu	MBL8288	
	Harris	**82C88**	**(2734, 2768, 4249)**
	Intel	8288	
	NEC	μPB8288	
		μPD71088	
		μPD8288	
	OKI	82C88	
		MSM82C88	
82HS321	AMD	AM27S43A	
	Intel	3632-1	
	MMI	53S3281B	
82S191	**Raytheon**	**29681A**	**(2985)**
8355	**Toshiba**	**TMP8355**	**(3306)**
8741A	NEC	μPD8741A	
8748	National	NS80CX48	
	NEC	μPD8748	
8755	NEC	μPD8755	
8755A	NEC	μPD8755A	
87C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
ADC0831	TI	ADC0831	
ADC0832	TI	ADC0832	
AMD8031	AD	AD636	
	Fujitsu	MBL8031	
	Maxim	AD636	
	Siemens	SAB8031	
	Signetics	SCN8031	
I2864A	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
I2864A			(Cont'd)
	IDT	IDT7M7864	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
ID2910	National	TP3020	
ID2911	National	TP3021	
	TI	TMC2911A	
ID2912	CMD Micro	G8912B	
	Intel	2912	
	National	TP3040	
	Plessey	MV8912	
	TI	TCM2912C	
	Thomson	ETC5040	
IM29C510	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
ISBC80/30	National	BLC80/316	
M2164A	**Thomson**	**MKB4564**	**(3297)**
M27128	AMD	AM27128	
	Intel	M27C128	
	SEEQ	M27128	
	TI	**SMJ27C128**	**(3220)**
	VLSI Tech	VT27C128	
	Waferscale	**WS27C128**	**(3376)**
M27256	AMD	AM27256	
		AM27C256	
	Intel	27256	
		27C256	**(2861)**
		M27C256	
	National	NMC27C256	
	SEEQ	**27C256**	**(2991)**
	SGS	M27256	
	TI	**SMJ27C256**	**(3220)**
	VLSI Tech	VT27C256	
	Waferscale	**WS27C256**	**(3376)**
M2732	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		2732A	
	National	MM2732	
		NMC2732	
	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
M2764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M2764	OKI		(Cont'd)
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
M27C128	AMD	AM27128	
	Intel	M27128	
	SEEQ	M27128	
	TI	**SMJ27C128**	**(3220)**
	VLSI Tech	VT27C128	
	Waferscale	**WS27C128**	**(3376)**
M27C256	AMD	AM27256	
		AM27C256	
	Intel	27256	
		27C256	**(2861)**
		M27256	
	National	NMC27C256	
	SEEQ	**27C256**	**(2991)**
	SGS	M27256	
	TI	**SMJ27C256**	**(3220)**
	VLSI Tech	VT27C256	
	Waferscale	**WS27C256**	**(3376)**
M27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
MB2168	Fujitsu	P51C68	
	Hitachi	P51C68	
	Siliconix	SI9553	
	Sprague	**UCN5853**	**(3203)**
	Supertex	HV5306	
	TI	P51C68	
		SN75553	
N27128A	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		P27128	
		P27128A	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Intel			**(Cont'd)**
N27128A			(Cont'd)
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
N27512	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
N27513	**Intel**	**27513**	**(2863)**
		P27513	
	Siliconix	SI9551	
	Sprague	**UCN5851**	**(3203)**
	Supertex	HV5122	
	TI	SN75551	
P27128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
P27128A	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
P27256	Toshiba	TMM24256	
P27512	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
P27513	**Intel**	**27513**	**(2863)**
		N27513	
	Siliconix	SI9551	
	Sprague	**UCN5851**	**(3203)**
	Supertex	HV5122	
	TI	SN75551	
P2764	Hitachi	HN482764P	
	NEC	2764C	
	Toshiba	TMM2464	
P51C259H	Fujitsu	MB81C466	
	Hitachi	HM50465	
	Inmos	IMS2820	
	SGS	L7910	
P8032	Siemens	SAB8032	
	Signetics	**SCN8032**	**(3074)**
P8051	AMD	P8051	
	Fujitsu	MBL8051	
	Siemens	SAB8051	
	Signetics	SCN8051	
P8052	Siemens	SAB8052	
	Signetics	**SCN8052**	**(3074)**
P80C31	AMD	P80C31	
	Fujitsu	MBL80C31	
	Harris	P80C31	
	Intel	80C31	
	OKI	M80C31	
	Siemens	SAB80C31	
	Signetics	SC80C31	
P80C51	Fujitsu	MBL80C51	
	Intel	80C51	
	Matra-Harris	P80C51	
	OKI	M80C51	
	Siemens	SAB80C51	
	Signetics	SC80C51	
P8251	AMD	8251	
	National	INS8251	
	NEC	μPD8251A	
	OKI	MSM82C51A	
	S-MOS	SMC82C51AC	
	SMC	COM8251A	
	Toshiba	**TMP8251**	**(3306)**
P8255	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
TCM29C16	Intel	2916	
	TI	TCM2916	
		TCM29C16	
TMS2168	Fujitsu	D51C69	
	Hitachi	D51C69	
	Siliconix	SI9554	
	Sprague	**UCN5854**	**(3203)**
	Supertex	HV5308	
	TI	D51C69	
		SN75554	
UM2168	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
UM2168			(Cont'd)
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
Interdesign/Ferranti			
1G000	Ferranti	ULA1G000	
1U000	Ferranti	ULA1U000	
2U000	Ferranti	ULA2U000	
3U000	Ferranti	ULA3U000	
ADVFC32	Cherry	CS4000	
MCF	Cherry	CS3000	
	Exar	XRF100	
	Interdesign	MOF	
	MCE	MCEA20F	
MOA	Exar	XRA100	
		XRM100	
	Interdesign	MOM	
	MCE	MCEA20	
		MCEA20A	
MOB	Exar	XRB100	
	MCE	MCEA20B	
MOC	Exar	XRC100A	
	MCE	MCEA20C	
MOD	Exar	XRD100	
	MCE	MCEA40D	
MOE	Cherry	CS2000	
	Exar	XRE100	
	MCE	MCEA20E	
MOF	Cherry	CS3000	
	Exar	XRF100	
	Interdesign	MCF	
	MCE	MCEA20F	
MOG	Cherry	CS2500	
	Exar	XRG100	
	MCE	MCEA20G	
MOH	Exar	XRH100	
	MCE	MCEA20H	
MOJ	Exar	XRJ100	
	MCE	MCEA20J	
MOL	Cherry	CS3200	
	Exar	XRL100	
	MCE	MCEA20L	
MOM	Exar	XRA100	
		XRM100	
	Interdesign	MOA	
	MCE	MCEA20	
		MCEA20A	
MON	MCE	MCEA20N	
MOP	MCE	MCEA20P	
MSA	Ferranti	ULA2C000	
MSB	Ferranti	ULA5C000	
MSC	Ferranti	ULA9C000	
♦ MUA	Ferranti	ULA2000	
♦ MUB	Ferranti	ULA2L000	
♦ MUC	Ferranti	ULA2H000	
International CMOS Technology			
18CP210	Gould	18CP210	
18CV8	Gould	18CV8	
22CP210	Gould	22CP210	
22CV10	Gould	22CV10	
27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
27C64			(Cont'd)
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
27CX641	Atmel	27HC64	
		AT27HC64	
	GIM	27HC64	
	GoldStar	**GL3620**	**(2699)**
		GM27HC64	**(2692)**
	Sanyo	LA7620	
	Sharp	**LH5763**	**(2994)**
	Waferscale	**WS57C64**	**(3376)**
27CX642	Atmel	27HC641	
		AT27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C263	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GE/RCA	**CD22203**	**(2636)**
	GIM	27HC641	
	Sharp	**LH5749**	**(2994)**
		LH5762	**(2994)**
	SiliconSys	SSI203	
	Waferscale	**WS57C49**	**(3376)**
International Microcircuits, Inc.			
6080	**S-MOS**	**SLA6080**	**(4305)**
H91102	AMD	AM25S557	
	AD	ADSP1080	
	LogicDev	LMU08	
	TRW-LSI	MPY08HU	
		TMC28KU	
IMI145156	Motorola	MC145156	
IMI145157	Motorola	MC145157	
IMI145158	Motorola	MC145158	
IMI4X2901	AMD	AM2I4X2901	
	IDT	**IDT49C401**	**(2801)**
	Waferscale	**WS59016**	**(3376)**
IMI6080	AMD	80186	
	Fujitsu	80186	
	Intel	80186	
	Siemens	80186	
IMI6140	**S-MOS**	**SLA6140**	**(4305)**
IMI6170	**S-MOS**	**SLA6170**	**(4305)**
IMI6270	**S-MOS**	**SLA6270**	**(4305)**
IMI6330	**S-MOS**	**SLA6330**	**(4305)**
IMI6430	**S-MOS**	**SLA6430**	**(4305)**
IMI6620	**S-MOS**	**SLA6620**	**(4305)**
MPY012	SiliconG	SM656	
	Unitrode	PIC656	
		PIC7517	
		PIC7535	
MPY12IMI	AD	ADSP1012	
	IDT	IDT7112	
		IDT7212	**(2806)**
	LogicDev	LMU12	
	TRW-LSI	MPY012H	
MPY16IMI	AMD	AM29516	
		AM29C516	
	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	LogicDev	LMU16	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TI	SN741616	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
International Microcircuits, Inc. (Cont'd)			
MPY16IMI			(Cont'd)
	TRW-LSI	MPY016H	
		MPY016K	
		TMC216H	
		TMC216K	
	Weitek	WTL1016	
		WTL1516	
		WTL2516	
Intronics			
A560	**Burr-Brown**	**3507**	**(2535)**
	Datel	AM452	
	Harris	HA2525	
ITT Semiconductors			
504	Dionics	DI805	
	Motorola	MC3494	
505	Dionics	DI230	
	ITT	ITT505	
	National	DM8885	
		DM8889	
		DS8885	
DF320	Mitel	MT4320	
	Plessey	MV4320	
ITT4116	AMD	AM9016	
	Fairchild	F16K	
		F4116	
	Hitachi	HM4716	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
ITT505	Dionics	DI230	
	ITT	505	
	National	DM8885	
		DM8889	
		DS8885	
SBA5089	Gould	S25089	
	National	TP5089	
	Samsung	MK5089	
	Sharp	LR4089	
	Stantel-STC	STC5089	
	TI	TCM5089	
	Thomson	MK5089	
	UMC	UM5089	
TBA950	National	TBA950	
Lambda Semiconductors			
LAS1405	Fairchild	SH0323	
		SH323	
		μA323	
		μA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	LinearTech	LM323	
		LT323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
LAS1412	Fairchild	μA78H12A	
	Micropac	M78H12	
♦ LAS14U	Fairchild	μA350	
		μA78HGA	
♦ LAS14U	**IPS**	**IP350**	**(2854)**
	LinearTech	LM350	
		LT350	
♦ LAS14U	**Motorola**	**LM350**	**(2929)**
	National	LM350	
	SiliconG	SG350	
	TI	LM350	
	Unitrode	**UC350**	**(3325)**
LAS1515	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LAS1515			(Cont'd)
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
LAS3905	Fairchild	μA78P05	
	Micropac	M78P05	
		MLAS3905	
LAS39U	Micropac	MLAS3912	
LAS79HG	Fairchild	μA79HG	
♦ LMC7806	Fairchild	μA7806	
	Motorola	**MC7806**	**(2927)**
	National	LM7806	
	NEC	μPC7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806	
		SG7806A	
♦ LMC7806	TI	μA7806	
	Thomson	μA7806	
	Toshiba	TA78006	
♦ LMC7808	Fairchild	μA7808	
	GoldStar	GL7808	
	Gould	μA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
♦ LMC7808	National	LM7808	
	NEC	μPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
♦ LMC7808	TI	μA7808	
	Thomson	μA7808	
	Toshiba	TA78008	
♦ LMC7812	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
♦ LMC7812	**Motorola**	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
♦ LMC7812	National	LM340-12	
		LM7812	
♦ LMC7812	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
♦ LMC7812	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
LMC7815	Fairchild	μA7815	
	GoldStar	GL7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	
		LM340T-15	
		LM78L15	
	NEC	μPC78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	SN75555	
		μA78L15	
	Toshiba	TA78L015	
♦ LMC7818	National	LM340-18	
	NEC	μPC7818	
	SiliconG	SG340-18	
		SG7818	
		SG7818A	
♦ LMC7818	TI	LM340-18	
	Thomson	μA7818	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ LMC7824	Fairchild	μA7824	
	GoldStar	GL7824	
	Gould	μA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	μPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
♦ LMC7824	TI	LM340-24	
		μA7824	
♦ LMC7824	Thomson	μA7824	
	Toshiba	TA78024	
♦ LMC7902	Fairchild	μA7902	
	Samsung	MC7902	
♦ LMC7905	Fairchild	MC7905	
		μA7905	
♦ LMC7905	**GoldStar**	**GL7905**	**(2701)**
	Gould	μA7905	
	Motorola	MC7905	
	Samsung	MC7905	
	SGS	L7905	
	SiliconG	SG7905	
		SG7905A	
♦ LMC7908	Fairchild	MC7908	
		μA7908	
		μA79M08	
♦ LMC7908	Motorola	MC7908	
	National	LM7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908	
		SG7908A	
♦ LMC7908	TI	μA7908	
		μA79M08	
♦ LMC7908	Toshiba	TA79008	
Lattice Semiconductor			
256K8	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
♦ F1600	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
♦ F1600	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
♦ F1600	**Inmos**	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
♦ F1600	**IDT**	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
♦ F1600	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ F1600			(Cont'd)
	Toshiba	TC5561	
		TC5562	
GAL16V8	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
GAL20V8	Fairchild	54AC158	
	GE/RCA	CD54AC158	
♦ L1010	VLSI Tech	VL2010	
♦ L1016	AMD	AM29516	
		AM29C516	
♦ L1016	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LogicDev	LMU16	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TI	SN741616	
	TRW-LSI	MPY016H	
		MPY016K	
		TMC216H	
		TMC216K	
♦ L1016	Weitek	WTL1016	
		WTL1516	
		WTL2516	
♦ L1017	AMD	AM29517	
	Cypress	**CY7C517**	**(2569)**
	IDT	**IDT7217**	**(2806, 2832)**
	LogicDev	LMU17	
		LMU217	
♦ L1017	**LSI Logic**	**L64017**	**(2868)**
	Weitek	WTL2517	
LT1001	Maxim	LT1001	
LT1062	Maxim	LT1062	
♦ SR16K4	AMD	AM2168	
		AM9968	
		AM99C168	
♦ SR16K4	Fairchild	F1620	
	Fujitsu	MB8168	
		MB81C69	
♦ SR16K4	**GoldStar**	**GM76C164**	**(2692)**
	Hitachi	HM6168	
		HM6268	
♦ SR16K4	Inmos	IMS1420	
		IMS1421	
		IMS1424	
♦ SR16K4	**IDT**	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
♦ SR16K4	Matra-Harris	HM65682	
		HMI65769	
♦ SR16K4	Motorola	MCM1423	
		MCM6168	
		MCM6288	
♦ SR16K4	NEC	μPD4314	
	S-MOS	SRM2274	
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
	Thomson	**MK41H68**	**(3265)**
	Toshiba	TMM2068	
	Vitelic	V61C62	
		V61C68	
♦ SR16K4	**VLSI Tech**	**VT20C19**	**(3347)**
		VT20C69	**(3349)**
SR16K8	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Lattice Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SR16K8			(Cont'd)
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
SR256K1	Cypress	CY7C197	
	Fujitsu	**MB81C81**	**(2622)**
	Inmos	**IMS1800**	**(2790)**
	IDT	**IDT71257**	**(2802)**
	Mitsubishi	M5M5257	
SR256K4	Cypress	CY7C194	
	Fujitsu	MB81C84	
	Inmos	**IMS1820**	**(2791)**
	IDT	**IDT71258**	**(2802)**
	Mitsubishi	M5M5258	
	NEC	μPD43254	
SR4K4	AMD	AM99C164	
		AM99C165	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	Inmos	**IMS1620**	**(2787)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR64K4	
	Motorola	MCM6288	
		MCM62L88	
	NEC	μPD4362	
	Performance	P4C188	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
SR64E4	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	54LS152	
	Hitachi	HM6789	
	Inmos	**IMS1624**	**(2788)**
	IDT	**IDT6198**	**(2802)**
	Motorola	MCM6290	
	NEC	μPD4363	
	SGS	T54LS152	
	Toshiba	TC55417	
	Vitelic	V61C62	
SR64K1	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
SR64K4	AMD	AM99C164	
		AM99C165	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	Inmos	**IMS1620**	**(2787)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR4K4	
	Motorola	MCM6288	
		MCM62L88	
	NEC	μPD4362	
	Performance	P4C188	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
SR64K8	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SR64K8			(Cont'd)
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
SR64KX4	AMD	AM91C65	
	Fujitsu	MB81C74	
		MB81C75	
	Lattice	SR4K4	
	Toshiba	TC55417	
		TCC55417	
	Vitelic	V61C62	

Linear Technology Corp.

Manufacturer Device	Replacement Source	Device	IC Master Page
LF155	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
		LF411	
	Thomson	LF155	
LF155A	National	LF155A	
	PMI	**PM155A**	**(2971)**
LF156	**Burr-Brown**	**OPA156A**	**(2532)**
	LinearTech	OP16	
	MicroPwr	MPOP16	
	National	LF156	
	PMI	**OP16**	**(2971)**
	Thomson	LF156	
LF156A	AD	AD544	
	Burr-Brown	**OPA156A**	**(2532)**
	Fairchild	LF156A	
	National	LF156A	
		OPA101	
	PMI	**OP43**	**(2970)**
		PM156A	**(2971)**
	TI	TL081	
LF198	AMD	LF198	
	National	LF198	
	Signetics	LF198	
LF355	**Motorola**	**LF355**	**(2920)**
	National	LF355	
	PMI	**OP43**	**(2970)**
		PM355	
	Thomson	LF355	
LF355A	National	LF355A	
	PMI	PM355A	
LF356	**Motorola**	**LF356**	**(2920)**
	National	LF356	
	PMI	PM356	
	Thomson	LF356	
LF356A	**Burr-Brown**	**OPA356A**	**(2532)**
	National	LF356A	
	PMI	PM356A	
LF398	National	LF398	
		LM298	
	PMI	**SMP10**	**(2975)**
	Signetics	LF398	
		NE5537	
LH2108	GE/Intersil	LH2108	
	National	LH2108	
	PMI	**PM2108**	**(2970, 2972)**
LM10	MCE	MCELM10	
	National	LM10	
LM101	AMD	LM101	
	AD	AD101	
	Fairchild	μA101	
	GE/Intersil	AD101	
	Motorola	LM101	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM101			(Cont'd)
	Raytheon	LM101	
	SGS	LS101	
	SiliconG	SG101	
	Thomson	LM101	
LM101A	National	LM101A	
LM107	AD	AD741S	
	Burr-Brown	3500	
	National	LH741A	
		LM107	
	PMI	PM741	
	Raytheon	RC741	
	SiliconG	SG107	
	Thomson	LM107	
LM108	AD	AD108	
	Fairchild	μA108	
	GE/Intersil	LM108	
	MicroPwr	MP108	
	Motorola	**LM108**	**(2919)**
	National	LM108	
	PMI	**PM108**	**(2970)**
	SiliconSys	SSI108	
LM108A	AD	AD108A	
	Fairchild	UA108A	
	Motorola	**LM108A**	**(2919)**
	PMI	**PM108A**	**(2970)**
LM11	**Motorola**	**LM11**	**(2920)**
	National	LM11	
LM111	AD	AD111	
	Fairchild	μA111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
LM117	Fairchild	μA117	
	IPS	**IP117**	**(2854)**
	MCE	MCELM117	
	Motorola	**LM117**	**(2929)**
	National	LM117	
	SiliconG	SG117	
	TI	TL117	
	Thomson	LM117	
	Unitrode	**UC117**	**(3325)**
LM118	National	LM118	
LM119	LinearTech	LT119	
	National	LM119	
	PMI	**PM119**	**(2975)**
	Signetics	LM119	
LM123	Fairchild	SH123	
		UA138	
		μA123	
	IPS	**IP123**	**(2854)**
	LinearTech	LT123	
	Motorola	**LM123**	**(2927)**
		MC78T05	**(2926)**
	National	LM123	
	SiliconG	SG123	
		SG123A	
LM129	National	LM129	
LM134	National	LM134	
LM136	National	LM136	
LM137	**IPS**	**IP137**	**(2854)**
	LinearTech	LT137	
	MCE	MCELM137	
	Motorola	**LM137**	**(2929)**
	National	LM137	
	SiliconG	SG137	
		SG137A	
	Thomson	LM137	
	Unitrode	**UC137**	**(3325)**
LM138	**IPS**	**IP138**	**(2854)**
	Micropac	MLM138	
	National	LM138	
	SiliconG	SG138	
LM150	**IPS**	**IP150**	**(2854)**
	LinearTech	LT150	
	Motorola	**LM150**	**(2929)**
	National	LM150	
	SiliconG	SG150	
	Unitrode	**UC150**	**(3325)**
LM185	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM185	
LM199	National	LM199	
LM199A	National	LM199A	
LM234	National	LM234	

ALT. SOURCE DIRECTORY

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Linear Technology Corp. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM301	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
LM301A	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
LM307	Ferranti	ZNREF100	
	National	LM307	
	SiliconG	SG307	
	SiliconSys	SSI6507	
	TI	LM307	
LM308A	AD	AD308A	
	Fairchild	μA308A	
	Motorola	**LM308A**	**(2919, 2958)**
	National	LM308A	
	PMI	PM308A	
LM311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM317	Fairchild	μA317	
	IPS	**IP317**	**(2854)**
	MCE	MCELM317	
	Motorola	**LM317**	**(2929)**
	National	LM317	
	SGS	LM317	
	SiliconG	SG317	
	TI	LM317	
	Thomson	LM317	
		TDB0117	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM317			(Cont'd)
	Unitrode	**UC317**	**(3325)**
LM318	AD	AD518	
	National	LM318	
	NEC	μPC318	
	TI	LM318	
	Thomson	LM318	
LM323	Fairchild	SH0323	
		SH323	
		μA323	
		μA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LT323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
LM329	National	LM329	
LM334	National	LM334	
LM336	National	LM336	
LM336-2	Ferranti	REF25	
	LinearTech	LM385-2	
	Motorola	LM385-2	
	National	LM336-2	
		LM385-2	
LM337	**IPS**	**IP337**	**(2854)**
	LinearTech	LT337	
	MCE	MCELM337	
	Motorola	**LM337**	**(2929)**
	National	LM337	
	SiliconG	SG337	
		SG337A	
	TI	LM337	
	Thomson	LM337	
	Unitrode	**UC337**	**(3325)**
LM338	Fairchild	μA338	
	IPS	**IP338**	**(2854)**
	LinearTech	LT338	
	Micropac	MLM338	
	National	LM338	
	SiliconG	SG338	
LM350	Fairchild	μA350	
		μA78HGA	
	IPS	**IP350**	**(2854)**
	LinearTech	LT350	
	Motorola	**LM350**	**(2929)**
	National	LM350	
	SiliconG	SG350	
	TI	LM350	
	Unitrode	**UC350**	**(3325)**
LM385	Maxim	ICL8069	
	MicroPwr	MP5010	
	Motorola	**LM385**	**(2958)**
	National	LM385	
LM385-1	Fairchild	54AC00	
	Ferranti	REF12	
	GE/RCA	CD54AC00	
	National	LM385-1	
LM385-2	Ferranti	REF25	
	LinearTech	LM336-2	
	Motorola	LM385-2	
	National	LM336-2	
		LM385-2	
LM399	National	LM399	
LM399A	National	LM399A	
LT1001	AD	AD517	
		OP07	
	Fairchild	μA714	
	Harris	**HA5130**	**(2737, 2747)**
		HA5135	**(2706)**
	LinearTech	OP07	
	Maxim	MAX400	
		OP07	
	Micra	MC0021	
	MicroPwr	MPOP07	
	Raytheon	**OP07**	**(2979)**
	TI	OP07D	
LT1002	MicroPwr	MPOP10	
	PMI	**OP10**	**(2972)**
LT1004	AD	AD589	
	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM185-1	
		LM385-1	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM113	
		LM313	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LT1004			(Cont'd)
	TeledyneP	TSC9491	
	TeledyneS	9491	
		TSC9491	
LT1007	AD	AD510	
		AD517	
	Burr-Brown	OP27	
		OPA27	**(2532)**
	Harris	**HA5127**	**(2737, 2747, 2768)**
		HAOP27	
	LinearTech	OP27	
	Maxim	OP27	
	PMI	OP27	
		OP27	**(2970)**
	Raytheon	**RC714**	**(2979)**
	TI	LT1007	
LT1008	AD	AD517	
	MicroPwr	MPOP08	
	PMI	**OP08**	**(2970)**
LT1009	AD	AD1403	
	Motorola	**MC1403**	**(2958)**
	SiliconG	SG3503	
	TI	LT1009	
LT1010	Elantec	EL2002	
		EL2003	**(2591, 2595)**
		ELH0002	**(2592)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	Hytek	HY0002	
	Micra	MC0002	
		MC0021	
	National	LH0002	
	OEI	9910	
	TeledyneC	LH0002	
LT1011	TI	LTC1011	
LT1012	MicroPwr	MPOP12	
	PMI	**OP12**	**(2970)**
	TI	OP12	
LT1013	**GE/RCA**	**CA158A**	**(2645)**
	Motorola	**LM158**	**(2922)**
	National	LM158A	
	Raytheon	RM4139	
	Signetics	LM158	
	TI	LM158	
LT1014	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
		RM4158	
	TI	LM148	
LT1019-10	AD	AD581	
		ADREF01	
	Gennum	REF01	
	LinearTech	LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
LT1019-5	AD	ADREF02	
	Gennum	REF02	
	LinearTech	LTREF02	
		REF02E	
	Maxim	REF02	
	MicroPwr	MP5532	
		MPREF02	
	PMI	**REF02**	**(2975)**
		REF02EZ	**(2975)**
	Raytheon	REF02	
	TeledyneS	TSC9496	
LT1021	**Burr-Brown**	**REF10**	**(2540)**
	PMI	**REF10**	**(2975)**

Manufacturer Device	Replacement Source	Device	IC Master Page
LT1022	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
		LF411	
	Thomson	LF155	
LT1033	National	LM133	
		LM333	
LT1037	**Burr-Brown**	**OPA37**	**(2532)**
	Harris	**HA5137**	**(2737, 2747, 2768)**
		HAOP37	
		MA5147	
	LinearTech	OP37	
	Maxim	OP37	
	PMI	OP37	
		OP37	**(2970)**
	TI	LT1037	
LT1055	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1056	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
		LF411	
	Thomson	LF155	
LT1056	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1055	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
		LF411	
	Thomson	LF155	
LT1060	**Exar**	**XR1010**	**(2602)**
	Harris	HA10	
	Maxim	MF10	
	MicroLinear	ML2110	
LT1070	TI	LT1070	
LT117A	**Motorola**	**LM117A**	**(2929)**
	National	LM117A	
	SiliconG	SG117A	
LT119	LinearTech	LM119	
	National	LM119	
	PMI	**PM119**	**(2975)**
	Signetics	LM119	
LT123	Fairchild	SH123	
		UA138	
		μA123	
	IPS	**IP123**	**(2854)**
	LinearTech	LM123	
	Motorola	**LM123**	**(2927)**
		MC78T05	**(2926)**
	National	LM123	
	SiliconG	SG123	
		SG123A	
LT137	**IPS**	**IP137**	**(2854)**
	LinearTech	LM137	
	MCE	MCELM137	
	Motorola	**LM137**	**(2929)**
	National	LM137	
	SiliconG	SG137	
		SG137A	
	Thomson	LM137	
	Unitrode	**UC137**	**(3325)**
LT138	Ferranti	ZN454	
	SiliconG	SG138	
	SiliconSys	SSI6280	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Linear Technology Corp. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LT150	**IPS**	**IP150**	**(2854)**
	LinearTech	LM150	
	Motorola	**LM150**	**(2929)**
	National	LM150	
	SiliconG	SG150	
	Unitrode	**UC150**	**(3325)**
LT1524	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	μA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	SG1524	
	National	LM1524	
	SGS	SG1524	
		UC1524A	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524**	**(3323)**
		UC1524A	**(3323)**
LT1525	Cherry	CS1525	
	LinearTech	SG1525	
	SiliconG	SG1525	
	TI	TL1525	
LT1525A	Cherry	CS1525A	
	Exar	**XR1525A**	**(2607)**
	IPS	**IP1525A**	**(2854)**
	Motorola	**SG1525A**	**(2931)**
	SGS	SG1524A	
	SiliconG	SG1525A	
	Siliconix	PWM125	
	Unitrode	**UC1525**	**(3323)**
		UC1525A	**(3323)**
LT1526	Cherry	CH1526	
	IPS	**IP1526**	**(2854, 2856)**
	Motorola	**SG1526**	**(2931)**
		SG3526	**(2931)**
	SiliconG	SG1526	
		SG3525	
		SG3526	
	Unitrode	**UC1526**	**(3323)**
LT1527	Cherry	CS1527	
	LinearTech	SG1527	
	SiliconG	1526	
		SG1527	
	TI	TL1527	
	Unitrode	**UC1527**	**(3323)**
LT1527A	Cherry	CS1527A	
	IPS	**IP1527A**	**(2854)**
	Motorola	**SG1527A**	**(2931)**
	SGS	SG1527A	
	SiliconG	SG1527A	
	Siliconix	PWM27	
	Unitrode	**UC1527A**	**(3323)**
LT1842	Cherry	CS1842	
	IPS	**IP1842**	**(2854, 2856)**
	SiliconG	SG1842	
	Unitrode	**UC1842**	**(3323)**
LT1843	Cherry	CS1843	
	IPS	**IP1843**	**(2854)**
	SiliconG	SG1843	
	Unitrode	**UC1843**	**(3323)**
LT2524	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	μA2524	
	IPS	IP2524	
	LinearTech	SG2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
LT2525A	Cherry	CS2525A	
	Exar	**XR2525A**	**(2607)**
	IPS	IP2525A	
	Motorola	**SG2525A**	**(2931)**
	SiliconG	SG2525A	
	Siliconix	PWM25B	
	TI	SG2525A	
	Unitrode	**UC2525A**	**(3323)**
LT2526	Cherry	CS2526	
	IPS	**IP2526**	**(2856)**
	Motorola	**SG2526**	**(2931)**
	SiliconG	SG2526	
		SG2527	
	Unitrode	**UC2526**	**(3323)**
LT2527A	Cherry	CS2527A	
	Exar	**XR2527A**	**(2607)**
	IPS	IP2527A	
	Motorola	**SG2527A**	**(2931)**
	SiliconG	SG2527A	
	TI	SG2527A	
	Unitrode	**UC2527A**	**(3323)**
LT323	Fairchild	SH0323	
		SH323	
		μA323	
		μA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
LT337	**IPS**	**IP337**	**(2854)**
	LinearTech	LM337	
	MCE	MCELM337	
	Motorola	**LM337**	**(2929)**
	National	LM337	
	SiliconG	SG337	
		SG337A	
	TI	LM337	
	Thomson	LM337	
	Unitrode	**UC337**	**(3325)**
LT338	Fairchild	μA338	
	IPS	**IP338**	**(2854)**
	LinearTech	LM338	
	Micropac	MLM338	
	National	LM338	
	SiliconG	SG338	
LT350	Fairchild	μA350	
		μA78HGA	
	IPS	**IP350**	**(2854)**
	LinearTech	LM350	
	Motorola	**LM350**	**(2929)**
	National	LM350	
	SiliconG	SG350	
	TI	LM350	
	Unitrode	**UC350**	**(3325)**
LT3524	Cherry	CS3524	
	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	National	LM3524	
	SGS	SG3524	
		UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
	TI	SG3524	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
LT3525	LinearTech	SG3525	
	SiliconG	SG3525	
	Unitrode	**UC3525**	**(3323)**
LT3525A	Cherry	CS3525A	
	Exar	**XR3525A**	**(2607)**
	IPS	**IP3525A**	**(2854)**
	Motorola	**SG3525A**	**(2931)**
	RIFA	RL3525A	
	SGS	SG3525A	
	SiliconG	SG3525A	
	Siliconix	PWM25	
	TI	SG3525A	
	Unitrode	**UC3525A**	**(3323)**
LT3526	**IPS**	**IP3526**	**(2854, 2856)**
	SiliconG	SG3526	
	Unitrode	**UC3526**	**(3323)**
		UC3626	
LT3527	LinearTech	SG3527	
	SiliconG	SG3527	
		SG3527A	
	TI	SG3527	
	Unitrode	**UC3527A**	**(3323)**
LT3527A	Cherry	CS3527	
		CS3527A	
	Exar	**XR3527A**	**(2607)**
	IPS	**IP3527**	**(2854)**
	Motorola	**SG3527A**	**(2931)**
	SGS	SG3527A	
	SiliconG	SG3527A	
	TI	SG3527A	
LTC1044	**Datel**	**VI7660**	**(2577)**
	Maxim	ICL7660	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LTC1044			(Cont'd)
	Siliconix	SI7660	
	TI	LTC1044	
LTC1052	Maxim	ICL7652	
	Siliconix	SI7652	
LTC1060	Maxim	MF10	
LTC7652	**Datel**	**AM7650**	**(2577)**
	LinearTech	LTC1052	
	Maxim	ICL7650	
		ICL7652	
	Siliconix	SI7135	
LTREF01	AD	AD581	
		ADREF01	
	Gennum	REF01	
	LinearTech	LT1019-10	
		REF01A	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
LTREF02	AD	ADREF02	
	Gennum	REF02	
	LinearTech	LT1019-5	
		REF02E	
	Maxim	REF02	
	MicroPwr	MP5532	
		MPREF02	
	PMI	**REF02**	**(2975)**
		REF02EZ	**(2975)**
	Raytheon	REF02	
	TeledyneS	TSC9496	
OP05	AD	AD510	
	MicroPwr	MPOP05	
	PMI	**OP05**	**(2970)**
OP07	Fairchild	μA714	
OP15	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1055	
		LT1056	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
		LF411	
	Thomson	LF155	
OP16	**Burr-Brown**	**OPA156A**	**(2532)**
	LinearTech	LF156	
	MicroPwr	MPOP16	
	National	LF156	
	PMI	**OP16**	**(2971)**
	Thomson	LF156	
OP227	MicroPwr	MPOP227	
	PMI	**OP227**	**(2970, 2972)**
OP27	AD	AD510	
		AD517	
	Burr-Brown	OP27	
		OPA27	**(2532)**
	Harris	**HA5127**	**(2737, 2747, 2768)**
		HAOP27	
	LinearTech	LT1007	
	Maxim	OP27	
	PMI	0P27	
		OP27	**(2970)**
	Raytheon	**RC714**	**(2979)**
	TI	LT1007	
OP37	**Burr-Brown**	**OPA37**	**(2532)**
	Harris	**HA5137**	**(2737, 2747, 2768)**
		HAOP37	
		MA5147	
	LinearTech	LT1037	
	Maxim	OP37	
	PMI	0P37	
		OP37	**(2970)**
	TI	LT1037	
REF01A	AD	AD581	
		ADREF01	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
REF01A			(Cont'd)
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
REF01E	Motorola	MC1400AU10	
	PMI	**REF01EZ**	**(2975)**
REF02A	**PMI**	**REF02AZ**	**(2975)**
REF02E	AD	ADREF02	
	Gennum	REF02	
	LinearTech	LT1019-5	
		LTREF02	
	Maxim	REF02	
	MicroPwr	MP5532	
		MPREF02	
	PMI	**REF02**	**(2975)**
		REF02EZ	**(2975)**
	Raytheon	REF02	
	TeledyneS	TSC9496	
SG1524	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	μA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
	National	LM1524	
	SGS	SG1524	
		UC1524A	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524**	**(3323)**
		UC1524A	**(3323)**
SG1525	Cherry	CS1525	
	LinearTech	LT1525	
	SiliconG	SG1525	
	TI	TL1525	
SG1527	Cherry	CS1527	
	LinearTech	LT1527	
	SiliconG	1526	
		SG1527	
	TI	TL1527	
	Unitrode	**UC1527**	**(3323)**
SG2524	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	μA2524	
	IPS	IP2524	
	LinearTech	LT2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
SG3524	Fairchild	μA3524	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
		SG3525A	
	TI	SG3525	
	Unitrode	**UC3524**	**(3323)**
		UC3524A	**(3323)**
SG3525	LinearTech	LT3525	
	SiliconG	SG3525	
	Unitrode	**UC3525**	**(3323)**
SG3527	LinearTech	LT3527	
	SiliconG	SG3527	
		SG3527A	
	TI	SG3527	
	Unitrode	**UC3527A**	**(3323)**
UC1846	National	DM54ALS468	
		DM54AS1034	
	SiliconG	SG1846	
	TI	SN54AS1034A	
	Unitrode	**UC1846**	**(3323)**
UC1847	National	DM54ALS521	
		DM54AS04	
	SiliconG	SG1847	
	TI	SN54ALS688	
		SN54AS04	
	Unitrode	**UC1847**	**(3323)**

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Linear Technology Corp. (Cont'd)			
UC3846	RIFA	RL3846	
	SiliconG	SG3846	
	Unitrode	**UC3846**	**(3323)**
UC3847	SiliconG	SG3847	
	Unitrode	**UC3847**	**(3323)**
LMS Electronics			
GR281	LMS	NVR2	
	Thomson	**MK48Z02**	**(3261)**
NVR2	LMS	GR281	
	Thomson	**MK48Z02**	**(3261)**
Logic Devices Inc.			
L10C23	TRW-LSI	TDC1023	
L29C520	**Waferscale**	**WS59520**	**(3376)**
L29C521	AMD	AM29521	
	Waferscale	**WS59521**	**(3376)**
L429C01	AMD	AM2901	
	Cypress	CY2901	
	IDT	**IDT39C01**	**(2801)**
	Waferscale	**WS5901**	**(3376)**
L5380	**Calmos**	**CA53C80**	**(2553)**
	NCR	NMOS5380	
LMA1009	AMD	AM29C509	
	AD	ADSP1009	
	IDT	**IDT7209**	**(2806)**
	TRW-LSI	TDC1009	
		TMC2009	
LMA1010	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
LMA1043	**IDT**	**IDT7243**	**(2806)**
	TRW-LSI	TDC1043	
LMA2010	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
LMU08	AMD	AM25S557	
	AD	ADSP1080	
	IMI	H91102	
	TRW-LSI	MPY08HU	
		TMC28KU	
LMU13	**IDT**	**IDT7213**	**(2806)**
LMU16	AMD	AM29516	
		AM29C516	
	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LMU16			(Cont'd)
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TI	SN741616	
	TRW-LSI	MPY016H	
		MPY016K	
		TMC216H	
		TMC216K	
	Weitek	WTL1016	
		WTL1516	
		WTL2516	
LMU17	AMD	AM29517	
	Cypress	**CY7C517**	**(2569)**
	IDT	**IDT7217**	**(2806, 2832)**
	LogicDev	LMU217	
	LSI Logic	**L64017**	**(2868)**
	Weitek	WTL2517	
LMU18	MMI	74S556	
		SN74S557	
LMU216	**IDT**	**IDT7216**	**(2806, 2832)**
	LSI Logic	L64015	
	MMI	67C7016	
	TRW-LSI	TMC216H	
		TMC216K	
LMU217	AMD	AM29517	
	Cypress	**CY7C517**	**(2569)**
	IDT	**IDT7217**	**(2806, 2832)**
	LogicDev	LMU17	
	LSI Logic	**L64017**	**(2868)**
	Weitek	WTL2517	
LMU557	AMD	AM25S557	
	MMI	SN54557	
		SN74S557	
LMU558	AMD	AM25S557	
		AM25S558	
	MMI	74S558	
		SN54558	
		SN74S558	
LMU8U	AD	ADSP1081	
LSI Computer Systems			
LS7231	Siemens	S576A	
LS7232	**PMI**	**OP07**	**(2970)**
	Siemens	S576B	
LS7233	Siemens	S576C	
LS7234	Siemens	S576D	
LSI Logic			
L64010	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64012**	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
L64012	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
	Matra-Harris	MS2010	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
L64012			(Cont'd)
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
L64015	AD	ADSP1016	
	IDT	**IDT7216**	**(2806, 2832)**
	LogicDev	LMU16	
	Weitek	WTL1516	
L64017	AMD	AM29517	
		AM29C517	
	Cypress	**CY7C517**	**(2569)**
	IDT	**IDT7217**	**(2806, 2832)**
	LogicDev	LMU17	
	Weitek	WTL1517	
		WTL2517	
		WTL9517	
♦ LC10000	CalDevices	HC10000	
♦ LC12600	CalDevices	HC12600	
♦ LC3100	CalDevices	HC3100	
♦ LC4100	CalDevices	HC4100	
♦ LC5400	CalDevices	HC5400	
♦ LC7700	CalDevices	HC7700	
LL5080	**GE/RCA**	**PA50800**	**(2659)**
	Toshiba	TC15G008	
LL5140	**GE/RCA**	**PA51400**	**(2659)**
	Toshiba	TC15G014	
LL5220	**GE/RCA**	**PA52200**	**(2659)**
	Toshiba	TC15G022	
LL5320	**GE/RCA**	**PA53200**	**(2659)**
	Toshiba	TC15G032	
LL5420	**GE/RCA**	**PA54200**	**(2659)**
	Toshiba	TC15G042	
LL5600	**GE/RCA**	**PA56000**	**(2659)**
	Toshiba	TC15G060	
LL7050	Raytheon	RL7050	
	Toshiba	TC17G005	
LL7080	Raytheon	RL7080	
	Toshiba	TC17G008	
LL71000	**Raytheon**	**RL71000**	**(4297)**
	Toshiba	TC17G100	
LL7140	**Raytheon**	**RL7140**	**(4297)**
	Toshiba	TC17G014	
LL7220	**Raytheon**	**RL7220**	**(4297)**
	Toshiba	TC17G022	
LL7320	**Raytheon**	**RL7320**	**(4297)**
	Toshiba	TC17G032	
LL7420	**Raytheon**	**RL7420**	**(4297)**
	Toshiba	TC17G042	
LL7600	**Raytheon**	**RL7600**	**(4297)**
	Toshiba	TC17G060	
Marconi Electronic Devices Inc.			
MA5413	Stantel-STC	TEL5413	
MA5433	Burr-Brown	3293	
	Stantel-STC	TEL5453	
Matra-Harris Semiconductors			
29C48	Intel	29C48	
29C53	Intel	29C53	
8031	Intel	8031	
	Matra-Harris	8051	
8032	Intel	8032	
		8052	
	Matra-Harris	8052	
8051	Intel	8031	
	Matra-Harris	8031	
8052	Intel	8032	
		8052	
	Matra-Harris	8032	
8086	Intel	8086	
8088	AMD	8088	
	Fujitsu	MBL8088	
	Intel	8088	
82716	Intel	82716	
	Matra-Harris	HC3052	
	National	TP3052	
HC3052	Intel	82716	
	Matra-Harris	82716	
	National	TP3052	
HC3053	National	TP3053	

Manufacturer Device	Replacement Source	Device	IC Master Page
HC3054	AD	DAC14	
	Intech	CYDAC14	
HC3057	Fairchild	μA3057	
	National	TP3057	
	Sierra	SC11302	
	Thomson	ETC5057	
HM2064	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
HM56162	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Matra-Harris Semiconductors (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM56162	Mitsubishi		(Cont'd)
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
HM6116	NEC	μUPD4016	
HM6166	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM6166			(Cont'd)
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
HM62641	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
HM6504	AMD	AM2141	
		AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
	Intel	5104	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	

Manufacturer Device	Replacement Source	Device	IC Master Page
HM6514	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
HM65161	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	

Manufacturer Device	Replacement Source	Device	IC Master Page
HM65162	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
HM65163	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Matra-Harris Semiconductors (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM65163	Matra-Harris		(Cont'd)
		HM65162	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
HM65262	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
HM65263	AMD	AM2167	
	Fujitsu	MB8167A	
	Hitachi	HM6167	
	IDT	**IDT6167**	**(2802)**
	TI	SMJ61CD16	
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
HM6561	**Harris**	**HM6561**	**(2704, 2763)**
HM6564	**Harris**	**HM6564**	**(2705, 2765)**
HM65641	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM65641	Fujitsu		(Cont'd)
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
HM65681	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
HM65682	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HM65682			(Cont'd)
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
HM65768	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
HMI65769	AMD	AM2168	
		AM9968	
		AM99CL68	
	Fairchild	F1620	
	Fujitsu	MB8168	
		MB81C69	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HM6168	
		HM6268	
	Inmos	IMS1420	
		IMS1421	
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Matra-Harris	HM65682	
	Motorola	MCM1423	
		MCM6168	
		MCM6288	
	NEC	μPD4314	
	S-MOS	SRM2274	
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
	Thomson	**MK41H68**	**(3265)**
	Toshiba	TMM2068	
	Vitelic	V61C62	
		V61C68	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C69	**(3349)**
HN65262	Harris	HN65262	
HN65641	IDT	IDT164	

Manufacturer Device	Replacement Source	Device	IC Master Page
HN65728	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
HN65747	AMD	AM2147	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM6147H	
	Intel	2147H	
	National	NMC2147H	
HN65748	AMD	AM21L48	
	Cypress	CY21L48	
		CY7C148	**(2562, 2564)**
MS2010	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Matra-Harris Semiconductors (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MS2010			(Cont'd)
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
MS2516	AMD	AM29516	
		AM29C516	
	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LogicDev	LMU16	
	LSI Logic	L64015	
	TI	SN741616	
	TRW-LSI	MPY016H	
		MPY016K	
		TMC216H	
		TMC216K	
	Weitek	WTL1016	
		WTL1516	
		WTL2516	
P80C51	Fujitsu	MBL80C51	
	Intel	80C51	
		P80C51	
	OKI	M80C51	
	Siemens	SAB80C51	
	Signetics	SC80C51	

Maxim Integrated Products

Manufacturer Device	Replacement Source	Device	IC Master Page
AD2700	AD	AD2700	
	HybridSys	R675-4	
	HyComp	HC2700	
		HC2710	
AD2701	AD	AD2701	
	HybridSys	R675-5	
	HyComp	HC2701	
		HC2710	
AD2710	AD	AD2710	
	HyComp	HC201	
		HC2711	
AD3554	AMD	29520/1	
		29520/1A	
	AD	AD3445	
	Hitachi	HA1393	
	MMI	29C520/1	
	Sprague	ULN3793	
AD536	AD	AD536	
	Burr-Brown	**4341**	**(2540)**
AD566	National	DAC1266	
AD566A	AD	AD566A	
AD578	AD	AD578	
AD580	AD	AD580	
	Hitachi	HA17012	
	SiliconG	SG1503	
AD581	AD	AD581	
		ADREF01	
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
AD584	AD	AD584	
AD636	AD	AD636	
	Fujitsu	MBL8031	
	Intel	AMD8031	
	Siemens	SAB8031	
	Signetics	SCN8031	
AD650	AD	AD650	

Manufacturer Device	Replacement Source	Device	IC Master Page
AD7224	AD	AD7224	
	PMI	**PM7224**	**(2973, 2976)**
AD7225	AD	AD7225	
	PMI	**DAC8408**	**(2973, 2976)**
AD7520	AD	AD7520	
	Datel	**DACHA10B**	**(2576)**
	GE/Intersil	**AD7520**	**(2668)**
	MicroPwr	MP7520	
	National	AD7520	
		DAC1020	
		DAC1021	
		DAC1022	
AD7521	AD	AD7521	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	**DACHA12B**	**(2576)**
	GE/Intersil	**AD7521**	**(2668)**
	HybridSys	DAC331-12	
	MicroPwr	MP7521	
	National	AD7521	
		DAC1220	
		DAC1221	
		DAC1222	
	PMI	AD7521	
AD7523	AD	AD7523	
	Datel	**DAC7523**	**(2576)**
	GE/Intersil	**AD7523**	**(2668)**
	MicroPwr	MP7523	
AD7524	AD	AD7524	
	GE/Intersil	AD7524	
	MicroPwr	MP7524	
	PMI	**PM7524**	**(2973, 2976)**
AD7528	AD	AD7528	
	Ferranti	ZN7528	
	MicroPwr	MP7528	
	PMI	**PM7528**	**(2973, 2976)**
AD7530	AD	AD7530	
	GE/Intersil	**AD7530**	**(2668)**
	MicroPwr	MP7530	
AD7531	AD	AD7531	
		AD8531	
	Burr-Brown	**DAC7541A**	**(2541)**
	GE/Intersil	AS7531	
	MicroPwr	MP7531	
	PMI	PM7531	
AD7533	AD	AD7533	
	Datel	**DAC7533**	**(2576)**
	GE/Intersil	**AD7533**	**(2668)**
	MicroPwr	MP7533	
		MP7633	
	National	AD7533	
	PMI	**PM7533**	**(2974, 2976)**
AD7537	AD	AD7537	
AD7541	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
AD7542	AD	AD7542	
	MicroPwr	MP7542	
	PMI	**PM7542**	**(2974, 2976)**
AD7543	AD	AD7543	
	MicroPwr	MP7543	
	PMI	**PM7543**	**(2974, 2976)**
AD7545	AD	AD7545	
	Burr-Brown	**DAC7545**	**(2541)**
	MicroPwr	MP7545	
	PMI	**PM7545**	**(2974, 2976)**
AD7547	AD	AD7547	
AD7548	AD	AD7548	
	PMI	**PM7548**	**(2974, 2976)**
AD7572	**AD**	**AD7572**	**(2413)**

Manufacturer Device	Replacement Source	Device	IC Master Page
AD7574	AD	AD7574	
	Maxim	MAX160	
	MicroPwr	MP7574	
AD7575	AD	AD7575	
	Siemens	SDA3203	
	Toshiba	TD6316	
AD7576	**AD**	**AD7576**	**(2414)**
	Plessey	SP4632	
		SP4653	
	SEEQ	**8023**	**(2991)**
	Siemens	S062P	
		SDA2211	
		SDA4212	
	Telefunken	µ684	
		µ686BS	
AD7581	AD	AD7581	
	Maxim	MAX161	
	MicroPwr	MP7581	
AD7628	AD	AD7628	
	Motorola	MC12020	
	Siemens	SO41P	
	Signetics	**NE604**	**(3103)**
		SA604	
	Sprague	ULN3820	
AD7820	AD	AD7820	
	Maxim	MAX150	
	National	DS7820	
	TI	SN55182	
AD7824	AD	AD7824	
	Maxim	MAX154	
AD7828	AD	AD7828	
	Maxim	MAX158	
ADC0820	MicroPwr	MP0820	
	National	ADC0820	
	Signetics	ADC0820	
BB3553	Burr-Brown	BB3553	
BB3554	Burr-Brown	BB3554	
DG201A	AD	ADG201	
	GE/Intersil	**DG201**	**(2679)**
		DG201A	**(2679)**
		IH201	
		IH5201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	MAX331	
	MicroPwr	MP201	
	National	LF11201	
		LF13201	
	PMI	**SW201**	**(2975)**
	Siliconix	DG201A	
DG202	Maxim	MAX332	
	National	LF13202	
	PMI	**SW02**	**(2975)**
		SW202	**(2975)**
	Siliconix	DG202	
DG212	GE/Intersil	DG212	
DG300A	**Harris**	**HI300**	**(2707)**
	Siliconix	DG300A	
DG301A	**Harris**	**HI301**	**(2707)**
	Siliconix	DG301A	
DG302A	**Harris**	**HI302**	**(2707)**
	MicroPwr	MP302	
	Siliconix	DG302A	
DG303A	**Harris**	**HI303**	**(2707)**
	MicroPwr	MP303	
	Siliconix	DG303A	
DG304A	**Harris**	**HI304**	**(2707)**
	Siliconix	DG304A	
DG306A	**Harris**	**HI306**	**(2707)**
	Siliconix	DG306A	
DG307A	**Harris**	**HI307**	**(2707)**
	Siliconix	DG307A	
♦ DG308A	Harris	HI308	
DG381A	**GE/Intersil**	**DG181**	**(2680)**
		IH5048	**(2679)**
	Harris	**HI381**	**(2707)**
		HI5048	**(2707, 2737)**
	Maxim	IH5048	
	Siliconix	DG181	
		DG381A	
DG384A	**GE/Intersil**	**DG184**	**(2680)**
		IH5049	**(2680)**
	Harris	**HI384**	**(2707)**
		HI5049	**(2707, 2737, 2747)**
	Maxim	IH5049	
	Siliconix	DG184	
		DG384A	
DG387A	**GE/Intersil**	**DG187**	**(2680)**
		IH5050	**(2680)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DG387A			(Cont'd)
	Harris	**HI387**	**(2707)**
		HI5050	**(2707, 2737, 2747)**
	Maxim	IH5050	
	Siliconix	DG187	
		DG387A	
DG390A	**Harris**	**HI390**	**(2707)**
	Siliconix	DG390A	
DG508A	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
DG509A	GE/Intersil	ICL6109	
		IH6208	**(2681)**
	Harris	**HI509**	**(2703, 2738, 2748)**
	Maxim	MAX359	
		MAX369	
	MicroPwr	MP7509DI	
	National	LF11509	
		LF13509	
	PMI	**MUX24**	**(2975)**
	Siliconix	DG509A	
	TeledyneP	4553	
HI508A	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	**MX808**	**(2577)**
	GE/Intersil	**IH5108**	**(2681)**
	Harris	**HI508A**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX358	
	MicroPwr	MP7508DI	
HI509A	**Burr-Brown**	**MPC4D**	**(2543)**
	GE/Intersil	**IH5208**	**(2681)**
	Harris	**HI509A**	**(2703, 2738, 2748)**
	Maxim	MAX359	
	TeledyneP	4553	
ICL7106	**GE/Intersil**	**ICL7106**	**(2666)**
	TeledyneS	TSC7106	
ICL7107	**GE/Intersil**	**ICL7107**	**(2666)**
	TeledyneS	TSC7107	
ICL7109	**Datel**	**ADC7109**	**(2575)**
	GE/Intersil	**ICL7109**	**(2667)**
	TeledyneS	TSC7109	
ICL7116	**GE/Intersil**	**ICL7116**	**(2666)**
	TeledyneS	TSC7116	
ICL7117	**GE/Intersil**	**ICL7117**	**(2666)**
	Maxim	ICL7126	
	TeledyneS	TSC7117	
ICL7126	**GE/Intersil**	**ICL7117**	**(2666)**
	Maxim	ICL7117	
	TeledyneS	TSC7117	
ICL7129	**GE/Intersil**	**ICL7129**	**(2666)**
ICL7135	**GE/Intersil**	**ICL7135**	**(2667)**
	Siliconix	SI7135	
	TeledyneS	TSC7135	
ICL7136	**GE/Intersil**	**ICL7136**	**(2666)**
ICL7137	**GE/Intersil**	**ICL7137**	**(2666)**
ICL7555	Exar	XRL555	
	GE/Intersil	ICL7555	
ICL7556	Exar	XRL556	
	GE/Intersil	ICL7556	
ICL7611	**GE/Intersil**	**ICL7611**	**(2673)**
ICL7612	**GE/Intersil**	**ICL7612**	**(2673)**
ICL7614	GE/Intersil	ICL7614	
ICL7616	GE/Intersil	ICL7616	
ICL7621	**GE/Intersil**	**ICL7621**	**(2673)**
	PMI	**OP220**	**(2970, 2972)**
		OP221	**(2970, 2972)**
	TI	TLC252	
		TLC272	
ICL7622	GE/Intersil	ICL7622	
ICL7631	**GE/Intersil**	**ICL7631**	**(2673)**
ICL7632	GE/Intersil	ICL7632	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Maxim Integrated Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
ICL7641	**GE/Intersil**	**ICL7641**	**(2673)**
	TI	TLC254	
		TLC274	
ICL7642	**GE/Intersil**	**ICL7642**	**(2673)**
ICL7650	**Datel**	**AM7650**	**(2577)**
	LinearTech	LTC1052	
		LTC7652	
	Maxim	ICL7652	
	Siliconix	SI7135	
ICL7652	**Datel**	**AM7650**	**(2577)**
	LinearTech	LTC1052	
		LTC7652	
	Maxim	ICL7650	
	Siliconix	SI7135	
ICL7660	**Datel**	**VI7660**	**(2577)**
	LinearTech	LTC1044	
	Siliconix	SI7660	
	TI	LTC1044	
ICL8069	AD	AD589	
	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM185-1	
		LM385-1	
	LinearTech	LT1004	
	MicroPwr	MP5010	
	National	LM113	
		LM313	
	TeledyneP	TSC9491	
	TeledyneS	9491	
		TSC9491	
ICM7211	**GE/Intersil**	**ICM7211**	**(2671)**
	GE/RCA	CD22104	
	Hughes	H7211	
	TeledyneS	TSC7211	
ICM7212	**GE/Intersil**	**ICM7212**	**(2671)**
	TeledyneS	TSC7212	
ICM7217	**GE/Intersil**	**ICM7217**	**(2669)**
ICM7218	Datel	DD7218	
ICM7224	**GE/Intersil**	**ICM7224**	**(2669)**
ICM7225	**GE/Intersil**	**ICM7225**	**(2669)**
ICM7231	**GE/Intersil**	**ICM7231**	**(2671)**
ICM7232	**GE/Intersil**	**ICM7232**	**(2671)**
ICM7233	**GE/Intersil**	**ICM7233**	**(2671)**
	Micrel	MIC7233	
ICM7234	GE/Intersil	ICM7234	
ICM7240	Exar	XR2240	
	GE/Intersil	**ICM7240**	**(2670)**
ICM7242	Exar	XR2242	
ICM7250	**GE/Intersil**	**ICM7250**	**(2670)**
ICM7260	GE/Intersil	ICM7260	
ICM7555	AdvLinear	ALD1502	
		ALD1504	
		ALD555	
		ALD555-1	
	GE/Intersil	**ICM7555**	**(2670)**
		ICM7555M	**(2670)**
	NEC	μPD555	
	TI	TLC555	
ICM7556	AdvLinear	ALD2502	
		ALD2504	
	GE/Intersil	**ICM7556**	**(2670)**
		ICM7556M	**(2670)**
	NEC	μPD556	
	TI	TLC552C	
		TLC552M	
		TLC556C	
		TLC556M	
IH5040	**GE/Intersil**	**IH5040**	**(2679)**
	Harris	**HI5040**	**(2707, 2737)**
	Siliconix	DG5040	
IH5041	**GE/Intersil**	**IH5041**	**(2680)**
	Harris	**HI5041**	**(2707, 2737)**
	Siliconix	DG5041	
IH5042	**GE/Intersil**	**DG188**	**(2680)**
		IH5042	**(2680)**
	Harris	**HI5042**	**(2707, 2737)**
	Siliconix	DG188	
		DG5042	
IH5043	**GE/Intersil**	**DG191**	**(2680)**
		IH5043	**(2680)**
	Harris	**HI5043**	**(2707, 2737, 2747)**
	Siliconix	DG191	
		DG243	
		DG5043	
IH5044	**GE/Intersil**	**IH5044**	**(2680)**
	Harris	**HI5044**	**(2707, 2737, 2747)**
	Siliconix	DG5044	
IH5045	**GE/Intersil**	**DG185**	**(2680)**
		IH5045	**(2680)**
	Harris	**HI5045**	**(2707, 2737, 2747)**
	Siliconix	DG185	
		DG5045	
	TI	TL185	
IH5046	**GE/Intersil**	**IH5046**	**(2680)**
	Harris	**HI5046**	**(2707, 2737, 2747)**
♦ IH5047	**GE/Intersil**	**IH5047**	**(2680)**
	Harris	**HI5047**	**(2707, 2737, 2747)**
IH5048	**GE/Intersil**	**DG181**	**(2680)**
		IH5048	**(2679)**
	Harris	**HI381**	**(2707)**
		HI5048	**(2707, 2737)**
	Maxim	DG381A	
	Siliconix	DG181	
		DG381A	
IH5049	**GE/Intersil**	**DG184**	**(2680)**
		IH5049	**(2680)**
	Harris	**HI384**	**(2707)**
		HI5049	**(2707, 2737, 2747)**
	Maxim	DG384A	
	Siliconix	DG184	
		DG384A	
IH5050	**GE/Intersil**	**DG187**	**(2680)**
		IH5050	**(2680)**
	Harris	**HI387**	**(2707)**
		HI5050	**(2707, 2737, 2747)**
	Maxim	DG387A	
	Siliconix	DG187	
		DG387A	
IH5051	**GE/Intersil**	**DG190**	**(2680)**
		IH5051	**(2680)**
	Harris	**HI5051**	**(2707, 2737, 2747)**
	Maxim	IH5052	
	Siliconix	DG190	
IH5052	**GE/Intersil**	**DG190**	**(2680)**
		IH5051	**(2680)**
	Harris	**HI5051**	**(2707, 2737, 2747)**
	Maxim	IH5051	
	Siliconix	DG190	
IH5140	**GE/Intersil**	**IH5140**	**(2679)**
	GE/RCA	**CD22212**	**(2637)**
	SiliconSys	SSIK212	
	Siliconix	DG5140	
IH5141	**GE/Intersil**	**IH5141**	**(2680)**
	GE/RCA	**CD22202**	**(2636)**
	SiliconSys	SSI202	
	Siliconix	DG5141	
IH5142	**GE/Intersil**	**IH5142**	**(2680)**
	Siliconix	DG5142	
IH5143	**GE/Intersil**	**IH5143**	**(2680)**
	Siliconix	DG5143	
IH5144	**GE/Intersil**	**IH5144**	**(2680)**
	GE/RCA	**CD22223**	**(2637)**
	SiliconSys	SSI223	
	Siliconix	DG5144	
IH5145	**GE/Intersil**	**IH5145**	**(2680)**
	Siliconix	DG5145	
IH5148	**GE/Intersil**	**IH5148**	**(2679)**
	Mitsubishi	M5M44C258	
	OKI	MSM514257	
	TI	**TMS44C257**	**(3259)**
IH5341	**GE/Intersil**	**IH5341**	**(2681)**
IH5352	GE/Intersil	IH5352	
LH0033	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
LH0033	MicroPwr		(Cont'd)
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
LH0063	National	LH0063	
	OEI	9963	
LH0101	**Apex**	**PA02**	**(2458)**
	Burr-Brown	**3571**	**(2536)**
		3572	**(2536)**
	Elantec	**ELH0101**	**(2593)**
	National	LH0101	
LT1001	Lattice	LT1001	
LT1062	Lattice	LT1062	
MAX150	AD	AD7820	
	Maxim	AD7820	
	National	DS7820	
	TI	SN55182	
MAX160	AD	AD7574	
	Maxim	AD7574	
	MicroPwr	MP7574	
MAX161	AD	AD7581	
	Maxim	AD7581	
	MicroPwr	MP7581	
MAX232	Dallas	DS1228	
		DS232	
MAX331	AD	ADG201	
	GE/Intersil	**DG201**	**(2679)**
		DG201A	**(2679)**
		IH201	
		IH5201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	DG201A	
	MicroPwr	MP201	
	National	LF11201	
		LF13201	
	PMI	**SW201**	**(2975)**
	Siliconix	DG201A	
MAX332	**PMI**	**SW02**	**(2975)**
	Siliconix	DG202	
MAX358	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	**MX808**	**(2577)**
	GE/Intersil	**IH5108**	**(2681)**
	Harris	**HI508A**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		HI508A	
	MicroPwr	MP7508DI	
MAX359	**Burr-Brown**	**MPC4D**	**(2543)**
	GE/Intersil	**IH5208**	**(2681)**
	Harris	**HI509A**	**(2703, 2738, 2748)**
	Maxim	HI509A	
	TeledyneP	4553	
MAX368	GE/Intersil	ICL6108	
	Harris	**HI508**	**(2703, 2738, 2748)**
	MicroPwr	MP7508DI	
MAX369	GE/Intersil	ICL6109	
	Harris	**HI509**	**(2703, 2738, 2748)**
	MicroPwr	MP7509DI	
MAX400	AD	AD517	
		OP07	
	Fairchild	μA714	
	Harris	**HA5130**	**(2737, 2747)**
		HA5135	**(2706)**
	LinearTech	LT1001	
		OP07	
	Maxim	OP07	
	Micra	MC0021	
	MicroPwr	MPOP07	
	Raytheon	**OP07**	**(2979)**
	TI	OP07D	
MAX4193	Raytheon	RC4193	
MAX4391	Raytheon	RC4391	
MAX574	AD	AD574	
	Burr-Brown	**ADC574A**	**(2541)**
	Datel	**ADC574A**	**(2575)**
	Harris	**HI574**	**(2703, 2738, 2744)**
	HybridSys	HS574	
	Intech	**ADC574**	**(2799)**
	MCE	MCE574	
	MicroNet	MN574A	
	MicroPwr	MP574	
	TeledyneP	TP574A	
♦ MAX634	Siliconix	DG308A	
MAX8211	**GE/Intersil**	**ICL8211**	**(2676)**
MAX8212	**GE/Intersil**	**ICL8212**	**(2676)**
MF10	**Exar**	**XR1010**	**(2602)**
	Harris	HA10	
	LinearTech	LT1060	
	MicroLinear	ML2110	
MM74C945	National	MM74C945	
♦ MM74C946	National	MM74C946	
MM74C947	National	MM74C947	
OP07	AD	AD517	
		OP07	
	Fairchild	μA714	
	Harris	**HA5130**	**(2737, 2747)**
		HA5135	**(2706)**
	LinearTech	LT1001	
		OP07	
	Maxim	MAX400	
	Micra	MC0021	
	MicroPwr	MPOP07	
	Raytheon	**OP07**	**(2979)**
	TI	OP07D	
OP27	AD	AD510	
		AD517	
	Burr-Brown	OP27	
		OPA27	**(2532)**
	Harris	**HA5127**	**(2737, 2747, 2768)**
		HAOP27	
	LinearTech	LT1007	
		OP27	
	PMI	OP27	
		OP27	**(2970)**
	Raytheon	**RC714**	**(2979)**
	TI	LT1007	
OP37	Burr-Brown	OP37	
PGA100	**Burr-Brown**	**PGA100**	**(2537)**
REF01	AD	AD581	
		ADREF01	
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	AD581	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
REF02	AD	ADREF02	
	Gennum	REF02	
	LinearTech	LT1019-5	
		LTREF02	
		REF02E	
	MicroPwr	MP5532	
		MPREF02	
	PMI	**REF02**	**(2975)**
		REF02EZ	**(2975)**
	Raytheon	REF02	
	TeledyneS	TSC9496	
VFC32	AD	ADVFC32	
	Burr-Brown	**VFC32**	**(2542, 2544)**
	MCE	MCEVFC32	

MCE Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
MCE386	National	LM386	
MCE4194	Exar	XR4194	
	Raytheon	RC4194	
		RM4194	
MCE565	AD	AD565	
MCE566	AD	AD566	
MCE567	Exar	XR2567	
		XR567	
	National	LM567	
	Samsung	LM567	
	Signetics	NE567	
		SE567	
MCE570	AD	AD570	
MCE571	AD	AD571	
		AD573	
	Fairchild	μA571	
	PMI	**ADC910**	**(2973)**
MCE574	AD	AD574	
	Burr-Brown	**ADC574A**	**(2541)**
	Datel	**ADC574A**	**(2575)**
	Harris	**HI574**	**(2703, 2738, 2744)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

MCE Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCE574			(Cont'd)
	HybridSys	HS574	
	Intech	**ADC574**	**(2799)**
	Maxim	MAX574	
	MicroNet	MN574A	
	MicroPwr	MP574	
	TeledyneP	TP574A	
MCE820	SGS	TBA820	
	TI	SN76001	
	Thomson	TBA820	
MCEA20	Exar	XRA100	
		XRM100	
	Interdesign	MOA	
		MOM	
	MCE	MCEA20A	
MCEA20A	Exar	XRA100	
		XRM100	
	Interdesign	MOA	
		MOM	
	MCE	MCEA20	
MCEA20B	Exar	XRB100	
	Interdesign	MOB	
MCEA20C	Exar	XRC100A	
	Interdesign	MOC	
MCEA20E	Cherry	CS2000	
	Exar	XRE100	
	Interdesign	MOE	
MCEA20F	Cherry	CS3000	
	Exar	XRF100	
	Interdesign	MCF	
		MOF	
MCEA20G	Cherry	CS2500	
	Exar	XRG100	
	Interdesign	MOG	
MCEA20H	Exar	XRH100	
	Interdesign	MOH	
MCEA20J	Exar	XRJ100	
	Interdesign	MOJ	
MCEA20L	Cherry	CS3200	
	Exar	XRL100	
	Interdesign	MOL	
MCEA20N	Interdesign	MON	
MCEA20P	Interdesign	MOP	
MCEA40D	Exar	XRD100	
	Interdesign	MOD	
MCEAD15C	Exar	XR400	
MCED15B	Exar	XR500	
MCELM10	LinearTech	LM10	
	National	LM10	
MCELM117	Fairchild	μA117	
	IPS	**IP117**	**(2854)**
	LinearTech	LM117	
	Motorola	**LM117**	**(2929)**
	National	LM117	
	SiliconG	SG117	
	TI	TL117	
	Thomson	LM117	
	Unitrode	**UC117**	**(3325)**
MCELM137	**IPS**	**IP137**	**(2854)**
	LinearTech	LM137	
		LT137	
	Motorola	**LM137**	**(2929)**
	National	LM137	
	SiliconG	SG137	
		SG137A	
	Thomson	LM137	
	Unitrode	**UC137**	**(3325)**
MCELM217	**IPS**	**IP217**	**(2854)**
	Motorola	**LM217**	**(2929)**
	National	LM217	
	SGS	LM217	
	SiliconG	SG217	
		SG217A	
	Thomson	LM217	
	Unitrode	**UC217**	**(3325)**
MCELM237	**IPS**	**IP237**	**(2854)**
	Motorola	**LM237**	**(2929)**
	National	LM237	
	SiliconG	SG237	
		SG237A	
	Unitrode	**UC237**	**(3325)**
MCELM317	Fairchild	μA317	
	IPS	**IP317**	**(2854)**
	LinearTech	LM317	
	Motorola	**LM317**	**(2929)**
	National	LM317	
	SGS	LM317	
	SiliconG	SG317	
	TI	LM317	
MCELM317			(Cont'd)
	Thomson	LM317	
		TDB0117	
	Unitrode	**UC317**	**(3325)**
MCELM337	**IPS**	**IP337**	**(2854)**
	LinearTech	LM337	
		LT337	
	Motorola	**LM337**	**(2929)**
	National	LM337	
	SiliconG	SG337	
		SG337A	
	TI	LM337	
	Thomson	LM337	
	Unitrode	**UC337**	**(3325)**
MCEVFC32	AD	ADVFC32	
	Burr-Brown	**VFC32**	**(2542, 2544)**
	Maxim	VFC32	

Micra Corp.

Manufacturer Device	Replacement Source	Device	IC Master Page
MC0002	Elantec	EL2002	
		EL2003	**(2591, 2595)**
		ELH0002	**(2592)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	Hytek	HY0002	
	LinearTech	LT1010	
	Micra	MC0021	
	National	LH0002	
	OEI	9910	
	TeledyneC	LH0002	
MC0003	National	LH0003	
MC0004	National	LH0004	
MC0006	**Elantec**	**EDH0006**	**(2593)**
	National	DH0006	
MC0008	CTI	CT0008	
	Elantec	**EDH0008**	**(2593)**
	National	DH0008	
MC0021	Elantec	EL2002	
		EL2003	**(2591, 2595)**
		ELH0002	**(2592)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	Hytek	HY0002	
	LinearTech	LT1010	
	Micra	MC0002	
	National	LH0002	
	OEI	9910	
	TeledyneC	LH0002	
MC0024	National	LH0024	
MC0032	AD	ADLH0032	
		HOS-060	
		HOS050	
		MOS050	
	Elantec	**ELH0032**	**(2593)**
	Harris	**HA2542**	**(2737, 2747, 2750)**
	National	LH0032	
	TeledyneC	LH0032	
	TeledyneP	0032	
MC0033	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
MC0041	**Elantec**	**ELH0041**	**(2593)**
		LH0041	
	National	LH0041	

Micrel

Manufacturer Device	Replacement Source	Device	IC Master Page
74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
MC54HCT240	CTI	54HCT240	
	GE/RCA	**CD54HCT240**	**(2631)**
	Hitachi	HD54HCT240	
	Micrel	MIC54HCT240	
	Mitel	MD54HCT240	
	Motorola	MC54HCT240	
	National	MM54HCT240	
	Signetics	54HCT240	
	Supertex	SI54HCT240	
	TI	SN54HCT240	
MC54HCT241	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**
	Vitelic	V51C256	
		V51C257	
MIC2257	Motorola	MC2257	
MIC2259	Motorola	MC2259	
MIC2260	Motorola	MC2260	
MIC54HCT240			
	CTI	54HCT240	
	GE/RCA	**CD54HCT240**	**(2631)**
	Hitachi	HD54HCT240	
	Micrel	MC54HCT240	
	Mitel	MD54HCT240	
	Motorola	MC54HCT240	
	National	MM54HCT240	
	Signetics	54HCT240	
	Supertex	SI54HCT240	
	TI	SN54HCT240	
MIC54HCT241			
	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**
	Vitelic	V51C256	
		V51C257	
MIC54HCT244			
	CTI	54HCT244	
	GE/RCA	**CD54HCT244**	**(2631)**
	Mitel	MD54HCT244	
	Motorola	MC54HCT244	
	National	MM54HCT244	
	Signetics	54HCT244	
	Sprague	SS54HCT244	
	Supertex	SI54HCT244	
	TI	SN54HCT244	
MIC54HCT343			
	Mitel	MD54HCT343	
MIC54HCT373			
	CTI	54HCT373	
	GE/RCA	**CD54HCT373**	**(2632)**
	Mitel	MD54HCT373	
	Motorola	MC54HCT373	
	National	MM54HCT373	
	Signetics	54HCT373	
	Sprague	SS54HCT373	
	Supertex	SI54HCT373	
	TI	SN54HCT373	
MIC54HCT374			
	CTI	54HCT374	
	GE/RCA	54HCT374	
		CD54HCT374	**(2631)**
	Micrel	MICHCT374	
	Mitel	MD54HCT374	
	Motorola	MC54HCT374	
	National	MM54HCT374	
	Sprague	SS54HCT374	
	Supertex	SI54HCT374	
	TI	SN54HCT374	
MIC7233	**GE/Intersil**	**ICM7233**	**(2671)**
	Maxim	ICM7233	
MIC74HCT240			
	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
MIC74HCT241			
	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
MIC74HCT242			
	GE/RCA	**CD74HCT242**	**(2631)**
	Hitachi	HD74HCT242	
	Signetics	**74HCT242**	**(3003)**
	TI	SN74HCT242	
MIC74HCT243			
	GE/RCA	**CD74HCT243**	**(2631)**
	Hitachi	HD74HCT243	
	Signetics	**74HCT243**	**(3003)**
	TI	SN74HCT243	
MIC74HCT244			
	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
MIC74HCT245			
	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Micrel			**(Cont'd)**
MIC74HCT245			(Cont'd)
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
MIC74HCT373			
	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
MIC74HCT374			
	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
MIC74HCT533			
	CTI	74HCT533	
	GE/RCA	**CD74HCT533**	**(2632)**
	Hitachi	HD74HCT533	
	Motorola	MC74HCT533	
	Plessey	MV74HCT533	
	Signetics	**74HCT533**	**(3003)**
	Sprague	SS74HCT533	
	TI	SN74HCT533	
MIC74HCT534			
	CTI	74HCT534	
	GE/RCA	**CD74HCT534**	**(2631)**
	Hitachi	HD74HCT534	
	Motorola	MC74HCT534	
	Plessey	MV74HCT534	
	Signetics	**74HCT534**	**(3003)**
	Sprague	SS74HCT534	
	TI	SN74HCT534	
MIC74HCT540			
	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
MIC74HCT541			
	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	

Manufacturer Device	Replacement Source	Device	IC Master Page
MIC74HCT563			
	CTI	74HCT563	
	GE/RCA	**CD74HCT563**	**(2632)**
	Hitachi	HD74HCT563	
	Plessey	MV74HCT563	
	SGS	M74HCT563	
	Signetics	**74HCT563**	**(3003)**
	Sprague	SS74HCT563	
	TI	SN74HCT563	
	Toshiba	TC74HCT563	
MIC74HCT564			
	CTI	74HCT564	
	GE/RCA	**CD74HCT564**	**(2631)**
	Hitachi	HD74HCT564	
	Plessey	MV74HCT564	
		MV74HCT573	
	SGS	M74HCT564	
	Signetics	**74HCT564**	**(3003)**
	Sprague	SS74HCT564	
	TI	SN74HCT564	
MIC74HCT573			
	CTI	74HCT573	
	GE/RCA	**CD74HCT573**	**(2632)**
	Hitachi	HD74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Signetics	**74HCT573**	**(3003)**
	Sprague	SS74HCT573	
	Supertex	74HCT573	
	TI	SN74HCT573	
	Toshiba	TC74HCT573	
MICHCT374	CTI	54HCT374	
	GE/RCA	54HCT374	
		CD54HCT374	**(2631)**
	Micrel	MIC54HCT374	
	Mitel	MD54HCT374	
	Motorola	MC54HCT374	
	National	MM54HCT374	
	Sprague	SS54HCT374	
	Supertex	SI54HCT374	
	TI	SN54HCT374	

Micro Linear

ADC0808	National	0808	
ADC0809	National	ADC0809	
	TI	ADC0809	
ADC0831	National	ADC0831	
	TI	ADC0831A	
ADC0832	National	ADC0832	
	TI	ADC0832B	
ADC0834	National	ADC0834	
	TI	ADC0834A	
ADC0838	Motorola	MC74F251	
	National	ADC0838	
	TI	ADC0838B	
♦ MF10	**Exar**	**XR1010**	**(2602)**
	Harris	HA10	
	LinearTech	LT1060	
	Maxim	MF10	
	MicroLinear	ML2110	
ML117	**Elantec**	**ELH0002**	**(2592)**
	Exar	**XR117**	**(2606)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	SiliconSys	SSI117	
	VTC	**VM117**	**(3375)**
ML2110	**Exar**	**XR1010**	**(2602)**
	Harris	HA10	
	LinearTech	LT1060	
	Maxim	MF10	
ML402	**Elantec**	**EL2007**	**(2591)**
ML501	SiliconSys	SSI501	
ML510	SGS	TDA2030	
	Telefunken	TDA2030	
	Thomson	TDA2030	
ML510A	SiliconSys	SSI510	
ML511	SiliconSys	SSI511	
ML541	Exar	XR541	
	Fairchild	FGC8000	
	PMI	**DAC88**	**(2974)**
	SiliconSys	SSI541	
ML8464	Exar	XR8464	
	National	DP8464	

Manufacturer Device	Replacement Source	Device	IC Master Page
Micro Networks			
DAC80	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC85	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
DAC85	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
	National	DAC1280	
		DAC1285	
	TeledyneP	TPDAC80	
DAKHK	**Datel**	**DACHK12**	**(2576)**
	Intech	DACHK12	
MN0300A	**AD**	**HTC0300A**	**(2423)**
	Intech	**SH376**	**(2799)**
	MicroNet	MN376	
		MN377	
	TeledyneP	4860	
MN050	ILC-DDC	ADH050	
MN0805	**Intech**	**VDAC0805**	**(2799)**
MN2020	HybridSys	HS2020	
MN3020	HybridSys	HS3020	
MN3349	HybridSys	DAC349	
MN346	AD	AD346	
	HybridSys	HS346	
	Intech	**SH347**	**(2799)**
	MicroNet	MN347	
MN347	AD	AD346	
	HybridSys	HS346	
	Intech	**SH347**	**(2799)**
	MicroNet	MN346	
MN370	AD	AD370	
		AD371	
	HybridSys	DAC346	
		DAC347	
		DAC356	
	MicroNet	MN371	
MN371	AD	AD370	
		AD371	
	HybridSys	DAC346	
		DAC347	
		DAC356	
	MicroNet	MN370	
MN376	**AD**	**HTC0300A**	**(2423)**
	Intech	**SH376**	**(2799)**
	MicroNet	MN0300A	
		MN377	
	TeledyneP	4860	
MN377	**AD**	**HTC0300A**	**(2423)**
	Intech	**SH376**	**(2799)**
	MicroNet	MN0300A	
		MN376	
	TeledyneP	4860	
MN5101	**Datel**	**ADC5101**	**(2575)**
MN5131	HybridSys	HS5131	
MN5150	HybridSys	HS5150	
MN5201	AD	AD5201	
MN5202	AD	AD5202	
MN5203	AD	AD5203	
MN5204	AD	AD5204	
MN5205	AD	AD5205	
MN5206	AD	AD5206	
MN5207	AD	AD5207	
MN5210	AD	AD5210	
	Datel	ADC5210	
	HybridSys	HS5210	
	Intech	ADC5210	

Manufacturer Device	Replacement Source	Device	IC Master Page
MN5211	AD	AD5211	
	Datel	**ADC5211**	**(2575)**
MN5212	AD	AD5212	
	Datel	**ADC5212**	**(2575)**
MN5213	AD	AD5213	
	Datel	ADC5213	
MN5214	AD	AD5214	
	Datel	**ADC5214**	**(2575)**
	HybridSys	MN5214	
	TeledyneP	TP5214	
MN5215	AD	AD5215	
	Datel	**ADC5215**	**(2575)**
MN5216	**Datel**	**ADC5216**	**(2575)**
	HybridSys	HS5216	
MN5240	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**
		ADC85	**(2799)**
		ADC87	**(2799)**
	MicroNet	MNADC84	
		MNADC85	
		MNADC87	
MN5245	**Intech**	**ADC5245**	**(2799)**
MN5246	**Intech**	**ADC5246**	**(2799)**
MN5250	HybridSys	HS5250	
MN5251	HybridSys	HS5251	
MN5252	HybridSys	HS5252	
MN5253	HybridSys	HS5253	
MN5610	**Intech**	**ADC5610**	**(2799)**
MN565A	AD	AD565A	
		AD565J	
	Fairchild	μA565	
	Harris	**HI565A**	**(2738, 2749)**
	Maxim	AD565A	
	TeledyneP	TP565A	
MN574	AD	574	
	Intech	**ADC574A**	**(2799)**
MN574A	AD	AD574	
	Burr-Brown	**ADC574A**	**(2541)**
	Datel	**ADC574A**	**(2575)**
	Harris	**HI574**	**(2703, 2738, 2744)**
	HybridSys	HS574	
	Intech	**ADC574**	**(2799)**
	Maxim	MAX574	
	MCE	MCE574	
	MicroPwr	MP574	
	TeledyneP	TP574A	
MN7150	**Datel**	**HDAS16**	**(2577)**
		HDAS8	**(2577)**
MN815	**Datel**	**ADC815**	**(2575)**
MN825	**Datel**	**ADC825**	**(2575)**
MNADC80	AD	ADADC80	
	Burr-Brown	**ADC80**	**(2541)**
MNADC84	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	**(2541)**
		ADC85	**(2541)**
		ADC87	**(2541, 2543)**
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	**(2799)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Micro Networks (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MNADC84	**Intech**		(Cont'd)
		ADC85	(2799)
		ADC87	(2799)
	MicroNet	MN5240	
		MNADC85	
		MNADC87	
MNADC85	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	(2541)
		ADC85	(2541)
		ADC87	(2541, 2543)
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	(2799)
		ADC85	(2799)
		ADC87	(2799)
	MicroNet	MN5240	
		MNADC84	
		MNADC87	
MNADC87	AD	ADADC84	
		ADADC85	
		ADADC85S	
		ADADC87	
	Burr-Brown	**ADC84**	(2541)
		ADC85	(2541)
		ADC87	(2541, 2543)
	Datel	ADC84	
		ADC85	
		ADC87	
		ADCHX12B	
		ADCHZ12B	
		ADCHZ12BGZ	
	HybridSys	ADC581	
		ADC581B	
		HSADC85	
		HSADC85C	
	ILC-DDC	DDC5240	
	Intech	**ADC84**	(2799)
		ADC85	(2799)
		ADC87	(2799)
	MicroNet	MN5240	
		MNADC84	
		MNADC85	
MNDAC71	AD	ADDAC71	
	Burr-Brown	**DAC700**	(2541)
		DAC701	(2541)
		DAC702	(2541)
		DAC703	(2541, 2544)
		DAC71	(2541)
		DAC72	(2541)
MNDAC87	AD	ADDAC87	
	Burr-Brown	DAC851	
		DAC87	(2542, 2544)
	Datel	DAC687	
		DAC87	
	Harris	**HI5687**	(2703)
	HybridSys	DAC335	
		HSDAC87	
MNDAC88	**Intech**	**DAC88**	(2799)
MNDACHK	Datel	DACHK	
	Intech	**DACHK**	(2799)
MNO605	AD	HDG0605	
MNO805	AD	HDG0805	
	Intech	0805H	

Micro Power Systems

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 6508	Fujitsu	8401	
	GE/Intersil	6508	
		IM6508-1	
♦ 6508	**Harris**	**HM6508**	(2704, 2762)
	National	6508	
		74C929	
		NM2102	
♦ 6508	Toshiba	5508	
♦ 6518	**Harris**	**HM6518**	(2704, 2762)
	Motorola	6518	
	National	MM74C930	
DAC01	MicroPwr	MP5520	
	PMI	DAC01	
MP0033	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	(2534, 2536)
	Elantec	**EL2004**	(2591)
		EL2005	(2591)
		EL2033	(2592)
		ELH0033	(2593)
		ELH2004	
		ELH2005	
	Harris	**HA5033**	(2706, 2738, 2748)
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
MP0033C	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	(2534, 2536)
	Elantec	**EL2004**	(2591)
		EL2005	(2591)
		EL2033	(2592)
		ELH0033	(2593)
		ELH2004	
		ELH2005	
	Harris	**HA5033**	(2706, 2738, 2748)
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
MP0820	Maxim	ADC0820	
	National	ADC0820	
	Signetics	ADC0820	
MP0P11	Motorola	MC471CP	
	PMI	0P11	
MP0P37	Burr-Brown	OP37	
	LinearTech	OP37	
	Maxim	OP37	
	MicroPwr	MPOP37	
	Raytheon	**OP37**	(2979)
	TI	OP37	
♦ MP1010	AMD	AM29510	
		AMD29510	
		AMD29L510	
♦ MP1010	AD	ADSP1010	
		ADSP1010A	(2450)
♦ MP1010	**Cypress**	**CY7C510**	(2569)
	IDT	**IDT7210**	(2806)
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
♦ MP1010	**LSI Logic**	**L64010**	(2868)
		L64012	(2868)
♦ MP1010	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
♦ MP1010	TRW-LSI	TDC1010	
		TMC2210	
♦ MP1010	VLSI Tech	VL2010	
	Waferscale	**WS59510**	(3376)
		WS59610	
♦ MP1010	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
MP108	AD	AD108	
	Fairchild	μA108	
	GE/Intersil	LM108	
	LinearTech	LM108	
	Motorola	**LM108**	(2919)
	National	LM108	
	PMI	**PM108**	(2970)
	SiliconSys	SSI108	
♦ MP108A	AD	AD108A	
	Fairchild	UA108A	
	LinearTech	LM108A	
	Motorola	**LM108A**	(2919)
	PMI	**PM108A**	(2970)
MP1208	**Datel**	**DAC612**	(2576)
	National	DAC1208	
MP1209	National	DAC1209	
MP1210	National	DAC1210	
MP1230	National	DAC1230	
MP1231	National	DAC1231	
MP1232	National	DAC1232	
♦ MP200	AD	ADG200	
	GE/Intersil	**DG200**	(2679)
		IH200	
		IH5200	
♦ MP200	**Harris**	**HI200**	(2707, 2737, 2747)
	PMI	SW05	
	Siliconix	DG200A	
MP2004	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	(2534, 2536)
	Elantec	**EL2004**	(2591)
		EL2005	(2591)
		EL2033	(2592)
		ELH0033	(2593)
		ELH2004	
		ELH2005	
	Harris	**HA5033**	(2706, 2738, 2748)
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
MP201	AD	ADG201	
	GE/Intersil	**DG201**	(2679)
		DG201A	(2679)
		IH201	
		IH5201	
	Harris	**HI201**	(2707, 2737, 2747)
	Maxim	DG201A	
		MAX331	
	National	LF11201	
		LF13201	
	PMI	**SW201**	(2975)
	Siliconix	DG201A	
MP207	LinearTech	LT1002	
	MicroPwr	MPOP207	
	PMI	**OP207**	(2970, 2972)
♦ MP208A	AD	AD208A	
	Fairchild	UA208A	
	Motorola	**LM208A**	(2919, 2958)
	National	LM208A	
	PMI	PM208A	
♦ MP2114	AMD	AM9114	
		AM9124	
♦ MP2114	Fairchild	F2114	
	Harris	**HM6514**	(2704, 2762, 2768)
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
♦ MP2114	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
♦ MP2114	OKI	MSM2114	
		MSM5114	
♦ MP2114	**S-MOS**	**SRM2114**	(3201)
	Sharp	**LH2114**	(2993)
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
♦ MP2114	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
♦ MP2114	UMC	UM6114	
MP2208A	GE/Intersil	LH2208A	
	National	LH2208A	
♦ MP2364C	GIM	R03-9364	
	Hitachi	HN48364	
	Mitsubishi	M58334	
	National	MM52164	
	NEC	μPD2364	
	Rockwell	R2364A	
	Signetics	2664	
		26S64	
♦ MP2365	Hitachi	HN61364	
	S-MOS	**SMM2365**	(3201)
	Toshiba	TC5364	
MP255	National	LF255	
	PMI	PM255	
	Thomson	LM255	
MP302	**Harris**	**HI302**	(2707)
	Maxim	DG302A	
	Siliconix	DG302A	
MP303	**Harris**	**HI303**	(2707)
	Maxim	DG303A	
	Siliconix	DG303A	
♦ MP308	AD	AD308	
	Burr-Brown	3500	
		3501	
♦ MP308	Fairchild	μA308	
	GE/Intersil	AD308	
		LM308	
♦ MP308	**Motorola**	**LM308**	(2919, 2958)
	National	LM308	
	Raytheon	LM308	
♦ MP308A	AD	AD308A	
	Fairchild	μA308A	
	LinearTech	LM308A	
	Motorola	**LM308A**	(2919, 2958)
	National	LM308A	
	PMI	PM308A	
♦ MP3140	Datel	DACHA14	
	HybridSys	HS3140	
♦ MP355	LinearTech	LF355	
	Motorola	**LF355**	(2920)
	National	LF355	
	PMI	**OP43**	(2970)
		PM355	
♦ MP355	Thomson	LF355	
♦ MP356	LinearTech	LF356	
	Motorola	**LF356**	(2920)
	National	LF356	
	PMI	PM356	
	Thomson	LF356	
♦ MP370	HybridSys	DAC370	
♦ MP377-18	HybridSys	DAC377-18	
MP5010	AD	AD589	
	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	(2676)
	Gennum	LM185-1	
		LM385-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	National	LM113	
		LM313	
	TeledyneP	TSC9491	
	TeledyneS	9491	
		TSC9491	
♦ MP5071	**Motorola**	**MC3357**	(2939, 2959)
♦ MP5078	Motorola	MC3420	
		MC3520	
♦ MP5507	AD	AD517	
		OP07	
♦ MP5507	Fairchild	μA714	
	Harris	**HA5130**	(2737, 2747)
		HA5135	(2706)
♦ MP5507	LinearTech	LT1001	
		OP07	
♦ MP5507	Maxim	MAX400	
		OP07	
♦ MP5507	Micra	MC0021	
	MicroPwr	MPOP07	
	Raytheon	**OP07**	(2979)
	TI	OP07D	
MP5520	MicroPwr	DAC01	
	PMI	DAC01	
MP5531	AD	AD581	
		ADREF01	
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Micro Power Systems (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MP5531			(Cont'd)
	MicroPwr	MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
MP5532	AD	ADREF02	
	Gennum	REF02	
	LinearTech	LT1019-5	
		LTREF02	
		REF02E	
	Maxim	REF02	
	MicroPwr	MPREF02	
	PMI	**REF02**	**(2975)**
		REF02EZ	**(2975)**
	Raytheon	REF02	
	TeledyneS	TSC9496	
♦ MP562	AD	AD562	
	Datel	**DAC562**	**(2576)**
	Harris	**HI562A**	**(2703, 2738, 2749)**
	PMI	**PM562**	**(2974)**
MP574	AD	AD574	
	Burr-Brown	**ADC574A**	**(2541)**
	Datel	**ADC574A**	**(2575)**
	Harris	**HI574**	**(2703, 2738, 2744)**
	HybridSys	HS574	
	Intech	**ADC574**	**(2799)**
	Maxim	MAX574	
	MCE	MCE574	
	MicroNet	MN574A	
	TeledyneP	TP574A	
♦ MP6116	AMD	AM9128	
		AM9218	
♦ MP6116	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ MP6116	Fujitsu	MB8128	
		MB8416	
♦ MP6116	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ MP6116	Hitachi	HM6116	
		HM6166	
♦ MP6116	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ MP6116	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ MP6116	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ MP6116	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ MP6116	National	MMC2116	
	NEC	μPD4016	
		μPD446	
♦ MP6116	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ MP6116	Performance S-MOS	P4C116	
		6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ MP6116	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ MP6116	Stantel-STC	STC6116	
		STC6166	
♦ MP6116	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ MP6116	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ MP6116	Vitelic	V61C16	
		V62C16	
♦ MP6117	Fujitsu	MB8418	
		MBM8418	
♦ MP6117	Hitachi	HM6117	
	NEC	μPD449	
	S-MOS	**SRM2018**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
♦ MP6117	Toshiba	TC5518	
		TC5518B	
♦ MP6118	Fujitsu	MB8417	
	S-MOS	**SRM2017**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
♦ MP6118	Toshiba	TC5516A	
♦ MP6504	AMD	AM2141	
		AM9244	
♦ MP6504	**Cypress**	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
♦ MP6504	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
♦ MP6504	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
♦ MP6514	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
♦ MP6514	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
♦ MP6514	Toshiba	TC5513	
		TC5514	
		TMM2114	
♦ MP6514	UMC	UM6104	
MP7501	AD	AD7501	
MP7502	AD	AD7502	
MP7503	AD	AD7503	
	Datel	**MV808**	**(2577)**
	HybridSys	MUX201	
MP7506	AD	AD7506	
	Datel	**MV1606**	**(2577)**
		MX1606	**(2577)**
	GE/Intersil	**IH6116**	**(2681)**
	Harris	**HI506**	**(2703, 2738, 2748)**
	Motorola	MC7506	
	PMI	**MUX16**	**(2975)**
	Siliconix	DG506A	
MP7507	AD	AD7507	
	Datel	**MVD807**	**(2577)**
		MXD807	**(2577)**
	GE/Intersil	**IH6216**	**(2681)**
	Harris	**HI507**	**(2703, 2738, 2748)**
	PMI	**MUX28**	**(2975)**
	Siliconix	DG507A	
	TeledyneP	4551	
MP7508DI	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	**MX808**	**(2577)**
	GE/Intersil	**IH5108**	**(2681)**
	Harris	**HI508A**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		HI508A	
		MAX358	
MP7509DI	GE/Intersil	ICL6109	
		IH6208	**(2681)**
	Harris	**HI509**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX359	
		MAX369	
	National	LF11509	
		LF13509	
	PMI	**MUX24**	**(2975)**
	Siliconix	DG509A	
	TeledyneP	4553	
MP7510DI	AD	AD7510	
	PMI	**SW7510**	**(2975)**
MP7511DI	AD	AD7511	
	PMI	**SW7511**	**(2975)**
MP7512DI	AD	AD7512	
MP7520	AD	AD7520	
	Datel	**DACHA10B**	**(2576)**
	GE/Intersil	**AD7520**	**(2668)**
	Maxim	AD7520	
	National	AD7520	
		DAC1020	
		DAC1021	
		DAC1022	
MP7521	AD	AD7521	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	**DACHA12B**	**(2576)**
	GE/Intersil	**AD7521**	**(2668)**
	HybridSys	DAC331-12	
	Maxim	AD7521	
	National	AD7521	
		DAC1220	
		DAC1221	
		DAC1222	
	PMI	AD7521	
MP7522	AD	AD7522	
MP7523	AD	AD7523	
	Datel	**DAC7523**	**(2576)**
	GE/Intersil	**AD7523**	**(2668)**
	Maxim	AD7523	
MP7524	AD	AD7524	
	GE/Intersil	AD7524	
	Maxim	AD7524	
	PMI	**PM7524**	**(2973, 2976)**
MP7528	AD	AD7528	
	Ferranti	ZN7528	
	Maxim	AD7528	
	PMI	**PM7528**	**(2973, 2976)**
MP7530	AD	AD7530	
	GE/Intersil	**AD7530**	**(2668)**
	Maxim	AD7530	
MP7531	AD	AD7531	
		AD8531	
	Burr-Brown	**DAC7541A**	**(2541)**
	GE/Intersil	AS7531	
	Maxim	AD7531	
	PMI	PM7531	
MP7533	AD	AD7533	
	Datel	**DAC7533**	**(2576)**
	GE/Intersil	**AD7533**	**(2668)**
	Maxim	AD7533	
	MicroPwr	MP7633	
	National	AD7533	
	PMI	**PM7533**	**(2974, 2976)**
MP7541	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
	Maxim	AD7541	
	MicroPwr	MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
MP7542	AD	AD7542	
	Maxim	AD7542	
	PMI	**PM7542**	**(2974, 2976)**
MP7543	AD	AD7543	
	Maxim	AD7543	
	PMI	**PM7543**	**(2974, 2976)**
MP7545	AD	AD7545	
	Burr-Brown	**DAC7545**	**(2541)**
	Maxim	AD7545	
	PMI	**PM7545**	**(2974, 2976)**
MP7550	AD	AD7550	
MP7574	AD	AD7574	
	Maxim	AD7574	
		MAX160	
MP7581	AD	AD7581	
	Maxim	AD7581	
		MAX161	
MP7621	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
	Maxim	AD7541	
	MicroPwr	MP7541	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
MP7622	HybridSys	HS3120	
	Siliconix	MP7622	
MP7628	AD	AD7225	
	PMI	**DAC8408**	**(2973, 2976)**
MP7633	AD	AD7533	
	Datel	**DAC7533**	**(2576)**
	GE/Intersil	**AD7533**	**(2668)**
	Maxim	AD7533	
	MicroPwr	MP7533	
	National	AD7533	
	PMI	**PM7533**	**(2974, 2976)**
MP7645	**PMI**	**PM7645**	**(2974, 2976)**
MP7682	Datel	ADC883	
	GE/RCA	**CA3306**	**(2651)**
	Hitachi	HA19216	
MP7684	**GE/RCA**	**CA3318**	**(2651)**
		CA8808	
	Hitachi	HA19209	
	Motorola	**MC10319**	**(2937)**
	NEC	μPD6950	
♦ MP9331	HybridSys	DAC9331	
MP9377	HybridSys	DAC9377	
♦ MP9377-16	HybridSys	DAC9377-16	
MPINA101	**Burr-Brown**	**INA101**	**(2537, 2545)**
MPOP01	**PMI**	**OP01**	**(2971)**
MPOP02	PMI	OP02	
MPOP04	Fairchild	μA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	μPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	μA747	
	TeledyneS	747	
	TI	μA747	
		μA747M	
MPOP05	AD	AD510	
	LinearTech	OP05	
	PMI	**OP05**	**(2970)**
MPOP07	AD	AD517	
		OP07	
	Fairchild	μA714	
	Harris	**HA5130**	**(2737, 2747)**
		HA5135	**(2706)**
	LinearTech	LT1001	
		OP07	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Micro Power Systems (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MPOP07			(Cont'd)
	Maxim	MAX400	
		OP07	
	Micra	MC0021	
	Raytheon	**OP07**	**(2979)**
	TI	OP07D	
MPOP08	AD	AD517	
	LinearTech	LT1008	
	PMI	**OP08**	**(2970)**
MPOP09	Fairchild	μA4136	
	PMI	**OP09**	**(2972)**
MPOP10	LinearTech	LT1002	
	PMI	**OP10**	**(2972)**
MPOP11	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
		RM4158	
	TI	LM148	
MPOP12	LinearTech	LT1012	
	PMI	**OP12**	**(2970)**
	TI	OP12	
MPOP14	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	μPC1458	
		μPC251	
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
MPOP207	LinearTech	LT1002	
	MicroPwr	MP207	
	PMI	**OP207**	**(2970, 2972)**
MPOP227	LinearTech	OP227	
	PMI	**OP227**	**(2970, 2972)**
MPOP27	Burr-Brown	OP27	
	LinearTech	OP27	
	Maxim	OP27	
	PMI	**OP27**	**(2970)**
	Raytheon	**OP27**	**(2979)**
	TI	OP27	
MPOP37	Burr-Brown	OP37	
	LinearTech	OP37	
	Maxim	OP37	
	MicroPwr	MP0P37	
	Raytheon	**OP37**	**(2979)**
	TI	OP37	
MPREF-02	AD	ADREF02	
	Gennum	REF02	
	Maxim	REF02	
	MicroPwr	MPREF02	
	PMI	**REF02**	**(2975)**
	Raytheon	REF02	
♦ MPREF-05	**PMI**	**REF05**	**(2975)**
♦ MPREF-10	**Burr-Brown**	**REF10**	**(2540)**
	LinearTech	LT1021	
	PMI	**REF10**	**(2975)**
MPREF01	AD	AD581	
		ADREF01	
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MPREF01			(Cont'd)
	MicroPwr	MP5531	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
MPREF02	AD	ADREF02	
	Gennum	REF02	
	Maxim	REF02	
	PMI	**REF02**	**(2975)**
	Raytheon	REF02	
♦ MPS6551	Commodore	MP6551	
		MPS6551	
♦ MPS6551	Gould	S6551	
	Harris	**HM6551**	**(2704, 2763)**
	National	6551	
		74C920	
♦ MPS6551	**Rockwell**	**R6551**	**(2990)**
	Sprague	BCM5101	
		SCM5101	
♦ MPS6551	Toshiba	5101	
♦ MPT01A	**PMI**	**MAT01**	**(2975)**
♦ MPT01GH	**PMI**	**MAT01GH**	**(2975)**
MPT02A	National	LM194	
		LM3942	
	PMI	**MAT02**	**(2975)**
♦ MPT02EH	**PMI**	**MAT02EH**	**(2975)**
♦ MPT02FH	**PMI**	**MAT02FH**	**(2975)**
♦ MPVFC32	AD	ADVFC32	
	Burr-Brown	**VFC32**	**(2542, 2544)**
	Maxim	VFC32	
	MCE	MCEVFC32	

Micron Technology

Manufacturer Device	Replacement Source	Device	IC Master Page
MT1256	AMD	AM90C256	
	GIM	WS57C256	
	Motorola	MCM6256	
		MCM6257	
		MCM64256	
	TI	SMJ32010	
		SMJ4256	**(3220)**
	Thomson	MK45H56	
	Vitelic	V51C256	
		V51C257	
MT4064	Fujitsu	MB81464	
	Hitachi	HM50464	
		HM50465	
	Inmos	IMS2820	
	Mitsubishi	M5M4464	
		MSM4464P	
	NEC	μPD41464	
	OKI	MSM41464	
	Samsung	KM41464	
	TI	SMJ4469	
		TMS4464	**(3259)**
	Toshiba	TMM41464	
MT4259	**Dense-Pac**	**DPD44256**	**(2581)**
	Fujitsu	MB85203	
		MB85204	
	Hitachi	HB561004A	
	NEC	MC41256A4	
	TI	TM4256EC4	
MT4264	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	

Manufacturer Device	Replacement Source	Device	IC Master Page
MT8259	**Dense-Pac**	**DPD42568**	**(2581)**
	Hitachi	HB561008B	
	Mitsubishi	MH25608A	
	NEC	MC41256A8	
	OKI	MSC2304KS8	
		MSC2304YS8	
	TI	TM4256FL8	
		TM4256GU8	
MT9259	Dense-Pac	DPD42569	
	Hitachi	HB561003	
		HB561009	
	Mitsubishi	MH25609A	
	NEC	MC41256A9	
	OKI	MSC2304KS9	
		MSC2304YS9	
	TI	TM4256EL9	
		TM4256GU9	

Micropac Industries

Manufacturer Device	Replacement Source	Device	IC Master Page
M78H05	Fairchild	SH0323	
		SH323	
		μA323	
		μA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
M78H12	Fairchild	μA78H12A	
	Lambda	LAS1412	
M78P05	Fairchild	μA78P05	
	Lambda	LAS3905	
	Micropac	MLAS3905	
MLAS3905	Fairchild	μA78P05	
	Lambda	LAS3905	
	Micropac	M78P05	
MLAS3912	Lambda	LAS39U	
MLAS3915	Lambda	LAS39U	
MLM138	**IPS**	**IP138**	**(2854)**
	LinearTech	LM138	
	National	LM138	
	SiliconG	SG138	
MLM196	National	LM196	
MLM338	Fairchild	μA338	
	IPS	**IP338**	**(2854)**
	LinearTech	LM338	
		LT338	
	National	LM338	
	SiliconG	SG338	
MLM396	National	LM396	

Mitel Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
M27256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M27256			(Cont'd)
	Waferscale	**WS57C256**	**(3376)**
M27C256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
M5K4164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
M5L27128	Hitachi	HM27128	
	SGS	ULN2802	
	SiliconG	SG2802	
	Sprague	**ULN2802**	**(3203)**
		ULS2802	
	Toshiba	TD62082	
		TMN27128	
M5L27256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Mitel Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5L27256			(Cont'd)
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
M5L2764	NEC	μPD2764	
M5M231000	**Cypress**	**PALC16R4**	**(4217)**
	GoldStar	**GM231024**	**(2692)**
	Hitachi	HM62301	
	MMI	PALC16R4Q-25	
	NEC	μPD231000	
	Toshiba	TC53100	
M5M41000	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
M5M5116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M5116	Matra-Harris		(Cont'd)
		HM65162	
		HM65163	
		HN65728	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
M5M5165	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M5165			(Cont'd)
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
M5M5256	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
MD21SC14	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
MD4332	Plessey	MV4332	
	Sanyo	STK4332	
MD54HCT138	CTI	54HCT138	
	GE/RCA	**CD54HCT138**	**(2632)**
	Motorola	MC54HCT138	
	National	MM54HCT138	
	Signetics	54HCT138	
	Sprague	SS54HCT138	
	Supertex	54HCT138	
	TI	SN54HCT138	
MD54HCT139	CTI	54HCT139	
	GE/RCA	**CD54HCT139**	**(2632)**
	National	MM54HCT139	
	Signetics	54HCT139	
	Sprague	SS54HCT139	
	Supertex	54HCT139	
MD54HCT240	CTI	54HCT240	
	GE/RCA	**CD54HCT240**	**(2631)**
	Hitachi	HD54HCT240	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MD54HCT240			(Cont'd)
	Micrel	MC54HCT240	
		MIC54HCT240	
	Motorola	MC54HCT240	
	National	MM54HCT240	
	Signetics	54HCT240	
	Supertex	SI54HCT240	
	TI	SN54HCT240	
MD54HCT241	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**
	Vitelic	V51C256	
		V51C257	
MD54HCT244	CTI	54HCT244	
	GE/RCA	**CD54HCT244**	**(2631)**
	Micrel	MIC54HCT244	
	Motorola	MC54HCT244	
	National	MM54HCT244	
	Signetics	54HCT244	
	Sprague	SS54HCT244	
	Supertex	SI54HCT244	
	TI	SN54HCT244	
MD54HCT245	CTI	54HCT245	
	GE/RCA	**CD54HCT245**	**(2631)**
	Motorola	MC54HCT245	
	National	MM54HCT245	
	Signetics	54HCT245	
	Sprague	SS54HCT245	
	Supertex	54HCT245	
	TI	SN54HCT245	
MD54HCT343	Micrel	MIC54HCT343	
MD54HCT373	CTI	54HCT373	
	GE/RCA	**CD54HCT373**	**(2632)**
	Micrel	MIC54HCT373	
	Motorola	MC54HCT373	
	National	MM54HCT373	
	Signetics	54HCT373	
	Sprague	SS54HCT373	
	Supertex	SI54HCT373	
	TI	SN54HCT373	
MD54HCT374	CTI	54HCT374	
	GE/RCA	54HCT374	
		CD54HCT374	**(2631)**
	Micrel	MIC54HCT374	
		MICHCT374	
	Motorola	MC54HCT374	
	National	MM54HCT374	
	Sprague	SS54HCT374	
	Supertex	SI54HCT374	
	TI	SN54HCT374	
MD54HCT540	CTI	54HCT540	
	GE/RCA	**CD54HCT540**	**(2631)**
	Motorola	MC54HCT540	
	National	MM54HCT540	
	Signetics	54HCT540	
	Sprague	SS54HCT540	
	Supertex	54HCT540	
	TI	SN54HCT540	
MD54HCT541	CTI	54HCT541	
	GE/RCA	**CD54HCT541**	**(2631)**
	Motorola	MC54HCT541	
	National	MM54HCT541	
	Signetics	54HCT541	
	Sprague	SS54HCT541	
	Supertex	54HCT541	
	TI	SN54HCT541	
MD54HCT544	National	MM54HCT544	
MD54HCT573	CTI	54HCT573	
	GE/RCA	**CD54HCT573**	**(2632)**
	Signetics	54HCT573	
	Sprague	SS54HCT573	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Mitel Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MD54HCT574	CTI	54HCT574	
	GE/RCA	**CD54HCT574**	**(2631)**
	Signetics	54HCT574	
	Sprague	SS54HCT574	
MD65SC51B	Gould	S65SC51	
MD68SC21	Fairchild	F6821	
	Gould	S6821	
	Hitachi	HD6821	
		HD68A21	
		HD68B21	
	Motorola	**MC6821**	**(2902)**
	Thomson	EF6821	
MD68SC40	Fairchild	F6840	
	Hitachi	HD6840	
	Motorola	**MC6840**	**(2902)**
	Thomson	EF6840	
MD74HC240	**GE/RCA**	**CD74HC240**	**(2631)**
	Hitachi	HD74HC240	
	Motorola	MC74HC240	
	National	MM74HC240	
	SGS	M74HC240	
	Signetics	**74HC240**	**(3003)**
	Sprague	SS74HC240	
	Supertex	SI74HC240	
	TI	SN74HC240	
	Toshiba	TC40H240	
MD74HC241	**GE/RCA**	**CD74HC241**	**(2631)**
	Hitachi	HD74HC241	
	Motorola	MC74HC241	
	National	MM74HC241	
	SGS	M74HC241	
	Signetics	**74HC241**	**(3003)**
	Sprague	SS74HC241	
	Supertex	SI74HC241	
	TI	SN74HC241	
MD74HC244	**GE/RCA**	**CD74HC244**	**(2631)**
	Hitachi	HD74HC244	
	Motorola	MC74HC244	
	National	MM74HC244	
	SGS	M74HC244	
	Signetics	**74HC244**	**(3003)**
	Sprague	SS74HC244	
	Supertex	SI74HC244	
	TI	SN74HC244	
MD74HC373	**GE/RCA**	**CD74HC373**	**(2632)**
	Hitachi	HD74HC373	
	Motorola	MC74HC373	
	National	MM74HC373	
	SGS	M74HC373	
	Signetics	**74HC373**	**(3003)**
	Sprague	SS74HC373	
	Supertex	SI74HC373	
	TI	SN74HC373	
MD74HC374	**GE/RCA**	**CD74HC374**	**(2631)**
	Hitachi	HD74HC374	
	Motorola	MC74HC374	
	National	MM74HC374	
	SGS	M74HC374	
	Signetics	**74HC374**	**(3003)**
	Sprague	SS74HC374	
	TI	SN74HC374	
MD74HCT138	CTI	74HCT138	
	GE/RCA	**CD74HCT138**	**(2632)**
	Hitachi	HD74HCT138	
	National	MM74HCT138	
	Plessey	MV74HCT138	
	SGS	M74HCT138	
	Signetics	**74HCT138**	**(3003)**
	Sprague	SS74HCT138	
	TI	SN74HCT138	
	Toshiba	TC74HCT138	
MD74HCT139	**GE/RCA**	**CD74HCT139**	**(2632)**
	IDT	IDT74HCT139	
	National	MM74HCT139	
	Plessey	MV74HCT139	
	Signetics	**74HCT139**	**(3003)**
	Sprague	SS74HCT139	
	Supertex	74HCT139	
MD74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MD74HCT245			(Cont'd)
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
MD74HCT540	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
MD74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
MD74HCT573	CTI	74HCT573	
	GE/RCA	**CD74HCT573**	**(2632)**
	Hitachi	HD74HCT573	
	Micrel	MIC74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Signetics	**74HCT573**	**(3003)**
	Sprague	SS74HCT573	
	Supertex	74HCT573	
	TI	SN74HCT573	
	Toshiba	TC74HCT573	
MD74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
♦ ML8204	Cherry	CS8204	
	Plessey	MV8204	
	Samsung	KA2410	
♦ ML8205	Cherry	CS8205	
	Exar	XRT8205	
	Samsung	KA2411	
MS1162	GoldStar	GL5229	
♦ MT3506	Gould	S3506	
	Plessey	MV3506	
♦ MT3507	Gould	S3507	
	Plessey	MV3507	
MT35212A	EG&G-Reticon		
		R5632	
		RM5632A	**(2590)**
	Exar	**XR2126**	**(2605)**
		XR2127	**(2605)**
	Gould	S35212	
		S35212A	
	Hitachi	HA17815	
	National	μA7815	
	Sierra	SC11000	
		SC11005	
MT35213	Gould	S35213	
MT3530	Gould	S3530	
MT4320	ITT	DF320	
	Plessey	MV4320	

Manufacturer Device	Replacement Source	Device	IC Master Page
MT4325	Plessey	MV4325	
MT8804	Fairchild	F8804	
	Plessey	MV8804	
MT8812	GoldStar	GM62300	
	SGS	M093	
MT8860	CMD Micro	G8860	
	Plessey	MB8860	
MT8865	CMD Micro	G8865	
	Plessey	MV8865	
	Thomson	MK8865	
MT8870	**CMD Micro**	**G8870**	**(2547)**
	Plessey	MV8870	
	Sierra	SC11270	
		SC11271	
MT8880	**CMD Micro**	**G8880**	**(2546)**
♦ MT8912	CMD Micro	G8912B	
	Intel	2912	
		ID2912	
♦ MT8912	National	TP3040	
	Plessey	MV8912	
	TI	TCM2912C	
	Thomson	ETC5040	
MT8940	GoldStar	GL7808	
	Gould	S8940	
		μA7808	
	Hitachi	HA17808	
	Motorola	**MC7808**	**(2927)**
	National	μA7808	
MT8960	Plessey	MV8960	
MT8961	Plessey	MV8961	
MT8962	Plessey	MV8962	
MT8963	Plessey	MV8963	
MT8964	Plessey	MV8964	
MT8965	Plessey	MV8965	
MT8970	GoldStar	GL7812	
	Gould	S8970	
	Hitachi	HA17812	
	National	μA7812	
MT8975	GoldStar	GL7806	
	Gould	S8975	
		μA7806	
	Hitachi	HA17806	
	National	μA7806	
MT8978	Gould	S8978	
	Hitachi	HA17807	
	National	μA7807	
MT8980	Gould	S8980	
MT8981	GoldStar	GL7805	
	Gould	S8981	
		μA7805	
	Hitachi	HA17805	
	National	μA7805	

Mitsubishi Electronics America, Inc.

5117	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	M5M8725	
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
		MK6116	
	Toshiba	TC5516	
		TC5517	
		TC5517A	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	

Manufacturer Device	Replacement Source	Device	IC Master Page
58981	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
5ML5101	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Motorola	MCM145101	
		MCMS1L01	
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	
AM99C88	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Mitsubishi Electronics America, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
AM99C88	Toshiba		(Cont'd)
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
M27512	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
M27512-170V05			
	GIM	27C512-170V05	
	Intel	**27512-170V05**	**(2862)**
M27512-170V10			
	Intel	**27512-170V10**	**(2862)**
M27512-2	GIM	27512-2	
	Intel	**27512-2**	**(2862)**
M27512-20	Fujitsu	MBM27512-20	
	GIM	27512-20	
	Intel	**27512-20**	**(2862)**
	Toshiba	VT27C512-20	
M27512-200V05			
	GIM	27512-200V05	
	Intel	**27512-200V05**	**(2862)**
M27512-200V10			
	GIM	27512-200V10	
	Intel	**27512-2000V10**	**(2862)**
M27512-25	AMD	AM27512-25	
	Fujitsu	MBM27512-25	
	GIM	27512-25	
	Hitachi	HN27512-25	
	Intel	**27512-25**	**(2862)**
	Toshiba	VT27C512-25	
M27512-3	AMD	AM27512-3	
	GIM	27512-3	
	Intel	**27512-3**	**(2862)**
M27512-30	AMD	AM27512-30	
	Fujitsu	MBM27512-412	
	GIM	27512-30	
	Intel	**27512-30**	**(2862)**
M51841	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
M52523	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M52523			(Cont'd)
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
M54516	Sanyo	LB1288	
M54517	Sanyo	LB1275	
	Sprague	**ULN2801**	**(3203)**
	Toshiba	TD62081	
		TD62105	
M54523	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
M54524	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
M54525	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		μA9666	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
M54526	Exar	XR2204	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
M54527	Sanyo	LB1271	
M54532	IPS	IP2064	
	Motorola	ULN2064	
	SGS	ULN2064	
	SiliconG	SG2064	
	TI	SN75064	
		ULN2064	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M54532			(Cont'd)
	Toshiba	TD62064	
M54535	Sanyo	LB1260	
M54563	**Sprague**	**UDN2981**	**(3203)**
M54584	Toshiba	TD62381	
M58275	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
M58333	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M58333			(Cont'd)
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
M58334	GIM	RO3-9364	
	Hitachi	HN48364	
	National	MM52164	
	NEC	μPD2364	
	Rockwell	R2364A	
	Signetics	2664	
		26S64	
♦ M58653	GIM	ER1451	
M58725	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
M5E555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Mitsubishi Electronics America, Inc. (Cont'd)			
M5E555	Mitsubishi		(Cont'd)
		M51848	
		M5251	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
M5E556	Samsung	NE556	
	SGS	NE556	
	Signetics	NE556	
	TI	NE556	
	Thomson	NE556	
♦ M5G1400	GIM	ER1400	
♦ M5K4116	AMD	AM9016	
	Fairchild	F16K	
		F4116	
♦ M5K4116	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
♦ M5K4164	Motorola	MCM6665	
	Vitelic	V51C64	
M5K4164AP	Fujitsu	MB8265A	
M5L2114	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
M5L27128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	

Manufacturer Device	Replacement Source	Device	IC Master Page
M5L27256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
♦ M5L2732	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		2732A	
		M2732	
♦ M5L2732	National	MM2732	
		NMC2732	
♦ M5L2732	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
M5L27512	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
M5L2764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5L2764			(Cont'd)
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
M5L27C128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
♦ M5L8039	Intel	8039	
	Toshiba	**TMP8039**	**(3306)**
M5L8042	Intel	8042	
M5L8226	Intel	8226	
	National	DP8226	
		INS8226	
	NEC	μPB8226	
M5M116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M116			(Cont'd)
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
M5M165	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
M5M2167	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Mitsubishi Electronics America, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M2167			(Cont'd)
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
M5M2168	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
M5M21C67	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M21C67			(Cont'd)
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
M5M21C68	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
M5M23128	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
M5M23256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
M5M2364	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M2364			(Cont'd)
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
M5M2365	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
M5M23C64	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
M5M27C100K			
	Fujitsu	**MBM27C1001**	**(2620)**
	Hitachi	HN27C1016	
	NEC	μPD27C1001	
	Toshiba	**TC571000**	**(3304)**
M5M27C101K			
	AMD	AM27C1024	
	Fujitsu	MBM27C1000	
		MBM27C1024	
	Hitachi	HN27C301G	
	NEC	μPD27C1000	
		μPD27C1024	
	Toshiba	TC571001	
M5M410000	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M410000	NEC		(Cont'd)
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
M5M41000S	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
M5M4256	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM4256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
M5M4257	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		MSM4257	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Mitsubishi Electronics America, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M4257			(Cont'd)
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
M5M4416	Fujitsu	MB81416	
	Hitachi	HM48416	
	Inmos	IMS2620	
	NEC	μPD41416	
	TI	TMS4416	
M5M4464	Fujitsu	MB81464	
	Hitachi	HM50464	
		HM50465	
	Inmos	IMS2820	
	MicronTech	MT4064	
	Mitsubishi	MSM4464P	
	NEC	μPD41464	
	OKI	MSM41464	
	Samsung	KM41464	
	TI	SMJ4469	
		TMS4464	**(3259)**
	Toshiba	TMM41464	
M5M44C258	**GE/Intersil**	**IH5148**	**(2679)**
	Maxim	IH5148	
	OKI	MSM514257	
	TI	**TMS44C257**	**(3259)**
M5M4C264	Fujitsu	MB81461	
	Hitachi	HM53461	
		HM53462	
		HM53464	
	Mitsubishi	MB81461	
	NEC	μPD41254	
		μPD41264	
		μPD42264	
	Samsung	KM41464	
	TI	**TMS4461**	**(3259)**
M5M5116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M5116			(Cont'd)
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
M5M5117	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M5117	Toshiba		(Cont'd)
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
M5M5118	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
M5M5164	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M5164	Hitachi		(Cont'd)
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
M5M5165	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Mitsubishi Electronics America, Inc. (Cont'd)			
M5M5165			(Cont'd)
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
M5M5256	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
M5M5257	Cypress	CY7C197	
	Fujitsu	**MB81C81**	**(2622)**
	Inmos	**IMS1800**	**(2790)**
	IDT	**IDT71257**	**(2802)**
	Lattice	SR256K1	
M5M5258	Cypress	CY7C194	
	Fujitsu	MB81C84	
	Inmos	**IMS1820**	**(2791)**
	IDT	**IDT71258**	**(2802)**
	Lattice	SR256K4	
	NEC	μPD43254	
M5M80C39	Intel	80C39	
	Signetics	SCC80C39	
	Toshiba	**TMP80C39**	**(3306)**
M5M8725	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	5117	
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
		MK6116	
	Toshiba	TC5516	
		TC5517	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M8725	Toshiba		(Cont'd)
		TC5517A	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	
M74ALS151	National	DM74ALS151	
	Signetics	74ALS151	
	TI	SN74ALS151	
M74ALS153	National	DM74ALS153	
	Signetics	74ALS153	
	TI	SN74ALS153	
M74ALS157	Signetics	74ALS157	
	TI	SN74ALS157	
M74ALS158	National	DM54ALS353	
		DM54AS1000	
		DM74ALS158	
	Signetics	74ALS158	
	TI	SN54ALS353	
		SN74ALS158	
M74ALS163	Motorola	SN74ALS242	
	National	DM74ALS242	
	TI	SN74ALS163	
		SN74ALS242B	
M74ALS174	National	DM74ALS174	
	Signetics	74ALS174	
	TI	SN74ALS174	
M74ALS175	National	DM74ALS175	
	Signetics	74ALS175	
	TI	SN74ALS175	
M74ALS191	National	DM74ALS191	
	Signetics	74ALS191	
	TI	SN74ALS191	
M74ALS193	Motorola	SN74ALS193	
	National	DM74ALS193	
	Signetics	74ALS193	
	TI	SN74ALS193	
M74ALS240	Motorola	SN74ALS240	
	National	DM74ALS240	
	Signetics	74ALS240	
	TI	SN74ALS240A	
M74ALS240A-1			
	Signetics	74ALS240A-1	
	TI	SN74ALS240A-1	
M74ALS241	Motorola	SN74ALS241	
	National	DM74ALS241	
	Signetics	74ALS241	
	TI	SN74ALS241A	
M74ALS241A-1			
	Signetics	74ALS241A-1	
	TI	SN74ALS241A-1	
M74ALS244	Motorola	SN74ALS244	
	National	DM74ALS244	
	Signetics	74ALS244	
	TI	SN74ALS244A	
M74ALS244A-1			
	Signetics	74ALS244A-1	
	TI	SN74ALS244A-1	
M74ALS245	Motorola	SN74ALS245	
	National	DM74ALS245	
	Signetics	74ALS245	
	TI	SN74ALS245A	
M74ALS245A-1			
	Signetics	74ALS245A-1	
	TI	SN74ALS245A-1	
M74ALS251	National	DM74ALS251	
	Signetics	74ALS251	
	TI	SN74ALS251	
M74ALS253	National	DM74ALS253	
	Signetics	74ALS253	
	TI	SN74ALS253	
M74ALS257	National	DM74ALS257	
	Signetics	74ALS257	
	TI	SN74ALS257	
M74ALS258	National	DM74ALS258	
	Signetics	74ALS258	
	TI	SN74ALS258	
M74ALS273	Motorola	SN74ALS273	
	National	DM74ALS273	
	Signetics	74ALS273	
	TI	SN74ALS273	
M74ALS373	Motorola	SN74ALS373	
	National	DM74ALS373	
	Signetics	74ALS373	
	TI	SN74ALS373	
M74ALS374	Motorola	SN74ALS374	
	National	DM74ALS374	
	Signetics	74ALS374	
	TI	SN74ALS374	
M74ALS377	Signetics	74ALS377	
M74ALS620	Motorola	SN74ALS620	
	National	DM74ALS620	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M74ALS620			(Cont'd)
	Signetics	74ALS620	
	TI	SN74ALS620A	
M74ALS620A-1			
	Signetics	74ALS620A-1	
	TI	SN74ALS620A-1	
M74ALS623	Motorola	SN74ALS623	
	National	DM74ALS623	
	Signetics	74ALS623	
	TI	SN74ALS623A	
M74ALS623A-1			
	Signetics	74ALS623A-1	
	TI	SN74ALS623A-1	
MB81461	Fujitsu	MB81461	
	Hitachi	HM53461	
		HM53462	
		HM53464	
	Mitsubishi	M5M4C264	
	NEC	μPD41254	
		μPD41264	
		μPD42264	
	Samsung	KM41464	
	TI	**TMS4461**	**(3259)**
MH1M09	**TI**	**TM024EAD9**	**(3260)**
MH25608	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MH25608A	**Dense-Pac**	**DPD42568**	**(2581)**
	Hitachi	HB561008B	
	MicronTech	MT8259	
	NEC	MC41256A8	
	OKI	MSC2304KS8	
		MSC2304YS8	
	TI	TM4256FL8	
		TM4256GU8	
MH25609	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MH25609	Fujitsu		(Cont'd)
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MH25609A	Dense-Pac	DPD42569	
	Hitachi	HB561003	
		HB561009	
	MicronTech	MT9259	
	NEC	MC41256A9	
	OKI	MSC2304KS9	
		MSC2304YS9	
	TI	TM4256EL9	
		TM4256GU9	
MS8725	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Mitsubishi Electronics America, Inc. (Cont'd)			
MS8725			(Cont'd)
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MSL27256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
MSM4257	Fujitsu	MB81257	
	Hitachi	HM50257	
	Motorola	MCM6256	
		MCM6257	
	NEC	μPD41257	
	Samsung	KM41257	
	TI	**TMS4256**	**(3259)**
		TMS4257	**(3259)**
	Toshiba	TMM41257	
	Vitelic	V51C256	
		V51C257	
MSM4464P	Fujitsu	MB81464	
	Hitachi	HM50464	
		HM50465	
	Inmos	IMS2820	
	MicronTech	MT4064	
	Mitsubishi	M5M4464	
	NEC	μPD41464	
	OKI	MSM41464	
	Samsung	KM41464	
	TI	SMJ4469	
		TMS4464	**(3259)**
	Toshiba	TMM41464	
TH310008	**TI**	**TM024GAD8**	**(3260)**
Monolithic Memories, Inc.			
29C520/1	AMD	29520/1	
		29520/1A	
			(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
29C520/1			(Cont'd)
	AD	AD3445	
	Hitachi	HA1393	
	Maxim	AD3554	
	Sprague	ULN3793	
5300-1	AMD	AM27S20	
	MMI	53S140	
		63S140	
	National	DM54S387	
	Signetics	N82S126	
		S82S126	
	TI	34SA10-25	
♦ 5301-1	MMI	53S141	
	National	DM54S287	
	Signetics	S82S129	
♦ 5305-1	MMI	53S240	
	National	DM54S570	
	Signetics	S82S130	
♦ 5306-1	MMI	53S241	
	National	DM54S571	
	Signetics	S82S131	
♦ 5308	Fujitsu	MB7117	
	National	DM54S470	
♦ 5309	National	DM54S471	
♦ 5330-1	AMD	AM27518	
		AM27LS18	
♦ 5330-1	National	74S188	
		DM54S188	
		DM7577	
♦ 5330-1	Signetics	N82S23	
		S82S23	
♦ 5330-1	TI	28SA030-25	
		38SA030	
		38SA030-25	
♦ 5331-1	AMD	27S19	
		AM27LS19	
		AM27S19	
♦ 5331-1	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
♦ 5331-1	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
♦ 5331-1	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
♦ 5331-1	TI	JBP38S030	
♦ 5340-1	National	DM54S475	
		DM77S295	
		DM87S295	
♦ 5341-1	National	DM54S474	
	Signetics	S82S141	
♦ 5348-1	Fujitsu	MB7123	
	National	DM54S473	
♦ 5349-1	AMD	27S29	
	Fairchild	LF157A	
	National	54S472	
		74S472	
		LF157A	
		LF351	
		LF353	
♦ 5349-1	**PMI**	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
5352-1	AMD	AM27S32	
	Fairchild	93452	
	Fujitsu	MB7121	
	Hitachi	HN25044	
	National	DM54S572	
5353-1	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	63S441	
	National	74S573	
		DM74S573	
	NEC	μPB426	
	Signetics	N82S137	
♦ 5380-1	National	DM77S180	
♦ 5381-1	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	93Z451	
		93Z451	
♦ 5381-1	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ 5381-1	Motorola	7681	
	National	77LS181	
			(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 5381-1	National		(Cont'd)
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ 5381-1	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ 5381-1	Signetics	N82S181	
		S82S181	
♦ 5381-1	TI	28586-60	
		28S86-60	
		JBP28L86A	
♦ 5388	Fujitsu	MB7127	
	National	DM77S184	
♦ 5388-1	Fujitsu	MB7127	
	National	DM77S184	
♦ 5389-1	National	DM77S185	
	Raytheon	**29651AM**	**(2985)**
	Signetics	S82S185	
53DA1643	AMD	AM27S85	
	MMI	63D1641	
		63DA1643	
53DA441	MMI	63DA441	
53DA841	MMI	63DA841	
53RA481	AMD	AM21L49	
		AM27S25	
	Cypress	**CY7C225**	**(2565)**
	Fujitsu	MB7226	
	MMI	63RA481	
	Motorola	MCM27S25	
	National	DM87SR25	
		DM87SR474	
53RS881	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
		S82HS189	
53S081	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
53S140	AMD	AM27S20	
	MMI	5300-1	
		63S140	
	National	DM54S387	
	Signetics	N82S126	
		S82S126	
	TI	34SA10-25	
53S141	National	DM54S287	
	Signetics	S82S129	
53S1641	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
53S1681	AMD	27S191	
		AM27S191	
			(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
53S1681			(Cont'd)
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
53S240	National	DM54S570	
	Signetics	S82S130	
53S241	National	DM54S571	
	Signetics	S82S131	
53S3281	AMD	27S43	
		AM27S43	
	Fujitsu	MB7142	
	MMI	63S3281	
	National	77S321	
		87S321	
		DM87S321	
	Raytheon	**29671**	**(2985)**
	Waferscale	**WS57C43**	**(3376)**
53S3281B	AMD	AM27S43A	
	Intel	3632-1	
		82HS321	
53S441	Motorola	MCM7643M	
	National	DM54S573	
		DM54S573A	
	Signetics	S82S137	
♦ 54S534	Signetics	54S534	
57401	**Cypress**	**CY7C401**	**(2567)**
	Fairchild	74F413	
	IDT	**IDT72401**	**(2805, 2833)**
	MMI	67C401	
		75401	
		C57401	
		C57L401	
		C67401	
		C67L401	
	National	DM77S401	
57402	**Cypress**	**CY7C402**	**(2567)**
	IDT	**IDT72402**	**(2805, 2833)**
	MMI	67C402	
		C57402	
		C57L402	
		C67402	
		C67L402	
	National	DM77S402	
57413	**IDT**	**IDT721265**	**(2806, 2831)**
		IDT72413	**(2805)**
	MMI	67413	
		67C4033	
	Weitek	WTL1065	
		WTL1265	
♦ 6300-1	Fujitsu	MB7113	
	National	DM74S387	
♦ 6301-1	AMD	27S21	
		AM27S21	
♦ 6301-1	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
♦ 6301-1	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
♦ 6305-1	AMD	AM27S12	
	Fujitsu	MB7115	
	MMI	63S240	
	National	74S570	
		DM74S570	
♦ 6305-1	Signetics	N82S130	
		S82S130	
♦ 6306-1	AMD	AM27S13	
	Fujitsu	MB7116	
	MMI	63S241	
	National	74S571A	
		DM74S571	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Monolithic Memories, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 6306-1	Signetics	N82S131	
♦ 6308-1	Fujitsu	MB7117	
63081	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
♦ 6309	National	DM74LS471	
♦ 6309-1	Fujitsu	MB7118	
	Signetics	N82LS135	
	TI	28L22	
♦ 6330	AMD	AM27S18	
	Fujitsu	MB7111	
	National	DM74S188	
	Signetics	N82S23	
	TI	28SA030-25	
♦ 6331-1	AMD	27S19	
		AM27LS19	
		AM27S19	
♦ 6331-1	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
♦ 6331-1	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
♦ 6331-1	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
♦ 6331-1	TI	JBP38S030	
♦ 6340-1	AMD	AM27S30	
	National	DM74S475	
		DM77S475	
		DM87S475	
♦ 6341-1	AMD	AM27S31	
	MMI	63S485	
	National	74S474	
		DM74S474	
♦ 6341-1	Signetics	N82S141	
♦ 6348-1	AMD	AM27S28	
	National	DM74S473	
♦ 6349-1	AMD	27S29	
	Fairchild	LF157A	
	National	54S472	
		74S472	
		LF157A	
		LF351	
		LF353	
♦ 6349-1	**PMI**	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
♦ 6349-2	AMD	AM27S29	
	Fujitsu	MB7124	
	MMI	635481	
		63S481	
♦ 6349-2	National	DM74S472	
	Raytheon	**29623**	**(2985)**
	Signetics	N825147A	
		N82S147	
♦ 6352	AMD	AM27S32	
	Fairchild	93452	
	Fujitsu	MB7121	
	Hitachi	HN25044	
	MMI	5352-1	
	National	DM54S572	
♦ 6353-1	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
♦ 6353-1	National	74S573	
		DM74S573	
♦ 6353-1	NEC	μPB426	
	Signetics	N82S137	
635481	AMD	AM27S29	
	Fujitsu	MB7124	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
635481			(Cont'd)
	MMI	63S481	
	National	DM74S472	
	Raytheon	**29623**	**(2985)**
	Signetics	N825147A	
		N82S147	
♦ 6380-1	AMD	AM27S180	
	Fujitsu	MB7131	
	National	DM87S180	
		DM87S229	
♦ 6381	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
♦ 6381	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ 6381	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ 6381	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ 6381	Signetics	N82S181	
		S82S181	
♦ 6381	TI	28586-60	
		28S86-60	
		JBP28L86A	
♦ 6381-1	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
♦ 6381-1	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ 6381-1	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ 6381-1	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ 6381-1	Signetics	N82S181	
		S82S181	
♦ 6381-1	TI	28586-60	
		28S86-60	
		JBP28L86A	
6381-2	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
♦ 6388	AMD	AM27S184	
	National	DM87S184	
♦ 6388-1	AMD	AM27S184	
	National	DM87S184	
♦ 6389	AMD	27S185	
		AM2725S291	
		AM27S185	
♦ 6389	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
♦ 6389	**Raytheon**	**29651**	**(2985)**
		29651A	**(2985)**

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 6389	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
♦ 6389-1	AMD	27S185	
		AM2725S291	
		AM27S185	
♦ 6389-1	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
♦ 6389-1	**Raytheon**	**29651**	**(2985)**
		29651A	**(2985)**
♦ 6389-1	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
63D1641	AMD	AM27S85	
	MMI	53DA1643	
		63DA1643	
63DA1643	AMD	AM27S85	
	MMI	53DA1643	
		63D1641	
63DA441	MMI	53DA441	
63DA841	MMI	53DA841	
63RA1681	AMD	AM27S45	
		AM27S47	
	Cypress	**CY7C245**	**(2565)**
	Signetics	**N82HS187**	**(3178)**
		S82HS187	
63RA481	AMD	AM21L49	
		AM27S25	
	Cypress	**CY7C225**	**(2565)**
	Fujitsu	MB7226	
	MMI	53RA481	
	Motorola	MCM27S25	
	National	DM87SR25	
		DM87SR474	
63RA881	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
		S82HS189	
63RS881	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RA881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
		S82HS189	
63S080	National	74S188	
	Signetics	N82S23	
		N82US123	
		S82S23	
	TI	38SA030-25	
		TBPSA030	
63S081	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
63S140	AMD	AM27S20	
	MMI	5300-1	
		53S140	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
63S140			(Cont'd)
	National	DM54S387	
	Signetics	N82S126	
		S82S126	
	TI	34SA10-25	
63S141	AMD	27S21	
		AM27S21	
	Fujitsu	MB7114	
	MMI	63S141A	
	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
63S141A	AMD	27S21	
		AM27S21	
	Fujitsu	MB7114	
	MMI	63S141	
	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
63S1641	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
63S1641A	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
63S1681	AMD	AM27S191	
		AM27S291	
		AM27S291A	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681A	
	Motorola	MCM76	
	National	87S291	
		DM878291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
63S1681A	AMD	AM27S191	
		AM27S291	
		AM27S291A	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
	Motorola	MCM76	
	National	87S291	
		DM878291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
63S240	AMD	AM27S12	
	Fujitsu	MB7115	
	National	74S570	
		DM74S570	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Monolithic Memories, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
63S240			(Cont'd)
	Signetics	N82S130	
		S82S130	
63S241	AMD	AM27S13	
	Fujitsu	MB7116	
	National	74S571A	
		DM74S571	
	Signetics	N82S131	
63S281	MMI	63S281A	
	Signetics	N82S135	
63S281A	MMI	63S281	
	Signetics	N82S135	
63S3281	AMD	27S43	
		AM27S43	
	Fujitsu	MB7142	
	MMI	53S3281	
	National	77S321	
		87S321	
		DM87S321	
	Raytheon	**29671**	**(2985)**
	Waferscale	**WS57C43**	**(3376)**
63S441	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
	National	74S573	
		DM74S573	
	NEC	μPB426	
	Signetics	N82S137	
63S481	AMD	AM27S29	
	Fujitsu	MB7124	
	MMI	635481	
	National	DM74S472	
	Raytheon	**29623**	**(2985)**
	Signetics	N825147A	
		N82S147	
63S485	AMD	AM27S31	
	National	74S474	
		DM74S474	
	Signetics	N82S141	
63S6481	Signetics	N82H5641	
63S841	AMD	27S185	
		AM2725S291	
		AM27S185	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	National	77S185	
		87S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**
	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
63S881	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
67402	**Cypress**	**CY7C402**	**(2567)**
	National	DM87S402	
67413	**IDT**	**IDT721265**	**(2806, 2831)**
		IDT72413	**(2805)**
	MMI	57413	
		67C4033	
	Weitek	WTL1065	
		WTL1265	
679502	AMD	AM8177	
67C401	**Cypress**	**CY7C401**	**(2567)**
	Fairchild	74F413	
	IDT	**IDT72401**	**(2805, 2833)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
67C401			(Cont'd)
	MMI	57401	
		75401	
		C57401	
		C57L401	
		C67401	
		C67L401	
	National	DM77S401	
67C402	**Cypress**	**CY7C402**	**(2567)**
	IDT	**IDT72402**	**(2805, 2833)**
	MMI	57402	
		C57402	
		C57L402	
		C67402	
		C67L402	
	National	DM77S402	
67C4023	**Cypress**	**CY7C404**	**(2567)**
	IDT	**IDT72404**	**(2805, 2833)**
67C4033	**IDT**	**IDT721265**	**(2806, 2831)**
		IDT72413	**(2805)**
	MMI	57413	
		67413	
	Weitek	WTL1065	
		WTL1265	
67C5013	**IDT**	**IDT721264**	**(2806, 2831)**
	Weitek	WTL1064	
		WTL1264	
67C7016	**IDT**	**IDT7216**	**(2806, 2832)**
	LogicDev	LMU216	
	LSI Logic	L64015	
	TRW-LSI	TMC216H	
		TMC216K	
67C7016/7	AMD	29516/7	
		29516A/7	
	AD	ADSP1016/7A	
	Cypress	**CY7C516/7**	**(2569)**
	IDT	**IDT7216/7**	**(2806, 2832)**
	Sprague	UCN4801	
		UCN5801	**(3203)**
	Weitek	WTL1016/7	
		WTL2516/7D	
67L4013D	**Cypress**	**CY7C403**	**(2567)**
	IDT	**IDT72403**	**(2805, 2833)**
♦ 74LS645-1	Signetics	SN74LS645-1	
	TI	SN74LS645-1	
74S225A	**TI**	**SN74S225**	**(3229)**
74S408	National	DP8408	
♦ 74S409	National	DP8409	
74S556	LogicDev	LMU18	
	MMI	SN74S557	
74S558	AMD	AM25S557	
		AM25S558	
	LogicDev	LMU558	
	MMI	SN54558	
		SN74S558	
♦ 74S730	AMD	AM2965	
♦ 74S734	AMD	AM2966	
75401	**Cypress**	**CY7C401**	**(2567)**
	Fairchild	74F413	
	IDT	**IDT72401**	**(2805, 2833)**
	MMI	57401	
		67C401	
		C57401	
		C57L401	
		C67401	
		C67L401	
	National	DM77S401	
82C82	Fujitsu	MBL8282	
	Harris	**82C82**	**(2733, 2768)**
	Intel	8282	
		82C82	
	NEC	μPB8282	
		μPD71082	
	OKI	82C82	
82C83	**Harris**	**82C83H**	**(2733, 2768)**
	Intel	8283	
		82C83	
	NEC	μPD71083	
	OKI	82C83	
82C86	AMD	DP8304	
	Fujitsu	MBL8286	
	Harris	**82C86H**	**(2733, 2768)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
82C86			(Cont'd)
	Intel	8286	
		82C86	
	National	DP8304	
	NEC	μPB8286	
		μPD71086	
	OKI	82C86	
82C87	AMD	8287	
	Harris	**82C87H**	**(2733, 2768)**
	Intel	8287	
		82C87	
	NEC	μPD8287	
		μPS71087	
	OKI	82C87	
87097	AMD	AMPAL16L8A	
	Fairchild	16P8B2	
	National	DMPAL16L8A	
		DMPAL16L8B2	
	TI	PAL16L825	
		TIBPAL16L8-30	**(4320)**
C57401	**Cypress**	**CY7C401**	**(2567)**
	Fairchild	74F413	
	IDT	**IDT72401**	**(2805, 2833)**
	MMI	57401	
		67C401	
		75401	
		C57L401	
		C67401	
		C67L401	
	National	DM77S401	
C57402	**Cypress**	**CY7C402**	**(2567)**
	IDT	**IDT72402**	**(2805, 2833)**
	MMI	57402	
		67C402	
		C57L402	
		C67402	
		C67L402	
	National	DM77S402	
C57L401	**Cypress**	**CY7C401**	**(2567)**
	Fairchild	74F413	
	IDT	**IDT72401**	**(2805, 2833)**
	MMI	57401	
		67C401	
		75401	
		C57401	
		C67401	
		C67L401	
	National	DM77S401	
C57L402	**Cypress**	**CY7C402**	**(2567)**
	IDT	**IDT72402**	**(2805, 2833)**
	MMI	57402	
		67C402	
		C57402	
		C67402	
		C67L402	
	National	DM77S402	
C67401	**Cypress**	**CY7C401**	**(2567)**
	Fairchild	74F413	
	IDT	**IDT72401**	**(2805, 2833)**
	MMI	57401	
		67C401	
		75401	
		C57401	
		C57L401	
		C67L401	
	National	DM77S401	
C67402	**Cypress**	**CY7C402**	**(2567)**
	IDT	**IDT72402**	**(2805, 2833)**
	MMI	57402	
		67C402	
		C57402	
		C57L402	
		C67L402	
	National	DM77S402	
C67L401	**Cypress**	**CY7C401**	**(2567)**
	Fairchild	74F413	
	IDT	**IDT72401**	**(2805, 2833)**
	MMI	57401	
		67C401	
		75401	
		C57401	
		C57L401	
		C67401	
	National	DM77S401	
C67L402	**Cypress**	**CY7C402**	**(2567)**
	IDT	**IDT72402**	**(2805, 2833)**
	MMI	57402	
		67C402	
		C57402	
		C57L402	
		C67402	
		C67L402	
	National	DM77S402	
M2018-33	**GoldStar**	**GM5371**	**(2701)**
	Thomson	MK5371	
	Xicor	XC2018-33	
M2018-50	**GoldStar**	**GM5372**	**(2701)**
	Xicor	XC2018-50	
M2018-70	**GoldStar**	**GM5373**	**(2701)**
	Thomson	MK5373	
	Xicor	XC2018-70	
M2064-33	**GoldStar**	**GL6901**	**(2701)**
	RIFA	PBL3726	
	Xilinx	**XC2064-33**	**(4346)**
M2064-50	Fairchild	μA3054/7	
	GoldStar	**GM3054/7**	**(2701)**
	Xilinx	**XC2064-50**	**(4346)**
M2064-70	**GoldStar**	**GM5370**	**(2701)**
	Thomson	MK5370	
	Xilinx	**XC2064-70**	**(4346)**
MC10H100	Motorola	MC10H100	
MC10H101	Motorola	MC10H101	
MC10H102	Motorola	MC10H102	
MC10H103	Motorola	MC10H103	
MC10H104	Motorola	MC10H104	
MC10H105	Motorola	MC10H105	
MC10H106	National	DM5493A	
	TI	SN5493A	
MC10H107	Motorola	MC10H107	
MC10H109	Motorola	MC10H109	
MC10H115	Motorola	MC10H115	
MC10H116	Motorola	MC10H116	
MC10H117	Motorola	MC10H117	
MC10H118	Motorola	MC10H118	
MC10H119	Motorola	MC10H119	
		MC74HC4352	
MC10H121	Motorola	MC10H121	
MC10H124	Motorola	MC10H124	
MC10H125	Motorola	MC10H125	
MC10H130	Motorola	MC10H130	
MC10H131	Motorola	MC10H131	
MC10H141	Motorola	MC10H141	
MC10H158	Motorola	MC10H158	
MC10H159	Motorola	MC10H159	
MC10H16	Motorola	MC10H16	
MC10H160	Motorola	MC10H160	
MC10H161	Motorola	MC10H161	
MC10H162	Motorola	MC10H162	
MC10H164	Motorola	MC10H164	
MC10H166	Motorola	MC10H166	
MC10H173	Motorola	MC10H173	
MC10H174	Motorola	MC10H174	
MC10H175	Motorola	MC10H175	
MC10H176	Motorola	MC10H176	
		MC10H179	
MC10H209	Motorola	MC10H209	
MC10H210	Motorola	MC10H210	
MC10H211	Motorola	MC10H211	
PAL10H8	MMI	PAL16A4	
	National	DMPAL10H8	
		PAL16A4	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL10L8	National	DMPAL10L8	
		PAL10L8	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL12H6	National	DMPAL12H6	
		PAL12H6	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL12L10	National	PAL12L10	
	Sprague	SPL12LC10	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Monolithic Memories, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
PAL12L16	MMI	PAL16L6	
	National	PAL16L6	
	Signetics	**PLS173**	**(3155, 3172)**
PAL12L6	National	DMPAL12L6	
		PAL12L6	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL14H4	National	DMPAL14H4	
		PAL14H4	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL14L4	National	DMPAL14L4	
		PAL14L4	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL14L8	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PALC22V10	
	National	PAL14L8	
	Signetics	**PLS173**	**(3155, 3172)**
	Sprague	SPL14LC8	
	TI	**TIBPAL22V10**	**(4320)**
PAL16A4	MMI	PAL10H8	
	National	DMPAL10H8	
		PAL16A4	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL16C1	National	DMPAL16C1	
		PAL16C1	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL16H2	National	DMPAL16H2	
		PAL16H2	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL16L2	National	DMPAL16L2	
		PAL16L2	
PAL16L6	MMI	PAL12L16	
	National	PAL16L6	
	Signetics	**PLS173**	**(3155, 3172)**
PAL16L8	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
PAL16L8A	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
PAL16L8A-2	AMD	AMPAL16L8L	
	Sprague	SPL16LC8	
	TI	PAL16L8A-2	
PAL16L8B	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
PAL16P8A	AMD	AMPAL16H8	
PAL16R4	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
PAL16R4A	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
PAL16R4A-2	TI	PAL16R4A-2	
PAL16R4B2	AMD	AMPAL16R4A	
	Fairchild	16RP4B2	
	National	DMPAL16R42	
		DMPAL16R4A	
	TI	PAL16R425	
PAL16R6	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	
	Fairchild	16RP6B	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
PAL16R6			(Cont'd)
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
PAL16R6A	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
PAL16R6A-2	AMD	AMPAL16R6L	
	TI	PAL16R6A-2	
PAL16R6B2	AMD	AMPAL16R6A	
	Fairchild	16RP6B2	
	National	DMPAL16R6A	
	TI	PAL16R625	
		TIBPAL16RS-30	
PAL16R6Q-25	Cypress	PALC46R6	
	Fujitsu	HB84256	
	GoldStar	GM76C256	
PAL16R8	Cypress	CYPAL16R8	
	Harris	**HPL16RC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R8A	
	National	DMPAL16R8	
	Sprague	SPL16RC8	
	TI	SN74PAL16R8A	
		TIBPAL16R8-15	**(4320)**
		TIBPAL16R8-20	**(4320)**
		TIBPAL16R8-25	**(4320)**
		TIBPAL16R8-30	**(4320)**
PAL16R8A	Cypress	CYPAL16R8	
	Harris	**HPL16RC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R8	
	National	DMPAL16R8	
	Sprague	SPL16RC8	
	TI	SN74PAL16R8A	
		TIBPAL16R8-15	**(4320)**
		TIBPAL16R8-20	**(4320)**
		TIBPAL16R8-25	**(4320)**
		TIBPAL16R8-30	**(4320)**
PAL16R8A-2	AMD	AMPAL16R8L	
	Sprague	SPL16RC8	
	TI	PAL16R8A-2	
PAL16R8B2	AMD	AMPAL16R8A	
	Fairchild	16RP8B2	
	National	DMPAL16R8A	
		DMPAL16R8B2	
	TI	PAL16R825	
PAL16X4	National	PAL16X4	
PAL18L4	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PALC22V10	
	Sprague	SPL18LC4	
	TI	**TIBPAL22V10**	**(4320)**
PAL20C1	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PALC22V10	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
PAL20C1			(Cont'd)
	National	PAL20C1	
	TI	**TIBPAL22V10**	**(4320)**
PAL20L10	Cypress	CUPLDC20G10	
		PAL20L10	
	National	DMPAL20L10	
		PAL20L10	
	Sprague	SPL20LC10	
	TI	**TIBPAL20L10**	**(4320)**
		TIBPAL20L10-25	**(3217, 4320)**
PAL20L2	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PALC22V10	
	National	PAL20L2	
	Sprague	SPL20LC2	
	TI	**TIBPAL22V10**	**(4320)**
PAL20L8	Cypress	CUPLDC20G10	
	Fairchild	F100165	
	Hitachi	HD100165	
		HM6288	
	MMI	PAL20L8B	
	National	PAL20L8	
	Signetics	**100165**	**(3020)**
	Sprague	SPL20LC8	
	TI	PAL20L8	
		TIBPAL20L8-20	**(3217, 4320)**
	Toshiba	TC55416	
PAL20L8B	Cypress	CUPLDC20G10	
	Fairchild	F100165	
	Hitachi	HD100165	
		HM6288	
	MMI	PAL20L8	
	National	PAL20L8	
	Signetics	**100165**	**(3020)**
	Sprague	SPL20LC8	
	TI	PAL20L8	
		TIBPAL20L8-20	**(3217, 4320)**
	Toshiba	TC55416	
PAL20R4	Cypress	CUPLDC20G10	
	Fairchild	F100179	
	Hitachi	HD100179	
	MMI	PAL20R4B	
	Sprague	SPL20RC4	
	TI	PAL20R4	
		TIBPAL20R4-20	**(3217, 4320)**
PAL20R4B	Cypress	CUPLDC20G10	
	Fairchild	F100179	
	Hitachi	HD100179	
	MMI	PAL20R4	
	Sprague	SPL20RC4	
	TI	PAL20R4	
		TIBPAL20R4-20	**(3217, 4320)**
PAL20R6	Cypress	CUPLDC20G10	
	Fairchild	F100170	
	Hitachi	HD100170	
	MMI	PAL20R6B	
	Signetics	**100170**	**(3020)**
	Sprague	SPL20RC6	
	TI	PAL20R6	
		TIBPAL20R6-20	**(3217, 4320)**
PAL20R6B	Cypress	CUPLDC20G10	
	Fairchild	F100170	
	Hitachi	HD100170	
	MMI	PAL20R6	
	Signetics	**100170**	**(3020)**
	Sprague	SPL20RC6	
	TI	PAL20R6	
		TIBPAL20R6-20	**(3217, 4320)**
PAL20R8	Cypress	CUPLDC20G10	
	Fairchild	F100166	
	Hitachi	HD100166	
	MMI	PAL20R8B	
	National	PAL20R8	
	Sprague	SPL20RC8	
	TI	PAL20R8	
		TIBPAL20R8-20	**(3217, 4320)**
PAL20R8B	Cypress	CUPLDC20G10	
	Fairchild	F100166	
	Hitachi	HD100166	
	MMI	PAL20R8	
	National	PAL20R8	
	Sprague	SPL20RC8	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Monolithic Memories, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
PAL20R8B			(Cont'd)
	TI	PAL20R8	
		TIBPAL20R8-20	**(3217, 4320)**
PAL20X10	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PALC22V10	
	National	DMPAL20X10	
		PAL20X10	
	Sprague	SPL20XC10	
	TI	**TIBPAL20X10-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
PAL20X4	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PALC22V10	
	National	DMPAL20X4	
		PAL20X4	
	Sprague	SPL20XC4	
	TI	**TIBPAL20X4-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
PAL20X8	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PALC22V10	
	National	DMPAL20X8	
		PAL20X8	
	Sprague	SPL20XC8	
	TI	**TIBPAL20X8-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
PALC16L8Q-25			
	Cypress	**PALC16L8**	**(4217)**
	GoldStar	**GM5375**	**(2701)**
	Thomson	MK5375	
PALC16R4Q-25			
	Cypress	**PALC16R4**	**(4217)**
	GoldStar	**GM231024**	**(2692)**
	Hitachi	HM62301	
	Mitel	M5M231000	
	NEC	μPD231000	
	Toshiba	TC53100	
PALC16R8Q-25			
	Cypress	**PALC16R8**	**(4217)**
	GoldStar	**GM5376**	**(2701)**
	Thomson	MK5376	
PALC22V10	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X10	
	National	DMPAL20X10	
		PAL20X10	
	Sprague	SPL20XC10	
	TI	**TIBPAL20X10-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
PAU20RA10	**Cypress**	**PLDC20RA10**	**(4218)**
SN54557	AMD	AM25S557	
	LogicDev	LMU557	
	MMI	SN74S557	
SN54558	AMD	AM25S557	
		AM25S558	
	LogicDev	LMU558	
	MMI	74S558	
		SN74S558	
SN54LS240	Fairchild	54LS240	
	Motorola	SN54LS240	
	SGS	T54LS240	
	TI	SN54LS240	
SN54LS241	Fairchild	54LS241	
	Motorola	SN54LS241	
	SGS	T54LS241	
	TI	SN54LS241	
SN54LS244	Fairchild	54LS244	
	Motorola	SN54LS244	
	SGS	T54LS244	
	TI	SN54LS244	
SN54LS245	Fairchild	54LS245	
	Motorola	SN54LS245	
	National	DM54LS245	
	Signetics	54LS245	
	TI	SN54LS245	
SN54LS273	Fairchild	54LS273	
	Motorola	SN54LS273	
	SGS	T54LS273	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS273			(Cont'd)
	Signetics	54LS273	
	TI	SN54LS273	
SN54LS373	Motorola	SN54LS373	
	SGS	T54LS373	
	Signetics	54LS373	
	TI	SN54LS373	
SN54LS374	Fairchild	54LS374	
	Motorola	SN54LS374	
	National	DM54LS374	
	SGS	T54LS374	
	TI	SN54LS374	
♦ SN54LS377	Fairchild	54LS377	
	Motorola	SN54LS377	
	SGS	T54LS377	
	Signetics	54LS377	
	TI	SN54LS377	
♦ SN54LS645	Motorola	SN54LS645	
	TI	SN54LS645	
♦ SN54S182	TI	SN54S182	
SN54S240	TI	SN54S240	
SN54S241	TI	SN54S241	
SN54S244	Signetics	54S244	
	TI	SN54S244	
SN54S373	TI	SN54S373	
SN54S374	TI	SN54S374	
♦ SN54S381	TI	SN54S381	
♦ SN74LS240	Fairchild	74LS240	
	Hitachi	HD74LS240	
	Motorola	SN74LS240	
	Panasonic	DN74LS240	
	SGS	T74LS240	
	Signetics	**74LS240**	**(3003)**
	TI	SN74LS240	
♦ SN74LS241	Fairchild	74LS241	
	Hitachi	HD74LS241	
	Motorola	SN74LS241	
	Panasonic	DN74LS241	
	SGS	T74LS241	
	Signetics	**74LS241**	**(3003)**
	TI	SN74LS241	
♦ SN74LS244	Fairchild	74LS244	
	Hitachi	HD74LS244	
	Motorola	SN74LS244	
	Panasonic	DN74LS244	
	SGS	T74LS244	
	Signetics	**74LS244**	**(3003)**
	TI	SN74LS244	
♦ SN74LS273	Fairchild	74LS273	
	Motorola	SN74LS273	
	SGS	T74LS273	
	Signetics	**74LS273**	**(3003)**
	TI	SN74LS273	
♦ SN74LS373	Fairchild	74LS373	
	Motorola	SN74LS373	
	Panasonic	DN74LS373	
	SGS	T74LS373	
	Signetics	**74LS373**	**(3003)**
	TI	SN74LS373	
♦ SN74LS374	Fairchild	74LS374	
	Motorola	SN74LS374	
	National	DM74LS374	
	SGS	T74LS374	
	Signetics	**74LS374**	**(3003)**
	TI	SN74LS374	
♦ SN74LS377	Fairchild	74LS377	
	Motorola	SN74LS377	
	SGS	T74LS377	
	Signetics	**74LS377**	**(3003)**
	TI	SN74LS377	
♦ SN74LS645	Motorola	SN74LS645	
	Signetics	**74LS645**	**(3003)**
	TI	SN74LS645	
SN74S182	Fairchild	74S182	
	National	DM74S182	
	Signetics	**74S182**	**(3003)**
	TI	SN74S182	
♦ SN74S244	TI	SN74S244	
♦ SN74S373	**Signetics**	**74S373**	**(3003)**
	TI	SN74S373	
♦ SN74S374	**Signetics**	**74S374**	**(3003)**
	TI	SN74S374	
SN74S557	AMD	AM25S557	
	LogicDev	LMU557	
	MMI	SN54557	
SN74S558	AMD	AM25S557	
		AM25S558	
	LogicDev	LMU558	
	MMI	74S558	
		SN54558	

Mosaid

Manufacturer Device	Replacement Source	Device	IC Master Page
MS1256CS	EDI	EDH81H256C	
	IDT	**IDT7MC156**	**(2803, 2840)**

Motorola Semiconductor Products

Manufacturer Device	Replacement Source	Device	IC Master Page
26LS31	AMD	26L631	
		26LS31	
	AT&T	**41LG**	**(2492)**
	National	26LS31	
26LS32	AMD	26LS32	
	AT&T	**41LF**	**(2490)**
	National	26LS32	
28C64	AMD	AM28645	
	EXEL	XL2865A	
	GIM	28C64	
	NCR	NCR5264	
	Samsung	KM2865A	
	SEEQ	DQ2864	
54ALS139	TI	SN54ALS139	
54F373	Fairchild	54F373	
	Motorola	MC54F373	
	Signetics	54F373	
	TI	SN547F373	
54HC03	**GE/RCA**	**CD54HC03**	**(2631)**
	National	MM54HC03	
	TI	SN54HC03	
54HC113	TI	SN54HC113	
54HC51	National	MM54HC51	
	TI	SN54HC51	
54LS183	TI	SN54LS183	
6504	AMD	AM2141	
		AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	National	NM2147	
		NMC6504	
	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
6514	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
6518	**Harris**	**HM6518**	**(2704, 2762)**
	National	MM74C930	
76161	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
76161			(Cont'd)
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
7681	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
81LS97	National	DM74LS797	
81LS98	National	DM74LS798	
AM26LS31	AMD	AM26LS31	
	National	DS26LS31	
	TI	AM26LS31	
CA3054	Fairchild	μA3054	
	GE/RCA	**CA3054**	**(2647, 2649)**
	National	LM3054	
	Sprague	ULN2054	
	Thomson	SFC2054	
CA3059	**GE/RCA**	**CA3059**	**(2649)**
CA3079	**GE/RCA**	**CA3079**	**(2649)**
DAC08	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**MC1408**	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
DM54LS299	Fairchild	54LS299	
	TI	SN54LS299	
♦ DS8641	National	DS8641	
HCA6306	National	SCX6306	
HCA6312	National	SCX6312	
HCA6324	National	SCX6324	
		SCX6325	
HCA6348	National	SCX6348	
LF355	LinearTech	LF355	
	National	LF355	
	PMI	**OP43**	**(2970)**
		PM355	
	Thomson	LF355	
♦ LF355A	LinearTech	LF355A	
	National	LF355A	
	PMI	PM355A	
LF356	LinearTech	LF356	
	National	LF356	
	PMI	PM356	
	Thomson	LF356	
♦ LF356A	**Burr-Brown**	**OPA356A**	**(2532)**
	LinearTech	LF356A	
	National	LF356A	
	PMI	PM356A	
LM101	AMD	LM101	
	AD	AD101	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM101			(Cont'd)
	Fairchild	μA101	
	GE/Intersil	AD101	
	LinearTech	LM101	
	Raytheon	LM101	
	SGS	LS101	
	SiliconG	SG101	
	Thomson	LM101	
LM108	AD	AD108	
	Fairchild	μA108	
	GE/Intersil	LM108	
	LinearTech	LM108	
	MicroPwr	MP108	
	National	LM108	
	PMI	**PM108**	**(2970)**
	SiliconSys	SSI108	
LM108A	AD	AD108A	
	Fairchild	UA108A	
	LinearTech	LM108A	
	PMI	**PM108A**	**(2970)**
LM109	Fairchild	μA109	
	IPS	**IP140-5**	**(2854)**
	National	LM109	
	SiliconG	SG109	
	Thomson	LM109	
		SFC2109	
LM11	LinearTech	LM11	
	National	LM11	
LM111	AD	AD111	
	Fairchild	μA111	
	LinearTech	LM111	
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
LM117	Fairchild	μA117	
	IPS	**IP117**	**(2854)**
	LinearTech	LM117	
	MCE	MCELM117	
	National	LM117	
	SiliconG	SG117	
	TI	TL117	
	Thomson	LM117	
	Unitrode	**UC117**	**(3325)**
LM117A	LinearTech	LT117A	
	National	LM117A	
	SiliconG	SG117A	
LM123	Fairchild	SH123	
		UA138	
		μA123	
	IPS	**IP123**	**(2854)**
	LinearTech	LM123	
		LT123	
	Motorola	**MC78T05**	**(2926)**
	National	LM123	
	SiliconG	SG123	
		SG123A	
LM124	Ferranti	ZN518	
	SiliconG	SG124A	
	SiliconSys	SSI6276	
♦ LM124A	Fairchild	μA124	
	GE/RCA	**CA124**	**(2645)**
	LinearTech	LT1014	
	National	LM124A	
	SiliconG	SG124	
	TI	LM124	
LM137	**IPS**	**IP137**	**(2854)**
	LinearTech	LM137	
		LT137	
	MCE	MCELM137	
	National	LM137	
	SiliconG	SG137	
		SG137A	
	Thomson	LM137	
	Unitrode	**UC137**	**(3325)**
♦ LM138	Ferranti	ZN454	
	LinearTech	LT138	
	SiliconG	SG138	
	SiliconSys	SSI6280	
LM139	Fairchild	μA139	
	GE/RCA	**CA139**	**(2647)**
	National	LM139	
	PMI	**CMP04**	**(2975)**
		PM139	**(2975)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM139			(Cont'd)
	Raytheon	LM139	
	Signetics	LM139	
	TI	LM139	
LM139A	**GE/RCA**	**CA139A**	**(2647)**
	National	LM139A	
	PMI	**CMP04**	**(2975)**
		PM139A	**(2975)**
	TI	LM139A	
LM140-12	**IPS**	**IP140-12**	**(2854)**
	National	LM140-12	
	SiliconG	SG140-12	
	Unitrode	UC140-12	
LM140-15	**IPS**	**IP140-15**	**(2854)**
	National	LM140-15	
	SiliconG	SG140-15	
	Unitrode	UC140-15	
♦ LM140-18	National	LM140-18	
	SiliconG	SG140-18	
♦ LM140-24	**GoldStar**	**GL7905**	**(2701)**
	Gould	μA7905	
	National	LM140-24	
	SiliconG	SG140-24	
	Toshiba	TA79005	
LM148	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**MC33174**	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
		RM4158	
	TI	LM148	
LM150	**IPS**	**IP150**	**(2854)**
	LinearTech	LM150	
		LT150	
	National	LM150	
	SiliconG	SG150	
	Unitrode	**UC150**	**(3325)**
LM158	**GE/RCA**	**CA158A**	**(2645)**
	LinearTech	LT1013	
	National	LM158A	
	Raytheon	RM4139	
	Signetics	LM158	
	TI	LM158	
LM193	National	LM193A	
	Signetics	LM193	
	TI	LM193	
LM201	Fairchild	μA201	
	Motorola	**MC1748**	**(2919)**
	National	LM748	
	SGS	LM748	
		LS148	
	SiliconG	SG201	
	TI	LM201	
		LM748	
		SN72748P	
		μA748	
	Thomson	LM201	
		LM748	
♦ LM205	Ferranti	ZN515	
	National	LM205	
	SiliconG	SG205	
	SiliconSys	SSI6284	
LM208	Fairchild	μA209	
	Ferranti	ZN437	
	National	LM209	
	SiliconG	SG209	
	SiliconSys	SSI6410	
LM208A	AD	AD208A	
	Fairchild	UA208A	
	National	LM208A	
	PMI	PM208A	
LM211	AD	AD211	
	National	LM211	
	PMI	PM211	
	Signetics	LM211	
	SiliconG	SG211	
	TI	LM211	
	Thomson	LM211	
LM217	**IPS**	**IP217**	**(2854)**
	MCE	MCELM217	
	National	LM217	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM217			(Cont'd)
	SGS	LM217	
	SiliconG	SG217	
		SG217A	
	Thomson	LM217	
	Unitrode	**UC217**	**(3325)**
LM223	Fairchild	SH223	
		μA223	
	IPS	**IP223**	**(2854)**
	National	LM223	
	SiliconG	SG223	
	Thomson	LM223	
LM224	Fairchild	μA224	
	Ferranti	ZN448	
	SiliconG	SG224	
	SiliconSys	SSI6051	
	TI	LM224	
♦ LM224A	Ferranti	ZN501	
	SiliconG	SG224A	
	SiliconSys	SSI6070M	
LM237	**IPS**	**IP237**	**(2854)**
	MCE	MCELM237	
	National	LM237	
	SiliconG	SG237	
		SG237A	
	Unitrode	**UC237**	**(3325)**
LM239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
		μA239	
	GE/RCA	**CA239**	**(2647)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	
LM239A	**GE/RCA**	**CA239A**	**(2647)**
	National	LM239A	
	PMI	**CMP04**	**(2975)**
LM250	**IPS**	**IP250**	**(2854)**
	National	LM250	
	SiliconG	SG250	
	Unitrode	**UC250**	**(3325)**
LM258	**GE/RCA**	**CA258A**	**(2645)**
	National	LM258A	
	PMI	**OP221**	**(2970, 2972)**
	Signetics	LM258	
	TI	LM258	
	Thomson	LM258	
LM285	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM285	
LM2900	Hitachi	HA17301	
	Motorola	**MC3301**	**(2924)**
	National	LM2900	
		LM3301	
	Raytheon	LM2900	
		RC3301	
	TI	LM2900	
LM2901	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**MC3302**	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
LM2902	Fairchild	μA2902	
		μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM324**	**(2923, 2958)**
		MC33174	**(2924, 2959)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM2902			(Cont'd)
	National	LM2902	
		LM324	
	NEC	μPC324	
		μPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
LM2903	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM311**	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM2904	**GE/RCA**	**CA2904**	**(2645)**
	SGS	LM2904	
	TI	LM2904	
	Thomson	LM2904	
	Toshiba	TA75358	
LM293	National	LM293	
	Signetics	LM293	
	TI	LM293	
LM301	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
♦ LM305	Fairchild	μA305	
	Ferranti	ZNREF025	
	National	LM305	
	SiliconG	SG305	
	SiliconSys	SSI6505	
♦ LM3065	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	LSC1008	
		M5140	
♦ LM3065	National	LM3064	
	NEC	μPC1382	
	Sanyo	LA1365	
	TI	SN76666	
	Toshiba	TA7176	
LM308	AD	AD308	
	Burr-Brown	3500	
		3501	
	Fairchild	μA308	
	GE/Intersil	AD308	
		LM308	
	National	LM308	
	Raytheon	LM308	
LM308A	AD	AD308A	
	Fairchild	μA308A	
	LinearTech	LM308A	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM308A			(Cont'd)
	National	LM308A	
	PMI	PM308A	
LM309	Fairchild	μA309	
	Ferranti	ZN447	
	National	LM309	
	SiliconG	SG309	
	SiliconSys	SSI6050	
LM311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM317	Fairchild	μA317	
	IPS	**IP317**	**(2854)**
	LinearTech	LM317	
	MCE	MCELM317	
	National	LM317	
	SGS	LM317	
	SiliconG	SG317	
	TI	LM317	
	Thomson	LM317	
		TDB0117	
	Unitrode	**UC317**	**(3325)**
LM317M	National	LM317M	
LM323	Fairchild	SH0323	
		SH323	
		μA323	
		μA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	
	Micropac	M78H05	
	National	LM323	
	SiliconG	SG323	
	Thomson	LM323	
LM324	Fairchild	μA2902	
		μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	μPC324	
		μPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
LM337	**IPS**	**IP337**	**(2854)**
	LinearTech	LM337	
		LT337	
	MCE	MCELM337	
	National	LM337	
	SiliconG	SG337	
		SG337A	
	TI	LM337	
	Thomson	LM337	
	Unitrode	**UC337**	**(3325)**
LM339	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM339	**GE/RCA**		**(Cont'd)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
LM340-05	Ferranti	ZN503	
	National	LM340-5	
	SiliconG	SG340-05	
	SiliconSys	SSI6072M	
	Unitrode	UC340-05	
LM340-12	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**MC7812**	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
LM340-15	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**MC7815**	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
♦ LM340-18	National	LM340-18	
	NEC	μPC7818	
	SiliconG	SG340-18	
		SG7818	
		SG7818A	
♦ LM340-18	TI	LM340-18	
	Thomson	μA7818	
♦ LM340-20	National	LM340-20	
	SiliconG	SG340-20	
LM340-24	National	LM340-24	
	SiliconG	SG340-24	
LM348	Exar	XR4751	
	Fairchild	μA348	
	GE/Intersil	LM348	
	GoldStar	**GL348**	**(2700)**
	Motorola	**MC4741**	**(2923, 2959)**
	National	LM348	
	Raytheon	HA4741	
	TI	LM348	
LM350	Fairchild	μA350	
		μA78HGA	
	IPS	**IP350**	**(2854)**
	LinearTech	LM350	
		LT350	
	National	LM350	
	SiliconG	SG350	
	TI	LM350	
	Unitrode	**UC350**	**(3325)**
♦ LM350-08	Fairchild	μA75453	
	National	LM340-08	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ LM350-08			(Cont'd)
	SiliconG	SG340-08	
		SG75453	
LM358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	National	LM358	
		LM358A	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
LM385	LinearTech	LM385	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM385	
LM385-2	Ferranti	REF25	
	LinearTech	LM336-2	
		LM385-2	
	National	LM336-2	
		LM385-2	
LM393	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	National	LM393	
	NEC	μPC393	
	Sanyo	LA6393	
	Signetics	LM393	
	TI	LM393	
	Toshiba	TA75393	
♦ LM3930	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	μPC277	
		μPC393	
♦ LM3930	SGS	LM393	
	TI	LM393	
	Toshiba	TA75393	
LSC1008	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	M5140	
	National	LM3064	
	NEC	μPC1382	
	Sanyo	LA1365	
	TI	SN76666	
	Toshiba	TA7176	
M5140	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	LSC1008	
	National	LM3064	
	NEC	μPC1382	
	Sanyo	LA1365	
	TI	SN76666	
	Toshiba	TA7176	
M5L2114	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
♦ MA1200	MMI	PAL20L6	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ MA600	Micropac	MASG600	
MC08	Fairchild	μA7808	
	GoldStar	GL7808	
	Gould	μA7808	
	Hitachi	HA17808	
	Motorola	**MC7808**	**(2927)**
	National	LM7808	
	NEC	μPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	μA7808	
	Thomson	μA7808	
	Toshiba	TA78008	
MC10100	**Signetics**	**10100**	**(3021)**
MC10101	Hitachi	HD10101	
	Signetics	**10101**	**(3021)**
MC10102	Hitachi	HD10102	
	Signetics	**10102**	**(3021)**
MC10103	**Signetics**	**10103**	**(3021)**
MC10104	Hitachi	HD10104	
	Signetics	**10104**	**(3021)**
MC10105	Hitachi	HD10105	
	Signetics	**10105**	**(3021)**
MC10106	Hitachi	HD10106	
	Signetics	**10106**	**(3021)**
MC10107	Hitachi	HD10107	
	Signetics	**10107**	**(3021)**
MC10109	Hitachi	HD10109	
	Signetics	**10109**	**(3021)**
MC10110	Hitachi	HD10110	
	Signetics	**10110**	**(3021)**
MC10111	Hitachi	HD10111	
	Signetics	**10111**	**(3021)**
MC10114	**Signetics**	**10114**	**(3021)**
MC10115	**Signetics**	**10115**	**(3021)**
MC10116	Hitachi	HD10116	
	National	DM10116	
	Signetics	**10116**	**(3021)**
MC10117	Hitachi	HD10117	
	Signetics	**10117**	**(3021)**
MC10118	Hitachi	HD10118	
	Signetics	**10118**	**(3021)**
MC10119	Hitachi	HD10119	
	Signetics	**10119**	**(3021)**
MC10121	Hitachi	HD10121	
	Signetics	**10121**	**(3021)**
MC10123	**Signetics**	**10123**	**(3021)**
MC10124	Hitachi	HD10124	
	Signetics	**10124**	**(3021)**
MC10125	Hitachi	HD10125	
	Signetics	**10125**	**(3021)**
MC10129	Signetics	10129	
MC10130	Hitachi	HD10130	
	Signetics	**10130**	**(3021)**
MC10131	Hitachi	HD10131	
	Signetics	**10131**	**(3021)**
MC10132	Hitachi	HD10132	
	Signetics	**10132**	**(3021)**
MC10133	Hitachi	HD10133	
	Signetics	**10133**	**(3021)**
MC10134	Hitachi	HD10134	
	Signetics	**10134**	**(3021)**
MC10135	**Signetics**	**10135**	**(3021)**
MC10136	Hitachi	HD10136	
	Signetics	**10136**	**(3021)**
MC10137	**Signetics**	**10137**	**(3021)**
MC10141	**Signetics**	**10141**	**(3021)**
MC10158	**Signetics**	**10158**	**(3021)**
MC10159	**Signetics**	**10159**	**(3021)**
MC10160	Hitachi	HD10160	
	Signetics	**10160**	**(3021)**
MC10161	Hitachi	HD10161	
	Signetics	**10161**	**(3021)**
MC10162	Hitachi	HD10162	
	Signetics	**10162**	**(3021)**
MC10164	Hitachi	HD10164	
	Signetics	**10164**	**(3021)**
	TI	SN10164	
MC10165	Hitachi	HD10165	
	Signetics	**10165**	**(3021)**
MC10171	**Signetics**	**10171**	**(3021)**
MC10172	**Signetics**	**10172**	**(3021)**
MC10173	**Signetics**	**10173**	**(3021)**
MC10174	Hitachi	HD10174	
	Signetics	**10174**	**(3021)**
	TI	SN10174	
MC10175	Hitachi	HD10175	
	Signetics	**10175**	**(3021)**
MC10178	Fairchild	F10178	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC10179	Hitachi	HD10179	
	Signetics	**10179**	**(3021)**
MC10180	Hitachi	HD10180	
	Signetics	**10180**	**(3021)**
MC10181	Hitachi	HD10181	
	Signetics	**10181**	**(3021)**
MC10188	**Signetics**	**10188**	**(3021)**
MC10189	**Signetics**	**10189**	**(3021)**
MC10192	**Signetics**	**10192**	**(3021)**
MC10210	**Signetics**	**10210**	**(3021)**
MC10211	**Signetics**	**10211**	**(3021)**
MC10216	Fairchild	F10216	
	Signetics	**10216**	**(3021)**
MC10231	**Signetics**	**10231**	**(3021)**
MC10319	**GE/RCA**	**CA3318**	**(2651)**
		CA8808	
	Hitachi	HA19209	
	MicroPwr	MP7684	
	NEC	μPD6950	
MC10H100	MMI	MC10H100	
MC10H101	MMI	MC10H101	
MC10H102	MMI	MC10H102	
MC10H103	MMI	MC10H103	
MC10H104	MMI	MC10H104	
MC10H105	MMI	MC10H105	
MC10H107	MMI	MC10H107	
MC10H109	MMI	MC10H109	
MC10H115	MMI	MC10H115	
MC10H116	MMI	MC10H116	
MC10H117	MMI	MC10H117	
MC10H118	MMI	MC10H118	
MC10H119	MMI	MC10H119	
	Motorola	MC74HC4352	
MC10H121	MMI	MC10H121	
MC10H124	MMI	MC10H124	
MC10H125	MMI	MC10H125	
MC10H130	MMI	MC10H130	
MC10H131	MMI	MC10H131	
MC10H141	MMI	MC10H141	
MC10H158	MMI	MC10H158	
MC10H159	MMI	MC10H159	
MC10H16	MMI	MC10H16	
MC10H160	MMI	MC10H160	
MC10H161	MMI	MC10H161	
MC10H162	MMI	MC10H162	
MC10H164	MMI	MC10H164	
MC10H166	MMI	MC10H166	
MC10H173	MMI	MC10H173	
MC10H174	MMI	MC10H174	
MC10H175	MMI	MC10H175	
MC10H176	MMI	MC10H176	
	Motorola	MC10H179	
MC10H179	MMI	MC10H176	
	Motorola	MC10H176	
MC10H209	MMI	MC10H209	
MC10H210	MMI	MC10H210	
MC10H211	MMI	MC10H211	
MC12015	National	DS8615	
MC12017	National	DS8617	
MC12020	AD	AD7628	
	Maxim	AD7628	
	Siemens	SO41P	
	Signetics	**NE604**	**(3103)**
		SA604	
	Sprague	ULN3820	
MC12071	National	DS8621	
♦ MC1309	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
♦ MC1309	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
♦ MC1309	TI	SN76111	
		SN76116	
♦ MC1311	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
♦ MC1311	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
♦ MC1311	TI	SN76111	
		SN76116	
♦ MC1327	Motorola	TDA1327	
	TI	SN76227	
♦ MC1344	Fairchild	μA705	
	National	LM1800	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ MC1344			(Cont'd)
	Sanyo	LA705	
		LA758	
♦ MC1344	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
♦ MC1344	TI	SN76111	
		SN76116	
MC1350	TI	SN76600	
	Thomson	ESM1350	
MC1352	Sanyo	LA1352	
♦ MC1357	GE/RCA	CA2111A	
	National	LM2111	
		LM2113	
♦ MC1357	Signetics	N5111	
	Sprague	ULN2111	
	TI	SN76642	
		SN76643	
♦ MC1358	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	LSC1008	
		M5140	
♦ MC1358	National	LM3064	
	NEC	μPC1382	
	Sanyo	LA1365	
	TI	SN76666	
	Toshiba	TA7176	
MC1374	**Sprague**	**UDN5714**	**(3203)**
	TI	SN75479	
		UDN5714	
	Toshiba	TD62479	
MC1391	GE/RCA	CA1391	
	National	LM1391	
♦ MC1394	GE/RCA	CA1394	
	National	LM1394	
MC14000	**GE/RCA**	**CD4000**	**(2633)**
	National	CD4000	
	SGS	HCC/HCF4000	
	Signetics	HEF400	
	Solitron	CM4000	
	Sprague	SCL4000	
MC14001	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
	National	CD4001	
		MM74C02	
	OKI	MSM4001	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
MC14002	Fairchild	F4002	
	GE/RCA	**CD4002**	**(2633)**
	National	CD4002	
	SGS	HCC/HCF4002	
	Signetics	HEF4002	
	Solitron	CM4002	
	Sprague	SCL4002	
	Toshiba	**TC4002**	**(3308)**
MC14006	Fairchild	F4006B	
	GE/RCA	**CD4006B**	**(2634)**
	National	CD4006	
MC14007	Fairchild	F4007	
	GE/RCA	**CD4007**	**(2633)**
	National	CD4007	
	SGS	HCC/HCF4007	
	Signetics	HEF4007	
	Solitron	CM4007	
	Sprague	SCL4007	
	Toshiba	**TC4007**	**(3308)**
MC14008	Fairchild	F4008	
	GE/RCA	**CD4008**	**(2636)**
	National	CD4008	
		MM74C83	
	SGS	HCC/HCF4008	
	Signetics	HEF4008	
	Solitron	CM4008	
	Sprague	SCL4008	
	Toshiba	**TC4008**	**(3308)**
MC14009	**GE/RCA**	**CD4009**	**(2633)**
	National	CD4009	
	SGS	HCC/HCF4009	
	Solitron	CM4009	
	Sprague	SCL4009	
	Toshiba	**TC4009**	**(3308)**
MC1400AG10	AD	AD581	
		ADREF01	
	Gennum	REF01	
	LinearTech	LT1019-10	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC1400AG10	LinearTech		(Cont'd)
		LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
MC1400AU10	LinearTech	REF01E	
	PMI	**REF01EZ**	**(2975)**
♦ MC1400AU5	AD	ADREF02	
	Gennum	REF02	
	LinearTech	LT1019-5	
		LTREF02	
		REF02E	
♦ MC1400AU5	Maxim	REF02	
	MicroPwr	MP5532	
		MPREF02	
♦ MC1400AU5	**PMI**	**REF02**	**(2975)**
		REF02EZ	**(2975)**
♦ MC1400AU5	Raytheon	REF02	
	TeledyneS	TSC9496	
MC14010	**GE/RCA**	**CD4010**	**(2633)**
	National	CD4010	
	SGS	HCC/HCF4010	
	Solitron	CM4010	
	Sprague	SCL4010	
	Toshiba	**TC4010**	**(3308)**
MC14011	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	National	CD4011	
		MM74C00	
	OKI	MSM4011	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
MC14012	Fairchild	F4012	
	GE/RCA	**CD4012**	**(2633)**
	National	CD4012	
	SGS	HCC/HCF4012	
	Signetics	HEF4012	
	Solitron	CM4012	
	Sprague	SCL4012	
	Toshiba	**TC4012**	**(3308)**
MC14013	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	National	CD4013	
		MM74C74	
	OKI	MSM4013	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
	Signetics	HEF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
MC14014	Fairchild	F4014	
	GE/RCA	**CD4014**	**(2634)**
	National	CD4014	
	SGS	HCC/HCF4014	
	Signetics	HEF4014	
	Solitron	CM4014	
	Sprague	SCL4014	
	Toshiba	**TC4014**	**(3308)**
MC14015	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	National	CD4015	
		MM74C164	
	OKI	MSM4015	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
MC14016	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC14016			(Cont'd)
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
MC14017	Fairchild	F4017	
	GE/RCA	**CD4017**	**(2635)**
	National	CD4017	
	SGS	HCC/HCF4017	
	Signetics	HEF4017	
	Solitron	CM4017	
	Sprague	SCL4017	
	Toshiba	**TC4017**	**(3308)**
MC14018	Fairchild	F4018	
	GE/RCA	**CD4018**	**(2635)**
	National	CD4018	
	SGS	HCC/HCF4018	
	Signetics	HEF4018	
	Solitron	CM4018	
	Sprague	SCL4018	
	Toshiba	**TC4018**	**(3308)**
MC14020	Fairchild	F4020	
	GE/RCA	**CD4020**	**(2634)**
	National	CD4020	
	SGS	HCC/HCF4020	
	Signetics	HEF4020	
	Solitron	CM4020	
	Sprague	SCL4020	
	Toshiba	**TC4020**	**(3308)**
MC14021	Fairchild	F4021	
	GE/RCA	**CD4021**	**(2634)**
	National	CD4021	
	SGS	HCC/HCF4021	
	Signetics	HEF4021	
	Sprague	SCL4021	
	Toshiba	**TC4021**	**(3308)**
MC14022	Fairchild	F4022	
	GE/RCA	**CD4022**	**(2635)**
	National	CD4022	
	SGS	HCC/HCF4022	
	Signetics	HEF4022	
	Solitron	CM4022	
	Sprague	SCL4022	
	Toshiba	**TC4022**	**(3308)**
MC14023	Fairchild	F4023	
	GE/RCA	**CD4023**	**(2633)**
	National	CD4023	
		MM74C10	
	SGS	HCC/HCF4023	
	Signetics	HEF4023	
	Solitron	CM4023	
	Sprague	SCL4023	
	Toshiba	**TC4023**	**(3308)**
MC14024	Fairchild	F4024	
	GE/RCA	**CD4024**	**(2634)**
	National	CD4024	
	SGS	HCC/HCF4024	
	Signetics	HEF4024	
	Solitron	CM4024	
	Sprague	SCL4024	
	Toshiba	**TC4024**	**(3308)**
MC14025	Fairchild	F4025	
	GE/RCA	**CD4025**	**(2633)**
	National	CD4025	
	SGS	HCC/HCF4025	
	Signetics	HEF4025	
	Solitron	CM4025	
	Sprague	SCL4025	
	Toshiba	**TC4025**	**(3308)**
MC14027	Fairchild	F4027	
	GE/RCA	**CD4027**	**(2634)**
	National	CD4027	
		MM74C76	
	OKI	MSM4027	
	Sanyo	LC4027	
	SGS	HCC/HCF4027	
	Signetics	HEF4027	
	Solitron	CM4027	
	Sprague	SCL4027	
MC14028	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	National	CD4028	
		MM74C42	
	OKI	MSM4028	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Motorola Semiconductor Products			**(Cont'd)**
MC14028			(Cont'd)
	Solitron	CM4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
MC14029	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
MC1403	AD	AD1403	
	LinearTech	LT1009	
	SiliconG	SG3503	
	TI	LT1009	
MC14032	**GE/RCA**	**CD4032**	**(2636)**
	SGS	HCC/HCF4032	
	Solitron	CM4032	
	Toshiba	**TC4032**	**(3308)**
MC14034	Fairchild	F4034	
	GE/RCA	**CD4034**	**(2634, 2636)**
	National	CD4034	
	SGS	HCC/HCF4034	
	Solitron	CM4034	
	Sprague	SCL4034	
	Toshiba	**TC4034**	**(3308)**
MC14035	Fairchild	F4035	
	GE/RCA	**CD4035**	**(2634)**
	SGS	HCC/HCF4035	
	Signetics	HEF4035	
	Solitron	CM4035	
	Toshiba	TC4035	
MC14038	**GE/RCA**	**CD4038**	**(2636)**
	SGS	HCC/HCF4038	
	Solitron	CM4038	
	Toshiba	**TC4038**	**(3308)**
MC14040	Fairchild	F4040	
	GE/RCA	**CD4040**	**(2634)**
	National	CD4040	
	SGS	HCC/HCF4040	
	Signetics	HEF4040	
	Solitron	CM4040	
	Sprague	SCL4040	
	Toshiba	**TC4040**	**(3308)**
MC14042	Fairchild	F4042	
	GE/RCA	**CD4042**	**(2634)**
	National	CD4042	
	SGS	HCC/HCF4042	
	Signetics	HEF4042	
	Solitron	CM4042	
	Sprague	SCL4042	
	Toshiba	**TC4042**	**(3308)**
MC14043	**GE/RCA**	**CD4043**	**(2634)**
	National	CD4043	
	SGS	HCC/HCF4043	
	Signetics	HEF4043	
	Solitron	CM4043	
	Sprague	SCL4043	
	Toshiba	**TC4043**	**(3308)**
MC14044	Fairchild	F4044	
	GE/RCA	**CD4044**	**(2634)**
	National	CD4044	
	SGS	HCC/HCF4044	
	Signetics	HEF4044	
	Solitron	CM4044	
	Toshiba	**TC4044**	**(3308)**
MC14046	Fairchild	F4046	
	GE/RCA	**CD4046**	**(2635)**
	National	CD4046	
	SGS	HCC/HCF4046	
	Solitron	CM4046	
	Sprague	SCL4046	
MC14049	Fairchild	F4049	
	GE/RCA	**CD4049**	**(2633)**
	National	CD4049	
	OKI	MSM4049	
	Sanyo	LC4049	
	SGS	HCC/HCF4049	
	Signetics	HEF4049	
	Solitron	CM4049	
	Sprague	SCL4049	
	Toshiba	**TC4049**	**(3308)**
MC14050	Fairchild	F4050	
	GE/RCA	**CD4050**	**(2633)**
	National	CD4050	
	SGS	HCC/HCF4050	
	Signetics	HEF4050	
	Solitron	CM4050	
	Sprague	SCL4050	
	Toshiba	**TC4050**	**(3308)**
MC14051	Fairchild	F4051	
	GE/RCA	**CD4051**	**(2635)**
	National	CD4051	
	SGS	HCC/HCF4051	
	Signetics	HEF4051	
	Solitron	CM4051	
	Sprague	SCL4051	
	Toshiba	**TC4051**	**(3308)**
MC14052	Fairchild	F4052	
	GE/RCA	**CD4052**	**(2635)**
	SGS	HCC/HCF4052	
	Signetics	HEF4052	
MC14053	Fairchild	F4053	
	GE/RCA	**CD4053**	**(2635)**
	National	CD4053	
	SGS	HCC/HCF4053	
	Signetics	HEF4053	
	Solitron	CM4053	
	Sprague	SCL4053	
	Toshiba	**TC4053B**	**(3308)**
MC14060	**GE/RCA**	**CD4060**	**(2634)**
	National	CD4060	
	SGS	HCC/HCF4060	
	Signetics	HEF4060	
	Sprague	SCL4060	
MC14066	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
MC14067	Fairchild	F4067	
	SGS	HCC/HCF4067	
	Signetics	HEF4067	
MC14068	Fairchild	F4068	
	GE/RCA	**CD4068**	**(2633)**
	SGS	HCC/HCF4068	
	Signetics	HEF4068	
	Solitron	CM4068	
	Sprague	SCL4068	
	Toshiba	**TC4068**	**(3308)**
MC14069	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	National	CD4069	
		MM54C04	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
MC14070	Fairchild	F4070	
	GE/RCA	**CD4070**	**(2633, 2636)**
	National	CD4070	
		MM74C86	
	SGS	HCC/HCF4070	
	Signetics	HEF4070	
	Solitron	CM4070	
	Sprague	SCL4070	
MC14071	Fairchild	F4071	
	GE/RCA	**CD4071**	**(2633)**
	National	CD4071	
		MM74C32	
	OKI	MSM4071	
	Sanyo	LC4071	
	SGS	HCC/HCF4071	
			(Continued)
MC14071			(Cont'd)
	Signetics	HEF4071	
	Solitron	CM4071	
	Sprague	SCL4071	
MC14072	Fairchild	F4072	
	GE/RCA	**CD4072**	**(2633)**
	National	CD4072	
	SGS	HCC/HCF4072	
	Signetics	HEF4072	
	Sprague	SCL4072	
	Toshiba	TC4072	
MC14073	Fairchild	F4073	
	GE/RCA	**CD4073**	**(2633)**
	National	CD4073	
	SGS	HCC/HCF4073	
	Signetics	HEF4073	
	Solitron	CM4073	
	Sprague	SCL4073	
	Toshiba	TC4073	
MC14075	Fairchild	F4075	
	GE/RCA	**CD4075**	**(2633)**
	National	CD4075	
	SGS	HCC/HCF4075	
	Signetics	HEF4075	
	Solitron	CM4075	
	Sprague	SCL4075	
	Toshiba	TC4075	
MC14076	Fairchild	F4076	
	GE/RCA	**CD4076**	**(2634)**
	National	CD4076	
		MM54C173	
		MM74C173	
	SGS	HCC/HCF4076	
	Signetics	HEF4076	
	Solitron	CM4076	
	Sprague	SCL4076	
	Toshiba	**TC4076**	**(3308)**
MC14077	Fairchild	F4077	
	GE/RCA	**CD4077**	**(2633, 2636)**
	National	CD4077	
	SGS	HCC/HCF4077	
	Signetics	HEF4077	
	Solitron	CM4077	
	Sprague	SCL4077	
MC14078	Fairchild	F4078	
	GE/RCA	**CD4078**	**(2633)**
	SGS	HCC/HCF4078	
	Signetics	HEF4078	
	Solitron	CM4078	
	Sprague	SCL4078	
	Toshiba	**TC4078**	**(3308)**
MC1408	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		µA0801	
		µA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	µPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
MC14081	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	National	CD4081	
		MM74C08	
	OKI	MSM4081	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
MC14082	Fairchild	F4082	
	GE/RCA	**CD4082**	**(2633)**
	National	CD4082	
			(Continued)
MC14082			(Cont'd)
	SGS	HCC/HCF4082	
	Signetics	HEF4082	
	Sprague	SCL4082	
	Toshiba	TC4082	
MC14093	Fairchild	F4093B	
	GE/RCA	**CD4093B**	**(2633)**
	National	CD4093B	
MC14094	**GE/RCA**	**CD4094B**	**(2634)**
MC14097	Fairchild	F4097	
	SGS	HCC/HCF4097	
MC14099	**GE/RCA**	**CD4099B**	**(2634)**
	Motorola	MC14099B	
	National	CD4099B	
MC14099B	**GE/RCA**	**CD4099B**	**(2634)**
	Motorola	MC14099	
	National	CD4099B	
MC14106	Fairchild	F400014	
		F40014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14584	
	National	CD40106	
		CD4584	
		MM54C14	
		MM74C14	
	SGS	HCC/HCF40106	
	Signetics	HEF40106	
	Sprague	SCL4584	
MC1411	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	µA9665	
	Mitsubishi	M54524	
	Motorola	ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
MC1412	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		µA9666	
	Mitsubishi	M54525	
	Motorola	ULN2002	
	NEC	µPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
♦ MC1412T	Exar	XR2002	
	Sprague	ULQ2002	
MC1413	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		µA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
♦ MC1413T	Exar	XR2003	
	SiliconG	SG2023	
	Sprague	**ULN2023**	**(3203)**
		ULQ2003	
		ULS2023	
♦ MC1413T	TI	SN75468	
MC1414	National	LM1414	
	Toshiba	TD62004	
MC1416	Exar	XR2204	
	Mitsubishi	M54526	
			(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Motorola Semiconductor Products (Cont'd)			
MC1416			(Cont'd)
	Motorola	ULN2004	
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
MC14160	Fairchild	F40160	
	GE/RCA	**CD40160**	**(2635)**
	National	CD40160	
	Sprague	SCL4160	
MC14161	Fairchild	F40161	
	GE/RCA	**CD40161**	**(2635)**
	National	CD40161	
	Sprague	SCL4161	
MC14162	Fairchild	F40162	
	GE/RCA	**CD40162**	**(2635)**
	National	CD40162	
	Sprague	SCL4162	
MC14163	Fairchild	F40163	
	GE/RCA	**CD40163**	**(2635)**
	National	CD40163	
	Sprague	SCL4163	
♦ MC1416T	Exar	XR2004	
	Sprague	ULQ2004	
♦ MC1417	**Sprague**	**UDN2580**	**(3203)**
MC14174	Fairchild	F40174B	
	GE/RCA	**CD40174B**	**(2634)**
	National	CD40174B	
MC14175	Fairchild	F40175	
	National	CD40175	
		MM54C175	
		MM74C175	
	Signetics	HEF40175	
	Toshiba	**TC40175**	**(3308)**
MC14188	SGS	HCF40188	
MC14194	Fairchild	F40194	
	GE/RCA	**CD40194**	**(2634)**
	SGS	HCC/HCF40194	
	Signetics	HEF40194	
MC1436	**Datel**	**AM464-2**	**(2577)**
	Harris	HA2645	
	National	LM1436	
		LM343	
	SiliconG	SG1436	
		SG343	
	TeledyneP	1332	
MC14412	Exar	XR14412	
MC14433	TeledyneS	TSC14433	
		TSC14433A	
MC14442	National	ADC0829	
	TI	TLC532	
		TLC533	
MC14443	Fairchild	μA9708	
	Hitachi	HD14443	
		HD14447	
	Motorola	**MC14447**	**(2937)**
MC14444	National	ADC0830	
	TI	TLC530	
		TLC531	
MC14447	Fairchild	μA9708	
	Hitachi	HD14443	
		HD14447	
	Motorola	**MC14443**	**(2937)**
MC1445	TI	MC1445	
MC14502	**GE/RCA**	**CD4502**	**(2633)**
	SGS	HCC/HCF4502	
	Signetics	HEF4502	
	Sprague	SCL4502	
MC145026	SGS	M145026	
MC145027	SGS	M145027	
MC14503	Fairchild	F40097B	
	GE/RCA	**CD4503**	**(2633)**
	National	CD4503	
	SGS	HCF4503	
	Toshiba	TC4503	
MC14504	Motorola	MC14504B	
MC145040	National	ADC0811	
	TI	TLC540	
		TLC541	
MC14504B	Motorola	MC14504	
MC14505	Signetics	HEF4505	
MC14506	**GE/RCA**	**CD4086B**	**(2633)**
	SGS	HCC/HCF4086	
	Signetics	HEF4086B	
MC14508	**GE/RCA**	**CD4508**	**(2634)**
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**
		HEF4508	
		N82147	
	Sprague	SCL4508	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
MC14510	Fairchild	F4510	
	GE/RCA	**CD4510**	**(2635)**
	National	CD4510	
	SGS	HCC/HCF4510	
	Signetics	HEF4510	
	Solitron	CM4510	
	Sprague	SCL4510	
	Toshiba	**TC4510**	**(3308)**
MC14511	Fairchild	F4511	
	GE/RCA	**CD4511**	**(2635)**
	National	CD4511	
	NEC	μPD4511	
	SGS	HCC/HCF4511	
	Signetics	HEF4511	
	Solitron	CM4511	
	Sprague	SCL4511	
	Toshiba	**TC4511**	**(3308)**
MC14512	Fairchild	F4512	
	GE/RCA	**CD4512**	**(2635)**
	National	CD4512	
	SGS	HCC/HCF4512	
	Sprague	SCL4512	
	Toshiba	**TC4512**	**(3308)**
MC14514	Fairchild	F4514	
	GE/RCA	**CD4514**	**(2633)**
	National	CD4514	
	SGS	HCC/HCF4514	
	Signetics	HEF4514	
	Solitron	CM4514	
	Sprague	SCL4514	
	Toshiba	**TC4514**	**(3308)**
MC14515	Fairchild	F4515	
	GE/RCA	**CD4515**	**(2633)**
	National	CD4515	
	SGS	HCC/HCF4515	
	Signetics	HEF4515	
	Solitron	CM4515	
	Sprague	SCL4515	
	Toshiba	**TC4515**	**(3308)**
MC145155	IMI	IMI145155	
MC145156	IMI	IMI145156	
MC145157	IMI	IMI145157	
MC145158	IMI	IMI145158	
MC14516	Fairchild	F4516	
	GE/RCA	**CD4516**	**(2635)**
	National	CD4516	
	SGS	HCC/HCF4516	
	Signetics	HEF4516	
	Solitron	CM4516	
	Sprague	SCL4516	
	Toshiba	**TC4516**	**(3308)**
MC145160	Sanyo	LC7150	
MC14517	**GE/RCA**	**CD4517**	**(2634)**
	SGS	HCC/HCF4517	
	Signetics	HEF4517	
	Sprague	SCL4517	
MC14518	Fairchild	F4518	
	GE/RCA	**CD4518**	**(2635)**
	National	CD4518	
	SGS	HCC/HCF4518	
	Signetics	HEF4518	
	Solitron	CM4518	
	Sprague	SCL4518	
	Toshiba	**TC4518**	**(3308)**
MC14519	Hitachi	HD4519	
	National	CD4519	
	Signetics	HEF4519	
MC14520	Fairchild	F4520	
	GE/RCA	**CD4520**	**(2635)**
	National	CD4520	
	OKI	MSM4520	
	Sanyo	LC4520	
	SGS	HCC/HCF4520	
	Signetics	HEF4520	
	Solitron	CM4520	
	Sprague	SCL4520	
	Toshiba	**TC4520**	**(3308)**
MC14521	Fairchild	F4521	
	SGS	HCC/HCF4045	
	Signetics	HEF4521	
MC14521			(Cont'd)
	Solitron	CM4045	
	Sprague	SCL4445	
	Toshiba	**TC4521**	**(3308)**
MC1452100	**GE/RCA**	**CD22100**	**(2638)**
	SGS	M22100	
	SiliconSys	SSI22100	
MC14522B	Fairchild	F4522	
	National	CD4522	
	Sprague	SCL4522	
MC14526	Fairchild	F4526	
	National	CD4526	
	Signetics	HEF4526	
	Sprague	SCL4526	
	Toshiba	**TC4526**	**(3308)**
MC14527	Fairchild	F4527	
	GE/RCA	**CD4527**	**(2636)**
	National	CD4527	
	SGS	HCC/HCF4527	
	Signetics	HEF4527	
	Sprague	SCL4527	
	Toshiba	**TC4527**	**(3308)**
MC14528	Fairchild	F4528	
	National	CD4528	
		MM74C221	
	SGS	HCC/HCF4098	
	Signetics	HEF4528	
	Toshiba	**TC4528**	**(3308)**
MC14529	National	CD4529	
MC14531	Fairchild	F4531	
	SGS	HCC/HCF40101	
	Signetics	HEF4531	
	Sprague	SCL4531	
	Toshiba	**TC4531**	**(3308)**
MC14532	Fairchild	F4532	
	GE/RCA	CD4532	
	SGS	HCC/HCF4532	
	Signetics	HEF4532	
	Sprague	SCL4532	
	Toshiba	**TC4532**	**(3308)**
MC14534	Signetics	HEF4534	
MC14536	**GE/RCA**	**CD4536**	**(2634)**
MC14538	National	CD4538	
	OKI	MSM4538	
	Signetics	HEF4538	
MC14539	Fairchild	F4539	
	Signetics	HEF4539	
MC14541	**GE/RCA**	**CD4541**	**(2634)**
	Signetics	HEF4591	
MC14543	Fairchild	F4543	
	GE/RCA	**CD4543**	**(2635)**
	Motorola	MC14543B	
	National	CD4543	
	Signetics	HEF4543	
	Toshiba	**TC4543**	**(3308)**
MC14543B	Fairchild	F4543	
	GE/RCA	**CD4543**	**(2635)**
	Motorola	MC14543	
	National	CD4543	
	Signetics	HEF4543	
	Toshiba	**TC4543**	**(3308)**
MC145453	National	MM5453	
MC1455	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
MC14553	Fairchild	F4553	
MC14555	Fairchild	F4555	
	GE/RCA	**CD4555**	**(2633, 2635)**
	SGS	HCC/HCF4555	
	Signetics	HEF4555	
	Sprague	SCL4555	
	Toshiba	**TC4555**	**(3308)**
MC14556	Fairchild	F4556	
	GE/RCA	**CD4556**	**(2633, 2635)**
	SGS	HCC/HCF4556	
	Signetics	HEF4556	
	Sprague	SCL4556	
	Toshiba	**TC4556**	**(3308)**
MC14557	Fairchild	F4557	
	Signetics	HEF4557	
♦ MC14558	**GE/RCA**	**CD4055**	**(2635)**
MC1456	Burr-Brown	3506	
	Datel	**AM460-2**	**(2577)**
	Elantec	**EHA2605**	**(2594)**
	Harris	HA2605	
	TI	MC1456	
MC14560	**Toshiba**	**TC4560**	**(3308)**
MC14561	**Toshiba**	**TC4561**	**(3308)**
MC14569	Signetics	HEF4059	
MC14572	**Toshiba**	**TC4572**	**(3308)**
MC14573	**Holt**	**HI8573**	**(2769)**
MC14574	**Holt**	**HI8574**	**(2769)**
MC14575	**Holt**	**HI8575**	**(2769)**
MC1458	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	National	LF412	
	NEC	μPC1458	
		μPC251	
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
MC14580	SGS	HCC/HCF40108	
MC14581	**GE/RCA**	**CD40181**	**(2636)**
	National	74C181	
	SGS	HCC/HCF40181	
	Sprague	SCL4581	
MC14582	Fairchild	F4582	
	GE/RCA	**CD40182**	**(2636)**
	National	74C182	
	SGS	HCC/HCF40182	
	Sprague	SCL4582	
MC14583	Fairchild	F4583	
	Toshiba	**TC4583**	**(3308)**
MC14584	Fairchild	F400014	
		F40014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14106	
	National	CD40106	
		CD4584	
		MM54C14	
		MM74C14	
	SGS	HCC/HCF40106	
	Signetics	HEF40106	
	Sprague	SCL4584	
MC14585	Fairchild	F40085	
	GE/RCA	**CD4585**	**(2636)**
	National	MM74C85	
	SGS	HCC/HCF4585	
	Signetics	HEF4585	
	Sprague	SCL4585	
	Toshiba	**TC4585**	**(3308)**
MC1468	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		μA212A	
		μA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG2501A	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
MC146805	GE/RCA	CDP6805	
MC146818	Dallas	DS1287	
	GE/RCA	**CDP6818**	**(2642)**

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC146818			(Cont'd)
	Hitachi	HD146818	
		HD146818A	
	Motorola	**MC146818A**	**(2902)**
MC146818A	Dallas	DS1287	
	GE/RCA	**CDP6818**	**(2642)**
	Hitachi	HD146818	
		HD146818A	
	Motorola	**MC146818**	**(2902)**
MC146823	**GE/RCA**	**CDP6823**	**(2642)**
MC1468HC05	GE/RCA	CDP68HC05	
♦ MC1471	**Sprague**	**UDN5711**	**(3203)**
	TI	SN75476	
		UDN5711	
♦ MC1471	Toshiba	TD62476	
MC1472	**Sprague**	**UDN5712**	**(3203)**
	TI	UDN5712	
	Toshiba	TD62477	
♦ MC1473	**Sprague**	**UDN5713**	**(3203)**
	TI	SN75478	
		UDN5713	
♦ MC1473	Toshiba	TD62478	
♦ MC1474	**Motorola**	**MC1374**	**(2947)**
	Sprague	**UDN5714**	**(3203)**
	TI	SN75479	
		UDN5714	
♦ MC1474	Toshiba	TD62479	
MC1488	SGS	MC1488	
MC1489	Fairchild	μA1489	
		μA212A	
		μA750	
	Signetics	MC1489	
	SiliconG	SG1489	
		SG508	
	Sprague	UHD508	
	TI	MC1489	
		SN55189	
		SN75189	
MC1489A	Exar	XR1489A	
	Fairchild	UA150	
		UA212A	
		μA1489A	
	National	DS1489A	
	SGS	MC1489	
	Signetics	MC1489A	
	SiliconG	SG1489A	
	TI	SN75189A	
MC1495	SiliconG	SG1495	
MC1496	National	LM1496	
	Plessey	SL1496	
	Signetics	MC1496	
	SiliconG	SG1496	
♦ MC1500AU10	AD	AD581	
		ADREF01	
♦ MC1500AU10	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
♦ MC1500AU10	Maxim	AD581	
		REF01	
♦ MC1500AU10	MicroPwr	MP5531	
		MPREF01	
♦ MC1500AU10	Motorola	MC1400AG10	
		MC1400AU10	
♦ MC1500AU10	**PMI**	**REF01**	**(2975)**
		REF01AZ	**(2975)**
♦ MC1500AU10	Raytheon	REF01	
	TeledyneS	TSC9495	
♦ MC1500AU5	LinearTech	REF02A	
	PMI	**REF02AZ**	**(2975)**
MC1508	AD	AD1508	
	Datel	**DACIC8BM**	**(2576)**
	National	MC1508	
	PMI	DAC1508	
	Signetics	MC1508	
		SE5008	
		SE5009	
MC1514	National	LM1514	
	TI	TL514M	
MC1536	Datel	AM464-2M	
	Harris	**HA2640**	**(2706, 2738, 2748)**
	National	LM143	
		LM1536	
	SiliconG	SG143	
		SG1536	
MC1537	Raytheon	RM1537	
MC1555	Exar	XR555M	
	GE/Intersil	SE555	
	Raytheon	RM555	
	Signetics	SE555	
	TI	SE555	
		SE555M	
MC1556	**Elantec**	**EHA2600**	**(2594)**
	Harris	**HA2600**	**(2706, 2737, 2747)**
	Hitachi	HA17741	
	Motorola	ML1556	
	Signetics	SE556	
	TeledyneP	1326	
	TI	MC1556	
		SE556M	
MC1558	Signetics	MC1558	
MC1568	Exar	XR1568	
	SiliconG	SG1501A	
		SG1568	
MC1590	GE/RCA	CA3011	
	National	LM3011	
MC1595	SiliconG	SG1595	
MC1596	Fairchild	μA796	
	National	LM1596	
	SiliconG	SG1596	
MC1648	Plessey	SP1648	
MC1650	Plessey	SP1650	
MC1651	Plessey	SP1651	
MC1658	Plessey	SP1658	
MC1660	Plessey	SP1660	
MC1662	Plessey	SP1662	
MC1664	Plessey	SP1664	
MC1666	Plessey	SP1666	
MC1668	Plessey	SP1668	
MC1670	Fairchild	11C70	
	Plessey	SP1670	
MC1672	Plessey	SP1672	
MC1674	Plessey	SP1674	
MC1688	Fairchild	11C01	
MC1690	Fairchild	11C06	
MC1692	Plessey	SP1692	
MC1699	Fairchild	11C05	
	Plessey	SP8610	
		SP8616	
MC1709	Fairchild	μA709	
	National	LM1709	
		LM709	
	NEC	μPC55	
	TI	μ709	
		μA709	
	Toshiba	TA7502	
MC1723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	μA723	
	SiliconG	SG723	
	TI	μA723	
		μA723M	
	Thomson	SFC2723	
		μA723	
MC1733	Fairchild	μA733	
	GE/Intersil	μA733	
	Hitachi	HA17733	
	Motorola	**NE592**	**(2960)**
	National	LM733	
	Signetics	μA733	
	SiliconG	SG1401	
	TI	μA733	
		μA733M	
MC1741	AD	AD741	
	Fairchild	μA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	National	LM741	
	NEC	μPC151	
		μPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
MC1741			(Cont'd)
	Signetics	μA741	
	SiliconG	SG741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
MC1747	Fairchild	μA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	National	LM747	
	NEC	μPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	μA747	
	TeledyneS	747	
	TI	μA747	
		μA747M	
MC1748	Fairchild	μA201	
	Motorola	**LM201**	**(2958)**
	National	LM748	
	SGS	LM748	
		LS148	
	SiliconG	SG201	
	TI	LM201	
		LM748	
		SN72748P	
		μA748	
	Thomson	LM201	
		LM748	
MC1776	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	National	LF441	
		LM4250	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
	Thomson	μA776	
MC2257	Micrel	MIC2257	
MC2259	Micrel	MIC2259	
MC2260	Micrel	MIC2260	
MC2652	Signetics	SCN2652	
MC2653	Signetics	SCN2653	
MC2661	**Motorola**	**MC68661**	**(2898)**
	Signetics	SCN2661	
	SMC	AY2661	
		COM2661	
MC2681	**Exar**	**XR88C681**	**(2612)**
	Signetics	**SCN2681**	**(3052)**
MC2682	Signetics	SCN2682	
MC26S10	AMD	AM26S10	
	National	DS26S10	
	TI	AM26S10	
MC2910	Fairchild	29F10	
	Thomson	TS2910	
	Waferscale	**WS5910**	**(3376)**
♦ MC3106	National	DM54H11	
♦ MC3245	National	DS3245	
MC3301	Hitachi	HA17301	
	Motorola	**LM2900**	**(2924)**
	National	LM2900	
		LM3301	
	Raytheon	LM2900	
		RC3301	
	TI	LM2900	
MC3302	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
MC3302			(Cont'd)
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
MC3303	Fairchild	μA3303	
	SGS	MC3303	
	Signetics	MC3303	
	TI	MC3303	
MC33060	IPS	IP33060	
MC33063	IPS	IP33063	
MC33074	AnalogSys	MA374	
	Fairchild	μA774	
	Motorola	**MC34004**	**(2923, 2959)**
		MC34004A	**(2923, 2959)**
		MC34074	**(2923, 2960)**
	NEC	μPC4084	
	TI	TL074	
		TL084BC	
MC33174	Fairchild	μA324	
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17324	
	National	LM324	
	PMI	**OP421**	**(2970, 2972)**
	Samsung	LM324	
	SGS	LM324	
	SiliconG	SG324	
	Thomson	LM324	
	Toshiba	TA79502	
MC3346	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
MC3359	Sprague	ULN3859	
MC3361	Samsung	MC3361	
	Signetics	MC3361	
	Sprague	ULN3862	
MC3373	**GoldStar**	**GL3273**	**(2700)**
	NCR	NCR6500-12	
	Rockwell	**R6500-12**	**(2988)**
		R6500-13	**(2988)**
		R6500-15	**(2988)**
♦ MC3386	**GE/RCA**	**CA3086**	**(2648)**
	National	LM3086	
	Plessey	SL3086	
	Sanyo	LA3086	
	SiliconG	SG3086	
		SG3886	
♦ MC3386	Sprague	ULN2086	
	Thomson	SFC2086	
MC34001	AnalogSys	MA333	
	Fairchild	μA771	
	NEC	μPC4071	
		μPC4081	
	TI	TL071	
		TL081C	
	Toshiba	TA75071	
MC34001A	TI	LL081BC	
MC34001B	TI	TL081AC	
MC34002	AnalogSys	MA336	
	Fairchild	μA772	
	NEC	μPC4072	
		μPC4082	
	SGS	TL072	
	TI	TL072	
		TL082C	
	Toshiba	TA75072	
		TA75074	
MC34002A	TI	TL082BC	
MC34002B	TI	TL082AC	
MC34004	AnalogSys	MA374	
	Fairchild	μA774	
	Motorola	**MC33074**	**(2924)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC34004	**Motorola**		**(Cont'd)**
		MC34004A	**(2923, 2959)**
		MC34074	**(2923, 2960)**
	NEC	μPC4084	
	TI	TL074	
		TL084BC	
MC34004A	AnalogSys	MA374	
	Fairchild	μA774	
	Motorola	**MC33074**	**(2924)**
		MC34004	**(2923, 2959)**
		MC34074	**(2923, 2960)**
	NEC	μPC4084	
	TI	TL074	
		TL084BC	
MC34004B	TI	TL084AC	
MC3401	**GE/RCA**	**CA3401**	**(2645)**
	National	LM3401	
		LM3900	
	Raytheon	LM3900	
		RC3401	
	TI	LM3900	
♦ MC3401B	TI	TL061M	
		TL071M	
♦ MC3402B	TI	TL062M	
		TL072M	
MC3403	SGS	MC3403	
	Signetics	MC3404	
	TI	MC3403	
♦ MC3404B	TI	TL064M	
		TL074M	
MC34060	**IPS**	**IP34060**	**(2854)**
MC34063	**IPS**	**IP34063**	**(2854)**
MC34074	AnalogSys	MA374	
	Fairchild	μA774	
	Motorola	**MC33074**	**(2924)**
		MC34004	**(2923, 2959)**
		MC34004A	**(2923, 2959)**
	NEC	μPC4084	
	TI	TL074	
		TL084BC	
♦ MC3410	Signetics	MC3410C	
♦ MC3412	AD	AD565A	
		AD565J	
♦ MC3412	Fairchild	μA565	
	Harris	**HI565A**	**(2738, 2749)**
	Maxim	AD565A	
	MicroNet	MN565A	
	TeledyneP	TP565A	
♦ MC3416	Raytheon	RC4444	
MC3420	Motorola	MC3520	
MC3423	SiliconG	SG3423	
	TI	MC3423	
MC3430	**Motorola**	**MC3441**	**(2952)**
	National	DS3651	
MC3432	National	DS3653	
MC3437	National	DS8837	
	Signetics	**N8T37**	**(3022)**
MC3441	**Motorola**	**MC3430**	**(2925)**
	National	DS3651	
♦ MC3446	**Motorola**	**MC3446A**	**(2952)**
	TI	MC3446	
MC3446A	TI	MC3446	
MC3448A	Fairchild	μA3448A	
		μA3486	
		μA3487	
MC3450	National	DS3650	
	TI	MC3450	
MC3452	National	DS3652	
	TI	MC3452	
MC3453	TI	MC3453	
MC3458	Fairchild	μA798	
	Motorola	**MC3558**	**(2922)**
♦ MC3461	Hitachi	HD103461	
MC3470	Cherry	CS3470A	
	Exar	XR3470	
MC3471	Cherry	CS3471	
	TI	MC3471	
MC3481	TI	MC3481	
MC3485	TI	SN75130	
MC3486	National	DS3486	
	TI	MC3486	
		SN75ALS195	
MC3487	National	DS3487	
	TI	MC3487	
		SN75ALS194	
MC3488	TI	9636	
		9636A	
MC3490	Dionics	DI513B	
		DI514	
		DI514B	
	Exar	XR6118	
	National	DM8887	
		DS8887	
	OKI	MSL912	
	Sanyo	LB1290	
	Signetics	NE594	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
	Toshiba	TD62781	
♦ MC3491	Dionics	DI230	
	National	DS8889	
MC3494	Dionics	DI805	
	ITT	504	
MC35001B	TI	TL081M	
MC35002B	TI	TL082M	
MC35004	TI	TL084M	
MC35060	**IPS**	**IP35060**	**(2854)**
MC35063	**IPS**	**IP35063**	**(2854)**
♦ MC3510	Signetics	MC3510	
		NE5410	
♦ MC3512	AD	AD565S	
MC3520	Motorola	MC3420	
MC3523	SiliconG	SG3523	
	TI	MC3523	
MC3558	Fairchild	μA798	
	Motorola	**MC3458**	**(2921, 2959)**
MC40175	**GE/RCA**	**CD40175**	**(2634)**
MC4024	Motorola	MC4324	
MC4044	Motorola	MC4344	
MC4324	Motorola	MC4024	
MC4344	Motorola	MC4044	
MC4558	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
MC471CP	MicroPwr	MP0P11	
	PMI	0P11	
MC4741	Exar	XR4751	
	Fairchild	μA348	
	GE/Intersil	LM348	
	GoldStar	**GL348**	**(2700)**
	Motorola	**LM348**	**(2923, 2958)**
	National	LM348	
	Raytheon	HA4741	
	TI	LM348	
♦ MC54107	National	DM54107	
	TI	SN54107	
MC5491	Fairchild	5491	
	National	SN5491	
	Signetics	5491	
	TI	SN5491	
MC54F00	Fairchild	54F00	
	Signetics	54F00	
	TI	SN54F00	
MC54F02	Fairchild	54F02	
	Signetics	54F02	
	TI	SN54F02	
MC54F04	Fairchild	54F04	
	Signetics	54F04	
		S4F04	
	TI	SN54F04	
MC54F08	Fairchild	54F08	
	Signetics	54F08	
	TI	SN54F08	
MC54F10	Fairchild	54F10	
	Signetics	54F10	
	TI	SN54F10	
MC54F109	Fairchild	54F109	
	Signetics	54F109	
	TI	SN54F109	
MC54F112	Fairchild	54F112	
	TI	SN54F112	
MC54F138	Fairchild	54F138	
	Signetics	54F138	
	TI	SN54F138	
MC54F139	Fairchild	54F139	
	Signetics	54F139	
MC54F153	Fairchild	54F153	
	TI	SN54F153	
MC54F157	Fairchild	54F157	
	Signetics	54F157	
	TI	SN54F157	
MC54F158	Fairchild	54F158	
	Signetics	54F158	
	TI	SN54F158	
MC54F20	Fairchild	54F20	
	Signetics	54F20	
	TI	SN54F20	
MC54F240	Fairchild	54F240	
	Signetics	54F240	
		SN54F240	
MC54F241	Fairchild	54F241	
	Signetics	54F241	
	TI	SN54F241	
MC54F242	Fairchild	54F242	
	Signetics	54F242	
	TI	SN54F242	
MC54F243	Fairchild	54F243	
	Signetics	54F243	
	TI	SN54F243	
MC54F244	Fairchild	54F244	
	Signetics	54F244	
	TI	SN54F244	
MC54F245	Fairchild	54F245	
	Signetics	54F245	
	TI	SN54F245	
MC54F257	Fairchild	54F257	
	Signetics	54F257	
	TI	SN54F257	
MC54F258	Fairchild	54F258	
	Signetics	54F258	
	TI	SN54F258	
MC54F280	Fairchild	54F280	
	Signetics	54F280	
	TI	SN54F280	
MC54F283	Fairchild	54F283	
	TI	SN54F283	
MC54F32	Fairchild	54F32	
	Signetics	54F32	
	TI	SN54F32	
MC54F333	Signetics	54F333	
MC54F350	Fairchild	54F350	
	TI	SN54F350	
MC54F352	Fairchild	54F352	
	TI	SN54F352	
MC54F353	Fairchild	54F353	
	TI	SN54F353	
MC54F373	Fairchild	54F373	
	Motorola	54F373	
	Signetics	54F373	
	TI	SN547F373	
MC54F374	Fairchild	54F374	
	Signetics	54F374	
	TI	SN54F374	
MC54F381	Fairchild	54F381	
	TI	SN54F381	
MC54F382	Fairchild	54F382	
	TI	SN54F382	
MC54F521	Fairchild	54F521	
	Signetics	54F521	
	TI	SN54F521	
MC54F533	Fairchild	54F533	
	TI	SN54F533	
MC54F534	Fairchild	54F534	
	Signetics	54F534	
	TI	SN54F534	
MC54F620	Fairchild	54F620	
	Signetics	54F620	
	TI	SN54F620	
MC54F623	Fairchild	54F623	
	TI	SN54F623	
MC54F74	Fairchild	54F74	
	TI	SN54F74	
MC54HC00	**GE/RCA**	**CD54HC00**	**(2631)**
	National	MM54HC00	
	Signetics	54HC00	
	Sprague	SS54HC00	
	TI	SN54HC00	
MC54HC02	**GE/RCA**	**CD54HC02**	**(2631)**
	National	MM54HC02	
	Signetics	54HC02	
	TI	SN54HC02	
MC54HC04	**GE/RCA**	**CD54HC04**	**(2631)**
	National	MM54HC04	
	Signetics	54HC04	
	TI	SN54HC04	
MC54HC08	**GE/RCA**	**CD54HC08**	**(2631)**
	National	MM54HC08	
	Signetics	54HC08	
	TI	SN54HC08	
MC54HC10	**GE/RCA**	**CD54HC10**	**(2631)**
	National	MM54HC10	
	Signetics	54HC10	
	TI	SN54HC10	
MC54HC107	**GE/RCA**	**CD54HC107**	**(2631)**
	National	MM54HC107	
	Signetics	54HC107	
	TI	SN54HC107	
MC54HC109	**GE/RCA**	**CD54HC109**	**(2631)**
	National	MM54HC109	
	Signetics	54HC109	
	TI	SN54HC109	
MC54HC11	**GE/RCA**	**CD54HC11**	**(2631)**
	National	MM54HC11	
	Signetics	54HC11	
	TI	SN54HC11	
MC54HC112	**GE/RCA**	**CD54HC112**	**(2631)**
	National	MM54HC112	
	Signetics	54HC112	
	TI	SN54HC112	
MC54HC123	**GE/RCA**	**CD54HC123**	**(2632)**
	National	MM54HC123	
	Signetics	54HC123	
MC54HC125	Fairchild	54HC125	
	GE/RCA	**CD54HC125**	**(2631)**
		CDHC125	
	National	MM54HC125	
	TI	SN54HC125	
MC54HC132	Fairchild	54HC132	
	GE/RCA	**CD54HC132**	**(2631)**
	National	MM54HC132	
	Signetics	54HC132	
	TI	SN54HC132	
MC54HC133	National	MM54HC133	
	Signetics	54HC133	
	TI	SN54HC133	
MC54HC137	**GE/RCA**	**CD54HC137**	**(2632)**
	National	MM54HC137	
	Sprague	SN54HC137	
		SS54HC137	
	TI	SN54HC137	
MC54HC138	**GE/RCA**	**CD54HC138**	**(2632)**
	National	MM54HC138	
	Signetics	54HC138	
	Sprague	SS54HC138	
	TI	SN54HC138	
MC54HC139	**GE/RCA**	**CD54HC139**	**(2632)**
	National	MM54HC139	
	Signetics	54HC139	
	Sprague	SS54HC139	
	TI	SN54HC139	
MC54HC14	**GE/RCA**	**CD54HC14**	**(2631)**
	National	MM54HC14	
	Signetics	54HC14	
	TI	SN54HC14	
MC54HC147	**GE/RCA**	**CD54HC147**	**(2632)**
	National	MM54HC147	
	Signetics	54HC147	
MC54HC151	**GE/RCA**	**CD54HC151**	**(2632)**
	National	MM54HC151	
	Signetics	54HC151	
	TI	SN54HC151	
MC54HC153	**GE/RCA**	**CD54HC153**	**(2632)**
	National	MM54HC153	
	Signetics	54HC153	
	TI	SN54HC153	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC54HC154	**GE/RCA**	**CD54HC154**	**(2632)**
	National	MM54HC154	
	Signetics	54HC154	
MC54HC157	**GE/RCA**	**CD54HC157**	**(2632)**
	Signetics	54HC157	
	TI	SN54HC157	
MC54HC158	**GE/RCA**	**CD54HC158**	**(2632)**
	National	MM54HC158	
	Signetics	54HC158	
	TI	SN54HC158	
MC54HC160	**GE/RCA**	**CD54HC160**	**(2632)**
	National	MM54HC160	
	Signetics	54HC160	
	TI	SN54HC160	
MC54HC161	**GE/RCA**	**CD54HC161**	**(2632)**
	National	MM54HC161	
	Signetics	54HC161	
	TI	SN54HC161	
MC54HC162	**GE/RCA**	**CD54HC162**	**(2632)**
	National	MM54HC162	
	Signetics	54HC162	
	TI	SN54HC162	
MC54HC163	**GE/RCA**	**CD54HC163**	**(2632)**
	National	MM54HC163	
	Signetics	54HC163	
MC54HC164	**GE/RCA**	**CD54HC164**	**(2631)**
	National	MM54HC164	
	Signetics	54HC164	
	TI	SN54HC164	
MC54HC165	**GE/RCA**	**CD54HC165**	**(2631)**
	National	MM54HC165	
	Signetics	54HC165	
	TI	SN54HC165	
MC54HC166	**GE/RCA**	**CD54HC166**	**(2631)**
	Signetics	54HC166	
	TI	SN54HC166	
MC54HC173	**GE/RCA**	**CD54HC173**	**(2631)**
	National	MM54HC173	
	Signetics	54HC173	
	TI	SN54HC173	
MC54HC174	**GE/RCA**	**CD54HC174**	**(2631)**
	National	MM54HC174	
	Signetics	54HC174	
	TI	SN54HC174	
MC54HC175	**GE/RCA**	**CD54HC175**	**(2631)**
	National	MM54HC175	
	Signetics	54HC175	
	TI	SN54HC175	
MC54HC181	**GE/RCA**	**CD54HC181**	**(2632)**
MC54HC182	**GE/RCA**	**CD54HC182**	**(2632)**
MC54HC190	**GE/RCA**	**CD54HC190**	**(2632)**
	TI	SN54HC190	
MC54HC192	**GE/RCA**	**CD54HC192**	**(2632)**
	National	MM54HC192	
	Signetics	54HC192	
	TI	SN54HC192	
MC54HC193	**GE/RCA**	**CD54HC193**	**(2632)**
	National	MM54HC193	
	Signetics	54HC193	
	TI	SN54HC193	
MC54HC194	**GE/RCA**	**CD54HC194**	**(2631)**
	National	MM54HC194	
	Signetics	54HC194	
	TI	SN54HC194	
MC54HC195	**GE/RCA**	**CD54HC195**	**(2631)**
	National	MM54HC195	
	Signetics	54HC195	
	TI	SN54HC195	
MC54HC20	**GE/RCA**	**CD54HC20**	**(2631)**
	National	MM54HC20	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC54HC20			(Cont'd)
	Signetics	54HC20	
	TI	SN54HC20	
MC54HC221	**GE/RCA**	**CD54HC221**	**(2632)**
	National	MM54HC221	
	Signetics	54HC221	
MC54HC237	**GE/RCA**	**CD54HC237**	**(2632)**
	National	MM54HC237	
	Sprague	SN54HC237	
	TI	SN54HC237	
MC54HC240	**GE/RCA**	**CD54HC240**	**(2631)**
	National	MM54HC240	
	Signetics	54HC240	
	Sprague	SS54HC240	
	Supertex	SI54HC240	
	TI	SN54HC240	
MC54HC241	**GE/RCA**	**CD54HC241**	**(2631)**
	National	MM54HC241	
	Signetics	54HC241	
	Sprague	SS54HC241	
	Supertex	SI54HC241	
	TI	SN54HC241	
MC54HC242	**GE/RCA**	**CD54HC242**	**(2631)**
	National	MM54HC242	
	Signetics	54HC242	
	TI	SN54HC242	
MC54HC243	Fairchild	54HC243	
	GE/RCA	**CD54HC243**	**(2631)**
	National	MM54HC243	
	Signetics	54HC243	
	TI	SN54HC243	
MC54HC244	**GE/RCA**	**CD54HC244**	**(2631)**
	National	MM54HC244	
	Signetics	54HC244	
	Sprague	SS54HC244	
	Supertex	SI54HC244	
	TI	SN54HC244	
MC54HC245	**GE/RCA**	**CD54HC245**	**(2631)**
	National	MM54HC245	
	Signetics	54HC245	
	Sprague	SS54HC245	
	TI	SN54HC245	
MC54HC251	**GE/RCA**	**CD54HC251**	**(2632)**
	National	MM54HC251	
	Signetics	54HC251	
	TI	SN54HC251	
MC54HC253	**GE/RCA**	**CD54HC253**	**(2632)**
	National	MM54HC253	
	Signetics	54HC253	
	TI	SN54HC253	
MC54HC257	**GE/RCA**	**CD54HC257**	**(2632)**
	National	MM54HC257	
	Signetics	54HC257	
	TI	SN54HC257	
MC54HC259	**GE/RCA**	**CD54HC259**	**(2632)**
	National	MM54HC259	
	Signetics	54HC259	
	TI	SN54HC259	
MC54HC266	National	MM54HC266	
	Signetics	54HC266	
	TI	SN54HC266	
MC54HC27	**GE/RCA**	**CD54HC27**	**(2631)**
	National	MM54HC27	
	Signetics	54HC27	
	TI	SN54HC27	
MC54HC273	CTI	54HC273	
	GE/RCA	**CD54HC273**	**(2631)**
	Signetics	54HC273	
	TI	SN54HC273	
MC54HC280	**GE/RCA**	**CD54HC280**	**(2632)**
	National	MM54HC280	
	Signetics	54HC280	
	TI	SN54HC280	
MC54HC283	**GE/RCA**	**CD54HC283**	**(2632)**
MC54HC299	**GE/RCA**	**CD54HC299**	**(2631)**
	National	MM54HC299	
	Signetics	54HC299	

Manufacturer Device	Replacement Source	Device	IC Master Page
MC54HC30	**GE/RCA**	**CD54HC30**	**(2631)**
	National	MM54HC30	
	Signetics	54HC30	
	TI	SN54HC30	
MC54HC32	**GE/RCA**	**CD54HC32**	**(2631)**
	National	MM54HC32	
	Signetics	54HC32	
	TI	SN54HC32	
MC54HC354	**GE/RCA**	**CD54HC354**	**(2632)**
	National	MM54HC354	
	Signetics	54HC354	
MC54HC356	**GE/RCA**	**CD54HC356**	**(2632)**
	National	MM54HC356	
	Signetics	54HC356	
MC54HC365	**GE/RCA**	**CD54HC365**	**(2631)**
	National	MM54HC365	
	Signetics	54HC365	
	TI	SN54HC365	
MC54HC366	**GE/RCA**	**CD54HC366**	**(2631)**
	National	MM54HC366	
	Signetics	54HC366	
	TI	SN54HC366	
MC54HC367	**GE/RCA**	**CD54HC367**	**(2631)**
	National	MM54HC367	
	Signetics	54HC367	
	TI	SN54HC367	
MC54HC368	**GE/RCA**	**CD54HC368**	**(2631)**
	National	MM54HC368	
	Signetics	54HC368	
	TI	SN54HC368	
MC54HC373	**GE/RCA**	**CD54HC373**	**(2632)**
	National	MM54HC373	
	Signetics	54HC373	
	Sprague	SS54HC373	
	Supertex	SI54HC373	
	TI	SN54HC373	
MC54HC374	**GE/RCA**	**CD54HC374**	**(2631)**
	National	MM54HC374	
	Signetics	54HC374	
	Sprague	SS54HC374	
	Supertex	SI54HC374	
	TI	SN54HC374	
MC54HC377	**GE/RCA**	**CD54HC377**	**(2631)**
	Signetics	54HC377	
	TI	SN54HC377	
MC54HC386	TI	SN54HC386	
MC54HC390	**GE/RCA**	**CD54HC390**	**(2632)**
	National	MM54HC390	
	Signetics	54HC390	
	TI	SN54HC390	
MC54HC393	**GE/RCA**	**CD54HC393**	**(2632)**
	National	MM54GC393	
	Signetics	54HC393	
	TI	SN54HC393	
MC54HC4002	**GE/RCA**	**CD54HC4002**	**(2631)**
	National	MM54HC4002	
	Signetics	54HC4002	
	TI	SN54HC4002	
MC54HC4016	GE/RCA	CD54HC4016	
	National	MM54HC4016	
	TI	SN54HC4016	
MC54HC4017	**GE/RCA**	**CD54HC4017**	**(2632)**
	National	MM54HC4017	
	Signetics	54HC4017	
MC54HC4024	**GE/RCA**	**CD54HC4024**	**(2632)**
	Signetics	54HC4024	
MC54HC404	GE/RCA	CD54HC404	
	National	MM54HC404	
	TI	SN54HC404	
MC54HC4040	**GE/RCA**	**CD54HC4040**	**(2632)**
	National	MM54HC4040	
	Signetics	54HC4040	
MC54HC4046	**GE/RCA**	**CD54HC4046**	**(2632)**
MC54HC4049	**GE/RCA**	**CD54HC4049**	**(2631)**
	National	MM54HC4049	
	Signetics	54HC4049	

Manufacturer Device	Replacement Source	Device	IC Master Page
MC54HC4050	**GE/RCA**	**CD54HC4050**	**(2631)**
	National	MM54HC4050	
	Signetics	54HC4050	
MC54HC4051	**GE/RCA**	**CD54HC4051**	**(2632)**
	Signetics	54HC4051	
MC54HC4052	**GE/RCA**	**CD54HC4052**	**(2632)**
	Signetics	54HC4052	
MC54HC4053	**GE/RCA**	**CD54HC4053**	**(2632)**
	Signetics	54HC4053	
MC54HC4060	**GE/RCA**	**CD54HC4060**	**(2632)**
	National	MM54HC4060	
	Signetics	54HC4060	
MC54HC4066	**GE/RCA**	**CD54HC4066**	**(2631)**
	National	MM54HC4066	
	TI	SN54HC4066	
MC54HC4075	**GE/RCA**	**CD54HC4075**	**(2631)**
	National	MM54HC4075	
	TI	SN54HC4075	
MC54HC4078	National	MM54HC4078	
	TI	SN54HC4078A	
MC54HC42	**GE/RCA**	**CD54HC42**	**(2632)**
	National	MM54HC42	
	Signetics	54HC42	
	TI	SN54HC42	
MC54HC4351	GE/RCA	CD54HC4351	
MC54HC4352	GE/RCA	CD54HC4352	
MC54HC4353	GE/RCA	CD54HC4353	
MC54HC4514	**GE/RCA**	**CD54HC4514**	**(2632)**
	National	MM54HC4514	
	Signetics	54HC4514	
MC54HC4538	**GE/RCA**	**CD54HC4538**	**(2632)**
	National	MM54HC4538	
	Signetics	54HC4538	
MC54HC4543	**GE/RCA**	**CD54HC4543**	**(2632)**
MC54HC533	**GE/RCA**	**CD54HC533**	**(2632)**
	National	MM54HC533	
	Signetics	54HC533	
	Sprague	SS54HC533	
	TI	SN54HC533	
MC54HC534	**GE/RCA**	**CD54HC534**	**(2631)**
	National	MM54HC534	
	Signetics	54HC534	
	Sprague	SS54HC534	
	TI	SN54HC534	
MC54HC540	**GE/RCA**	**CD54HC540**	**(2631)**
	Signetics	54HC540	
	Sprague	SS54HC540	
	TI	SN54HC540	
MC54HC564	**GE/RCA**	**CD54HC564**	**(2631)**
	National	MM54HC564	
	Signetics	54HC564	
	Sprague	SS54HC564	
	TI	SN54HC564	
MC54HC573	**GE/RCA**	**CD54HC573**	**(2632)**
	National	MM54HC573	
	Signetics	54HC573	
	Sprague	SS54HC573	
	TI	SN54HC573	
MC54HC574	**GE/RCA**	**CD54HC574**	**(2631)**
	National	MM54HC574	
	Signetics	54HC574	
	Sprague	SS54HC574	
	TI	SN54HC574	
MC54HC590	TI	SN54HC590A	
MC54HC595	National	MM54HC595	
	TI	SN54HC595	
MC54HC620	Hitachi	HD54HC620	
	TI	SN54HC620	
MC54HC623	TI	SN54HC623	
MC54HC640	**GE/RCA**	**CD54HC640**	**(2631)**
	National	MM54HC640	
	Signetics	54HC640	
	Sprague	SS54HC640	
	TI	SN54HC640	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC54HC643	**GE/RCA**	**CD54HC643**	**(2631)**
	National	MM54HC643	
	Signetics	54HC643	
	TI	SN54HC643	
MC54HC646	**GE/RCA**	**CD54HC646**	**(2631)**
	National	MM54HC646	
	Signetics	54HC646	
MC54HC648	**GE/RCA**	**CD54HC648**	**(2631)**
	National	MM54HC648	
	Signetics	54HC648	
MC54HC688	Fairchild	54HC688	
	GE/RCA	**CD54HC688**	**(2632)**
	National	MM54HC688	
	Signetics	54HC688	
	TI	SN54HC688	
MC54HC73	**GE/RCA**	**CD54HC73**	**(2631)**
	National	MM54HC73	
	Signetics	54HC73	
MC54HC74	**GE/RCA**	**CD54HC74**	**(2631)**
	National	MM54HC74	
	Signetics	54HC74	
	TI	SN54HC74	
MC54HC75	**GE/RCA**	**CD54HC75**	**(2632)**
	National	MM54HC75	
	Signetics	54HC75	
	TI	SN54HC75	
MC54HC76	National	MM54HC76	
	Signetics	54HC76	
MC54HC85	**GE/RCA**	**CD54HC85**	**(2632)**
	National	MM54HC85	
	Signetics	54HC85	
MC54HC86	**GE/RCA**	**CD54HC86**	**(2631)**
	National	MM54HC86	
	Signetics	54HC86	
	TI	SN54HC86	
MC54HCT00	**GE/RCA**	**CD54HCT00**	**(2631)**
	Signetics	54HCT00	
MC54HCT03	**GE/RCA**	**CD54HCT03**	**(2631)**
MC54HCT04	Fairchild	54HCT04	
	GE/RCA	**CD54HCT04**	**(2631)**
	National	MM54HCT04	
	Signetics	54HCT04	
	TI	SN54HCT04	
MC54HCT125	**GE/RCA**	**CD54HCT125**	**(2631)**
MC54HCT126	**GE/RCA**	**CD54HCT126**	**(2631)**
MC54HCT138	CTI	54HCT138	
	GE/RCA	**CD54HCT138**	**(2632)**
	Mitel	MD54HCT138	
	National	MM54HCT138	
	Signetics	54HCT138	
	Sprague	SS54HCT138	
	Supertex	54HCT138	
	TI	SN54HCT138	
MC54HCT157	**GE/RCA**	**CD54HCT157**	**(2632)**
	Signetics	54HCT157	
MC54HCT158	**GE/RCA**	**CD54HCT158**	**(2632)**
	Signetics	54HCT158	
MC54HCT240	CTI	54HCT240	
	GE/RCA	**CD54HCT240**	**(2631)**
	Hitachi	HD54HCT240	
	Micrel	MC54HCT240	
		MIC54HCT240	
	Mitel	MD54HCT240	
	National	MM54HCT240	
	Signetics	54HCT240	
	Supertex	SI54HCT240	
	TI	SN54HCT240	
MC54HCT241	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC54HCT241			(Cont'd)
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**
	Vitelic	V51C256	
		V51C257	
MC54HCT244	CTI	54HCT244	
	GE/RCA	**CD54HCT244**	**(2631)**
	Micrel	MIC54HCT244	
	Mitel	MD54HCT244	
	National	MM54HCT244	
	Signetics	54HCT244	
	Sprague	SS54HCT244	
	Supertex	SI54HCT244	
	TI	SN54HCT244	
MC54HCT245	CTI	54HCT245	
	GE/RCA	**CD54HCT245**	**(2631)**
	Mitel	MD54HCT245	
	National	MM54HCT245	
	Signetics	54HCT245	
	Sprague	SS54HCT245	
	Supertex	54HCT245	
	TI	SN54HCT245	
MC54HCT257	**GE/RCA**	**CD54HCT257**	**(2632)**
	Signetics	54HCT257	
MC54HCT258	**GE/RCA**	**CD54HCT258**	**(2632)**
MC54HCT373	CTI	54HCT373	
	GE/RCA	**CD54HCT373**	**(2632)**
	Micrel	MIC54HCT373	
	Mitel	MD54HCT373	
	National	MM54HCT373	
	Signetics	54HCT373	
	Sprague	SS54HCT373	
	Supertex	SI54HCT373	
	TI	SN54HCT373	
MC54HCT374	CTI	54HCT374	
	GE/RCA	54HCT374	
		CD54HCT374	**(2631)**
	Micrel	MIC54HCT374	
		MICHCT374	
	Mitel	MD54HCT374	
	National	MM54HCT374	
	Sprague	SS54HCT374	
	Supertex	SI54HCT374	
	TI	SN54HCT374	
MC54HCT533	CTI	54HCT533	
	GE/RCA	**CD54HCT533**	**(2632)**
	Signetics	54HCT533	
	Sprague	SS54HCT533	
MC54HCT534	CTI	54HCT534	
	GE/RCA	**CD54HCT534**	**(2631)**
	Signetics	54HCT534	
	Sprague	SS54HCT534	
MC54HCT540	CTI	54HCT540	
	GE/RCA	**CD54HCT540**	**(2631)**
	Mitel	MD54HCT540	
	National	MM54HCT540	
	Signetics	54HCT540	
	Sprague	SS54HCT540	
	Supertex	54HCT540	
	TI	SN54HCT540	
MC54HCT541	CTI	54HCT541	
	GE/RCA	**CD54HCT541**	**(2631)**
	Mitel	MD54HCT541	
	National	MM54HCT541	
	Signetics	54HCT541	
	Sprague	SS54HCT541	
	Supertex	54HCT541	
	TI	SN54HCT541	
MC54HCT640	**GE/RCA**	**CD54HCT640**	**(2631)**
	Signetics	54HCT640	
	Sprague	SS54HCT640	
MC54HCT643	**GE/RCA**	**CD54HCT643**	**(2631)**
	Signetics	54HCT643	
MC54HCU04	**GE/RCA**	**CD54HCU04**	**(2631)**
	Signetics	54HCU04	
MC55107	National	DS55107	
		LM55107A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC55107			(Cont'd)
	TI	SN55107A	
		SN55107B	
MC55108	Fairchild	55108	
	National	DS55108	
		LM55108A	
	TI	SN55108A	
		SN55108B	
MC5522	Motorola	MC5523	
	National	LM5522	
MC5523	Motorola	MC5522	
	National	LM5522	
MC5524	Fairchild	MC5524	
	National	LM5524	
	Raytheon	RM5524	
	TI	SNJ5524	
MC5525	Fairchild	MC5525	
	National	LM5525	
MC5528	Fairchild	MC5528	
	National	LM5528	
MC5529	Fairchild	MC5529	
	National	LM5529	
MC55325	National	DS55325	
	SiliconG	SG55325	
	TI	SN55325	
		SNJ55325	
MC5534	Fairchild	MC5534	
	National	LM5534	
MC5535	National	LM5535	
MC5539	National	LM5539	
MC6108	AMD	AM6108	
MC6800	Fairchild	F6800A	
	Hitachi	HD6800	
		HD68A00	
		HD68B00	
	Thomson	EF6800	
MC68000	Hitachi	HD68000	
	Rockwell	**R68000**	**(2987, 2989)**
	Signetics	SCN68000	
	Thomson	**TS68000**	**(3281)**
MC68008	Thomson	TS68008	
MC6802	Fairchild	F6802	
	Hitachi	HD6802	
	Thomson	EF6802	
MC6804	Thomson	EF6804	
MC6805	Hitachi	HD6805	
	Thomson	EF6805	
MC6808	Fairchild	F6808	
MC6809	Hitachi	HD6809	
		HD68B09	
	Thomson	EF6809	
MC6810	Fairchild	F6810	
	Hitachi	HD6810	
		HD68A10	
	Motorola	**MCM6810**	**(2902)**
MC6820	**Rockwell**	**R6520**	**(2990)**
MC6821	Fairchild	F6821	
	Gould	S6821	
	Hitachi	HD6821	
		HD68A21	
		HD68B21	
	Mitel	MD68SC21	
	Thomson	EF6821	
MC6840	Fairchild	F6840	
	Hitachi	HD6840	
	Mitel	MD68SC40	
	Thomson	EF6840	
MC6843	Hitachi	HD6843	
MC6844	Hitachi	HD6844	
MC6845	Fairchild	F6845	
	Hitachi	HD6845	
MC68450	Hitachi	HD68450	
MC6845A	Fairchild	F6845A	
	Hitachi	HD6845A	
MC6850	Fairchild	F6850	
	Hitachi	HD6850	
	Thomson	EF6850	
MC6852	Fairchild	F6852	
	Hitachi	HD6852	
MC6860	Fairchild	F6860	
MC6862	Fairchild	F6862	
♦ MC68652	Signetics	SCN68652	
♦ MC68653	Motorola	MC2653	
	Signetics	SCN2653	
MC68661	Motorola	MC2661	
	Signetics	SCN2661	
	SMC	AY2661	
		COM2661	
MC68681	**Signetics**	**SCN68681**	**(3054)**
MC68682	Signetics	68682	

Manufacturer Device	Replacement Source	Device	IC Master Page
MC6880A	Hitachi	HD268T26	
	Motorola	**MC8T26**	**(2951)**
	Signetics	N8T26	
MC6885	**Motorola**	**MC8T95**	**(2951)**
	National	DM8095	
	Signetics	**N8T95**	**(3022)**
	TI	SN74365	
MC68901	Thomson	MK68901	
♦ MC68HC01	Hitachi	HD6301	
		HD6303	
♦ MC68HC03	Hitachi	HD6301	
		HD6303	
MC68HC68T1	GE/RCA	CDP68HC68T1	
MC719924	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	**MC7924**	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
MC74F00	Fairchild	74F00	
	Signetics	**74F00**	**(3023)**
	TI	SN74F00	
MC74F02	Fairchild	74F02	
	Signetics	**74F02**	**(3023)**
	TI	SN74F02	
MC74F04	Fairchild	74F04	
	Signetics	**74F04**	**(3023)**
	TI	SN74F04	
MC74F08	Fairchild	74F08	
	Signetics	**74F08**	**(3023)**
MC74F10	Fairchild	74F10	
	Signetics	**74F10**	**(3023)**
MC74F109	Fairchild	74F109	
	Signetics	**74F109**	**(3023)**
	TI	SN74F109	
MC74F11	Fairchild	74F11	
	Signetics	**74F11**	**(3023)**
	TI	SN74F11	
MC74F112	Fairchild	74F112	
	Signetics	**74F112**	**(3023)**
	TI	SN74F112	
MC74F114	Fairchild	74F114	
	TI	SN74F114	
MC74F138	Fairchild	74F138	
	Signetics	**74F138**	**(3023)**
	TI	SN74F138	
MC74F139	**Signetics**	**74F139**	**(3023)**
MC74F148	Fairchild	74F148	
	Signetics	**74F148**	**(3023)**
MC74F151	Fairchild	74F151	
	Signetics	**74F151**	**(3023)**
	TI	SN74F151	
MC74F153	Fairchild	74F153	
	Signetics	**74F153**	**(3023)**
	TI	SN74F153	
MC74F157	Fairchild	74F157	
	Signetics	**74F157**	**(3023)**
	TI	SN74F157	
MC74F158	Fairchild	74F158	
	Signetics	**74F158**	**(3023)**
	TI	SN74F158	
MC74F160	Fairchild	74F160	
	Signetics	74F160	
	TI	SN74F160	
MC74F161	Fairchild	74F161	
	Signetics	74F161	
	TI	SN74F161	
MC74F162	Fairchild	74F162	
	Signetics	74F162	
	TI	SN74F162	
MC74F163	Fairchild	74F163	
	Signetics	74F163	
	TI	SN74F163	
MC74F164	Fairchild	74F164	
	Signetics	**74F164**	**(3023)**
MC74F168	Fairchild	74F168	
	Signetics	**74F168**	**(3023)**
	TI	SN74F168	
MC74F169	Fairchild	74F169	
	Signetics	**74F169**	**(3023)**
	TI	SN74F169	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC74F174	Fairchild	74F174	
	Signetics	**74F174**	**(3023)**
	TI	SN74F174	
MC74F175	Fairchild	74F175	
	Signetics	**74F175**	**(3023)**
	TI	SN74F175	
MC74F181	Fairchild	74F181	
	Signetics	**74F181**	**(3023)**
MC74F182	Fairchild	74F182	
	Signetics	**74F182**	**(3023)**
MC74F189	Cypress	CY74F189	
	Fairchild	74F189	
	Signetics	**74F198**	**(3023)**
MC74F190	Fairchild	74F190	
	Signetics	**74F190**	**(3023)**
MC74F191	Fairchild	74F191	
	Signetics	**74F191**	**(3023)**
MC74F192	Fairchild	74F192	
	Signetics	**74F192**	**(3023)**
MC74F193	Fairchild	74F193	
	Signetics	**74F193**	**(3023)**
MC74F194	Fairchild	74F194	
	Signetics	**74F194**	**(3023)**
MC74F195	Fairchild	74F195	
	Signetics	**74F195**	**(3023)**
MC74F20	Fairchild	74F20	
	Signetics	**74F20**	**(3023)**
	TI	SN74F20	
MC74F21	TI	SN74F21	
MC74F240	Fairchild	74F240	
	Signetics	**74F240**	**(3023)**
	TI	**SN74BCT240**	**(3249)**
		SN74F240	
MC74F241	Fairchild	74F241	
	Signetics	**74F241**	**(3023)**
	TI	**SN74BCT241**	**(3249)**
		SN74F241	
MC74F242	**Signetics**	**74F242**	**(3023)**
	TI	SN74F242	
MC74F243	Fairchild	74F243	
	Signetics	**74F243**	**(3023)**
	TI	SN74F243	
MC74F244	Fairchild	74F244	
	Signetics	**74F244**	**(3023)**
	TI	**SN74BCT244**	**(3249)**
		SN74F244	
MC74F245	Fairchild	74F245	
	Signetics	**74F245**	**(3023)**
	TI	**SN74BCT245**	**(3249)**
		SN74F245	
MC74F251	MicroLinear	ADC0838	
	National	ADC0838	
	TI	ADC0838B	
MC74F253	Fairchild	74F253	
	Signetics	**74F253**	**(3023)**
	TI	SN74F253	
MC74F257	Fairchild	74F257	
	Signetics	**74F257**	**(3023)**
	TI	SN74F257	
MC74F258	Fairchild	74F258	
	Signetics	**74F258**	**(3023)**
	TI	SN74F258	
MC74F259	Fairchild	74F259	
		74F37	
	Signetics	**74F259**	**(3023)**
		74F37	**(3023)**
MC74F280	Fairchild	74F280	
	Signetics	**74F280**	**(3023)**
	TI	SN74F280	
MC74F283	Fairchild	74F283	
	Signetics	**74F283**	**(3023)**
	TI	SN74F283	
MC74F2968	AMD	AM2968	
MC74F2970	AMD	AM2970	
MC74F32	Fairchild	74F32	
	Signetics	**74F32**	**(3023)**
MC74F323	Fairchild	74F298	
		74F323	
	Signetics	**74F298**	**(3023)**
		74F323	**(3023)**
	TI	SN74F323	
MC74F350	Fairchild	74F299	
		74F350	
	Signetics	**74F299**	**(3023)**
		74F350	**(3023)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC74F350			(Cont'd)
	TI	SN74F299	
		SN74F350	
MC74F352	Fairchild	74F30	
		74F352	
	Signetics	**74F30**	**(3023)**
		74F352	**(3023)**
	TI	SN74F30	
		SN74F352	
MC74F353	Fairchild	74F30244	
		74F353	
	Signetics	**74F30244**	**(3023)**
		74F353	**(3023)**
	TI	SN74F353	
MC74F373	Fairchild	74F373	
	Signetics	**74F373**	**(3023)**
	TI	**SN74BCT373**	**(3249)**
		SN74F373	
MC74F374	Fairchild	74F374	
	Signetics	**74F374**	**(3023)**
	TI	**SN74BCT374**	**(3249)**
		SN74F374	
MC74F378	Fairchild	74F3037	
		74F378	
	Signetics	**74F3037**	**(3023, 3043)**
		74F378	**(3023)**
	TI	SN74F378	
MC74F379	Fairchild	74F3040	
		74F379	
	Signetics	**74F3040**	**(3023)**
		74F379	**(3023)**
	TI	SN74F379	
MC74F381	Fairchild	74F322	
		74F381	
	Signetics	**74F322**	**(3023)**
		74F381	**(3024)**
	TI	SN74F381	
MC74F382	Fairchild	74F365	
		74F382	
	Signetics	**74F365**	**(3023)**
		74F382	**(3024)**
	TI	SN74F382	
MC74F398	Fairchild	74F273	
		74F398	
	Signetics	**74F273**	**(3023)**
		74F398	**(3024)**
	TI	SN74F273	
MC74F399	Fairchild	74F399	
	Signetics	**74F399**	**(3024)**
MC74F521	Fairchild	74F521	
	Signetics	**74F521**	**(3024)**
	TI	SN74F521	
MC74F533	Fairchild	74F533	
	Signetics	**74F533**	**(3024)**
	TI	**SN74BCT533**	**(3249)**
		SN74F533	
MC74F534	Fairchild	74F534	
	Signetics	**74F534**	**(3024)**
	TI	**SN74BCT534**	**(3249)**
		SN74F534	
MC74F620	Fairchild	74F366	
		74F620	
	Signetics	**74F366**	**(3023)**
		74F620	**(3024)**
	TI	**SN74BCT620**	**(3249)**
		SN74F620	
MC74F623	Fairchild	74F367	
		74F623	
	Signetics	**74F367**	**(3023)**
		74F623	**(3024)**
	TI	**SN74BCT623**	**(3249)**
		SN74F623	
MC74F653	Fairchild	74ACT151	
		74F653	
	GE/RCA	**CD74ACT151**	**(2629)**
	TI	SN74F653	
MC74F74	Fairchild	74F74	
	Signetics	74F74	
	TI	SN74F74	
MC74HC00	**GE/RCA**	**CD74HC00**	**(2631)**
	Hitachi	HD74HC00	
	National	MM74HC00	
	SGS	M74HC00	
	Signetics	**74HC00**	**(3003)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC74HC00			(Cont'd)
	TI	SN74HC00	
	Toshiba	TC40H000	
MC74HC02	**GE/RCA**	**CD74HC02**	**(2631)**
	Hitachi	HD74HC02	
	National	MM74HC02	
	SGS	M74HC02	
	Signetics	**74HC02**	**(3003)**
	TI	SN74HC02	
	Toshiba	TC40H002	
MC74HC03	**GE/RCA**	**CD74HC03**	**(2631)**
	National	MM74HC03	
	SGS	M74HC03	
	TI	SN74HC03	
	Toshiba	**TC74HC03**	**(3307)**
MC74HC04	**GE/RCA**	**CD74HC04**	**(2631)**
	Hitachi	HD74HC04	
	National	MM74HC04	
	SGS	M74HC04	
	TI	SN74HC04	
	Toshiba	TC40H004	
MC74HC05	TI	SN74HC05	
MC74HC08	**GE/RCA**	**CD74HC08**	**(2631)**
	Hitachi	HD74HC08	
	National	MM74HC08	
	SGS	M74HC08	
	Signetics	**74HC08**	**(3003)**
	TI	SN74HC08	
MC74HC10	**GE/RCA**	**CD74HC10**	**(2631)**
	Hitachi	HD74HC10	
	National	MM74HC10	
	SGS	M74HC10	
	Signetics	**74HC10**	**(3003)**
	TI	SN74HC10	
	Toshiba	TC40H010	
MC74HC107	**GE/RCA**	**CD74HC107**	**(2631)**
	Hitachi	HD74HC107	
	National	MM74HC107	
	SGS	M74HC107	
	Signetics	**74HC107**	**(3003)**
	TI	SN74HC107	
	Toshiba	TC40H107	
MC74HC109	**GE/RCA**	**CD74HC109**	**(2631)**
	Hitachi	HD74HC109	
	National	MM74HC109	
	SGS	M74HC109	
	Signetics	**74HC109**	**(3003)**
	TI	SN74HC109	
	Toshiba	**TC74HC109**	**(3307)**
MC74HC11	**GE/RCA**	**CD74HC11**	**(2631)**
	Hitachi	HD74HC11	
	National	MM74HC11	
	SGS	M74HC11	
	Signetics	**74HC11**	**(3003)**
	TI	SN74HC11	
	Toshiba	TC40H011	
MC74HC112	**GE/RCA**	**CD74HC112**	**(2631)**
	Hitachi	HD74HC112	
	National	MM74HC112	
	SGS	M74HC112	
	Signetics	**74HC112**	**(3003)**
	TI	SN74HC112	
MC74HC113	Hitachi	HD74HC113	
	National	MM74HC113	
	SGS	M74HC113	
	TI	SN74HC113	
MC74HC123A	Hitachi	HD74HC123	
	National	MM74HC123	
	SGS	M74HC123	
	Signetics	**74HC123**	**(3003)**
	TI	SN74HC123	
MC74HC125	**GE/RCA**	**CD74HC125**	**(2631)**
	Hitachi	HD74HC125	
	National	MM74HC125	
	SGS	M74HC125	
	TI	SN74HC125	
	Toshiba	**TC74HC125**	**(3307)**
MC74HC126	**GE/RCA**	**CD74HC126**	**(2631)**
	Hitachi	HD74HC126	
	National	MM74HC126	
	SGS	M74HC126	
	Toshiba	**TC74HC126**	**(3307)**
MC74HC131	SGS	M74HC131	
MC74HC132	**GE/RCA**	**CD74HC132**	**(2631)**
	Hitachi	HD74HC132	
	National	MM74HC132	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC74HC132			(Cont'd)
	SGS	M74HC132	
	Signetics	**74HC132**	**(3003)**
	TI	SN74HC132	
MC74HC133	National	MM74HC133	
	SGS	M74HC133	
	TI	SN74HC133	
MC74HC137	Hitachi	HD74HC137	
	National	MM74HC137	
	SGS	M74HC137	
	Toshiba	**TC74HC137**	**(3307)**
MC74HC138	**GE/RCA**	**CD74HC138**	**(2632)**
	Hitachi	HD74HC138	
	National	MM74HC138	
	SGS	M74HC138	
	Signetics	**74HC138**	**(3003)**
	Sprague	SS74HC138	
	TI	SN74HC138	
MC74HC14	**GE/RCA**	**CD74HC14**	**(2631)**
	Hitachi	HD74HC14	
	National	MM74HC14	
	SGS	M74HC14	
	Signetics	**74HC14**	**(3003)**
	TI	SN74HC14	
MC74HC147	**GE/RCA**	**CD74HC147**	**(2632)**
	Hitachi	HD74HC147	
	National	MM74HC147	
	SGS	M74HC147	
	Signetics	**74HC147**	**(3003)**
	TI	SN74HC147	
MC74HC151	**GE/RCA**	**CD74HC151**	**(2632)**
	Hitachi	HD74HC151	
	National	MM74HC151	
	SGS	M74HC151	
	Signetics	**74HC151**	**(3003)**
	TI	SN74HC151	
	Universal	US74HC151	
MC74HC153	**GE/RCA**	**CD74HC153**	**(2632)**
	Hitachi	HD74HC153	
	National	MM74HC153	
	SGS	M74HC153	
	Signetics	**74HC153**	**(3003)**
	TI	SN74HC153	
	Toshiba	TC40H153	
MC74HC154	**GE/RCA**	**CD74HC154**	**(2632)**
	Hitachi	HD74HC154	
	National	MM74HC154	
	SGS	M74HC154	
	Signetics	**74HC154**	**(3003)**
	TI	SN74HC154	
MC74HC157	**GE/RCA**	**CD74HC157**	**(2632)**
	Hitachi	HD74HC157	
	National	MM74HC157	
	SGS	M74HC157	
	Signetics	**74HC157**	**(3003)**
	TI	SN74HC157	
	Toshiba	TC40H157	
MC74HC158	**GE/RCA**	**CD74HC158**	**(2632)**
	Hitachi	HD74HC158	
	National	MM74HC158	
	SGS	M74HC158	
	Signetics	**74HC158**	**(3003)**
	TI	SN74HC158	
	Toshiba	TC40H158	
MC74HC160	**GE/RCA**	**CD74HC160**	**(2632)**
	National	MM74HC160	
	SGS	M74HC160	
	Signetics	**74HC160**	**(3003)**
	TI	SN74HC160	
MC74HC161	**GE/RCA**	**CD74HC161**	**(2632)**
	Hitachi	HD74HC161	
	National	MM74HC161	
	SGS	M74HC161	
	Signetics	**74HC161**	**(3003)**
	TI	SN74HC161	
MC74HC162	**GE/RCA**	**CD74HC162**	**(2632)**
	Hitachi	HD74HC162	
	National	MM74HC162	
	SGS	M74HC162	
	Signetics	**74HC162**	**(3003)**
	TI	SN74HC162	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC74HC163	**GE/RCA**	**CD74HC163**	**(2632)**
	Hitachi	HD74HC163	
	National	MM74HC163	
	SGS	M74HC163	
	Signetics	**74HC163**	**(3003)**
	TI	SN74HC163	
MC74HC164	**GE/RCA**	**CD74HC164**	**(2631)**
	Hitachi	HD74HC164	
	National	MM74HC164	
	SGS	M74HC164	
	Signetics	**74HC164**	**(3003)**
	TI	SN74HC164	
MC74HC165	**GE/RCA**	**CD74HC165**	**(2631)**
	Hitachi	HD74HC165	
	National	MM74HC165	
	SGS	M74HC165	
	Signetics	**74HC165**	**(3003)**
	TI	SN74HC165	
MC74HC173	**GE/RCA**	**CD74HC173**	**(2631)**
	Hitachi	HD74HC173	
	National	MM74HC173	
	SGS	M74HC173	
	Signetics	**74HC173**	**(3003)**
	TI	SN74HC173	
MC74HC174	**GE/RCA**	**CD74HC174**	**(2631)**
	Hitachi	HD74HC174	
	National	MM74HC174	
	SGS	M74HC174	
	Signetics	**74HC174**	**(3003)**
	TI	SN74HC174	
	Toshiba	TC40H174	
MC74HC175	**GE/RCA**	**CD74HC175**	**(2631)**
	Hitachi	HD74HC175	
	National	MM74HC175	
	SGS	M74HC175	
	Signetics	**74HC175**	**(3003)**
	TI	SN74HC175	
	Toshiba	TC40H175	
MC74HC190	**GE/RCA**	**CD74HC190**	**(2632)**
	Hitachi	HD74HC190	
	SGS	M74HC190	
	Signetics	**74HC190**	**(3003)**
		PC74HC190	
		PCF74HC190	
	TI	SN74HC190	
	Toshiba	**TC74HC190**	**(3307)**
MC74HC191	**GE/RCA**	**CD74HC191**	**(2632)**
	Hitachi	HD74HC191	
	SGS	M74HC191	
	Signetics	**74HC191**	**(3003)**
	TI	SN74HC191	
MC74HC192	**GE/RCA**	**CD74HC192**	**(2632)**
	Hitachi	HD74HC192	
	National	MM74HC192	
	SGS	M74HC192	
	Signetics	**74HC192**	**(3003)**
	TI	SN74HC192	
	Toshiba	TC40H192	
MC74HC193	**GE/RCA**	**CD74HC193**	**(2632)**
	Hitachi	HD74HC193	
	National	MM74HC193	
	SGS	M74HC193	
	Signetics	**74HC193**	**(3003)**
	TI	SN74HC193	
	Toshiba	TC40H193	
MC74HC194	**GE/RCA**	**CD74HC194**	**(2631)**
	Hitachi	HD74HC194	
	National	MM74HC194	
	SGS	M74HC194	
	Signetics	**74HC194**	**(3003)**
	TI	SN74HC194	
MC74HC195	**GE/RCA**	**CD74HC195**	**(2631)**
	Hitachi	HD74HC195	
	National	MM74HC195	
	SGS	M74HC195	
	Signetics	**74HC195**	**(3003)**
	TI	SN74HC195	
MC74HC20	**GE/RCA**	**CD74HC20**	**(2631)**
	Hitachi	HD74HC20	
	National	MM74HC20	
	SGS	M74HC20	
	Signetics	**74HC20**	**(3003)**
	TI	SN74HC20	
	Toshiba	TC40H020	
MC74HC21	Hitachi	HD74HC21	
	SGS	M74HC21	
	TI	SN74HC21	
	Toshiba	**TC74HC21**	**(3307)**
MC74HC221A	**GE/RCA**	**CD74HC221**	**(2632)**
	National	MM74HC221	
	SGS	M74HC221	
	Signetics	**74HC221**	**(3003)**
MC74HC237	SGS	M74HC237	
	TI	SN74HC237	
	Toshiba	**TC74HC237**	**(3307)**
MC74HC240	**GE/RCA**	**CD74HC240**	**(2631)**
	Hitachi	HD74HC240	
	Mitel	MD74HC240	
	National	MM74HC240	
	SGS	M74HC240	
	Signetics	**74HC240**	**(3003)**
	Sprague	SS74HC240	
	Supertex	SI74HC240	
	TI	SN74HC240	
	Toshiba	TC40H240	
MC74HC241	**GE/RCA**	**CD74HC241**	**(2631)**
	Hitachi	HD74HC241	
	Mitel	MD74HC241	
	National	MM74HC241	
	SGS	M74HC241	
	Signetics	**74HC241**	**(3003)**
	Sprague	SS74HC241	
	Supertex	SI74HC241	
	TI	SN74HC241	
MC74HC242	**GE/RCA**	**CD74HC242**	**(2631)**
	Hitachi	HD74HC242	
	National	MM74HC242	
	SGS	M74HC242	
	Signetics	**74HC242**	**(3003)**
	TI	SN74HC242	
MC74HC243	**GE/RCA**	**CD74HC243**	**(2631)**
	Hitachi	HD74HC243	
	National	MM74HC243	
	SGS	M74HC243	
		M74HC245	
	Signetics	**74HC243**	**(3003)**
	TI	SN74HC243	
MC74HC244	**GE/RCA**	**CD74HC244**	**(2631)**
	Hitachi	HD74HC244	
	Mitel	MD74HC244	
	National	MM74HC244	
	SGS	M74HC244	
	Signetics	**74HC244**	**(3003)**
	Sprague	SS74HC244	
	Supertex	SI74HC244	
	TI	SN74HC244	
MC74HC245	**GE/RCA**	**CD74HC245**	**(2631)**
	Hitachi	HD74HC245	
	National	MM74HC245	
	Signetics	**74HC245**	**(3003)**
	Sprague	SS74HC245	
	TI	SN74HC245	
MC74HC251	**GE/RCA**	**CD74HC251**	**(2632)**
	Hitachi	HD74HC251	
	National	MM74HC251	
	SGS	M74HC251	
	Signetics	**74HC251**	**(3003)**
	TI	SN74HC251	
MC74HC253	**GE/RCA**	**CD74HC253**	**(2632)**
	Hitachi	HD74HC253	
	National	MM74HC253	
	SGS	M74HC253	
	Signetics	**74HC253**	**(3003)**
	TI	SN74HC253	
MC74HC257	**GE/RCA**	**CD74HC257**	**(2632)**
	Hitachi	HD74HC257	
	National	MM74HC257	
	SGS	M74HC257	
	Signetics	**74HC257**	**(3003)**
	TI	SN74HC257	
MC74HC259	**GE/RCA**	**CD74HC259**	**(2632)**
	Hitachi	HD74HC259	
	National	MM74HC259	
	Signetics	**74HC259**	**(3003)**
	TI	SN74HC259	
MC74HC266	Hitachi	HD74HC266	
	National	MM74HC266	
	SGS	M74HC266	
	Signetics	74HC266	
	TI	SN74HC266	
MC74HC27	**GE/RCA**	**CD74HC27**	**(2631)**
	Hitachi	HD74HC27	
	National	MM74HC27	
	SGS	M74HC27	
	Signetics	**74HC27**	**(3003)**
	TI	SN74HC27	
	Toshiba	TC40H027	
	Universal	US74HC27	
MC74HC273	CTI	74HC273	
	GE/RCA	**CD74HC273**	**(2631)**
	Hitachi	HD74HC273	
	SGS	M74HC273	
	Signetics	**74HC273**	**(3003)**
	TI	SN74HC273	
MC74HC280	**GE/RCA**	**CD74HC280**	**(2632)**
	Hitachi	HD74HC280	
	National	MM74HC280	
	SGS	M74HC280	
	Signetics	**74HC280**	**(3003)**
	TI	SN74HC280	
MC74HC283	**GE/RCA**	**CD74HC283**	**(2632)**
	SGS	M74HC283	
MC74HC299	**GE/RCA**	**CD74HC299**	**(2631)**
	National	MM74HC299	
	SGS	M74HC299	
	Signetics	**74HC299**	**(3003)**
MC74HC30	**GE/RCA**	**CD74HC30**	**(2631)**
	Hitachi	HD74HC30	
	National	MM74HC30	
	SGS	M74HC30	
	Signetics	**74HC30**	**(3003)**
	TI	SN74HC30	
MC74HC32	**GE/RCA**	**CD74HC32**	**(2631)**
	Hitachi	HD74HC32	
	National	MM74HC32	
	SGS	M74HC32	
	Signetics	**74HC32**	**(3003)**
	TI	SN74HC32	
	Toshiba	TC40H032	
MC74HC354	**GE/RCA**	**CD74HC354**	**(2632)**
	Hitachi	HD74HC354	
	National	MM74HC354	
	SGS	M74HC354	
	Signetics	**74HC354**	**(3003)**
	TI	SN74HC354	
MC74HC356	**GE/RCA**	**CD74HC356**	**(2632)**
	Hitachi	HD74HC356	
	National	MM74HC356	
	SGS	M74HC356	
	Signetics	**74HC356**	**(3003)**
	TI	SN74HC356	
MC74HC365	**GE/RCA**	**CD74HC365**	**(2631)**
	Hitachi	HD74HC365	
	National	MM74HC365	
	SGS	M74HC365	
	TI	SN74HC365	
MC74HC366	**GE/RCA**	**CD74HC366**	**(2631)**
	Hitachi	HD74HC366	
	National	MM74HC366	
	SGS	M74HC366	
	Signetics	**74HC366**	**(3003)**
	TI	SN74HC366	
MC74HC367	**GE/RCA**	**CD74HC367**	**(2631)**
	Hitachi	HD74HC367	
	National	MM74HC367	
	SGS	M74HC367	
	Signetics	**74HC367**	**(3003)**
	TI	SN74HC367	
MC74HC368	**GE/RCA**	**CD74HC368**	**(2631)**
	Hitachi	HD74HC368	
	National	MM74HC368	
	SGS	M74HC368	
MC74HC368			(Cont'd)
	Signetics	**74HC368**	**(3003)**
	TI	SN74HC368	
MC74HC373	**GE/RCA**	**CD74HC373**	**(2632)**
	Hitachi	HD74HC373	
	Mitel	MD74HC373	
	National	MM74HC373	
	SGS	M74HC373	
	Signetics	**74HC373**	**(3003)**
	Sprague	SS74HC373	
	Supertex	SI74HC373	
	TI	SN74HC373	
MC74HC374	**GE/RCA**	**CD74HC374**	**(2631)**
	Hitachi	HD74HC374	
	Mitel	MD74HC374	
	National	MM74HC374	
	SGS	M74HC374	
	Signetics	**74HC374**	**(3003)**
	Sprague	SS74HC374	
	TI	SN74HC374	
MC74HC377	**GE/RCA**	**CD74HC377**	**(2631)**
	Hitachi	HD74HC377	
	SGS	M74HC377	
	Signetics	**74HC377**	**(3003)**
	TI	SN74HC377	
MC74HC386	SGS	M74HC386	
	TI	SN74HC386	
	Toshiba	**TC74HC386**	**(3307)**
MC74HC390	**GE/RCA**	**CD74HC390**	**(2632)**
	Hitachi	HD74HC390	
	National	MM74HC390	
	SGS	M74HC390	
	Signetics	**74HC390**	**(3003)**
	TI	SN74HC390	
MC74HC393	**GE/RCA**	**CD74HC393**	**(2632)**
	Hitachi	HD74HC393	
	National	MM74HC393	
	SGS	M74HC393	
	Signetics	**74HC393**	**(3003)**
	TI	SN74HC393	
MC74HC4002	**GE/RCA**	**CD74HC4002**	**(2631)**
	National	MM74HC4002	
	SGS	M74HC4002	
	Signetics	**74HC4002**	**(3003)**
	TI	SN74HC4002	
MC74HC4010	SGS	M74HC4010	
MC74HC4016	GE/RCA	CD74HC4016	
MC74HC4017	**GE/RCA**	**CD74HC4017**	**(2632)**
	National	MM74HC4017	
	SGS	M74HC4017	
	Signetics	**74HC4017**	**(3003)**
	TI	SN74HC4017	
MC74HC4020	**GE/RCA**	**CD74HC4020**	**(2632)**
	Hitachi	HD74HC4020	
	National	MM74HC4020	
	SGS	M74HC4020	
	Signetics	**74HC4020**	**(3003)**
	TI	SN74HC4020	
MC74HC4024	**GE/RCA**	**CD74HC4024**	**(2632)**
	Hitachi	HD74HC4024	
	SGS	M74HC4024	
	Signetics	**74HC4024**	**(3003)**
	TI	SN74HC4024	
MC74HC4028	SGS	M74HC4028	
MC74HC4040	**GE/RCA**	**CD74HC4040**	**(2632)**
	Hitachi	HD74HC4040	
	National	MM74HC4040	
	SGS	M74HC4040	
	Signetics	**74HC4040**	**(3003)**
	TI	SN74HC4040	
MC74HC4046	**GE/RCA**	**CD74HC4046**	**(2632)**
	Signetics	**74HC4046**	**(3003)**
MC74HC4049	**GE/RCA**	**CD74HC4049**	**(2631)**
	National	MM74HC4049	
	SGS	M74HC4049	
	Signetics	**74HC4049**	**(3003)**
	TI	SN74HC4049	
MC74HC4050	**GE/RCA**	**CD74HC4050**	**(2631)**
	Motorola	MC84HC4050	
	SGS	M74HC4050	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC74HC4050			(Cont'd)
	Signetics	PC74HC4050	
	Toshiba	**TC74HC4050**	**(3307)**
MC74HC4051	**GE/RCA**	**CD74HC4051**	**(2632)**
	SGS	M74HC4051	
	Signetics	**74HC4051**	**(3003)**
	TI	SN74HC4051	
MC74HC4052	**GE/RCA**	**CD74HC4052**	**(2632)**
	SGS	M74HC4052	
	Signetics	**74HC4052**	**(3003)**
	TI	SN74HC4052	
MC74HC4053	**GE/RCA**	**CD74HC4053**	**(2632)**
	SGS	M74HC4053	
	Signetics	**74HC4053**	**(3003)**
	TI	SN74HC4053	
MC74HC4060	**GE/RCA**	**CD74HC4060**	**(2632)**
	National	MM74HC4060	
	SGS	M74HC4060	
	Signetics	**74HC4060**	**(3003)**
	TI	SN74HC4060	
MC74HC4066	SGS	M74HC4066	
	Signetics	PC74HC4066	
	TI	SN74HC4075	
MC74HC4072	SGS	M74HC4072	
MC74HC4075	**GE/RCA**	**CD74HC4075**	**(2631)**
	National	MM74HC4075	
	Signetics	74HC4075	
	TI	SN74HC4075	
	Toshiba	**TC74HC4075**	**(3307)**
MC74HC4078	National	MM74HC4078	
	SGS	M74HC4078	
	TI	SN74HC4078A	
	Toshiba	**TC74HC4078**	**(3307)**
MC74HC4102	SGS	M74HC4102	
MC74HC4103	SGS	M74HC4103	
MC74HC42	**GE/RCA**	**CD74HC42**	**(2632)**
	Hitachi	HD74HC42	
	National	MM74HC42	
	SGS	M74HC42	
	Signetics	**74HC42**	**(3003)**
	TI	SN74HC42	
MC74HC423A	**GE/RCA**	**CD74HC423**	**(2632)**
	SGS	M74HC423	
	Signetics	**74HC423**	**(3003)**
MC74HC4316	GE/RCA	CD74HC4316	
MC74HC4351	GE/RCA	CD74HC4351	
MC74HC4352	MMI	MC10H119	
	Motorola	MC10H119	
MC74HC4353	GE/RCA	CD74HC4353	
MC74HC4514	**GE/RCA**	**CD74HC4514**	**(2632)**
	Hitachi	HD74HC4514	
	National	MM74HC4514	
	SGS	M74HC4514	
	Signetics	**74HC4514**	**(3003)**
	TI	SN74HC4514	
MC74HC4538	**GE/RCA**	**CD74HC4538**	**(2632)**
	National	MM74HC4538	
	SGS	M74HC4538	
	Signetics	**74HC4538**	**(3003)**
MC74HC4543	**Cypress**	**CY7C172**	**(2562, 2564)**
	GE/RCA	**CD74HC4543**	**(2632)**
	IDT	**IDT71682**	**(2802)**
	National	MM74HC4543	
	Performance	P4C1682	
	SGS	M74HC4543	
	Signetics	PC74HC4543	
	Toshiba	**TC74HC4543**	**(3307)**
MC74HC51	Hitachi	HD74HC51	
	National	MM74HC51	
	TI	SN74HC51	
	Toshiba	**TC74HC51**	**(3307)**
MC74HC533	**GE/RCA**	**CD74HC533**	**(2632)**
	Hitachi	HD74HC533	
	National	MM74HC533	
	SGS	M74HC533	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC74HC533			(Cont'd)
	Signetics	**74HC533**	**(3003)**
	Sprague	SS74HC533	
	TI	SN74HC533	
MC74HC534	**GE/RCA**	**CD74HC534**	**(2631)**
	Hitachi	HD74HC534	
	National	MM74HC534	
	SGS	M74HC534	
	Signetics	**74HC534**	**(3003)**
	Sprague	SS74HC534	
	TI	SN74HC534	
MC74HC540	**GE/RCA**	**CD74HC540**	**(2631)**
	Hitachi	HD74HC540	
	SGS	M74HC540	
	Signetics	**74HC540**	**(3003)**
	Sprague	SS74HC540	
	TI	SN74HC540	
	Toshiba	**TC74HC540**	**(3307)**
MC74HC541	**GE/RCA**	**CD74HC541**	**(2631)**
	Hitachi	HD74HC541	
	SGS	M74HC541	
	Signetics	**74HC541**	**(3003)**
	Sprague	SS74HC541	
	TI	SN74HC541	
MC74HC563	**GE/RCA**	**CD74HC563**	**(2632)**
	Hitachi	HD74HC563	
	National	MM74HC563	
	SGS	M74HC563	
	Signetics	**74HC563**	**(3003)**
	Sprague	SS74HC563	
	TI	SN74HC563	
MC74HC564	**GE/RCA**	**CD74HC564**	**(2631)**
	Hitachi	HD74HC564	
	National	MM74HC564	
	SGS	M74HC564	
	Signetics	**74HC564**	**(3003)**
	Sprague	SS74HC564	
	TI	SN74HC564	
MC74HC573	**GE/RCA**	**CD74HC573**	**(2632)**
	Hitachi	HD74HC573	
	National	MM74HC573	
	SGS	M74HC573	
	Signetics	**74HC573**	**(3003)**
	Sprague	SS74HC573	
	TI	SN74HC573	
	Toshiba	**TC74HC573**	**(3307)**
MC74HC574	**GE/RCA**	**CD74HC574**	**(2631)**
	Hitachi	HD74HC574	
	National	MM74HC574	
	SGS	M74HC574	
	Signetics	**74HC574**	**(3003)**
	Sprague	SS74HC574	
	TI	SN74HC574	
MC74HC58	National	MM74HC58	
	TI	SN74HC58	
MC74HC589	TI	SN74HC589	
MC74HC595	**Cypress**	**CY7C164**	**(2562)**
	Hitachi	HD74HC595	
	Inmos	**IMS1620**	**(2787)**
	Motorola	MCM6288	
		MCM62L88	
	Performance	P4C188	
	SGS	M74HC595	
	TI	SMJ64C64	
		SN74HC595	
	Toshiba	TC55416	
	Vitelic	V61C62	
	VLSI Tech	CT64KS4	
MC74HC597	Hitachi	HD74HCT620	
	Motorola	MC74HCT620	
	SGS	M74HCT620	
	TI	SN74HCT620	
MC74HC620	Hitachi	HD74HC620	
	National	MM74HC620	
	TI	SN74HC620	
	Toshiba	**TC74HC620**	**(3307)**
MC74HC623	Hitachi	HD74HC623	
	National	MM74HC623	
	TI	SN74HC623	
	Toshiba	**TC74HC623**	**(3307)**
MC74HC640	**GE/RCA**	**CD74HC640**	**(2631)**
	Hitachi	HD74HC640	
	National	MM74HC640	
	Signetics	**74HC640**	**(3003)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC74HC640			(Cont'd)
	Sprague	SS74HC640	
	TI	SN74HC640	
MC74HC643	**GE/RCA**	**CD74HC643**	**(2631)**
	Hitachi	HD74HC643	
	National	MM74HC643	
	SGS	M74HC643	
	Signetics	**74HC643**	**(3003)**
	Sprague	SS74HC643	
	TI	SN74HC643	
MC74HC646	**GE/RCA**	**CD74HC646**	**(2631)**
	Hitachi	HD74HC646	
	National	MM74HC646	
	SGS	M74HC646	
	Signetics	**74HC646**	**(3003)**
	TI	SN74HC646	
MC74HC648	**GE/RCA**	**CD74HC648**	**(2631)**
	Hitachi	HD74HC648	
	National	MM74HC648	
	Signetics	**74HC648**	**(3003)**
	TI	SN74HC648	
MC74HC651	Hitachi	HD74HC651	
	TI	SN74HC651	
	Toshiba	**TC74HC651**	**(3307)**
MC74HC652	Hitachi	HD74HC652	
	TI	SN74HC652	
	Toshiba	**TC74HC652**	**(3307)**
MC74HC688	**GE/RCA**	**CD74HC688**	**(2632)**
	National	MM74HC688	
	SGS	M74HC688	
	Signetics	**74HC688**	**(3003)**
	TI	SN74HC688	
	Toshiba	**TC74HC688**	**(3307)**
MC74HC7266	**GE/RCA**	**CD74HC7266**	**(2631)**
	National	MM74HC7266	
	Signetics	PC74HC7266	
	TI	SN74HC7266	
	Toshiba	**TC74HC7266**	**(3307)**
MC74HC73	**GE/RCA**	**CD74HC73**	**(2631)**
	Hitachi	HD74HC73	
	National	MM74HC73	
	SGS	M74HC73	
	Signetics	**74HC73**	**(3003)**
	TI	SN74HC73	
	Toshiba	**TC74HC73**	**(3307)**
MC74HC74	**GE/RCA**	**CD74HC74**	**(2631)**
	Hitachi	HD74HC74	
	National	MM74HC74	
	SGS	M74HC74	
	Signetics	**74HC74**	**(3003)**
	TI	SN74HC74	
	Toshiba	TC40H074	
MC74HC75	**GE/RCA**	**CD74HC75**	**(2632)**
	Hitachi	HD74HC75	
	National	MM74HC75	
	SGS	M74HC75	
	Signetics	**74HC75**	**(3003)**
	TI	SN74HC75	
	Toshiba	**TC74HC75**	**(3307)**
MC74HC76	Hitachi	HD74HC76	
	National	MM74HC76	
	SGS	M74HC76	
	TI	SN74HC76	
	Toshiba	TC40H076	
MC74HC85	**GE/RCA**	**CD74HC85**	**(2632)**
	National	MM74HC85	
	SGS	M74HC85	
	Signetics	**74HC85**	**(3003)**
	TI	SN74HC85	
MC74HC86	**GE/RCA**	**CD74HC86**	**(2631)**
	Hitachi	HD74HC86	
	National	MM74HC86	
	SGS	M74HC86	
	Signetics	**74HC86**	**(3003)**
	TI	SN74HC86	
MC74HCT00	**GE/RCA**	**CD74HCT00**	**(2631)**
MC74HCT04	**GE/RCA**	**CD74HCT04**	**(2631)**
	SGS	M74HCT04	
MC74HCT05	National	MM74HCT05	
MC74HCT240	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC74HCT240			(Cont'd)
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
MC74HCT241	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
MC74HCT244	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
MC74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
MC74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
MC74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
MC74HCT533	CTI	74HCT533	
	GE/RCA	**CD74HCT533**	**(2632)**
	Hitachi	HD74HCT533	
	Micrel	MIC74HCT533	
	Plessey	MV74HCT533	
	Signetics	**74HCT533**	**(3003)**
	Sprague	SS74HCT533	
	TI	SN74HCT533	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC74HCT534	CTI	74HCT534	
	GE/RCA	**CD74HCT534**	**(2631)**
	Hitachi	HD74HCT534	
	Micrel	MIC74HCT534	
	Plessey	MV74HCT534	
	Signetics	**74HCT534**	**(3003)**
	Sprague	SS74HCT534	
	TI	SN74HCT534	
MC74HCT540	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
MC74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
MC74HCT620	Hitachi	HD74HCT620	
	Motorola	MC74HC597	
	SGS	M74HCT620	
	TI	SN74HCT620	
MC74HCT623	Hitachi	HD74HCT623	
	TI	SN74HCT623	
MC74HCT640	**GE/RCA**	**CD74HCT640**	**(2631)**
	Hitachi	HD74HCT640	
	SGS	M74HCT640	
	Signetics	**74HCT640**	**(3003)**
	Sprague	SS74HCT640	
	TI	SN74HCT640	
	Toshiba	TC74HCT640	
MC74HCT643	**GE/RCA**	**CD74HCT643**	**(2631)**
	Hitachi	HD74HCT643	
	SGS	M74HCT643	
	Signetics	**74HCT643**	**(3003)**
	TI	SN74HCT643	
	Toshiba	TC74HCT643	
MC74HCU04	SGS	M74HCU04	
	Signetics	74HCU04	
MC7506	AD	AD7506	
	Datel	**MV1606**	**(2577)**
		MX1606	**(2577)**
	GE/Intersil	**IH6116**	**(2681)**
	Harris	**HI506**	**(2703, 2738, 2748)**
	MicroPwr	MP7506	
	PMI	**MUX16**	**(2975)**
	Siliconix	DG506A	
MC75107	Fairchild	75107	
	National	DS75107	
		LM75107A	
	TI	SN75107B	
MC75108	Fairchild	75108	
	National	DS75108	
		LM75108A	
	TI	SN75108B	
♦ MC75109	TI	SN75109A	
MC75125	National	DS75125	
	TI	SN75125	
		SN75ALS125	
MC75127	National	DS75127	
	TI	SN75127	
		SN75ALS127	
MC75128	National	DS75128	
	TI	SN75128	
MC75129	National	DS75129	
	TI	SN75129	
♦ MC75140	TI	SN75140A	
MC7520	Fairchild	7520	
MC7521	Fairchild	7521	
	National	LM7521	
MC7523	National	LM7523	
	Raytheon	RC7523	
MC7524	National	DS75S24	
	Signetics	7524	
MC7525	Fairchild	7525	
	National	LM7525	
MC7528	Raytheon	RC7528	
	Thomson	SFC2528	
MC7529	Fairchild	7529	
	National	LM7529	
	Raytheon	RC7529	
MC75325	National	DS75325	
	SiliconG	SG55327	
		SG75325	
	TI	SN55327	
MC7535	National	LM7535	
♦ MC75365	National	DS75365	
♦ MC75368	Motorola	MC75358	
MC7538	Fairchild	7538	
	National	LM7538	
MC7539	Fairchild	7539	
	National	LM7539	
MC75401	Fairchild	µA75461	
	National	DS75461	
	SiliconG	SG75461	
	TI	SN75461	
MC75402	Fairchild	µA75462	
	National	DS75462	
	SiliconG	SG75462	
	TI	SN75462	
MC75403	National	DS75463	
	SiliconG	SG75463	
	TI	SN75463	
MC75404	National	DS75464	
		SG75464	
	SiliconG	SG75464	
♦ MC75450	Fairchild	75450	
	National	DS75450	
	SiliconG	SG75450B	
♦ MC75451	Fairchild	75451	
	National	DS75451	
	SiliconG	SG75451	
	TI	SN75451	
♦ MC75452	Fairchild	75452	
	National	DS75452	
	SiliconG	SG75452A	
		SG75452B	
♦ MC75452	TI	SN75452B	
MC75453	Fairchild	75453	
	National	DS75453	
		LM75453	
	SiliconG	SG75453A	
		SG75453B	
	TI	SN75453B	
♦ MC75454	National	DS75454	
	SiliconG	SG75453B	
		SG75454B	
		SG7545A	
♦ MC75454	TI	SN75454B	
MC75460	National	DS75460	
	SiliconG	SG75460	
♦ MC75461	Fairchild	µA75461	
	Motorola	MC75401	
	National	DS75461	
	SiliconG	SG75461	
	TI	SN75461	
♦ MC75462	Fairchild	µA75462	
	Motorola	MC75402	
	National	DS75462	
	SiliconG	SG75462	
	TI	SN75462	
♦ MC75463	Motorola	MC75403	
	National	DS75463	
	SiliconG	SG75463	
	TI	SN75463	
♦ MC75464	Motorola	MC75404	
	National	DS75464	
		SG75464	
♦ MC75464	SiliconG	SG75464	
MC75S110	Fairchild	75110	
	National	LM75110	
	TI	SN75110A	
♦ MC7802	Fairchild	µA78L02	
	TI	µA78L02	
MC7805	GoldStar	GL7805	
		GL7905	**(2701)**
	Gould	µA7805	
		µA7905	
MC7805			(Cont'd)
	NEC	µPC7805	
	SiliconG	SG7805	
	Toshiba	TA78005	
		TA79005	
MC7806	Fairchild	µA7806	
	National	LM7806	
	NEC	µPC7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806	
		SG7806A	
	TI	µA7806	
	Thomson	µA7806	
	Toshiba	TA78006	
MC7808	Fairchild	µA7808	
	GoldStar	GL7808	
	Gould	µA7808	
	Hitachi	HA17808	
	Motorola	MC08	
	National	LM7808	
	NEC	µPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	µA7808	
	Thomson	µA7808	
	Toshiba	TA78008	
MC7809	Fairchild	µA7809	
	GoldStar	GL7809	
	Gould	µA7809	
	Hitachi	HA17809	
	National	LM7809	
	NEC	µPC7809	
	TI	µA7809	
	Toshiba	TA78009	
♦ MC7810	Fairchild	µA7810	
	National	LM7810	
	SGS	L7810	
	TI	µA7810	
	Toshiba	TA78010	
MC7812	Fairchild	µA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
	National	LM340-12	
		LM7812	
	NEC	µPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	µA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
MC7815	Fairchild	µA78L15	
	GoldStar	GL7815	
	Gould	µA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
	National	LM340-15	
		LM7815	
	NEC	µPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		µA7815	
	Thomson	µA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
MC7818	Fairchild	µA7818	
	National	LM7818	
	Samsung	MC7818	
	SGS	L7818	
MC7818			(Cont'd)
	TI	µA7818	
	Toshiba	TA78018	
♦ MC7820	Fairchild	µA7820	
		µA7910	
♦ MC7820	National	LM7820	
	SGS	L7820	
	SiliconG	SG7820	
		SG7820A	
♦ MC7820	TI	µA7820	
		µA7910	
♦ MC7820	Toshiba	TA78020	
MC7824	Fairchild	µA7824	
	GoldStar	GL7824	
	Gould	µA7824	
	National	LM7824	
	NEC	µPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
		µA7824	
	Thomson	µA7824	
	Toshiba	TA78024	
MC78L05	Fairchild	µA78L05	
	National	LM340LA-5	
		LM78L05	
	NEC	µPC78L05	
	TI	µA78L05	
	Thomson	µA7805	
	Toshiba	TA78L006	
♦ MC78L06	Fairchild	µA78L06	
	National	LM78L06	
	TI	µA78L06	
		µA87L06	
♦ MC78L06	Toshiba	TA78L012	
MC78L08	Fairchild	µA78L08	
	National	LM78L08	
	NEC	µPC78L08	
	TI	µA78L08	
	Toshiba	TA78L008	
♦ MC78L09	Fairchild	µA78L09	
	National	LM78L09	
	TI	µA78L09	
	Toshiba	TA78L009	
♦ MC78L10	Fairchild	µA78L10	
	National	LM78L10	
	TI	µA78L10	
	Toshiba	TA78L010	
MC78L12	Fairchild	µA78L12	
	National	LM340LA-12	
		LM78L12	
	NEC	µPC78L12	
	TI	µA78L12	
	Thomson	µA7812	
	Toshiba	TA78L012	
MC78L15	Fairchild	µA7815	
	GoldStar	GL7815	
	Lambda	LMC7815	
	National	LM340LA-15	
		LM340T-15	
		LM78L15	
	NEC	µPC78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	SN75555	
		µA78L15	
	Toshiba	TA78L015	
MC78L18	Fairchild	µA78L18	
	National	LM78L18	
	TI	µA78L18	
		µA78m20	
	Toshiba	TA78L018	
♦ MC78L20	Fairchild	µA78L20	
	National	LM78L20	
	TI	µA78L20	
	Toshiba	TA78L024	
		TA78L20	
MC78M05	Fairchild	µA78M05	
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	µPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Motorola Semiconductor Products (Cont'd)			
MC78M05			(Cont'd)
	TI	μA78M05	
	Toshiba	TA78M05	
MC78M06	Fairchild	μA78M06	
	National	LM78M06	
	Samsung	MC78M06	
	Sanyo	L78M06	
	SGS	L78M06	
		L78M06CV	
	TI	μA78M06	
	Toshiba	TA78M06	
MC78M08	Fairchild	μA78M08	
	National	LM78M08	
	NEC	μPC78M08	
	Samsung	MC78M08	
	Sanyo	L78M08	
	SGS	L78M08	
		L78M08CV	
	TI	μA78M08	
	Toshiba	TA78M08	
♦ MC78M09	Fairchild	μA78M09	
	National	LM78M09	
	SGS	L78M09	
	TI	μA78M09	
	Toshiba	TA78M09	
♦ MC78M10	Fairchild	μA78M10	
	National	LM78M10	
		LM7910	
♦ MC78M10	SGS	L78M10	
	TI	μA78M10	
	Toshiba	TA78M10	
MC78M12	Fairchild	μA78M12	
	National	LM341-12	
		LM342-12	
		LM78M12	
	NEC	μPC78M12	
	Samsung	MC78M12	
	Sanyo	L78M12	
	SGS	L78M12	
		L78M12CV	
	TI	μA78M12	
	Toshiba	TA78M12	
MC78M15	Fairchild	μA78M15	
	National	LM341-15	
		LM342-15	
		LM78M15	
	NEC	μPC78M15	
	Samsung	MC78M15	
	Sanyo	L78M15	
	SGS	L78M15	
		L78M15CV	
	TI	μA78M15	
	Toshiba	TA78M15	
MC78M18	Fairchild	μA78M18	
	Samsung	MC78M18	
	Sanyo	L78M18	
	SGS	L78M18	
	TI	μA78M18	
	Toshiba	TA78M18	
MC78M20	Fairchild	μA78M20	
	National	LM78M20	
	SGS	L78M20	
	TI	μA78M20	
	Toshiba	TA78M20	
MC78M24	Fairchild	μA78M24	
	Samsung	MC78M24	
	Sanyo	L78M24	
	SGS	L78M24	
		L78M24CV	
	TI	μA78M24	
	Toshiba	TA78M24	
MC78T05	Fairchild	SH123	
		UA138	
		μA123	
	IPS	**IP123**	**(2854)**
	LinearTech	LM123	
		LT123	
	Motorola	**LM123**	**(2927)**
	National	LM123	
	SiliconG	SG123	
		SG123A	
MC78T12	**IPS**	**IP123-12**	**(2854)**
		IP323-12	**(2854)**
MC78T15	**IPS**	**IP123-15**	**(2854)**
		IP323-15	**(2854)**
♦ MC7902	Fairchild	μA7902	
	Samsung	MC7902	
MC7905	Fairchild	MC7905	
		μA7905	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC7905			(Cont'd)
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	Samsung	MC7905	
	SGS	L7905	
	SiliconG	SG7905	
		SG7905A	
MC7906	Fairchild	μA7906	
	GoldStar	GL7806	
	Gould	μA7806	
	National	LM7906	
	NEC	μPC7806	
	Samsung	MC7906	
	SGS	L7906	
	TI	μA7906	
	Toshiba	TA78006	
MC7908	Fairchild	MC7908	
		μA7908	
		μA79M08	
	National	LM7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908	
		SG7908A	
	TI	μA7908	
		μA79M08	
	Toshiba	TA79008	
♦ MC7909	Fairchild	μA7909	
	GoldStar	**GL7909**	**(2701)**
	Gould	μA7909	
	National	LM7909	
	NEC	μPC7909	
	SGS	L7909	
	TI	μA7909	
	Toshiba	TA7900	
		TA79009	
♦ MC7910	Fairchild	μA7820	
		μA7910	
♦ MC7910	National	LM7820	
	SGS	L7820	
	SiliconG	SG7820	
		SG7820A	
♦ MC7910	TI	μA7820	
		μA7910	
♦ MC7910	Toshiba	TA78020	
MC7912	Fairchild	μA7912	
		μA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	μA7824	
		μA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	μPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
MC7915	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
MC7918	Fairchild	μA7918	
	National	LM7918	
	Samsung	MC7918	
	SGS	L7918	
	SiliconG	SG7918	
		SG7918A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC7918			(Cont'd)
	TI	μA7918	
	Toshiba	TA79018	
♦ MC7920	Fairchild	μA7920	
	National	LM7920	
	SGS	L7920	
	SiliconG	SG7920	
		SG7920A	
♦ MC7920	SiliconSys	SSI957	
	TI	μA7920	
	Toshiba	TA79020	
MC7924	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
MC7952	**IPS**	**IP120-5**	**(2854)**
	National	LM320-5	
	SGS	L7952	
	SiliconG	SG320-5	
MC830	Fairchild	930	
		9930	
	Motorola	MC930	
	National	DM930	
	Raytheon	RM930	
MC835	Fairchild	9135	
		9935	
	Motorola	MC935	
	National	DM935	
MC837	Fairchild	937	
		9937	
	Motorola	MC937	
	National	DM937	
MC84HC4050	**GE/RCA**	**CD74HC4050**	**(2631)**
	Motorola	MC74HC4050	
	SGS	M74HC4050	
	Signetics	PC74HC4050	
	Toshiba	**TC74HC4050**	**(3307)**
MC8500	SiliconSys	SSI8500	
MC8502	SiliconSys	SSI8502	
MC8503	Fairchild	F9401	
	Signetics	9401	
MC851	Fairchild	9951	
	Motorola	MC852	
		MC951	
	Raytheon	RM951	
MC852	Fairchild	9951	
	Motorola	MC851	
		MC951	
	Raytheon	RM951	
MC8520	SiliconSys	SSI8520	
MC853	Fairchild	9093	
	Motorola	MC953	
	National	DM9093	
	Raytheon	RM993	
MC855	Fairchild	9097	
	Motorola	MC955	
	National	DM9097	
	Raytheon	RM997	
MC856	Fairchild	9094	
	Motorola	MC956	
	National	DM9094	
	Raytheon	RM9094	
		RM994	
MC857	Fairchild	9157	
	Motorola	MC957	
	National	DM9567	
		DM957	
	Raytheon	RM957	
MC858	Fairchild	9158	
	Motorola	MC958	
	National	DM958	
	Raytheon	RM958	
MC8T26	Hitachi	HD268T26	
	Motorola	**MC6880A**	**(2951)**
	Signetics	N8T26	

Manufacturer Device	Replacement Source	Device	IC Master Page
MC8T26A	Fairchild	μA8T26A	
	National	DS8T26A	
	Signetics	**N8T26A**	**(3022)**
MC8T28	**Signetics**	**N8T28**	**(3022)**
MC8T95	**Motorola**	**MC6885**	**(2951)**
	National	DM8095	
	Signetics	**N8T95**	**(3022)**
	TI	SN74365	
MC930	Fairchild	930	
		9930	
	Motorola	MC830	
	National	DM930	
	Raytheon	RM930	
MC932	Fairchild	932	
		9932	
	National	DM932	
	Raytheon	RM932	
MC933	Fairchild	9933	
	National	DM933	
MC934	Raytheon	RM934	
MC935	Fairchild	9135	
		9935	
	Motorola	MC835	
	National	DM935	
MC936	Fairchild	936	
		9936	
	National	DM936	
MC937	Fairchild	937	
		9937	
	Motorola	MC837	
	National	DM937	
MC941	Fairchild	9941	
	Raytheon	RM941	
MC943	Fairchild	SH2001	
MC944	Fairchild	944	
		9944	
	National	DM944	
MC945	Fairchild	945	
		9945	
	National	DM945	
MC946	Fairchild	946	
		9946	
	National	DM946	
MC948	Fairchild	948	
		9948	
	National	DM948	
MC949	Fairchild	949	
	National	DM949	
	Raytheon	RM949	
MC950	Fairchild	9950	
MC951	Fairchild	9951	
	Motorola	MC851	
		MC852	
	Raytheon	RM951	
MC952	Fairchild	9099	
	Raytheon	RM952	
		RM999	
MC953	Fairchild	9093	
	Motorola	MC853	
	National	DM9093	
	Raytheon	RM993	
MC955	Fairchild	9097	
	Motorola	MC855	
	National	DM9097	
	Raytheon	RM997	
MC956	Fairchild	9094	
	Motorola	MC856	
	National	DM9094	
	Raytheon	RM9094	
		RM994	
MC957	Fairchild	9157	
	Motorola	MC857	
	National	DM9567	
		DM957	
	Raytheon	RM957	
MC958	Fairchild	9158	
	Motorola	MC858	
	National	DM958	
	Raytheon	RM958	
MC961	Fairchild	9961	
	National	DM961	
MC962	Fairchild	962	
		9962	
	National	DM962	
MC963	Fairchild	9963	
	National	DM963	
	Raytheon	RM963	
MCA500	National	MCA500	
MCM100416	**Signetics**	**100149**	**(3020)**
MCM10144	Fairchild	F10144	
	TI	SN10144	
MCM10145	Signetics	10145	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM10146	AMD	AM10415	
	Fujitsu	MBM100470A	
		MBM10415	
	Hitachi	HM2110	
		HM2112	
	National	DM10415	
	Siemens	GXB10415	
MCM10147	TI	SN10147	
MCM10148	Hitachi	HD10148	
	TI	SN10148	
MCM10149	**Signetics**	**10149**	**(3021, 3185)**
MCM10152	National	DM10414	
♦ MCM10422	Fujitsu	MBM10422A	
	National	DM10422	
	NEC	μPB10422	
MCM10470	AMD	AM10470	
	Fujitsu	MBM10470A	
	Hitachi	HM10470	
	National	DM10470	
	NEC	μPB10470	
MCM10474	AMD	AM10474	
	Fairchild	F10474	
	Fujitsu	MBM10474A	
	Hitachi	HM10474	
	National	DM10474	
	NEC	μPB10474	
MCM1423	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
MCM145101	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCMS1L01	
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	
MCM2016	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM2016			(Cont'd)
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MCM2016H	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM2016H			(Cont'd)
	Motorola	MCM2016	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MCM2018	**Harris**	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Motorola	MCM6116	
	TI	SMJ68CE16	
	Toshiba	TMM2018	
	Vitelic	V61C16	
		V62C16	
MCM2114	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
MCM2167	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM21L14	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
♦ MCM2532	Hitachi	HN462532	
	National	MM2532	
		NMC2532	
		TDA2530	
		TDA2532	
♦ MCM2532	Plessey	TDA2530	
♦ MCM2716	**Harris**	**HM6616**	**(2768)**
	Hitachi	HN462716	
	National	MM2716	
	OKI	MSM2716	
	SGS	M2716	
	Thomson	ET2716	
MCM27S19	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
MCM27S25	AMD	AM21L49	
		AM27S25	
	Cypress	**CY7C225**	**(2565)**
	Fujitsu	MB7226	
	MMI	53RA481	
		63RA481	
	National	DM87SR25	
		DM87SR474	
MCM27S35	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RA881	
		63RS881	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
		S82HS189	
♦ MCM2801	GIM	ER59256	
	NCR	NCR52801	
MCM4027	Fairchild	M4027	
	Stantel-STC	STC4027	
♦ MCM4116B	AMD	AM9016	
	Fairchild	F16K	
		F4116	
♦ MCM4116B	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM4164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
MCM4164C	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
♦ MCM4517	Fairchild	F100422	
	Fujitsu	MB8118	
		MBM100422	
		MBM100422A	
♦ MCM4517	Hitachi	HM100422	
	National	DM100422	
		NMC5295	
♦ MCM4517	NEC	μPB100422	
MCM6116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116 (2564)**	
		CY7C128 (2561, 2564)	
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A (2643)**	
	GoldStar	**GM76C28 (2692)**	
	Harris	**HM6516 (2704, 2761, 2768)**	
		HM65162 (2704, 2761, 2768)	
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116 (2770)**	
	Inmos	**IMS1433 (2784)**	
	IDT	**IDT6116 (2802)**	
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM6116	Mitsubishi		(Cont'd)
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115 (2993)**	
		LH5116 (2993)	
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MCM6147	Cypress	CY2147	
		CY7C147 (2562, 2564)	
	Fujitsu	MBM2147	
	Harris	**HM6504 (2704, 2762, 2768)**	
	Hitachi	HM4847	
		HM6147	
	Intel	2147	
	National	MM2147	
		NMC2141	
	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
♦ MCM6147A	Cypress	CY2147	
		CY7C147 (2562, 2564)	
♦ MCM6147A	Fujitsu	MBM2147	
	Harris	**HM6504 (2704, 2762, 2768)**	
	Hitachi	HM4847	
		HM6147	
♦ MCM6147A	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
♦ MCM6147A	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
MCM6164	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185 (2562)**	
		CY7C186 (2562)	
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264 (2643)**	
	GoldStar	**GM76C88 (2692)**	
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64 (2770)	
	Inmos	**IMS1630 (2789)**	
	IDT	**IDT7188 (2802)**	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM6164			(Cont'd)
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064 (3201)**	
		SRM2264 (3201)	
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98 (3352)**	
MCM6164C	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185 (2562)**	
		CY7C186 (2562)	
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264 (2643)**	
	GoldStar	**GM76C88 (2692)**	
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64 (2770)	
	Inmos	**IMS1630 (2789)**	
	IDT	**IDT7188 (2802)**	
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064 (3201)**	
		SRM2264 (3201)	
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM6164C	Toshiba		(Cont'd)
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98 (3352)**	
♦ MCM61L47A	Cypress	CY2147	
		CY7C147 (2562, 2564)	
♦ MCM61L47A	Fujitsu	MBM2147	
	Harris	**HM6504 (2704, 2762, 2768)**	
	Hitachi	HM4847	
		HM6147	
♦ MCM61L47A	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
♦ MCM61L47A	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
MCM61L64	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185 (2562)**	
		CY7C186 (2562)	
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264 (2643)**	
	GoldStar	**GM76C88 (2692)**	
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64 (2770)	
	Inmos	**IMS1630 (2789)**	
	IDT	**IDT7188 (2802)**	
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064 (3201)**	
		SRM2264 (3201)	
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98 (3352)**	
MCM6256	Inmos	IMS2800	
		IMS2801	
	Motorola	MCM6257	
	TI	**TMS4256 (3259)**	
	Vitelic	V51C256	
		V51C257	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM6256B	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**
	Vitelic	V51C256	
		V51C257	
MCM6257	Inmos	IMS2800	
		IMS2801	
	Motorola	MCM6256	
	TI	**TMS4256**	**(3259)**
	Vitelic	V51C256	
		V51C257	
MCM6257B	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
MCM6268	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
MCM6269	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM6269			(Cont'd)
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
MCM6270	AMD	99C60	
		AM99CL68	
	Cypress	**CY7C170**	**(2562)**
	Performance	P4C170	
	Thomson	MK4170	
		MK41H78	
	Toshiba	TMM2078	
		TMM2078D	
	Vitelic	V61C68	
MCM6287	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
MCM6288	AMD	AM99C164	
		AM99C165	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	Inmos	**IMS1620**	**(2787)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR4K4	
		SR64K4	
	Motorola	MCM62L88	
	NEC	μPD4362	
	Performance	P4C188	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
MCM6290	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	54LS152	
	Hitachi	HM6789	
	Inmos	**IMS1624**	**(2788)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR64E4	
	NEC	μPD4363	
	SGS	T54LS152	
	Toshiba	TC55417	
	Vitelic	V61C62	
MCM62L87	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM62L87			(Cont'd)
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
MCM62L88	AMD	AM99C164	
		AM99C165	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	Inmos	**IMS1620**	**(2787)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR4K4	
		SR64K4	
	Motorola	MCM6288	
	NEC	μPD4362	
	Performance	P4C188	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
♦ MCM63128	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
♦ MCM63128	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
♦ MCM63128	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
♦ MCM63256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
♦ MCM63256	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
♦ MCM63256	**S-MOS**	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
♦ MCM63256	Signetics	23256	
		23256A	
♦ MCM63256	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
♦ MCM63256	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
MCM64256	AMD	AM90C256	
	GIM	WS57C256	
	MicronTech	MT1256	
	Motorola	MCM6256	
		MCM6257	
	TI	SMJ32010	
		SMJ4256	**(3220)**
	Thomson	MK45H56	
	Vitelic	V51C256	
		V51C257	
MCM6665	Vitelic	V51C64	
MCM6810	Fairchild	F6810	
	Hitachi	HD6810	
		HD68A10	
	Motorola	MC6810	
♦ MCM68364	Gould	S2364	
	Hitachi	HN48364	
	NCR	NCR2364	
	OKI	MSM3864	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ MCM68364			(Cont'd)
	Sharp	LH2364A	
	Signetics	2364	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
♦ MCM68365	NCR	NCR2365	
	NEC	μPD2364E	
	Signetics	2364	
		2664	
♦ MCM68365	VLSI Tech	VT2365	
♦ MCM68366	GIM	RO3-9364	
	Hitachi	HN48364	
	Mitsubishi	M58334	
	National	MM52164	
	NEC	μPD2364	
	Rockwell	R2364A	
	Signetics	2664	
		26S64	
♦ MCM68369	Fairchild	F3568	
		F3569	
		F3570	
♦ MCM68369	GIM	RO3-9365	
		RO9864	
♦ MCM68369	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
♦ MCM68369	National	MM52264	
		NM52264	
♦ MCM68369	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
♦ MCM68369	Supertex	23SC64	
		23SC64/A	
		CM6400	
♦ MCM68369	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
♦ MCM68370	Fairchild	F3568	
		F3569	
		F3570	
♦ MCM68370	GIM	RO3-9365	
		RO9864	
♦ MCM68370	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
♦ MCM68370	National	MM52264	
		NM52264	
♦ MCM68370	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
♦ MCM68370	Supertex	23SC64	
		23SC64/A	
		CM6400	
♦ MCM68370	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
♦ MCM68A332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
♦ MCM68A332	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
♦ MCM68A332	Signetics	2332	
		2632A	
♦ MCM68A332	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
♦ MCM68A332	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
MCM68B10	Fairchild	F68B10	
MCM76	AMD	AM27S191	
		AM27S291	
		AM27S291A	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MCM76			(Cont'd)
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
	National	87S291	
		DM878291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
MCM76101	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
♦ MCM76161	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
♦ MCM76161	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
♦ MCM76161	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
♦ MCM76161	**Waferscale**	**WS57C191**	**(3376)**
MCM76165	AMD	AM2864B	
♦ MCM7621	AMD	AM27S13	
	Fujitsu	MB7116	
	MMI	63S241	
	National	74S571A	
		DM74S571	
♦ MCM7621	Signetics	N82S131	
♦ MCM7641	AMD	AM27S31	
	MMI	63S485	
	National	74S474	
		DM74S474	
♦ MCM7641	Signetics	N82S141	
♦ MCM7643	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
♦ MCM7643	National	74S573	
		DM74S573	
♦ MCM7643	NEC	μPB426	
	Signetics	N82S137	
MCM7643M	MMI	53S441	
	National	DM54S573	
		DM54S573A	
	Signetics	S82S137	
♦ MCM7681	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
♦ MCM7681	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ MCM7681	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ MCM7681	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ MCM7681	Signetics	N82S181	
		S82S181	
♦ MCM7681	TI	28586-60	
		28S86-60	
		JBP28L86A	
♦ MCM7685	AMD	27S185	
		AM2725S291	
		AM27S185	
♦ MCM7685	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
♦ MCM7685	**Raytheon**	**29651**	**(2985)**
		29651A	**(2985)**
♦ MCM7685	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
MCM93415	AMD	AM685	
		AM93415	
	Fairchild	93415	
MCM93422	AMD	AM93422	
	Cypress	**CY7C122**	**(2561, 2564)**
		CY93422	
	Fairchild	93422	
	Performance	P4C422	
		P93U422	
♦ MCM93425	AMD	AM93425	
	Elantec	**EDH0008**	**(2593)**
	Fairchild	93425	
MCM93L415	AMD	AM93L415	
	Apex	**PA81**	**(2458)**
	Burr-Brown	**3581**	**(2536)**
	Fairchild	93L415	
♦ MCM93L422	AMD	AM93L422	
	Apex	**PA82**	**(2458)**
	Burr-Brown	**3582**	**(2536)**
	Fairchild	93L422	
♦ MCM93L422A			
	AMD	AM93L422A	
	Fairchild	93L422A	
	GE/RCA	**CD22212**	**(2637)**
	SiliconSys	SSIK212	
MCM93L425	AMD	AM93L425	
	Fairchild	93L425	
	SiliconSys	SSI202	
MCMS1L01	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	
ML1556	**Elantec**	**EHA2600**	**(2594)**
	Harris	**HA2600**	**(2706, 2737, 2747)**
	Hitachi	HA17741	
	Motorola	**MC1556**	**(2921)**
	Signetics	SE556	
	TeledyneP	1326	
	TI	MC1556	
		SE556M	
ML74F113	Fairchild	74F113	
	TI	SN74F113	
MQ3724	Fairchild	FQ3724	
	Raytheon	SP3724	
MQ3725	Fairchild	FQ3725	
	National	DH3725	
	Raytheon	SP3725	
MT1259	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
MT1259			(Cont'd)
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
NE592	Fairchild	μA733	
	GE/Intersil	μA733	
	Hitachi	HA17733	
	Motorola	**MC1733**	**(2920)**
	National	LM733	
	Signetics	μA733	
	SiliconG	SG1401	
	TI	μA733	
		μA733M	
SE4558	Signetics	MC14558	
SE592	GE/Intersil	SE592	
	Signetics	SE592	
	TI	SE592	
♦ SG1525	Cherry	CS1525	
	LinearTech	LT1525	
		SG1525	
♦ SG1525	SiliconG	SG1525	
	TI	TL1525	
SG1525A	Cherry	CS1525A	
	Exar	**XR1525A**	**(2607)**
	IPS	**IP1525A**	**(2854)**
	LinearTech	LT1525A	
	SGS	SG1524A	
	SiliconG	SG1525A	
	Siliconix	PWM125	
	Unitrode	**UC1525**	**(3323)**
		UC1525A	**(3323)**
SG1526	Cherry	CH1526	
	IPS	**IP1526**	**(2854, 2856)**
	LinearTech	LT1526	
	Motorola	**SG3526**	**(2931)**
	SiliconG	SG1526	
		SG3525	
		SG3526	
	Unitrode	**UC1526**	**(3323)**
♦ SG1527	Cherry	CS1527	
	LinearTech	LT1527	
		SG1527	
♦ SG1527	SiliconG	1526	
		SG1527	
♦ SG1527	TI	TL1527	
	Unitrode	**UC1527**	**(3323)**
SG1527A	Cherry	CS1527A	
	IPS	**IP1527A**	**(2854)**
	LinearTech	LT1527A	
	SGS	SG1527A	
	SiliconG	SG1527A	
	Siliconix	PWM27	
	Unitrode	**UC1527A**	**(3323)**
♦ SG2525	Cherry	CS2525	
	SiliconG	SG2525	
	TI	TL2525	
	Unitrode	**UC2525**	**(3323)**
SG2525A	Cherry	CS2525A	
	Exar	**XR2525A**	**(2607)**
	IPS	IP2525A	
	LinearTech	LT2525A	
	SiliconG	SG2525A	
	Siliconix	PWM25B	
	TI	SG2525A	
	Unitrode	**UC2525A**	**(3323)**
SG2526	Cherry	CS2526	
	IPS	**IP2526**	**(2856)**
	LinearTech	LT2526	
	SiliconG	SG2526	
		SG2527	
	Unitrode	**UC2526**	**(3323)**
♦ SG2527	Cherry	CS2527	
	SiliconG	SG2527	
♦ SG2527			(Cont'd)
	TI	TL2527	
	Unitrode	**UC2527**	**(3323)**
SG2527A	Cherry	CS2527A	
	Exar	**XR2527A**	**(2607)**
	IPS	IP2527A	
	LinearTech	LT2527A	
	SiliconG	SG2527A	
	TI	SG2527A	
	Unitrode	**UC2527A**	**(3323)**
♦ SG3525	LinearTech	LT3525	
		SG3525	
♦ SG3525	SiliconG	SG3525	
	Unitrode	**UC3525**	**(3323)**
SG3525A	Cherry	CS3525A	
	Exar	**XR3525A**	**(2607)**
	IPS	**IP3525A**	**(2854)**
	LinearTech	LT3525A	
	RIFA	RL3525A	
	SGS	SG3525A	
	SiliconG	SG3525A	
	Siliconix	PWM25	
	TI	SG3525A	
	Unitrode	**UC3525A**	**(3323)**
SG3526	Cherry	CH1526	
	IPS	**IP1526**	**(2854, 2856)**
	LinearTech	LT1526	
	Motorola	**SG1526**	**(2931)**
	SiliconG	SG1526	
		SG3525	
		SG3526	
	Unitrode	**UC1526**	**(3323)**
SG3527A	Cherry	CS3527	
		CS3527A	
	Exar	**XR3527A**	**(2607)**
	IPS	**IP3527**	**(2854)**
	LinearTech	LT3527A	
	SGS	SG3527A	
	SiliconG	SG3527A	
	TI	SG3527A	
SN54ALS00	National	DM54ALS00	
	TI	SN54ALS00A	
SN54ALS02	National	DM54ALS02	
	TI	SN54ALS02	
SN54ALS04	National	DM54ALS04	
SN54ALS08	National	DM54ALS08	
	TI	SN54ALS08	
		SN54ALS09	
SN54ALS09	National	DM54ALS09	
SN54ALS160	National	DM54ALS160	
		DM54ALS160B	
SN54ALS161	National	DM54ALS161	
	TI	SN54ALS161B	
SN54ALS162	National	DM54ALS162	
	TI	SN54ALS162B	
SN54ALS163	National	DM54ALS163	
	TI	SN54ALS163B	
SN54ALS240	National	DM54ALS240	
	TI	SN54ALS240A	
SN54ALS241	National	DM54ALS241	
	TI	SN54ALS241A	
SN54ALS242	National	DM54ALS242	
	TI	SN54ALS242B	
SN54ALS243	National	DM54ALS243	
	TI	SN54ALS243A	
SN54ALS244	National	DM54ALS244	
	TI	SN54ALS244A	
SN54ALS245	National	DM54ALS245	
	TI	SN54ALS245A	
SN54ALS273	National	DM54ALS273	
	TI	SN54ALS273	
SN54ALS32	National	DM54ALS32	
	TI	SN54ALS32	
SN54ALS373	National	DM54ALS373	
	TI	SN54ALS373	
SN54ALS374	National	DM54ALS374	
	TI	SN54ALS374	
SN54ALS377	National	DM54ALS377	
SN54ALS573	National	DM54ALS573	
	TI	SN54ALS573B	
SN54ALS574	National	DM54ALS574	
	TI	SN54ALS574A	
SN54ALS576	National	DM54ALS576	
	TI	SN54ALS576A	
SN54ALS580	National	DM54ALS580	
	TI	SN54ALS580A	
SN54ALS620	National	DM54ALS620	
SN54ALS621	National	DM54ALS621	
SN54ALS622	National	DM54ALS622	
SN54ALS623	National	DM54ALS623	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54ALS640	National	DM54ALS640	
	TI	SN54ALS640A	
SN54ALS641	National	DM54ALS641	
SN54ALS643	National	DM54ALS643	
SN54ALS644	National	DM54ALS644	
SN54ALS646	National	DM54ALS646	
SN54ALS647	National	DM54ALS647	
SN54ALS648	National	DM54ALS648	
SN54ALS649	National	DM54ALS649	
SN54ALS690	National	DM54ALS690	
SN54ALS691	National	DM54ALS691	
SN54ALS692	National	DM54ALS692	
SN54ALS693	National	DM54ALS693	
SN54ALS696	National	DM54ALS696	
SN54ALS697	National	DM54ALS697	
SN54ALS698	National	DM54ALS698	
SN54ALS699	National	DM54ALS699	
SN54ALS74	National	DM54ALS74	
	TI	SN54ALS74A	
SN54ALS873	National	DM54ALS873	
	TI	SN54ALS873B	
SN54ALS874	TI	SN54ALS874B	
SN54ALS876	National	DM54ALS876	
SN54ALS880	National	DM54ALS880	
	TI	SN54ALS880B	
SN54LS00	Fairchild	54LS00	
	National	DM54LS00	
	SGS	T54LS00	
	Signetics	54LS00	
	TI	SN54LS00	
SN54LS01	National	DM54LS01	
	TI	SN54LS01	
SN54LS02	Fairchild	54LS02	
	National	DM54LS02	
	SGS	T54LS02	
	Signetics	54LS02	
	TI	SN54LS02	
SN54LS03	Fairchild	54LS03	
	National	DM54LS03	
	SGS	T54LS03	
	TI	SN54LS03	
SN54LS04	Fairchild	54LS04	
	National	DM54LS04	
	SGS	T54LS04	
	Signetics	54LS04	
	TI	SN54LS04	
SN54LS05	Fairchild	54LS05	
	National	DM54LS05	
	SGS	T54LS05	
	TI	SN54LS05	
SN54LS08	Fairchild	54LS08	
	National	DM54LS08	
	SGS	T54LS08	
	Signetics	54LS08	
	TI	SN54LS08	
SN54LS09	Fairchild	54LS09	
	National	DM54LS09	
	SGS	T54LS09	
	TI	SN54LS09	
SN54LS10	Fairchild	54LS10	
	National	DM54LS10	
	SGS	54LS10	
		T54LS10	
	Signetics	54LS10	
	TI	SN54LS10	
SN54LS107	National	DM54LS107	
	Signetics	54LS107	
	TI	SN54LS107	
SN54LS109	Fairchild	54LS109	
	National	DM54LS109	
	SGS	54LS109	
		T54LS109	
	Signetics	54LS109	
	TI	SN54LS109	
SN54LS11	Fairchild	54LS11	
	National	DM54LS11	
	SGS	T54LS11	
	TI	SN54LS11	
SN54LS12	National	DM54LS12	
	TI	SN54LS12	
SN54LS122	National	DM54LS122	
	TI	SN54LS122	
SN54LS123	National	DM54LS123	
	TI	SN54LS123	
SN54LS125	Fairchild	54LS125A	
	Motorola	SN54LS125A	
	National	DM54LS125	
	SGS	T54LS125	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS125			(Cont'd)
	Signetics	54LS125A	
	TI	SN54LS125A	
SN54LS125A	Fairchild	54LS125A	
	Motorola	SN54LS125	
	National	DM54LS125	
	SGS	T54LS125	
	Signetics	54LS125A	
	TI	SN54LS125A	
SN54LS126	Fairchild	54LS126	
	National	DM54LS126	
	SGS	54LS126	
		T54LS126	
	Signetics	54LS126	
	TI	SN54LS126	
SN54LS13	Fairchild	54LS13	
	National	DM54LS13	
	SGS	T54LS13	
	TI	SN54LS13	
SN54LS132	National	DM54LS132	
	SGS	T54LS132	
	Signetics	54LS132	
	TI	SN54LS132	
SN54LS133	Fairchild	54LS133	
	SGS	T54LS133	
SN54LS136	Fairchild	54LS136	
	National	DM54LS136	
	SGS	T54LS136	
	Signetics	54LS136	
	TI	SN54LS136	
SN54LS137	TI	SN54LS137	
SN54LS138	Fairchild	54LS138	
	National	DM54LS138	
	SGS	T54LS138	
	Signetics	54LS138	
	TI	SN54LS138	
SN54LS139	Fairchild	54LS139	
	National	DM54LS139	
	SGS	T54LS139	
	Signetics	54LS139	
	TI	SN54LS139A	
SN54LS14	Fairchild	54LS14	
	National	DM54LS14	
	SGS	T54LS14	
	Signetics	54LS14	
	TI	SN54LS14	
SN54LS145	TI	SN54LS145	
SN54LS147	TI	SN54LS147	
SN54LS148	TI	SN54LS148	
SN54LS15	Fairchild	54LS15	
	National	DM54LS15	
	SGS	T54LS15	
	TI	SN54LS15	
SN54LS151	Fairchild	54LS151	
	National	DM54LS151	
	SGS	T54LS151	
	Signetics	54LS151	
	TI	SN54LS151	
SN54LS153	Fairchild	54LS153	
	National	DM54LS153	
	SGS	T54LS153	
	Signetics	54LS153	
	TI	SN54LS153	
SN54LS155	Fairchild	54LS155	
	National	DM54LS155	
	SGS	T54LS155	
	TI	SN54LS155A	
SN54LS156	Fairchild	54LS156	
	National	DM54LS156	
	SGS	T54LS156	
	TI	SN54LS156	
SN54LS157	Fairchild	54LS157	
	National	DM54LS157	
	SGS	T54LS157	
	Signetics	54LS157	
	TI	SN54LS157	
SN54LS158	Fairchild	54LS158	
	National	DM54LS158	
	SGS	T54LS158	
	Signetics	54LS158	
	TI	SN54LS158	
SN54LS160A	Fairchild	54LS160A	
	SGS	T54LS160	
	Signetics	54LS160A	
	TI	SN54LS160A	
SN54LS161A	Fairchild	54LS161A	
	National	DM54LS161A	
	SGS	T54LS161	
	Signetics	54LS161A	
	TI	SN54LS161A	
SN54LS162A	Fairchild	54LS162A	
	National	DM54LS162A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS162A			(Cont'd)
	SGS	T54LS162	
	Signetics	54LS162A	
	TI	SN54LS162A	
SN54LS163A	Fairchild	54LS163A	
	National	DM54LS163	
		DM54LS163A	
	SGS	T54LS163	
	Signetics	54LS163A	
	TI	SN54LS163A	
SN54LS164	Fairchild	54LS164	
	SGS	T54LS164	
	Signetics	54LS164	
	TI	SN54LS164	
SN54LS165	Fairchild	54LS165	
	TI	SN54LS165A	
SN54LS166	TI	SN54LS166A	
SN54LS168	Fairchild	54LS168	
	National	DM54LS168	
	SGS	T54LS168	
SN54LS169	Fairchild	54LS169	
	National	DM54LS169	
	SGS	T54LS169	
	TI	SN54LS169B	
♦ SN54LS170	Fairchild	54LS170	
	National	DM54LS170	
	SGS	T54LS170	
	TI	SN54LS170	
SN54LS173A	Fairchild	54LS173	
	National	DM54LS173	
	Signetics	54LS173	
	TI	SN54LS173A	
SN54LS174	Fairchild	54LS174	
	National	DM54LS174	
	SGS	T54LS174	
	Signetics	54LS174	
	TI	SN54LS174	
SN54LS175	Fairchild	54LS175	
	National	DM54LS175	
	SGS	T54LS175	
	Signetics	54LS175	
	TI	SN54LS175	
SN54LS181	Fairchild	54LS181	
	SGS	T54LS181	
	Signetics	54LS181	
	TI	SN54LS181	
SN54LS190	National	DM54LS190	
	SGS	T54LS190	
	Signetics	54LS190	
	TI	SN54LS190	
SN54LS191	National	DM54LS191	
	SGS	T54LS191	
	Signetics	54LS191	
	TI	SN54LS191	
SN54LS192	Fairchild	54LS192	
	National	DM54LS192	
	SGS	T54LS192	
	Signetics	54LS192	
	TI	SN54LS192	
SN54LS193	Fairchild	54LS193	
	National	DM54LS193	
	SGS	T54LS193	
	Signetics	54LS193	
	TI	SN54LS193	
SN54LS194A	Fairchild	54LS194A	
	SGS	T54LS194	
	TI	SN54LS194A	
SN54LS195A	Fairchild	54LS195A	
	SGS	T54LS195	
	Signetics	54LS195A	
	TI	SN54LS195A	
SN54LS196	National	DM54LS196	
	SGS	T54LS196	
	TI	SN54LS196	
SN54LS197	National	DM54LS197	
	SGS	T54LS197	
	Signetics	54LS197	
	TI	SN54LS197	
SN54LS20	Fairchild	54LS20	
	National	DM54LS20	
	SGS	T54LS20	
	Signetics	54LS20	
	TI	SN54LS20	
SN54LS21	Fairchild	54LS21	
	National	DM54LS21	
	SGS	T54LS21	
	TI	SN54LS21	
SN54LS221	National	DM54LS221	
	Signetics	54LS221	
	TI	SN54LS221	
SN54LS240	Fairchild	54LS240	
	MMI	SN54LS240	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS240			(Cont'd)
	SGS	T54LS240	
	TI	SN54LS240	
SN54LS241	Fairchild	54LS241	
	MMI	SN54LS241	
	SGS	T54LS241	
	TI	SN54LS241	
SN54LS242	TI	SN54LS242	
SN54LS243	TI	SN54LS243	
SN54LS244	Fairchild	54LS244	
	MMI	SN54LS244	
	SGS	T54LS244	
	TI	SN54LS244	
SN54LS245	Fairchild	54LS245	
	MMI	SN54LS245	
	National	DM54LS245	
	Signetics	54LS245	
	TI	SN54LS245	
SN54LS247	Fairchild	54LS247	
	National	DM54LS247	
	TI	SN54LS247	
SN54LS248	Fairchild	54LS248	
	National	DM54LS248	
	Signetics	54LS248	
	TI	SN54LS248	
SN54LS249	Fairchild	54LS249	
	National	DM54LS249	
	TI	SN54LS249	
SN54LS251	Fairchild	54LS251	
	SGS	T54LS251	
	Signetics	54LS251	
	TI	SN54LS251	
SN54LS253	Fairchild	54LS253	
	National	DM54LS253	
		DM7214	
	SGS	T54LS253	
	Signetics	54LS253	
	TI	SN54LS253	
SN54LS256	Fairchild	54LS256	
	SGS	T54LS256	
SN54LS257A	TI	SN54LS257B	
SN54LS258A	Fairchild	54LS258A	
	TI	SN54LS258B	
SN54LS259	Fairchild	54LS259	
	SGS	T54LS259	
	TI	SN54LS259B	
SN54LS26	Fairchild	54LS26	
	National	DM54LS26	
	SGS	T54LS26	
	TI	SN54LS26	
SN54LS260A	Fairchild	54LS260	
	SGS	T54LS260	
	Signetics	54LS260A	
SN54LS266	Fairchild	54LS266	
	National	DM54LS266	
	SGS	T54LS266	
	Signetics	54LS266	
	TI	SN54LS266	
SN54LS27	Fairchild	54LS27	
	National	DM54LS27	
	SGS	T54LS27	
	TI	SN54LS27	
SN54LS273	Fairchild	54LS273	
	MMI	SN54LS273	
	SGS	T54LS273	
	Signetics	54LS273	
	TI	SN54LS273	
SN54LS279	Fairchild	54LS279	
	National	DM54LS279	
	SGS	T54LS279	
	Signetics	54LS279	
	TI	SN54LS279A	
SN54LS28	Fairchild	54LS28	
	SGS	T54LS28	
	Signetics	54LS194A	
		54LS28	
	TI	SN54LS28	
SN54LS280	SGS	T54LS280	
	TI	SN54LS280	
SN54LS283	Fairchild	54LS283	
	National	DM54LS283	
	SGS	T54LS283	
	Signetics	54LS283	
	TI	SN54LS283	
SN54LS290	National	DM54LS290	
	SGS	T54LS290	
	Signetics	54LS290	
	TI	SN54LS290	
SN54LS293	National	DM54LS293	
	SGS	T54LS293	
	Signetics	54LS293	
	TI	SN54LS293	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS295A	Fairchild	54LS295A	
	SGS	T54LS295	
	TI	SN54LS295B	
SN54LS298	Fairchild	54LS298	
	National	DM54LS298	
	SGS	54LS298	
		T54LS298	
	Signetics	54LS298	
	TI	SN54LS298	
SN54LS30	Fairchild	54LS30	
	National	DM54LS30	
	SGS	T54LS30	
	Signetics	54LS30	
	TI	SN54LS30	
SN54LS32	Fairchild	54LS32	
	National	DM54LS32	
	SGS	T54LS32	
	Signetics	54LS32	
	TI	SN54LS32	
SN54LS33	Fairchild	54LS33	
	SGS	T54LS33	
	TI	SN54LS33	
SN54LS348	TI	SN54LS348	
SN54LS352	Fairchild	54LS352	
	National	DM54LS352	
	SGS	T54LS352	
	TI	SN54LS352	
SN54LS353	Fairchild	54LS353	
	National	DM54LS353	
	SGS	T54LS353	
		T54LS354	
	TI	SN54LS353	
SN54LS365A	Fairchild	54LS365A	
	SGS	T54LS365	
	Signetics	54LS365	
		54LS365A	
	TI	SN54LS365A	
SN54LS366A	Fairchild	54LS366A	
	National	DM54LS366	
	SGS	T54LS366	
	Signetics	54LS366A	
	TI	SN54LS366A	
SN54LS367A	Fairchild	54LS367A	
	National	DM54LS367	
	SGS	T54LS367	
	Signetics	54LS367	
		54LS367A	
	TI	SN54LS367A	
SN54LS368A	Fairchild	54LS368A	
	National	DM54LS368	
	SGS	T54LS368	
	Signetics	54LS368	
		54LS368A	
	TI	SN54LS368A	
SN54LS37	Fairchild	54LS37	
	National	DM54LS37	
	SGS	T54LS37	
	Signetics	54LS37	
	TI	SN54LS37	
SN54LS373	MMI	SN54LS373	
	SGS	T54LS373	
	Signetics	54LS373	
	TI	SN54LS373	
SN54LS374	Fairchild	54LS374	
	MMI	SN54LS374	
	National	DM54LS374	
	SGS	T54LS374	
	TI	SN54LS374	
SN54LS375	Fairchild	54LS375	
	Signetics	54LS375	
	TI	SN54LS375	
SN54LS377	Fairchild	54LS377	
	SGS	T54LS377	
	Signetics	54LS377	
	TI	SN54LS377	
SN54LS378	AMD	SN54LS378	
	Signetics	54LS378	
	TI	SN54LS378	
SN54LS379	AMD	SN54LS379	
	Fairchild	54LS379	
	SGS	T54LS379	
	TI	SN54LS379	
SN54LS38	Fairchild	54LS38	
	National	DM54LS38	
	SGS	T54LS38	
	TI	SN54LS38	
SN54LS385	AMD	SN54LS385	
	TI	SN54LS385	
SN54LS386	National	DM54LS386	
	Raytheon	RM8241	
	TI	SN54LS386	
SN54LS390	SGS	T54LS390	
	TI	SN54LS390	
SN54LS393	SGS	T54LS393	
	TI	SN54LS393	
SN54LS395	Fairchild	54LS395	
	SGS	T54LS395	
	Signetics	54LS395	
	TI	SN54LS395	
SN54LS398	TI	SN54LS398	
SN54LS40	Fairchild	54LS40	
	National	DM54LS40	
	SGS	T54LS40	
	TI	SN54LS40	
SN54LS42	Fairchild	54LS42	
	National	DM54LS42	
	SGS	T54LS42	
	Signetics	54LS42	
	TI	SN54LS42	
SN54LS47	Fairchild	54LS47	
	National	DM54LS47	
	TI	SN54LS47	
SN54LS48	Fairchild	54LS48	
	National	DM54LS48	
	TI	SN54LS48	
SN54LS49	Fairchild	54LS49	
	National	DM54LS49	
	TI	SN54LS49	
SN54LS490	Fairchild	54LS490	
	SGS	T54LS490	
	TI	SN54LS490	
SN54LS51	Fairchild	54LS51	
	National	DM54LS51	
	SGS	T54LS51	
	Signetics	54LS51	
	TI	SN54LS51	
SN54LS54	Fairchild	54LS54	
	National	DM54LS54	
	SGS	T54LS54	
	TI	SN54LS54	
SN54LS540	TI	SN54LS540	
SN54LS541	Fairchild	54LS541	
	Signetics	54LS541	
	TI	SN54LS541	
SN54LS55	Fairchild	54LS55	
	National	DM54LS55	
	SGS	T54LS55	
SN54LS640	TI	SN54LS640	
SN54LS641	TI	SN54LS641	
SN54LS642	TI	SN54LS642	
SN54LS644	TI	SN54LS644	
SN54LS645	TI	SN54LS645	
SN54LS668	TI	SN54LS668	
SN54LS669	TI	SN54LS669	
SN54LS670	Fairchild	54LS670	
	National	DM54LS670	
	SGS	T54LS670	
	Signetics	54LS670	
	TI	SN54LS670	
SN54LS673	TI	SN54LS673	
SN54LS674	TI	SN54LS674	
SN54LS682	TI	SN54LS682	
SN54LS683	TI	SN54LS683	
SN54LS684	TI	SN54LS684	
SN54LS685	TI	SN54LS685	
SN54LS688	TI	SN54LS688	
SN54LS689	TI	SN54LS689	
SN54LS73A	National	DM54LS73	
		DM54LS73A	
	Signetics	54LS73	
	TI	SN54LS73A	
SN54LS74A	Fairchild	54LS74	
	National	DM54LS74	
		DM54LS74A	
	SGS	T54LS74	
	Signetics	54LS74	
	TI	SN54LS74A	
SN54LS75	National	DM54LS75	
	Signetics	54LS75	
	TI	SN54LS75	
SN54LS76A	National	DM54LS76	
	Signetics	54LS76	
	TI	SN54LS76A	
SN54LS77	National	DM54LS77	
SN54LS78A	National	DM54LS78	
	TI	SN54LS78A	
SN54LS83A	Fairchild	54LS83A	
	National	DM54LS83A	
	SGS	T54LS83	
	Signetics	54LS83	
		54LS83A	
	TI	SN54LS83A	
SN54LS85	Fairchild	54LS85	
	National	DM54LS85	
	Signetics	54LS85	
	TI	SN54LS85	
SN54LS86	National	DM54LS86	
	SGS	T54LS86	
	Signetics	54LS86	
	TI	SN54LS86A	
♦ SN54LS89	Signetics	54LS89	
SN54LS90	National	DM54LS90	
	SGS	T54LS90	
	Signetics	54LS90	
	TI	SN54LS90	
SN54LS91	TI	SN54LS91	
SN54LS92	National	DM54LS92	
	SGS	T54LS92	
	Signetics	54LS92	
	TI	SN54LS92	
SN54LS93	National	DM54LS93	
	SGS	T54LS93	
	Signetics	54LS93	
	TI	SN54LS93	
SN54LS95B	Fairchild	54LS95B	
	National	DM54LS95B	
	SGS	T54LS95	
	Signetics	54LS95B	
	TI	SN54LS95B	
SN74ALS00	National	DM74ALS00	
	Signetics	74ALS00	
	TI	SN74ALS00	
		SN74ALS00A	
SN74ALS02	National	DM74ALS02	
	Signetics	74ALS02	
	TI	SN74ALS02	
SN74ALS04	National	DM74ALS04	
	Signetics	74ALS04	
	TI	SN74ALS04	
		SN74ALS04B	
SN74ALS08	National	DM74ALS08	
	Signetics	74ALS08	
	TI	SN74ALS08	
SN74ALS09	National	DM74ALS09	
	TI	SN74ALS09A	
SN74ALS160	National	DM74ALS160	
	TI	SN74ALS160B	
SN74ALS161	National	DM74ALS161	
	Signetics	74ALS161	
	TI	SN74ALS161B	
SN74ALS162	National	DM74ALS162	
	TI	SN74ALS162A	
SN74ALS163	National	DM74ALS163	
	Signetics	74ALS163	
	TI	SN74ALS163A	
		SN74ALS163B	
SN74ALS192	National	DM74ALS192	
	TI	SN74ALS192	
SN74ALS193	Mitsubishi	M74ALS193	
	National	DM74ALS193	
	Signetics	74ALS193	
	TI	SN74ALS193	
SN74ALS240	Mitsubishi	M74ALS240	
	National	DM74ALS240	
	Signetics	74ALS240	
	TI	SN74ALS240A	
SN74ALS241	Mitsubishi	M74ALS241	
	National	DM74ALS241	
	Signetics	74ALS241	
	TI	SN74ALS241A	
SN74ALS242	Mitsubishi	M74ALS163	
	National	DM74ALS242	
	TI	SN74ALS163	
		SN74ALS242B	
SN74ALS243	National	DM74ALS243	
	TI	SN74ALS243A	
SN74ALS244	Mitsubishi	M74ALS244	
	National	DM74ALS244	
	Signetics	74ALS244	
	TI	SN74ALS244A	
SN74ALS245	Mitsubishi	M74ALS245	
	National	DM74ALS245	
	Signetics	74ALS245	
	TI	SN74ALS245A	
SN74ALS273	Mitsubishi	M74ALS273	
	National	DM74ALS273	
	Signetics	74ALS273	
	TI	SN74ALS273	
SN74ALS32	National	DM74ALS32	
	Signetics	74ALS32	
	TI	SN74ALS32	
SN74ALS373	Mitsubishi	M74ALS373	
	National	DM74ALS373	
	Signetics	74ALS373	
	TI	SN74ALS373	
SN74ALS374	Mitsubishi	M74ALS374	
	National	DM74ALS374	
	Signetics	74ALS374	
	TI	SN74ALS374	
SN74ALS377	National	DM74ALS377	
SN74ALS573	National	DM74ALS573	
	Signetics	74ALS73	
	TI	SN74ALS573	
SN74ALS574	National	DM74ALS574	
	TI	SN74ALS574	
SN74ALS576	National	DM74ALS576	
	TI	SN74ALS576	
SN74ALS580	National	DM74ALS580	
	TI	SN74ALS580A	
SN74ALS620	Mitsubishi	M74ALS620	
	National	DM74ALS620	
	Signetics	74ALS620	
	TI	SN74ALS620A	
SN74ALS621	National	DM74ALS621	
	TI	SN74ALS621A	
SN74ALS623	Mitsubishi	M74ALS623	
	National	DM74ALS623	
	Signetics	74ALS623	
	TI	SN74ALS623A	
SN74ALS640	National	DM74ALS640	
	TI	SN74ALS640A	
SN74ALS641	National	DM74ALS641	
	TI	SN74ALS641A	
SN74ALS642	National	DM74ALS642	
	TI	SN74ALS642A	
SN74ALS643	National	DM74ALS643	
	TI	SN74ALS643A	
SN74ALS644	National	DM74ALS644	
	TI	SN74ALS644A	
SN74ALS646	National	DM74ALS646	
SN74ALS647	National	DM74ALS647	
SN74ALS648	National	DM74ALS648	
SN74ALS649	National	DM74ALS649	
SN74ALS690	National	DM74ALS690	
SN74ALS691	National	DM74ALS691	
SN74ALS692	National	DM74ALS692	
SN74ALS693	National	DM74ALS693	
SN74ALS697	National	DM74ALS697	
SN74ALS698	National	DM74ALS698	
SN74ALS699	National	DM74ALS699	
SN74ALS74	National	DM74ALS74	
	TI	SN74ALS74A	
SN74ALS873	National	DM74ALS873	
	TI	SN74ALS873B	
SN74ALS874	National	DM74ALS874	
	TI	SN74ALS874B	
SN74ALS876	National	DM74ALS876	
	TI	SN74ALS876A	
SN74ALS880	National	DM74ALS880	
	TI	SN74ALS880A	
		SN74ALS880B	
SN74LS00	Fairchild	74LS00	
	Hitachi	HD74LS00	
	National	DM74LS00	
	Panasonic	DN74LS00	
	SGS	T74LS00	
	Signetics	**74LS00**	**(3003)**
	TI	SN74LS00	
SN74LS01	Fairchild	74LS01	
	Hitachi	HD74LS01	
	National	DM74LS01	
	Panasonic	DN74LS01	
	Signetics	**74LS01**	**(3003)**
	TI	SN74LS01	
SN74LS02	Fairchild	74LS02	
	Hitachi	HD74LS02	
	National	DM74LS02	
	Panasonic	DN74LS02	
	SGS	T74LS02	
	Signetics	**74LS02**	**(3003)**
	TI	SN74LS02	
SN74LS03	Fairchild	74LS03	
	Hitachi	HD74LS03	
	National	DM74LS03	
	Panasonic	DN74LS03	
	SGS	T74LS03	
	TI	SN74LS03	
SN74LS04	Fairchild	74LS04	
	Hitachi	HD74LS04	
	National	DM74LS04	

(Continued)

(Continued)

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS04			(Cont'd)
	Panasonic	DN74LS04	
	SGS	T74LS04	
	Signetics	**74LS04**	**(3003)**
	TI	SN74LS04	
SN74LS05	Fairchild	74LS05	
	Hitachi	HD74LS05	
	National	DM74LS05	
	Panasonic	DN74LS05	
	SGS	T74LS05	
	Signetics	**74LS05**	**(3003)**
	TI	SN74LS05	
SN74LS08	Fairchild	74LS08	
	Hitachi	HD74LS08	
	National	DM74LS08	
	Panasonic	DN74LS08	
	SGS	T74LS08	
	Signetics	**74LS08**	**(3003)**
	TI	SN74LS08	
SN74LS09	Fairchild	74LS09	
	Hitachi	HD74LS09	
	National	DM74LS09	
	Panasonic	DN74LS09	
	SGS	T74LS09	
	TI	SN74LS09	
SN74LS10	Fairchild	74LS10	
	Hitachi	HD74LS10	
	National	DM74LS10	
	Panasonic	DN74LS10	
	SGS	T74LS10	
	Signetics	**74LS10**	**(3003)**
	TI	SN74LS10	
SN74LS109	Fairchild	74LS109	
	Hitachi	HD74LS109	
	National	DM74LS109	
	Panasonic	DN74LS109	
	SGS	T74LS109	
	Signetics	**74LS109**	**(3003)**
	TI	SN74LS109A	
SN74LS11	Fairchild	74LS11	
	Hitachi	HD74LS11	
	National	DM74LS11	
	Panasonic	DN74LS11	
	SGS	T74LS11	
	Signetics	**74LS11**	**(3003)**
	TI	SN74LS11	
SN74LS112A	Fairchild	74LS112	
	Hitachi	HD74LS112	
	National	DM74LS112	
	Panasonic	DN74LS112	
	SGS	T74LS112	
	Signetics	**74LS112**	**(3003)**
	TI	SN74LS112A	
SN74LS113A	Hitachi	HD74LS113	
	National	DM74LS113	
	Panasonic	DN74LS113	
	SGS	T74LS113	
	Signetics	**74LS113**	**(3003)**
	TI	SN74LS113A	
SN74LS114A	Hitachi	HD74LS114	
	National	DM74LS114	
	Panasonic	DN74LS114	
	SGS	T74LS114	
	TI	SN74LS114A	
SN74LS12	Hitachi	HD74LS12	
	National	DM74LS12	
	Panasonic	DN74LS12	
	Signetics	74LS12	
	TI	SN74LS12	
SN74LS122	National	DM74LS122	
	TI	SN74LS122	
SN74LS123	Hitachi	HD74LS123	
	National	DM74LS123	
	Panasonic	DN74LS123	
	TI	SN74LS123	
SN74LS125A	Fairchild	74LS125A	
	National	DM74LS125	
	Panasonic	DN74LS125A	
	SGS	T74LS125	
	Signetics	**74LS125A**	**(3003)**
	TI	SN74LS125A	
SN74LS126A	Fairchild	74LS126	
	National	DM74LS126	
	SGS	T74LS126	
	Signetics	**74LS126A**	**(3003)**
	TI	SN74LS126A	
SN74LS13	Fairchild	74LS13	
	Hitachi	HD74LS13	
	National	DM74LS13	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS13			(Cont'd)
	Panasonic	DN74LS13	
	SGS	T74LS13	
	Signetics	**74LS13**	**(3003)**
	TI	SN74LS13	
SN74LS132	Fairchild	74LS132	
	Hitachi	HD74LS132	
	National	DM74LS132	
	Panasonic	DN74LS132	
	SGS	T74LS132	
	Signetics	**74LS132**	**(3003)**
	TI	SN74LS132	
SN74LS133	Fairchild	74LS133	
	SGS	TL74LS133	
SN74LS136	Fairchild	74LS136	
	Hitachi	HD74LS136	
	National	DM74LS136	
	Panasonic	DN74LS136	
	SGS	T74LS136	
	Signetics	**74LS136**	**(3003)**
	TI	SN74LS136	
SN74LS137	TI	SN74LS137	
SN74LS138	Fairchild	74LS138	
	Hitachi	HD74LS138	
	National	DM74LS138	
	Panasonic	DN74LS138	
	SGS	T74LS138	
	Signetics	**74LS138**	**(3003)**
	TI	SN74LS138	
SN74LS139	Fairchild	74LS139	
	Hitachi	HD74LS139	
	National	DM74LS139	
	Panasonic	DN74LS139	
	SGS	T74LS139	
	Signetics	**74LS139**	**(3003)**
	TI	SN74LS139A	
SN74LS14	Fairchild	74LS14	
	Hitachi	HD74LS14	
	National	DM74LS14	
	Panasonic	DN74LS14	
	Signetics	**74LS14**	**(3003)**
	TI	SN74LS14	
SN74LS145	Panasonic	DN74LS145	
	TI	SN74LS145	
SN74LS147	TI	SN74LS147	
SN74LS148	Hitachi	HD74LS148	
	TI	SN74LS148	
SN74LS15	Fairchild	74LS15	
	National	DM74LS15	
	Panasonic	DN74LS15	
	SGS	T74LS15	
	TI	SN74LS15	
SN74LS151	Fairchild	74LS151	
	Hitachi	HD74LS151	
		HD74LS151A	
	National	DM74LS151	
	Panasonic	DN74LS151	
	SGS	T74LS151	
	Signetics	**74LS151**	**(3003)**
	TI	SN74LS151	
SN74LS153	Fairchild	74LS153	
	Hitachi	HD74LS153	
	National	DM74LS153	
	Panasonic	DN74LS153	
	SGS	T74LS153	
	Signetics	**74LS153**	**(3003)**
	TI	SN74LS153	
SN74LS155	Fairchild	74LS155	
	Hitachi	HD74LS155	
	National	DM74LS155	
	Panasonic	DN74LS155	
	Signetics	**74LS155**	**(3003)**
	TI	SN74LS155A	
SN74LS156	Fairchild	74LS156	
	Hitachi	HD74LS156	
	National	DM74LS156	
	Panasonic	DN74LS156	
	SGS	T74LS156	
	Signetics	**74LS156**	**(3003)**
	TI	SN74LS156	
SN74LS157	Fairchild	74LS157	
	Hitachi	HD74LS157	
	National	DM74LS157	
	Panasonic	DN74LS157	
	SGS	T74LS157	
	Signetics	**74LS157**	**(3003)**
	TI	SN74LS157	
SN74LS158	Fairchild	74LS158	
	Hitachi	HD74LS158	
	National	DM74LS158	
	Panasonic	DN74LS158	
	SGS	T74LS158	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS158			(Cont'd)
	Signetics	**74LS158**	**(3003)**
	TI	SN74LS158	
SN74LS160A	Fairchild	74LS160	
	Hitachi	HD74LS160A	
	National	DM74LS160	
	Panasonic	DN74LS160A	
	SGS	T74LS160	
	Signetics	**74LS160**	**(3003)**
		74LS160A	**(3003)**
	TI	SN74LS160A	
SN74LS161A	Fairchild	74LS161A	
	Hitachi	HD74LS161A	
	National	DM74LS161	
	Panasonic	DN74LS161A	
	SGS	T74LS161	
	Signetics	**74LS161A**	**(3003)**
	TI	SN74LS161A	
SN74LS162A	Fairchild	74LS162	
	Hitachi	HD74LS162A	
	National	DM74LS162	
	Panasonic	DN74LS162A	
	SGS	T74LS162	
	Signetics	**74LS162A**	**(3003)**
	TI	SN74LS162A	
SN74LS163A	Fairchild	74LS163	
	Hitachi	HD74LS163	
		HD74LS163A	
	National	DM74LS163	
	Panasonic	DN74LS163A	
	SGS	T74LS163	
	Signetics	**74LS163A**	**(3003)**
	TI	SN74LS163A	
SN74LS164A	Fairchild	74LS164	
	Hitachi	HD74LS164	
	National	DM74LS164	
	Panasonic	DN74LS164	
	SGS	T74LS164	
	Signetics	**74LS164**	**(3003)**
		74LS164A	**(3003)**
	TI	SN74LS164	
SN74LS165	Fairchild	74LS165	
	SGS	T74LS165	
	TI	SN74LS165A	
SN74LS166	TI	SN74LS166A	
SN74LS169	Fairchild	74LS169	
	Hitachi	HD74LS169	
	National	DM74LS169	
	SGS	T74LS169	
	Signetics	**74LS169A**	**(3003)**
	TI	SN74LS169	
SN74LS170	Fairchild	74LS170	
	National	DM74LS170	
	Panasonic	DN74LS170	
	SGS	T74LS170	
	Signetics	**74LS170**	**(3003)**
	TI	SN74LS170	
SN74LS173A	Fairchild	74LS173	
	National	DM74LS173	
	Panasonic	DN74LS173	
	SGS	T74LS173	
	Signetics	**74LS173**	**(3003)**
	TI	SN74LS173A	
SN74LS174	Fairchild	74LS174	
	Hitachi	HD74LS174	
	National	DM74LS174	
	Panasonic	DN74LS174	
	SGS	T74LS174	
	Signetics	**74LS174**	**(3003)**
	TI	SN74LS174	
SN74LS175	Fairchild	74LS175	
	Hitachi	HD74LS175	
	Panasonic	DN74LS175	
	SGS	T74LS175	
	Signetics	**74LS175**	**(3003)**
	TI	SN74LS175	
SN74LS181	Fairchild	74LS181	
	Hitachi	HD74LS181	
	SGS	T74LS181	
	Signetics	**74LS181**	**(3003)**
	TI	SN74LS181	
SN74LS190	Fairchild	74LS190	
	Hitachi	HD74LS190	
	National	DM74LS190	
	Panasonic	DN74LS190	
	SGS	T74LS190	
	TI	SN74LS190	
SN74LS191	Fairchild	74LS191	
	Hitachi	HD74LS191	
	National	DM74LS191	
	Panasonic	DN74LS191	
	SGS	T74LS191	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS191			(Cont'd)
	Signetics	**74LS191**	**(3003)**
	TI	SN74LS191	
SN74LS192	Fairchild	74LS192	
	Hitachi	HD74LS192	
	National	DM74LS192	
	Panasonic	DN74LS192	
	SGS	T74LS192	
	Signetics	**74LS192**	**(3003)**
	TI	SN74LS192	
SN74LS193	Fairchild	74LS193	
	Hitachi	HD74LS193	
	National	DM74LS193	
	Panasonic	DN74LS193	
	SGS	T74LS193	
	Signetics	**74LS193**	**(3003)**
	TI	SN74LS193	
SN74LS194A	Fairchild	74LS194A	
	Hitachi	HD74LS194A	
	National	DM74LS194	
	Panasonic	DN74LS194A	
	SGS	T74LS194A	
	Signetics	**74LS194A**	**(3003)**
	TI	SN74LS194A	
SN74LS195A	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
SN74LS196	Fairchild	74LS196	
	Hitachi	HD74LS196	
	National	DM74LS196	
	Panasonic	DN74LS196	
	SGS	T74LS196	
	Signetics	N82S80	
	TI	SN74LS196	
SN74LS197	Fairchild	74LS197	
	Hitachi	HD74LS197	
	National	DM74LS197	
	Panasonic	DN74LS197	
	SGS	T74LS197	
	Signetics	**74LS197**	**(3003)**
	TI	SN74LS197	
SN74LS20	Fairchild	74LS20	
	Hitachi	HD74LS20	
	National	DM74LS20	
	Panasonic	DN74LS20	
	SGS	T74LS20	
	Signetics	**74LS20**	**(3003)**
	TI	SN74LS20	
SN74LS21	Fairchild	74LS21	
	Hitachi	HD74LS21	
	National	DM74LS21	
	Panasonic	DN74LS21	
	SGS	T74LS21	
	Signetics	**74LS21**	**(3003)**
	TI	SN74LS21	
SN74LS22	Hitachi	HD74LS22	
	National	DM74LS22	
	Panasonic	DN74LS22	
	SGS	T74LS22	
SN74LS221	Fairchild	74LS221	
	Hitachi	HD74LS221	
	National	DM74LS221	
	TI	SN74LS221	
SN74LS240	Fairchild	74LS240	
	Hitachi	HD74LS240	
	Panasonic	DN74LS240	
	SGS	T74LS240	
	Signetics	**74LS240**	**(3003)**
	TI	SN74LS240	
SN74LS241	Fairchild	74LS241	
	Hitachi	HD74LS241	
	Panasonic	DN74LS241	
	SGS	T74LS241	
	Signetics	**74LS241**	**(3003)**
	TI	SN74LS241	
SN74LS242	Fairchild	74LS242A	
	Signetics	**74LS242**	**(3003)**
	TI	SN74LS242	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS243	Fairchild	74LS243A	
	Signetics	**74LS243**	**(3003)**
	TI	SN74LS243	
SN74LS244	Fairchild	74LS244	
	Hitachi	HD74LS244	
	Panasonic	DN74LS244	
	SGS	T74LS244	
	Signetics	**74LS244**	**(3003)**
	TI	SN74LS244	
SN74LS247	Fairchild	74LS247	
	Hitachi	HD74LS247	
	National	DM74LS247	
	TI	SN74LS247	
SN74LS248	Fairchild	74LS248	
	Hitachi	HD74LS248	
	National	DM74LS248	
	SGS	T74LS248	
SN74LS249	Fairchild	74LS249	
	Hitachi	HD74LS249	
	National	DM74LS249	
	SGS	T74LS249	
SN74LS251	Fairchild	74LS251	
	Hitachi	HD74LS251	
	National	DM74LS251	
	Panasonic	DN74LS251	
	SGS	T74LS251	
	Signetics	**74LS251**	**(3003)**
	TI	SN74LS251	
SN74LS253	Fairchild	74LS253	
	Hitachi	HD74LS253	
	National	DM74LS253	
		DM8214	
	Panasonic	DN74LS253	
	SGS	T74LS253	
	Signetics	**74LS253**	**(3003)**
	TI	SN74LS253	
SN74LS256	Fairchild	74LS256	
	Signetics	**74LS256**	**(3003)**
SN74LS257A	Fairchild	74LS257A	
	Hitachi	HD74LS257	
	National	DM74LS257	
	SGS	T74LS257	
	Signetics	**74LS257**	**(3003)**
		74LS257A	**(3003)**
	TI	SN74LS257B	
SN74LS258A	Fairchild	74LS258A	
	Hitachi	HD74LS258	
	National	DM74LS258	
	Panasonic	DN74LS258A	
	SGS	T74LS258	
	Signetics	**74LS258**	**(3003)**
	TI	SN74LS258B	
SN74LS259	Fairchild	74LS259	
	SGS	T74LS259	
	Signetics	**74LS259**	**(3003)**
	TI	SN74LS259B	
SN74LS26	Fairchild	74LS26	
	Hitachi	HD74LS26	
	National	DM74LS26	
	Panasonic	DN74LS26	
	SGS	T74LS26	
	Signetics	**74LS26**	**(3003)**
	TI	SN74LS26	
SN74LS260	Fairchild	74LS260	
	Signetics	**74LS260**	**(3003)**
SN74LS266	Fairchild	74LS266	
	National	DM74LS266	
	Panasonic	DN74LS266	
	Raytheon	RC8242	
	SGS	T74LS266	
	Signetics	**74LS266**	**(3003)**
		N8242	**(3022)**
	TI	SN74LS266	
SN74LS27	Fairchild	74LS27	
	Hitachi	HD74LS27	
	National	DM74LS27	
	Panasonic	DN74LS27	
	SGS	T74LS27	
	Signetics	**74LS27**	**(3003)**
	TI	SN74LS27	
SN74LS273	Fairchild	74LS273	
	SGS	T74LS273	
	Signetics	**74LS273**	**(3003)**
	TI	SN74LS273	
SN74LS279	Fairchild	74LS279	
	Hitachi	HD74LS279	
	National	DM74LS279	
	Panasonic	DN74LS279	
	SGS	T74LS279	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS279			(Cont'd)
	Signetics	74LS279	
	TI	SN74LS279A	
SN74LS28	Fairchild	74LS28	
	SGS	T74LS28	
	TI	SN74LS28	
SN74LS280	Hitachi	HD74LS280	
	Panasonic	DN74LS280	
	SGS	T74LS280	
	TI	SN74LS280	
SN74LS283	Fairchild	74LS283	
	Hitachi	HD74LS283	
		HD74LS283A	
	National	DM74LS283	
	Panasonic	DN74LS283	
	SGS	T74LS283	
	Signetics	**74LS283**	**(3003)**
	TI	SN74LS283	
SN74LS290	Fairchild	74LS290	
	Hitachi	HD74LS290	
	National	DM74LS290	
	Panasonic	DN74LS290	
	SGS	T74LS290	
	Signetics	**74LS290**	**(3003)**
	TI	SN74LS290	
SN74LS293	Fairchild	74LS293	
	Hitachi	HD74LS293	
	National	DM74LS293	
	Panasonic	DN74LS293	
	SGS	T74LS293	
	Signetics	**74LS293**	**(3003)**
	TI	SN74LS293	
SN74LS295A	Fairchild	74LS295A	
	SGS	T74LS295A	
	Signetics	**74LS295A**	**(3003)**
		74LS295B	**(3003)**
	TI	SN74LS295B	
SN74LS298	Fairchild	74LS298	
	Hitachi	HD74LS298	
	SGS	T74LS298	
	Signetics	**74LS298**	**(3003)**
	TI	SN74LS298	
SN74LS299	AMD	SN74LS299	
	Fairchild	74LS299	
	Hitachi	HD74LS299	
	SGS	T74LS299	
	TI	SN74LS299	
SN74LS30	Fairchild	74LS30	
	Hitachi	HD74LS30	
	National	DM74LS30	
	Panasonic	DN74LS30	
	SGS	T74LS30	
	Signetics	**74LS30**	**(3003)**
	TI	SN74LS30	
SN74LS322	Fairchild	74LS322	
	TI	SN74LS322A	
SN74LS323	Fairchild	54LS323	
		74LS323	
	TI	SN54LS323	
		SN74LS323	
SN74LS33	Fairchild	74LS33	
	Panasonic	DN74LS33	
	SGS	T74LS33	
	Signetics	**74LS33**	**(3003)**
	TI	SN74LS33	
SN74LS352	Fairchild	74LS352	
	National	DM74LS352	
	SGS	T74LS352	
	TI	SN74LS352	
SN74LS353	Fairchild	74LS353	
	National	DM74LS353	
	SGS	T74LS353	
	TI	SN74LS353	
SN74LS365A	Fairchild	74LS365A	
	National	DM74LS365	
	Panasonic	DN74LS365A	
	SGS	T74LS365	
		T74LS365A	
	Signetics	**74LS365**	**(3003)**
		74LS365A	**(3003)**
	TI	SN74LS365A	
SN74LS366A	Fairchild	74LS366A	
	National	DM74LS366	
	Panasonic	DN74LS366A	
	SGS	T74LS366	
		T74LS366A	
	Signetics	**74LS366A**	**(3003)**
	TI	SN74LS366A	
SN74LS367A	Fairchild	74LS367A	
	Hitachi	HD74LS367	
		HD74LS367A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS367A			(Cont'd)
	National	DM74LS367	
	Panasonic	DN74LS367A	
	SGS	T74LS367	
		T74LS367A	
	Signetics	**74LS367**	**(3003)**
		74LS367A	**(3003)**
	TI	SN74LS367A	
SN74LS368A	Fairchild	74LS368A	
	Hitachi	HD74LS368	
	National	DM74LS368	
	Panasonic	DN74LS368A	
	SGS	T74LS368	
	Signetics	**74LS368**	**(3003)**
		74LS368A	**(3003)**
	TI	SN74LS368A	
SN74LS37	Fairchild	74LS37	
	Hitachi	HD74LS37	
	National	DM74LS37	
	Panasonic	DN74LS37	
	SGS	T74LS37	
	Signetics	74LS37	
	TI	SN74LS37	
SN74LS373	Fairchild	74LS373	
	Panasonic	DN74LS373	
	SGS	T74LS373	
	Signetics	**74LS373**	**(3003)**
	TI	SN74LS373	
SN74LS374	Fairchild	74LS374	
	National	DM74LS374	
	SGS	T74LS374	
	Signetics	**74LS374**	**(3003)**
	TI	SN74LS374	
SN74LS375	Fairchild	74LS375	
	Signetics	**74LS375**	**(3003)**
	TI	SN74LS375	
SN74LS377	Fairchild	74LS377	
	SGS	T74LS377	
	Signetics	**74LS377**	**(3003)**
	TI	SN74LS377	
SN74LS378	AMD	SN74LS378	
	Fairchild	74LS378	
	SGS	T74LS378	
	Signetics	**74LS378**	**(3003)**
	TI	SN74LS378	
SN74LS379	Fairchild	74LS379	
	SGS	T74LS379	
	TI	SN74LS379	
SN74LS38	Fairchild	74LS38	
	Hitachi	HD74LS38	
	National	DM74LS38	
	Panasonic	DN74LS38	
	SGS	T74LS38	
	Signetics	**74LS38**	**(3003)**
	TI	SN74LS38	
SN74LS386	Hitachi	HD74LS386	
	National	DM74LS386	
	Panasonic	DN74LS386	
	TI	SN74LS386A	
SN74LS390	Fairchild	74LS390	
	Panasonic	DN74LS390	
	SGS	T74LS390	
	TI	SN74LS390	
SN74LS393	Fairchild	74LS393	
	Panasonic	DN74LS393	
	SGS	T74LS393	
	Signetics	**74LS393**	**(3003)**
	TI	SN74LS393	
♦ SN74LS395	Fairchild	74LS395	
	National	DM74LS395	
	Panasonic	DN74LS395A	
	SGS	T74LS395	
	Signetics	**74LS395**	**(3003)**
	TI	SN74LS395A	
SN74LS398	TI	SN74LS398	
SN74LS399	AMD	SN74LS399	
	SGS	T74LS399	
	TI	SN74LS399	
SN74LS40	Fairchild	74LS40	
	Hitachi	HD74LS40	
	National	DM74LS40	
	Panasonic	DN74LS40	
	SGS	T74LS40	
	Signetics	**74LS40**	**(3003)**
	TI	SN74LS40	
SN74LS42	Fairchild	74LS42	
	Hitachi	HD74LS42	
	National	DM74LS42	
	Panasonic	DN74LS42	
	SGS	T74LS42	
	Signetics	**74LS42**	**(3003)**
	TI	SN74LS42	

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS47	Fairchild	74LS47	
	Hitachi	HD74LS47	
	National	DM74LS47	
	SGS	T74LS47	
	TI	SN74LS47	
SN74LS48	Fairchild	74LS48	
	Hitachi	HD74LS48	
	National	DM74LS48	
	SGS	T74LS48	
	Signetics	74LS48	
SN74LS49	Hitachi	HD74LS49	
	National	DM74LS49	
	SGS	T74LS49	
	TI	SN74LS49	
SN74LS490	Fairchild	74LS490	
	Panasonic	DN74LS490	
	SGS	T74LS490	
	Signetics	**74LS490**	**(3003)**
SN74LS51	Fairchild	74LS51	
	Hitachi	HD74LS51	
	National	DM74LS51	
	Panasonic	DN74LS51	
	SGS	T74LS51	
	Signetics	**74LS51**	**(3003)**
	TI	SN74LS51	
SN74LS54	Fairchild	74LS54	
	Hitachi	HD74LS54	
	National	DM74LS54	
	Panasonic	DN74LS54	
	SGS	T74LS54	
	Signetics	**74LS54**	**(3003)**
	TI	SN74LS54	
SN74LS540	Fairchild	74LS540	
	Signetics	**74LS540**	**(3003)**
	TI	SN74LS540	
SN74LS541	**Signetics**	**74LS541**	**(3003)**
	TI	SN74LS541	
SN74LS55	Fairchild	74LS55	
	Hitachi	HD74LS55	
	National	DM74LS55	
	Panasonic	DN74LS55	
	SGS	T74LS55	
	TI	SN74LS55	
SN74LS568	**Signetics**	**74LS568**	**(3003)**
SN74LS569	**Signetics**	**74LS569**	**(3003)**
SN74LS607	TI	SN74LS607	
SN74LS640	**Signetics**	**74LS640**	**(3003)**
		N8T125	**(3022)**
	TI	SN74LS640	
SN74LS641	**Signetics**	**74LS641**	**(3003)**
	TI	SN74LS641	
SN74LS642	**Signetics**	**74LS642**	**(3003)**
	TI	SN74LS642	
SN74LS644	TI	SN74LS644	
SN74LS645	**Signetics**	**74LS645**	**(3003)**
	TI	SN74LS645	
SN74LS669	TI	SN74LS669	
SN74LS670	Fairchild	74LS670	
	National	DM74LS670	
	SGS	T74LS670	
	Signetics	**74LS670**	**(3003)**
	TI	SN74LS670	
SN74LS674	TI	SN74LS674	
SN74LS73A	Hitachi	HD74LS73	
	National	DM74LS73	
	Panasonic	DN74LS73	
	Signetics	**74LS73**	**(3003)**
	TI	SN74LS73A	
SN74LS74A	Fairchild	74LS74	
	Hitachi	HD74LS74	
		HD74LS74A	
	National	DM74LS74	
	Panasonic	DN74LS74A	
	SGS	T74LS74	
	Signetics	74LS74	
	TI	SN74LS74A	
SN74LS75	Hitachi	HD74LS75	
	National	DM74LS75	
	Panasonic	DN74LS75	
	Signetics	**74LS75**	**(3003)**
	TI	SN74LS75	
SN74LS76A	Hitachi	HD74LS76	
	National	DM74LS76	
	Panasonic	DN74LS76	
	Signetics	**74LS76**	**(3003)**
	TI	SN74LS76A	
SN74LS78A	Hitachi	HD74LS78	
	National	DM74LS78	
	Panasonic	DN74LS78	
	TI	SN74LS78A	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS83A	Fairchild	74LS83A	
	Hitachi	HD74LS183A	
		HD74LS83A	
	National	DM74LS83A	
	Panasonic	DN74LS83A	
	SGS	T74LS83	
	Signetics	**74LS83**	**(3003)**
		74LS83A	**(3003)**
	TI	SN74LS83A	
SN74LS85	Fairchild	74LS85	
	Hitachi	HD74LS85	
	National	DM74LS85	
	Panasonic	DN74LS85	
	Signetics	**74LS85**	**(3003)**
	TI	SN74LS85	
SN74LS86	Fairchild	74LS86	
	Hitachi	HD74LS86	
	National	DM74LS86	
	Panasonic	DN74LS86	
	SGS	T74LS86	
	Signetics	**74LS86**	**(3003)**
	TI	SN74LS86A	
♦ SN74LS89	Signetics	74LS89	
SN74LS90	Fairchild	74LS90	
	National	DM74LS90	
	Panasonic	DN74LS90	
	SGS	T74LS90	
	Signetics	**74LS90**	**(3003)**
	TI	SN74LS90	
SN74LS91	Hitachi	HD74LS91	
	TI	SN74LS91	
SN74LS92	Hitachi	HD74LS92	
	National	DM74LS92	
	Panasonic	DN74LS92	
	SGS	T74LS92	
	Signetics	**74LS92**	**(3003)**
	TI	SN74LS92	
SN74LS93	Hitachi	HD74LS93	
	National	DM74LS93	
	Panasonic	DN74LS93	
	SGS	T74LS93	
	Signetics	**74LS93**	**(3003)**
	TI	SN74LS93	
SN74LS95B	Fairchild	74LS95B	
	Hitachi	HD74LS95B	
	National	DM74LS95B	
	Panasonic	DN74LS95B	
	SGS	T74LS95	
		T74LS95B	
	Signetics	**74LS95B**	**(3003)**
	TI	SN74LS95B	
SN74S112	Fairchild	74S112	
	National	DM74S112	
	Signetics	**74S112**	**(3003)**
	TI	SN74S112	
SN75172	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75173**	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
SN75173	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN75173	**Motorola**		**(Cont'd)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
SN75174	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
SN75175	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
SN75176	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
SN75177	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN75177	**Motorola**		**(Cont'd)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
SN75178	Fairchild	µA8T28	
		µA96172	
		µA96173	
		µA96174	
		µA96175	
		µA96176	
		µA96177	
		µA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
TCA4500	National	LM4500	
	Siemens	TCA4500	
TDA1085	Plessey	TDA1085	
TDA1085A	Plessey	TDA1085A	
TDA1327	TI	SN76227	
TL431	Fairchild	µA431	
	TI	TL431	
TL493	**Unitrode**	**UC493A**	**(3323)**
TL494	Cherry	CS494M	
	Exar	XR494	
	IPS	**IP494A**	**(2854)**
	TI	TL494M	
		TL594M	
	Unitrode	**UC494A**	**(3323)**
♦ TL495	Exar	XR495	
TL780-05C	IPS	IP780SAC	
	TI	TL780-05C	
TL780-12C	**IPS**	**IP7812AC**	**(2854)**
	TI	TL780-12C	
TL780-15C	**IPS**	**IP7815AC**	**(2854)**
	TI	TL780-15C	
UDN2841	Sprague	UDN2841	
ULN2001	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	µA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
ULN2002	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		µA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
	NEC	µPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ULN2002			(Cont'd)
	Toshiba	TD62002	
ULN2003	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		µA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
ULN2004	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
ULN2064	IPS	IP2064	
	Mitsubishi	M54532	
	SGS	ULN2064	
	SiliconG	SG2064	
	TI	SN75064	
		ULN2064	
	Toshiba	TD62064	
ULN2065	IPS	IP2065	
	SGS	ULN2065	
	SiliconG	SG2065	
	Sprague	**ULN2065**	**(3203)**
	TI	SN75065	
		ULN2065	
	Toshiba	TD62064	
ULN2066	IPS	IP2066	
	SGS	ULN2066	
	SiliconG	SG2066	
	Sprague	ULN2066	
	TI	SN75066	
		ULN2066	
ULN2067	IPS	IP2067	
	SGS	ULN2067	
	SiliconG	SG2067	
	Sprague	ULN2067	
	TI	SN75067	
		ULN2067	
ULN2068	IPS	IP2068	
	SGS	ULN2068	
	SiliconG	SG2068	
	Sprague	**ULN2068**	**(3203)**
	TI	SN75068	
		ULN2068	
ULN2069	IPS	IP2069	
	SGS	ULN2069	
	SiliconG	SG2069	
	Sprague	**ULN2069**	**(3203)**
	TI	SN75069	
		ULN2069	
ULN2074	IPS	IP2074	
	SGS	ULN2074	
	SiliconG	SG2074	
	Sprague	**ULN2074**	**(3203)**
	TI	ULN2074	
	Toshiba	TD62074	
ULN2075	IPS	IP2075	
	SGS	ULN2075	
	SiliconG	SG2075	
	Sprague	**ULN2075**	**(3203)**
	TI	ULN2075	
ULN2801	SGS	ULN2801	
	SiliconG	SG2801	
	Sprague	ULS2801	
	Toshiba	TD62081	
ULN2804	SGS	ULN2804	
	SiliconG	SG2804	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Motorola Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
ULN2804			(Cont'd)
	Sprague	**ULN2804**	**(3203)**
		ULS2804	
	Toshiba	TD62084	
♦ μA758	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
♦ μA758	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
♦ μA758	TI	SN76111	
		SN76116	
μA78S40	Fairchild	μA78S40	

National Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
0808	MicroLinear	ADC0808	
26LS31	AMD	26L631	
		26LS31	
	AT&T	**41LG**	**(2492)**
	Motorola	26LS31	
26LS32	AMD	26LS32	
	AT&T	**41LF**	**(2490)**
	Motorola	26LS32	
41257	Fujitsu	MB81257	
	Hitachi	HM50257	
	Motorola	MCM6256	
		MCM6257	
	Vitelic	V51C256	
		V51C257	
545472	AMD	27S29	
	Fairchild	LF157A	
	National	74S472	
		LF157A	
		LF351	
		LF353	
	PMI	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
5492	Fairchild	5492	
	National	DM5492	
	TI	SN5492	
6116	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	5117	
		M5M8725	
	Motorola	MCM2016	
		MCM6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
		MK6116	
	Toshiba	TC5516	
		TC5517	
		TC5517A	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	
6508	Fujitsu	8401	
	GE/Intersil	6508	
		IM6508-1	
	Harris	**HM6508**	**(2704, 2762)**
	National	74C929	
		NM2102	
	Toshiba	5508	
6551	Commodore	MP6551	
		MPS6551	
	Gould	S6551	
	Harris	**HM6551**	**(2704, 2763)**
	National	74C920	
	Rockwell	**R6551**	**(2990)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	5101	
74C181	**GE/RCA**	**CD40181**	**(2636)**
	Motorola	MC14581	
	SGS	HCC/HCF40181	
	Sprague	SCL4581	
74C182	Fairchild	F4582	
	GE/RCA	**CD40182**	**(2636)**
	Motorola	MC14582	
	SGS	HCC/HCF40182	
	Sprague	SCL4582	
74C920	Commodore	MP6551	
		MPS6551	
	Gould	S6551	
	Harris	**HM6551**	**(2704, 2763)**
	National	6551	
	Rockwell	**R6551**	**(2990)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	5101	
74C929	Fujitsu	8401	
	GE/Intersil	6508	
		IM6508-1	
	Harris	**HM6508**	**(2704, 2762)**
	National	6508	
		NM2102	
	Toshiba	5508	
74S188	AMD	AM27518	
		AM27LS18	
	National	DM54S188	
		DM7577	
	Signetics	N82S23	
		S82S23	
	TI	28SA030-25	
		38SA030	
		38SA030-25	
74S288	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
	Motorola	MCM27S19	
	National	DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
74S472	AMD	27S29	
	Fairchild	LF157A	
	National	545472	
		LF157A	
		LF351	
		LF353	
	PMI	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
74S474	AMD	AM27S31	
	MMI	63S485	
	National	DM74S474	
	Signetics	N82S141	
74S570	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	NEC	μPD27C512	
	Panatech	TMS27C512	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74S570			(Cont'd)
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	
74S571A	AMD	AM27S13	
	Fujitsu	MB7116	
	MMI	63S241	
	National	DM74S571	
	Signetics	N82S131	
74S573	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
	National	DM74S573	
	NEC	μPB426	
	Signetics	N82S137	
77LS181	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
77S185	AMD	27S185	
		AM2725S291	
		AM27S185	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	87S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**
	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
77S191	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
77S321	AMD	27S43	
		AM27S43	
	Fujitsu	MB7142	
	MMI	53S3281	
		63S3281	
	National	87S321	
		DM87S321	
	Raytheon	**29671**	**(2985)**
	Waferscale	**WS57C43**	**(3376)**
8250A	Raytheon	RC8250	
87S181	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
87S181			(Cont'd)
	Motorola	7681	
	National	77LS181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
87S185	AMD	27S185	
		AM2725S291	
		AM27S185	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**
	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
87S191	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
87S195	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
87S291	AMD	AM27S191	
		AM27S291	
		AM27S291A	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
	Motorola	MCM76	
	National	DM878291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
87S321	AMD	27S43	
		AM27S43	
	Fujitsu	MB7142	
	MMI	53S3281	
		63S3281	
	National	77S321	
		DM87S321	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
87S321			(Cont'd)
	Raytheon	**29671**	**(2985)**
	Waferscale	**WS57C43**	**(3376)**
87SR/81	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR181	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
		S82HS189	
87SR181	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
		S82HS189	
9650	Western	WD9650	
AD7520	AD	AD7520	
	Datel	**DACHA10B**	**(2576)**
	GE/Intersil	**AD7520**	**(2668)**
	Maxim	AD7520	
	MicroPwr	MP7520	
	National	DAC1020	
		DAC1021	
		DAC1022	
AD7521	AD	AD7521	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	**DACHA12B**	**(2576)**
	GE/Intersil	**AD7521**	**(2668)**
	HybridSys	DAC331-12	
	Maxim	AD7521	
	MicroPwr	MP7521	
	National	DAC1220	
		DAC1221	
		DAC1222	
	PMI	AD7521	
AD7533	AD	AD7533	
	Datel	**DAC7533**	**(2576)**
	GE/Intersil	**AD7533**	**(2668)**
	Maxim	AD7533	
	MicroPwr	MP7533	
		MP7633	
	PMI	**PM7533**	**(2974, 2976)**
ADC0801	TI	ADC0801	
ADC0802	**GE/Intersil**	**ADC0802**	**(2667)**
	TI	ADC0802	
ADC0803	Datel	ADC830	
	GE/Intersil	**ADC0803**	**(2667)**
	Signetics	ADC0803	
	TI	ADC0803	
ADC0804	**GE/Intersil**	**ADC0804**	**(2667)**
	TI	ADC0804	
ADC0805	Signetics	ADC0805	
	TI	ADC0805	
		ADC0824A	
ADC0808	Siemens	SDA0808	
	TI	ADC0808	
	Thomson	MK0808	
ADC0809	MicroLinear	ADC0809	
	TI	ADC0809	
ADC0811	**Motorola**	**MC145040**	**(2937)**
	TI	TLC540	
		TLC541	
ADC0816	Datel	DAS952	
ADC0820	Maxim	ADC0820	
	MicroPwr	MP0820	
	Signetics	ADC0820	
ADC0829	**Motorola**	**MC14442**	**(2937)**
	TI	TLC532	
		TLC533	
ADC0830	**Motorola**	**MC14444**	**(2937)**
	TI	TLC530	
		TLC531	
ADC0831	MicroLinear	ADC0831	
	TI	ADC0831A	
ADC0832	MicroLinear	ADC0832	
	TI	ADC0832B	
ADC0834	MicroLinear	ADC0834	
	TI	ADC0834A	
ADC0838	MicroLinear	ADC0838	
	Motorola	MC74F251	
	TI	ADC0838B	
AH0126	**GE/Intersil**	**DG126**	**(2679)**
	Siliconix	DG126	
AH0129	**GE/Intersil**	**DG129**	**(2680)**
	Siliconix	DG129	
AH0133	**GE/Intersil**	**DG133**	**(2680)**
	Siliconix	DG133	
AH0134	**GE/Intersil**	**DG134**	**(2680)**
	Siliconix	DG134	
AH0139	**GE/Intersil**	**DG139**	**(2679)**
	Siliconix	DG139	
AH0140	**GE/Intersil**	**DG140**	**(2680)**
	Siliconix	DG140	
AH0141	**GE/Intersil**	**DG141**	**(2679)**
	Siliconix	DG141	
AH0142	**GE/Intersil**	**DG142**	**(2680)**
	Siliconix	DG142	
AH0143	**GE/Intersil**	**DG143**	**(2680)**
	Siliconix	DG143	
AH0144	**GE/Intersil**	**DG144**	**(2680)**
	Siliconix	DG144	
AH0145	**GE/Intersil**	**DG145**	**(2680)**
	Siliconix	DG145	
AH0146	**GE/Intersil**	**DG146**	**(2680)**
	Siliconix	DG146	
AH0151	**GE/Intersil**	**DG151**	**(2680)**
AH0152	**GE/Intersil**	**DG152**	**(2680)**
AH0153	**GE/Intersil**	**DG153**	**(2680)**
AH0154	**GE/Intersil**	**DG154**	**(2680)**
	National	AM0154	
AH0161	**GE/Intersil**	**DG161**	**(2680)**
AH0162	**GE/Intersil**	**DG162**	**(2680)**
AH0163	**GE/Intersil**	**DG163**	**(2680)**
	National	AM0163	
AH0164	**GE/Intersil**	**DG164**	**(2680)**
	National	AM0164	
AH5009	**GE/Intersil**	**IH5009**	**(2681)**
	National	AM9709	
		AM97C09	
AH5010	**GE/Intersil**	**IH5010**	**(2681)**
	National	AM9710	
AH5011	**GE/Intersil**	**IH5011**	**(2681)**
	National	AM9711	
AH5012	**GE/Intersil**	**IH5012**	**(2681)**
	National	AM9712	
AH5013	GE/Intersil	IH5013	
AH5014	GE/Intersil	IH5014	
AH5015	GE/Intersil	IH5015	
AH5016	GE/Intersil	IH5016	
AM0154	**GE/Intersil**	**DG154**	**(2680)**
	National	AH0154	
AM0163	**GE/Intersil**	**DG163**	**(2680)**
	National	AH0163	
AM0164	**GE/Intersil**	**DG164**	**(2680)**
	National	AH0164	
AM9709	**GE/Intersil**	**IH5009**	**(2681)**
	National	AH5009	
		AM97C09	
AM9710	**GE/Intersil**	**IH5010**	**(2681)**
	National	AH5010	
AM9711	**GE/Intersil**	**IH5011**	**(2681)**
	National	AH5011	
AM9712	**GE/Intersil**	**IH5012**	**(2681)**
	National	AH5012	
AM97C09	**GE/Intersil**	**IH5009**	**(2681)**
	National	AH5009	
		AM9709	
♦ AM97C10	**GE/Intersil**	**IH5010**	**(2681)**
	National	AH5010	
		AM9710	
♦ AM97C11	**GE/Intersil**	**IH5011**	**(2681)**
	National	AH5011	
		AM9711	
♦ AM97C12	**GE/Intersil**	**IH5012**	**(2681)**
	National	AH5012	
		AM9712	
BLC80/316	Intel	ISBC80/30	
CD4000	**GE/RCA**	**CD4000**	**(2633)**
	Motorola	MC14000	
	SGS	HCC/HCF4000	
	Signetics	HEF400	
	Solitron	CM4000	
	Sprague	SCL4000	
CD4001	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
	Motorola	MC14001	
	National	MM74C02	
	OKI	MSM4001	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
CD4002	Fairchild	F4002	
	GE/RCA	**CD4002**	**(2633)**
	Motorola	MC14002	
	SGS	HCC/HCF4002	
	Signetics	HEF4002	
	Solitron	CM4002	
	Sprague	SCL4002	
	Toshiba	**TC4002**	**(3308)**
CD4006	Fairchild	F4006	
	GE/RCA	**CD4006**	**(2634)**
	SGS	HCC/HCF4006	
	Signetics	HEF4006	
	Solitron	CM4006	
	Sprague	SCL4006	
	Toshiba	**TC4006**	**(3308)**
CD4007	Fairchild	F4007	
	GE/RCA	**CD4007**	**(2633)**
	Motorola	MC14007	
	SGS	HCC/HCF4007	
	Signetics	HEF4007	
	Solitron	CM4007	
	Sprague	SCL4007	
	Toshiba	**TC4007**	**(3308)**
CD4008	Fairchild	F4008	
	GE/RCA	**CD4008**	**(2636)**
	Motorola	MC14008	
	National	MM74C83	
	SGS	HCC/HCF4008	
	Signetics	HEF4008	
	Solitron	CM4008	
	Sprague	SCL4008	
	Toshiba	**TC4008**	**(3308)**
CD4009	**GE/RCA**	**CD4009**	**(2633)**
	Motorola	MC14009	
	SGS	HCC/HCF4009	
	Solitron	CM4009	
	Sprague	SCL4009	
	Toshiba	**TC4009**	**(3308)**
CD4010	**GE/RCA**	**CD4010**	**(2633)**
	Motorola	MC14010	
	SGS	HCC/HCF4010	
	Solitron	CM4010	
	Sprague	SCL4010	
	Toshiba	**TC4010**	**(3308)**
CD40106	Fairchild	F400014	
		F40014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14106	
		MC14584	
	National	CD4584	
		MM54C14	
		MM74C14	
	SGS	HCC/HCF40106	
	Signetics	HEF40106	
	Sprague	SCL4584	
CD4011	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	Motorola	MC14011	
	National	MM74C00	
	OKI	MSM4011	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
CD4012	Fairchild	F4012	
	GE/RCA	**CD4012**	**(2633)**
	Motorola	MC14012	
	SGS	HCC/HCF4012	
	Signetics	HEF4012	
	Solitron	CM4012	
	Sprague	SCL4012	
	Toshiba	**TC4012**	**(3308)**
CD4013	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	MM74C74	
	OKI	MSM4013	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
CD4013			(Cont'd)
	Signetics	HEF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
CD4014	Fairchild	F4014	
	GE/RCA	**CD4014**	**(2634)**
	Motorola	MC14014	
	SGS	HCC/HCF4014	
	Signetics	HEF4014	
	Solitron	CM4014	
	Sprague	SCL4014	
	Toshiba	**TC4014**	**(3308)**
CD4015	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	MM74C164	
	OKI	MSM4015	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
CD4016	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
CD40160	Fairchild	F40160	
	GE/RCA	**CD40160**	**(2635)**
	Motorola	MC14160	
	Sprague	SCL4160	
CD40161	Fairchild	F40161	
	GE/RCA	**CD40161**	**(2635)**
	Motorola	MC14161	
	Sprague	SCL4161	
CD40162	Fairchild	F40162	
	GE/RCA	**CD40162**	**(2635)**
	Motorola	MC14162	
	Sprague	SCL4162	
CD40163	Fairchild	F40163	
	GE/RCA	**CD40163**	**(2635)**
	Motorola	MC14163	
	Sprague	SCL4163	
CD4017	Fairchild	F4017	
	GE/RCA	**CD4017**	**(2635)**
	Motorola	MC14017	
	SGS	HCC/HCF4017	
	Signetics	HEF4017	
	Solitron	CM4017	
	Sprague	SCL4017	
	Toshiba	**TC4017**	**(3308)**
CD40174B	Fairchild	F40174B	
	GE/RCA	**CD40174B**	**(2634)**
	Motorola	MC14174	
CD40175	Fairchild	F40175	
	Motorola	MC14175	
	National	MM54C175	
		MM74C175	
	Signetics	HEF40175	
	Toshiba	**TC40175**	**(3308)**
CD4018	Fairchild	F4018	
	GE/RCA	**CD4018**	**(2635)**
	Motorola	MC14018	
	SGS	HCC/HCF4018	
	Signetics	HEF4018	
	Solitron	CM4018	
	Sprague	SCL4018	
	Toshiba	**TC4018**	**(3308)**
CD4019	Fairchild	F4019	
	GE/RCA	**CD4019**	**(2633, 2635)**
	OKI	MSM4019	
	Sanyo	LC4019	
	SGS	HCC/HCF4019	
	Signetics	HEF4019	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4019			(Cont'd)
	Solitron	CM4019	
	Sprague	SCL4019	
	Toshiba	**TC4019**	**(3308)**
CD40192	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
CD40193	Fairchild	F40193	
	GE/RCA	**CD40193**	**(2635)**
	National	MM54C193	
		MM74C193	
	SGS	HCC/HCF40193	
	Signetics	HEF40193	
	Sprague	SCL4193	
	Toshiba	**TC40193**	**(3308)**
CD40195	Fairchild	F40195	
	National	MM74C195	
CD4020	Fairchild	F4020	
	GE/RCA	**CD4020**	**(2634)**
	Motorola	MC14020	
	SGS	HCC/HCF4020	
	Signetics	HEF4020	
	Solitron	CM4020	
	Sprague	SCL4020	
	Toshiba	**TC4020**	**(3308)**
CD4021	Fairchild	F4021	
	GE/RCA	**CD4021**	**(2634)**
	Motorola	MC14021	
	SGS	HCC/HCF4021	
	Signetics	HEF4021	
	Sprague	SCL4021	
	Toshiba	**TC4021**	**(3308)**
CD4022	Fairchild	F4022	
	GE/RCA	**CD4022**	**(2635)**
	Motorola	MC14022	
	SGS	HCC/HCF4022	
	Signetics	HEF4022	
	Solitron	CM4022	
	Sprague	SCL4022	
	Toshiba	**TC4022**	**(3308)**
CD4023	Fairchild	F4023	
	GE/RCA	**CD4023**	**(2633)**
	Motorola	MC14023	
	National	MM74C10	
	SGS	HCC/HCF4023	
	Signetics	HEF4023	
	Solitron	CM4023	
	Sprague	SCL4023	
	Toshiba	**TC4023**	**(3308)**
CD4024	Fairchild	F4024	
	GE/RCA	**CD4024**	**(2634)**
	Motorola	MC14024	
	SGS	HCC/HCF4024	
	Signetics	HEF4024	
	Solitron	CM4024	
	Sprague	SCL4024	
	Toshiba	**TC4024**	**(3308)**
CD4025	Fairchild	F4025	
	GE/RCA	**CD4025**	**(2633)**
	Motorola	MC14025	
	SGS	HCC/HCF4025	
	Signetics	HEF4025	
	Solitron	CM4025	
	Sprague	SCL4025	
	Toshiba	**TC4025**	**(3308)**
CD4027	Fairchild	F4027	
	GE/RCA	**CD4027**	**(2634)**
	Motorola	MC14027	
	National	MM74C76	
	OKI	MSM4027	
	Sanyo	LC4027	
	SGS	HCC/HCF4027	
	Signetics	HEF4027	
	Solitron	CM4027	
	Sprague	SCL4027	
CD4028	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	MM74C42	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4028			(Cont'd)
	OKI	MSM4028	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	
	Solitron	CM4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
CD4029	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD40192	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
CD4030	Fairchild	F4030	
	GE/RCA	**CD4030**	**(2633, 2636)**
	SGS	HCC/HCF4030	
	Signetics	HEF4030	
	Solitron	CM4030	
	Sprague	SCL4030	
	Toshiba	**TC4030**	**(3308)**
CD4031	Fairchild	F4031	
	GE/RCA	**CD4031**	**(2634)**
	SGS	HCC/HCF4031	
	Signetics	HEF4731	
CD4031B	**GE/RCA**	**CD4031B**	**(2634)**
	Motorola	MC14557	
CD4034	Fairchild	F4034	
	GE/RCA	**CD4034**	**(2634, 2636)**
	Motorola	MC14034	
	SGS	HCC/HCF4034	
	Solitron	CM4034	
	Sprague	SCL4034	
	Toshiba	**TC4034**	**(3308)**
CD4035B	Motorola	MC14035	
CD4040	Fairchild	F4040	
	GE/RCA	**CD4040**	**(2634)**
	Motorola	MC14040	
	SGS	HCC/HCF4040	
	Signetics	HEF4040	
	Solitron	CM4040	
	Sprague	SCL4040	
	Toshiba	**TC4040**	**(3308)**
CD4041	Fairchild	F4041	
	GE/RCA	**CD4041**	**(2633)**
	SGS	HCC/HCF4041	
	Signetics	HEF4041	
	Solitron	CM4041	
	Sprague	SCL4041	
CD4042	Fairchild	F4042	
	GE/RCA	**CD4042**	**(2634)**
	Motorola	MC14042	
	SGS	HCC/HCF4042	
	Signetics	HEF4042	
	Solitron	CM4042	
	Sprague	SCL4042	
	Toshiba	**TC4042**	**(3308)**
CD4043	**GE/RCA**	**CD4043**	**(2634)**
	Motorola	MC14043	
	SGS	HCC/HCF4043	
	Signetics	HEF4043	
	Solitron	CM4043	
	Sprague	SCL4043	
	Toshiba	**TC4043**	**(3308)**
CD4044	Fairchild	F4044	
	GE/RCA	**CD4044**	**(2634)**
	Motorola	MC14044	
	SGS	HCC/HCF4044	
	Signetics	HEF4044	
	Solitron	CM4044	
	Toshiba	**TC4044**	**(3308)**
CD4046	Fairchild	F4046	
	GE/RCA	**CD4046**	**(2635)**
	Motorola	MC14046	
	SGS	HCC/HCF4046	
	Solitron	CM4046	
	Sprague	SCL4046	
CD4047	Fairchild	F4047	
	GE/RCA	**CD4047**	**(2634)**
	SGS	HCC/HCF4047	
	Signetics	HEF4047	
	Solitron	CM4047	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4047			(Cont'd)
	Sprague	SCL4047	
	Toshiba	**TC4047**	**(3308)**
CD4048	**GE/RCA**	**CD4048**	**(2633)**
	SGS	HCC/HCF4048	
	Solitron	CM4048	
	Sprague	SCL4402	
CD4049	Fairchild	F4049	
	GE/RCA	**CD4049**	**(2633)**
	Motorola	MC14049	
	OKI	MSM4049	
	Sanyo	LC4049	
	SGS	HCC/HCF4049	
	Signetics	HEF4049	
	Solitron	CM4049	
	Sprague	SCL4049	
	Toshiba	**TC4049**	**(3308)**
CD4050	Fairchild	F4050	
	GE/RCA	**CD4050**	**(2633)**
	Motorola	MC14050	
	SGS	HCC/HCF4050	
	Signetics	HEF4050	
	Solitron	CM4050	
	Sprague	SCL4050	
	Toshiba	**TC4050**	**(3308)**
CD4051	Fairchild	F4051	
	GE/RCA	**CD4051**	**(2635)**
	Motorola	MC14051	
	SGS	HCC/HCF4051	
	Signetics	HEF4051	
	Solitron	CM4051	
	Sprague	SCL4051	
	Toshiba	**TC4051**	**(3308)**
CD4052	**Harris**	**HI1828A**	**(2703, 2738, 2748)**
	Solitron	CM4052	
	Sprague	SCL4052	
	Toshiba	**TC4052**	**(3308)**
CD4052B	Motorola	MC14052	
CD4053	Fairchild	F4053	
	GE/RCA	**CD4053**	**(2635)**
	Motorola	MC14053	
	SGS	HCC/HCF4053	
	Signetics	HEF4053	
	Solitron	CM4053	
	Sprague	SCL4053	
	Toshiba	**TC4053B**	**(3308)**
CD4060	**GE/RCA**	**CD4060**	**(2634)**
	Motorola	MC14060	
	SGS	HCC/HCF4060	
	Signetics	HEF4060	
	Sprague	SCL4060	
CD4066	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
CD4069	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	MM54C04	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
CD4070	Fairchild	F4070	
	GE/RCA	**CD4070**	**(2633, 2636)**
	Motorola	MC14070	
	National	MM74C86	
	SGS	HCC/HCF4070	
	Signetics	HEF4070	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4070			(Cont'd)
	Solitron	CM4070	
	Sprague	SCL4070	
CD4071	Fairchild	F4071	
	GE/RCA	**CD4071**	**(2633)**
	Motorola	MC14071	
	National	MM74C32	
	OKI	MSM4071	
	Sanyo	LC4071	
	SGS	HCC/HCF4071	
	Signetics	HEF4071	
	Solitron	CM4071	
	Sprague	SCL4071	
CD4072	Fairchild	F4072	
	GE/RCA	**CD4072**	**(2633)**
	Motorola	MC14072	
	SGS	HCC/HCF4072	
	Signetics	HEF4072	
	Sprague	SCL4072	
	Toshiba	TC4072	
CD4073	Fairchild	F4073	
	GE/RCA	**CD4073**	**(2633)**
	Motorola	MC14073	
	SGS	HCC/HCF4073	
	Signetics	HEF4073	
	Solitron	CM4073	
	Sprague	SCL4073	
	Toshiba	TC4073	
CD4075	Fairchild	F4075	
	GE/RCA	**CD4075**	**(2633)**
	Motorola	MC14075	
	SGS	HCC/HCF4075	
	Signetics	HEF4075	
	Solitron	CM4075	
	Sprague	SCL4075	
	Toshiba	TC4075	
CD4076	Fairchild	F4076	
	GE/RCA	**CD4076**	**(2634)**
	Motorola	MC14076	
	National	MM54C173	
		MM74C173	
	SGS	HCC/HCF4076	
	Signetics	HEF4076	
	Solitron	CM4076	
	Sprague	SCL4076	
	Toshiba	**TC4076**	**(3308)**
CD4077	Fairchild	F4077	
	GE/RCA	**CD4077**	**(2633, 2636)**
	Motorola	MC14077	
	SGS	HCC/HCF4077	
	Signetics	HEF4077	
	Solitron	CM4077	
	Sprague	SCL4077	
CD4081	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	MM74C08	
	OKI	MSM4081	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
CD4082	Fairchild	F4082	
	GE/RCA	**CD4082**	**(2633)**
	Motorola	MC14082	
	SGS	HCC/HCF4082	
	Signetics	HEF4082	
	Sprague	SCL4082	
	Toshiba	TC4082	
CD4089	**GE/RCA**	**CD4089**	**(2636)**
	SGS	HCC/HCF4089	
CD4093B	Fairchild	F4093B	
	GE/RCA	**CD4093B**	**(2633)**
	Motorola	MC14093	
CD4099B	**GE/RCA**	**CD4099B**	**(2634)**
	Motorola	MC14099	
		MC14099B	
CD4503	Fairchild	F40097B	
	GE/RCA	**CD4503**	**(2633)**
	Motorola	MC14503	
	SGS	HCF4503	
	Toshiba	TC4503	
CD4510	Fairchild	F4510	
	GE/RCA	**CD4510**	**(2635)**
	Motorola	MC14510	
	SGS	HCC/HCF4510	
	Signetics	HEF4510	
	Solitron	CM4510	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CD4510			(Cont'd)
	Sprague	SCL4510	
	Toshiba	**TC4510**	**(3308)**
CD4511	Fairchild	F4511	
	GE/RCA	**CD4511**	**(2635)**
	Motorola	MC14511	
	NEC	μPD4511	
	SGS	HCC/HCF4511	
	Signetics	HEF4511	
	Solitron	CM4511	
	Sprague	SCL4511	
	Toshiba	**TC4511**	**(3308)**
CD4512	Fairchild	F4512	
	GE/RCA	**CD4512**	**(2635)**
	Motorola	MC14512	
	SGS	HCC/HCF4512	
	Sprague	SCL4512	
	Toshiba	**TC4512**	**(3308)**
CD4514	Fairchild	F4514	
	GE/RCA	**CD4514**	**(2633)**
	Motorola	MC14514	
	SGS	HCC/HCF4514	
	Signetics	HEF4514	
	Solitron	CM4514	
	Sprague	SCL4514	
	Toshiba	**TC4514**	**(3308)**
CD4515	Fairchild	F4515	
	GE/RCA	**CD4515**	**(2633)**
	Motorola	MC14515	
	SGS	HCC/HCF4515	
	Signetics	HEF4515	
	Solitron	CM4515	
	Sprague	SCL4515	
	Toshiba	**TC4515**	**(3308)**
CD4516	Fairchild	F4516	
	GE/RCA	**CD4516**	**(2635)**
	Motorola	MC14516	
	SGS	HCC/HCF4516	
	Signetics	HEF4516	
	Solitron	CM4516	
	Sprague	SCL4516	
	Toshiba	**TC4516**	**(3308)**
CD4518	Fairchild	F4518	
	GE/RCA	**CD4518**	**(2635)**
	Motorola	MC14518	
	SGS	HCC/HCF4518	
	Signetics	HEF4518	
	Solitron	CM4518	
	Sprague	SCL4518	
	Toshiba	**TC4518**	**(3308)**
CD4519	Hitachi	HD4519	
	Motorola	MC14519	
	Signetics	HEF4519	
CD4520	Fairchild	F4520	
	GE/RCA	**CD4520**	**(2635)**
	Motorola	MC14520	
	OKI	MSM4520	
	Sanyo	LC4520	
	SGS	HCC/HCF4520	
	Signetics	HEF4520	
	Solitron	CM4520	
	Sprague	SCL4520	
	Toshiba	**TC4520**	**(3308)**
CD4522	Fairchild	F4522	
	Motorola	MC14522B	
	Sprague	SCL4522	
CD4526	Fairchild	F4526	
	Motorola	MC14526	
	Signetics	HEF4526	
	Sprague	SCL4526	
	Toshiba	**TC4526**	**(3308)**
CD4527	Fairchild	F4527	
	GE/RCA	**CD4527**	**(2636)**
	Motorola	MC14527	
	SGS	HCC/HCF4527	
	Signetics	HEF4527	
	Sprague	SCL4527	
	Toshiba	**TC4527**	**(3308)**
CD4528	Fairchild	F4528	
	Motorola	MC14528	
	National	MM74C221	
	SGS	HCC/HCF4098	
	Signetics	HEF4528	
	Toshiba	**TC4528**	**(3308)**
CD4529	Motorola	MC14529	
CD4538	Motorola	MC14538	
	OKI	MSM4538	
	Signetics	HEF4538	
CD4543	Fairchild	F4543	
	GE/RCA	**CD4543**	**(2635)**
	Motorola	MC14543	
		MC14543B	
	Signetics	HEF4543	
	Toshiba	**TC4543**	**(3308)**
CD4584	Fairchild	F400014	
		F40014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14106	
		MC14584	
	National	CD40106	
		MM54C14	
		MM74C14	
	SGS	HCC/HCF40106	
	Signetics	HEF40106	
	Sprague	SCL4584	
CD4723	Fairchild	F4723	
COP410	Thomson	ET9410	
COP411	Thomson	ET9411	
COP420	Thomson	ET9420	
COP421	Thomson	ET9421	
COP422	Thomson	ET9422	
COP444	Thomson	ET9444	
COP445	Thomson	ET9445	
COP494	National	NMC9306	
	Sierra	SC22001	
	Xicor	**X2444**	**(3388, 3400)**
COP495	GIM	ER5911	
	Hyundai	**HY93C46**	**(2770)**
	National	NMC9346	
	NCR	59346	
		NCR59308	
	SGS	M9346	
	Sierra	SC22011	
COP820	Sierra	SC44820	
COP821	Sierra	SC44821	
COP822	Sierra	SC44822	
COP841	Sierra	SC44840	
COP844	Sierra	SC44844	
		SC46844	
COP848	Sierra	SC44848	
		SC46848	
COP8620	Sierra	SC48620	
COP8621	Sierra	SC48621	
COP8622	Sierra	SC48622	
COP8720	Sierra	SC48720	
COP8721	Sierra	SC48721	
COP8722	Sierra	SC48722	
COP884	Sierra	SC44884	
COP888	Sierra	SC44888	
		SC46888	
♦ DAC0800	AMD	AM1408	
		DAC08	
♦ DAC0800	AD	AD1408	
		ADDAC-08	
♦ DAC0800	**Datel**	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
♦ DAC0800	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
♦ DAC0800	Hitachi	HA17008	
		HA17408	
♦ DAC0800	**Motorola**	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
♦ DAC0800	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
♦ DAC0800	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
♦ DAC0800	Raytheon	DAC08	
	Signetics	MC1408	
DAC0801	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DAC0801			(Cont'd)
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
DAC0802	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
DAC0806	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
DAC0807	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DAC0807			(Cont'd)
	Raytheon	DAC08	
	Signetics	MC1408	
DAC0808	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
DAC0832	**Datel**	**DAC608**	**(2576)**
DAC1006	**Datel**	**DAC610**	**(2576)**
DAC1020	AD	AD7520	
	Datel	**DACHA10B**	**(2576)**
	GE/Intersil	**AD7520**	**(2668)**
	Maxim	AD7520	
	MicroPwr	MP7520	
	National	AD7520	
		DAC1021	
		DAC1022	
DAC1021	AD	AD7520	
	Datel	**DACHA10B**	**(2576)**
	GE/Intersil	**AD7520**	**(2668)**
	Maxim	AD7520	
	MicroPwr	MP7520	
	National	AD7520	
		DAC1020	
		DAC1022	
DAC1022	AD	AD7520	
	Datel	**DACHA10B**	**(2576)**
	GE/Intersil	**AD7520**	**(2668)**
	Maxim	AD7520	
	MicroPwr	MP7520	
	National	AD7520	
		DAC1020	
		DAC1021	
DAC1208	**Datel**	**DAC612**	**(2576)**
	MicroPwr	MP1208	
DAC1209	MicroPwr	MP1209	
DAC1210	MicroPwr	MP1210	
DAC1220	AD	AD7521	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	**DACHA12B**	**(2576)**
	GE/Intersil	**AD7521**	**(2668)**
	HybridSys	DAC331-12	
	Maxim	AD7521	
	MicroPwr	MP7521	
	National	AD7521	
		DAC1221	
		DAC1222	
	PMI	AD7521	
DAC1221	AD	AD7521	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	**DACHA12B**	**(2576)**
	GE/Intersil	**AD7521**	**(2668)**
	HybridSys	DAC331-12	
	Maxim	AD7521	
	MicroPwr	MP7521	
	National	AD7521	
		DAC1220	
		DAC1222	
	PMI	AD7521	
DAC1222	AD	AD7521	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	**DACHA12B**	**(2576)**
	GE/Intersil	**AD7521**	**(2668)**
	HybridSys	DAC331-12	
	Maxim	AD7521	
	MicroPwr	MP7521	
	National	AD7521	
		DAC1220	
		DAC1221	
	PMI	AD7521	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DAC1230	MicroPwr	MP1230	
DAC1231	MicroPwr	MP1231	
DAC1232	MicroPwr	MP1232	
DAC1266	Maxim	AD566	
DAC1280	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1285	
	TeledyneP	TPDAC80	
DAC1285	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
	TeledyneP	TPDAC80	
DAC1287	**Burr-Brown**	**DAC85/CCD**	**(2542)**
DH0006	**Elantec**	**EDH0006**	**(2593)**
	Micra	MC0006	
DH0008	CTI	CT0008	
	Elantec	**EDH0008**	**(2593)**
	Micra	MC0008	
DH3725	Fairchild	FQ3725	
	Motorola	MQ3725	
	Raytheon	SP3725	
DM100422	Fairchild	F100422	
	Fujitsu	MB8118	
		MBM100422	
		MBM100422A	
	Hitachi	HM100422	
	National	NMC5295	
	NEC	μPB100422	
DM10116	Hitachi	HD10116	
	Motorola	MC10116	
	Signetics	**10116**	**(3021)**
DM10414	Motorola	MCM10152	
DM10415	AMD	AM10415	
	Fujitsu	MBM100470A	
		MBM10415	
	Hitachi	HM2110	
		HM2112	
	Motorola	**MCM10146**	**(2918)**
	Siemens	GXB10415	
DM10422	Fujitsu	MBM10422A	
	NEC	μPB10422	
DM10470	AMD	AM10470	
	Fujitsu	MBM10470A	
	Hitachi	HM10470	
	Motorola	MCM10470	
	NEC	μPB10470	
DM10474	AMD	AM10474	
	Fairchild	F10474	
	Fujitsu	MBM10474A	
	Hitachi	HM10474	
	Motorola	MCM10474	
	NEC	μPB10474	
DM5400	Fairchild	5400	
	Signetics	5400	
	TI	SN5400	
DM5401	TI	SN5401	
DM5402	Fairchild	5402	
	TI	SN5402	
DM5403	TI	SN5403	
DM5404	Fairchild	5404	
		9016	
	National	DM9016C	
DM5405	TI	SN5405	
DM5406	TI	SN5406	
DM5407	TI	SN5407	
DM5408	Fairchild	5408	
	TI	SN5408	
DM5409	Fairchild	5409	
	TI	SN5409	
DM5410	Fairchild	5410	
	TI	SN5410	
DM54107	TI	SN54107	
DM54109	Signetics	54109	
	TI	SN54109	
DM54121	Fairchild	54121	
	Signetics	54121	
	TI	SN54121	
DM54123	Fairchild	54123	
	Signetics	54123	
	TI	SN54123	
DM54125	Fairchild	54125	
	National	DM7093	
	TI	SN54125	
DM54126	National	DM7094	
	Signetics	54126	
	TI	SN54126	
DM5413	TI	SN5413	
DM54132	Signetics	54132	
	TI	SN54132	
DM5414	Fairchild	5414	
	Signetics	5414	
	TI	SN5414	
DM54141	Signetics	54141	
DM54147	Signetics	54147	
	TI	SN54147	
DM54148	National	DM9318	
	Signetics	54148	
	TI	SN54148	
DM54150	Fairchild	54150	
	TI	SN54150	
DM54151	Fairchild	54151A	
	Signetics	54151	
	TI	SN54151A	
DM54153	Fairchild	54153	
	Signetics	54153	
	TI	SN54153	
DM54155	TI	SN54155	
DM54156	TI	SN54156	
DM54157	Fairchild	54157	
	Signetics	54157	
	TI	SN54157	
DM5416	TI	SN5416	
DM54160	Raytheon	RM9310	
	Signetics	54160	
	TI	SN54160	
DM54161	Fairchild	54161	
	Signetics	54161	
	TI	SN54161	
DM54162	TI	SN54162	
DM54163	Signetics	54163	
	TI	SN54163	
DM54164	Fairchild	54164	
	National	DM7570	
	Signetics	54164	
	TI	SN54164	
DM54165	Fairchild	54165	
	National	DM7590	
	Signetics	54165	
	TI	SN54165	
DM54166	Signetics	54166	
	TI	SN54166	
DM5417	TI	SN5417	
DM54170	Fairchild	54170	
	TI	SN54170	
DM54173	Fairchild	54173	
	National	DM7551	
	Raytheon	RM8T10	
	TI	SN54173	
DM54174	Fairchild	54174	
	Signetics	54174	
	TI	SN54174	
DM54175	Fairchild	54175	
	Signetics	54175	
	TI	SN54175	
DM54176	Raytheon	RM8280	
	Signetics	54176	
		S8280	
	TI	SN54176	
DM54177	National	DM7281	
	Raytheon	RM8281	
	Signetics	S7281	
	TI	SN54177	
DM54180	Signetics	54180	
	TI	SN54180	
DM54181	Raytheon	RM9341	
	Signetics	54181	
	TI	SN54181	
DM54182	Raytheon	RM9342	
	TI	SN54182	
DM54184	TI	SN54184	
DM54185A	TI	SN54185A	
DM54190	Signetics	54190	
	TI	SN54190	
DM54191	Fairchild	54191	
	Signetics	54191	
	TI	SN54191	
DM54192	National	DM7560	
	TI	SN54192	
DM54193	National	DM7563	
	TI	SN54193	
DM54194	Signetics	54194	
DM54195	Fairchild	9300	
	TI	SN54195	
DM54196	Signetics	54196	
	TI	SN54196	
DM54197	Fairchild	54197	
	TI	SN54197	
DM54198	TI	SN54198	
DM54199	TI	SN54199	
DM5420	Fairchild	5420	
	Signetics	5420	
	TI	SN5420	
DM5423	TI	SN5423	
DM5425	Fairchild	5425	
	TI	SN5425	
DM54251	National	DM7121	
	TI	SN54251	
DM5426	Signetics	5426	
	TI	SN5426	
DM5427	TI	SN5427	
DM5430	Fairchild	5430	
	TI	SN5430	
DM5432	Fairchild	5432	
	Signetics	5432	
	TI	SN5432	
DM5437	Fairchild	5437	
	TI	SN5437	
DM5438	TI	SN5438	
DM5440	Fairchild	5440	
	TI	SN5440	
DM5442	Fairchild	5442A	
	Signetics	5442	
	TI	SN5442A	
DM5445	Siemens	S042	
	Signetics	**NE602**	**(3101)**
		SA602	
	TI	SN5445	
DM5446	Fairchild	5446	
	TI	SN5446	
DM5447A	TI	SN5447A	
DM5448	Fairchild	5448	
	TI	SN5448	
DM5450	TI	SN5450	
DM5451	TI	SN5451	
DM5453	TI	SN5453	
DM5454	TI	SN5454	
DM5470	TI	SN5470	
DM5472	TI	SN5472	
DM5473	Fairchild	5473	
	Signetics	5473	
	TI	SN5473	
DM5474	Fairchild	5474	
	Signetics	5474	
	TI	SN5474	
DM5475	Fairchild	5475	
	Signetics	5475	
	TI	SN5475	
DM5476	Fairchild	5476	
	Signetics	5476	
	TI	SN5476	
DM5485	Fairchild	5485	
	Signetics	5485	
	TI	SN5485	
DM5486	Fairchild	5486	
	Signetics	5486	
	TI	SN5486	
DM5488	Signetics	S8224	
DM5489	AMD	SN5489-1	
	National	DM54S289	
		MM54S289	
	Signetics	S82S25	
DM5490A	TI	SN5490A	
DM5492	Fairchild	5492	
	National	5492	
	TI	SN5492	
DM5493A	MMI	MC10H106	
	TI	SN5493A	
DM5495	Fairchild	5495	
	Signetics	5495	
	TI	SN5495	
DM5496	Signetics	5496	
	TI	SN5496	
DM54ALS00	Motorola	SN54ALS00	
	TI	SN54ALS00A	
DM54ALS01	TI	SN54ALS01	
DM54ALS02	Motorola	SN54ALS02	
	TI	SN54ALS02	
DM54ALS03	TI	SN54ALS03B	
DM54ALS04	Motorola	SN54ALS04	
DM54ALS05	TI	SN54ALS05A	
DM54ALS08	Motorola	SN54ALS08	
	TI	SN54ALS08	
		SN54ALS09	
DM54ALS09	Motorola	SN54ALS09	
DM54ALS10	TI	SN54ALS10A	
DM54ALS1000			
	National	DM54AS160	
	SiliconG	JAN55325	
	TI	JANB55325	
DM54ALS1002			
	National	DM54AS162	
	SiliconG	SG3049	
DM54ALS1003			
	National	DM54AS168	
	SiliconG	SG2950	
	Sprague	ULN2950	
DM54ALS1004			
	National	DM54AS175	
	SiliconG	SG2813	
	Sprague	**ULN2813**	**(3203)**
	TI	SN54AS175	
DM54ALS1005			
	National	DM54AS243	
	SiliconG	SG2814	
	Sprague	**ULN2814**	**(3203)**
DM54ALS1008			
	National	DM54AS245	
	SiliconG	SG2815	
	Sprague	**ULN2815**	**(3203)**
	TI	SN54ALS1008A	
		SN54AS245	
DM54ALS1010			
	TI	54ALS1010A	
		SN54ALS1010	
DM54ALS1011			
	National	DM54AS258	
DM54ALS1020			
	National	DM54AS264	
DM54ALS1032			
	National	DM54ALS40	
		DM54AS808	
	TI	SN54AS808B	
DM54ALS1034			
	TI	SN54ALS1034	
DM54ALS1035			
	National	DM54ALS131	
	TI	SN54ALS1035	
		SN54AS832B	
DM54ALS109	TI	SN54ALS109A	
DM54ALS11	TI	SN54ALS11A	
DM54ALS112	TI	SN54ALS112A	
DM54ALS113	TI	SN54ALS113A	
DM54ALS114	TI	SN54ALS114A	
DM54ALS12	TI	SN54ALS12A	
DM54ALS1242			
	National	DM54ALS1243	
DM54ALS1243			
	National	DM54ALS1242	
DM54ALS1244			
	TI	SN54ALS1244A	
DM54ALS1245			
	TI	SN54ALS1245	
DM54ALS131	National	DM54ALS1035	
	TI	SN54ALS1035	
		SN54AS832B	
DM54ALS133	TI	SN54ALS133	
DM54ALS138	TI	SN54ALS138	
DM54ALS15	TI	SN54ALS15A	
DM54ALS151	TI	SN54ALS151	
DM54ALS153	TI	SN54ALS153	
DM54ALS160	Motorola	SN54ALS160	
	National	DM54ALS160B	
DM54ALS160B			
	Motorola	SN54ALS160	
	National	DM54ALS160	
DM54ALS161	Motorola	SN54ALS161	
	TI	SN54ALS161B	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	IC Master Device	Page
DM54ALS162	Motorola	SN54ALS162	
	TI	SN54ALS162B	
DM54ALS163	Motorola	SN54ALS163	
	TI	SN54ALS163B	
DM54ALS168B			
	National	DM54ALS1240	
		DM54AS880	
DM54ALS169	TI	SN54ALS169B	
DM54ALS174	TI	SN54ALS174	
DM54ALS175	TI	SN54ALS175	
DM54ALS191	TI	SN54ALS191	
DM54ALS193	TI	SN54ALS193	
DM54ALS20	TI	SN54ALS20A	
DM54ALS21	TI	SN54ALS21A	
DM54ALS22	TI	SN54ALS22B	
DM54ALS231	National	DM74ALS157	
	TI	SN54AS881A	
DM54ALS240	Motorola	SN54ALS240	
	TI	SN54ALS240A	
DM54ALS241	Motorola	SN54ALS241	
	TI	SN54ALS241A	
DM54ALS242	Motorola	SN54ALS242	
	TI	SN54ALS242B	
DM54ALS243	Motorola	SN54ALS243	
	TI	SN54ALS243A	
DM54ALS244	Motorola	SN54ALS244	
	TI	SN54ALS244A	
DM54ALS245	Motorola	SN54ALS245	
	TI	SN54ALS245A	
DM54ALS251	TI	SN54ALS251	
DM54ALS253	TI	SN54ALS253	
DM54ALS257	TI	SN54ALS257	
DM54ALS258	TI	SN54ALS258	
DM54ALS27	TI	SN54ALS27	
DM54ALS273	Motorola	SN54ALS273	
	TI	SN54ALS273	
DM54ALS28	TI	SN54ALS28A	
DM54ALS32	Motorola	SN54ALS32	
	TI	SN54ALS32	
DM54ALS33	TI	SN54ALS33A	
DM54ALS352	TI	SN54ALS352	
DM54ALS353	Mitsubishi	M74ALS158	
	National	DM54AS1000	
		DM74ALS158	
	Signetics	74ALS158	
	TI	SN54ALS353	
		SN74ALS158	
DM54ALS373	Motorola	SN54ALS373	
	TI	SN54ALS373	
DM54ALS374	Motorola	SN54ALS374	
	TI	SN54ALS374	
DM54ALS377	Motorola	SN54ALS377	
DM54ALS38	TI	SN54ALS38A	
DM54ALS40	National	DM54ALS1032	
		DM54AS808	
	TI	SN54AS808B	
DM54ALS465	National	DM54AS1004	
		DM74ALS231	
	TI	SN54AS1004A	
		SN74ALS231	
DM54ALS466	National	DM54AS1008	
DM54ALS467	National	DM54AS1032	
	TI	SN54AS1032A	
DM54ALS468	LinearTech	UC1846	
	National	DM54AS1034	
	SiliconG	SG1846	
	TI	SN54AS1034A	
	Unitrode	**UC1846 (3323)**	
DM54ALS519	National	DM54AS1036	
	SiliconG	SG2846	
	TI	SN54AS1036A	
	Unitrode	**UC2846 (3323)**	
DM54ALS520	TI	SN54ALS520	
DM54ALS521	LinearTech	UC1847	
	National	DM54AS04	
	SiliconG	SG1847	
	TI	SN54ALS688	
		SN54AS04	
	Unitrode	**UC1847 (3323)**	
DM54ALS522	National	DM54AS32	
	SiliconG	SG2847	
	TI	SN54ALS522	
		SN54AS32	
	Unitrode	**UC2847 (3323)**	
DM54ALS563	TI	SN54ALS563A	
DM54ALS564	TI	SN54ALS564A	
DM54ALS573	Motorola	SN54ALS573	
	TI	SN54ALS573B	
DM54ALS574	Motorola	SN54ALS574	
	TI	SN54ALS574A	
DM54ALS576	Motorola	SN54ALS576	
	TI	SN54ALS576A	
DM54ALS580	Motorola	SN54ALS580	
	TI	SN54ALS580A	
DM54ALS620	Motorola	SN54ALS620	
DM54ALS621	Motorola	SN54ALS621	
DM54ALS622	Motorola	SN54ALS622	
DM54ALS623	Motorola	SN54ALS623	
DM54ALS640	Motorola	SN54ALS640	
	TI	SN54ALS640A	
DM54ALS641	Motorola	SN54ALS641	
DM54ALS643	Motorola	SN54ALS643	
DM54ALS644	Motorola	SN54ALS644	
DM54ALS645	TI	SN54ALS645A	
DM54ALS646	Motorola	SN54ALS646	
DM54ALS647	Motorola	SN54ALS647	
DM54ALS648	Motorola	SN54ALS648	
DM54ALS649	Motorola	SN54ALS649	
DM54ALS690	Motorola	SN54ALS690	
DM54ALS691	Motorola	SN54ALS691	
DM54ALS692	Motorola	SN54ALS692	
DM54ALS693	Motorola	SN54ALS693	
DM54ALS696	Motorola	SN54ALS696	
DM54ALS697	Motorola	SN54ALS697	
DM54ALS698	Motorola	SN54ALS698	
DM54ALS699	Motorola	SN54ALS699	
DM54ALS74	Motorola	SN54ALS74	
	TI	SN54ALS74A	
DM54ALS804	TI	SN54ALS804A	
DM54ALS805	TI	SN54ALS805A	
DM54ALS832	TI	SN54ALS832A	
DM54ALS86	TI	SN54ALS86	
DM54ALS873	Motorola	SN54ALS873	
	TI	SN54ALS873B	
DM54ALS876	Motorola	SN54ALS876	
DM54ALS880	Motorola	SN54ALS880	
	TI	SN54ALS880B	
DM54AS00	TI	SN54AS00	
DM54AS02	TI	SN54AS02	
DM54AS04	LinearTech	UC1847	
	National	DM54ALS521	
	SiliconG	SG1847	
	TI	SN54ALS688	
		SN54AS04	
	Unitrode	**UC1847 (3323)**	
DM54AS08	TI	SN54AS08	
DM54AS10	TI	SN54AS10	
DM54AS1000	Mitsubishi	M74ALS158	
	National	DM54ALS353	
		DM74ALS158	
	Signetics	74ALS158	
	TI	SN54ALS353	
		SN74ALS158	
DM54AS1004	National	DM54ALS465	
		DM74ALS231	
	TI	SN54AS1004A	
		SN74ALS231	
DM54AS1008	National	DM54ALS466	
DM54AS1032	National	DM54ALS467	
	TI	SN54AS1032A	
DM54AS1034	LinearTech	UC1846	
	National	DM54ALS468	
	SiliconG	SG1846	
	TI	SN54AS1034A	
	Unitrode	**UC1846 (3323)**	
DM54AS1036	National	DM54ALS519	
	SiliconG	SG2846	
	TI	SN54AS1036A	
	Unitrode	**UC2846 (3323)**	
DM54AS109	TI	SN54AS109	
DM54AS160	National	DM54ALS1000	
	SiliconG	JAN55325	
	TI	JANB55325	
DM54AS161	TI	SN54AS161	
DM54AS162	National	DM54ALS1002	
	SiliconG	SG3049	
DM54AS163	TI	SN54AS163	
DM54AS168	National	DM54ALS1003	
	SiliconG	SG2950	
	Sprague	ULN2950	
DM54AS174	TI	SN54AS174	
DM54AS175	National	DM54ALS1004	
	SiliconG	SG2813	
	Sprague	**ULN2813 (3203)**	
	TI	SN54AS175	
DM54AS181	TI	SN54AS181B	
DM54AS20	TI	SN54AS20	
DM54AS21	TI	SN54AS21	
DM54AS230	TI	SN54AS230	
DM54AS240	TI	SN54AS240	
DM54AS241	TI	SN54AS241	
DM54AS242	TI	SN54AS242	
DM54AS243	National	DM54ALS1005	
	SiliconG	SG2814	
	Sprague	**ULN2814 (3203)**	
DM54AS244	TI	SN54AS244	
DM54AS245	National	DM54ALS1008	
	SiliconG	SG2815	
	Sprague	**ULN2815 (3203)**	
	TI	SN54ALS1008A	
		SN54AS245	
DM54AS258	National	DM54ALS1011	
DM54AS264	National	DM54ALS1020	
DM54AS27	TI	SN54AS27	
DM54AS280	TI	SN54AS280	
DM54AS30	TI	SN54AS30	
DM54AS32	National	DM54ALS522	
	SiliconG	SG2847	
	TI	SN54ALS522	
		SN54AS32	
	Unitrode	**UC2847 (3323)**	
DM54AS34	TI	SN54AS34	
DM54AS373	TI	SN54AS373	
DM54AS374	TI	SN54AS374	
DM54AS573	TI	SN54AS573	
DM54AS574	TI	SN54AS574	
DM54AS575	TI	SN54AS575	
DM54AS640	TI	SN54AS640	
DM54AS645	TI	SN54AS645	
DM54AS646	TI	SN54AS646	
DM54AS651	TI	SN54AS651	
DM54AS74	National	JAN101A	
	SiliconG	JAN101A	
	TI	SN54AS74	
DM54AS804	TI	SN54AS804B	
DM54AS805	TI	SN54AS805B	
DM54AS808	National	DM54ALS1032	
		DM54ALS40	
	TI	SN54AS808B	
DM54AS873	TI	SN54AS873	
DM54AS874	TI	SN54AS874	
DM54AS880	National	DM54ALS1240	
		DM54ALS168B	
DM54H108	GoldStar	GL7806	
	Gould	μA7806	
DM54L164	National	DM76L70	
DM54LS00	Fairchild	54LS00	
	Motorola	SN54LS00	
	SGS	T54LS00	
	Signetics	54LS00	
	TI	SN54LS00	
DM54LS01	Motorola	SN54LS01	
	TI	SN54LS01	
DM54LS02	Fairchild	54LS02	
	Motorola	SN54LS02	
	SGS	T54LS02	
	Signetics	54LS02	
	TI	SN54LS02	
DM54LS03	Fairchild	54LS03	
	Motorola	SN54LS03	
	SGS	T54LS03	
	TI	SN54LS03	
DM54LS04	Fairchild	54LS04	
	Motorola	SN54LS04	
	SGS	T54LS04	
	Signetics	54LS04	
	TI	SN54LS04	
DM54LS05	Fairchild	54LS05	
	Motorola	SN54LS05	
	SGS	T54LS05	
	TI	SN54LS05	
DM54LS08	Fairchild	54LS08	
	Motorola	SN54LS08	
	SGS	T54LS08	
	Signetics	54LS08	
	TI	SN54LS08	
DM54LS09	Fairchild	54LS09	
	Motorola	SN54LS09	
	SGS	T54LS09	
	TI	SN54LS09	
DM54LS10	Fairchild	54LS10	
	Motorola	SN54LS10	
	SGS	54LS10	
		T54LS10	
	Signetics	54LS10	
	TI	SN54LS10	
DM54LS107	Motorola	SN54LS107	
	Signetics	54LS107	
	TI	SN54LS107	
DM54LS109	Fairchild	54LS109	
	Motorola	SN54LS109	
DM54LS109			(Cont'd)
	SGS	54LS109	
		T54LS109	
	Signetics	54LS109	
	TI	SN54LS109	
DM54LS11	Fairchild	54LS11	
	Motorola	SN54LS11	
	SGS	T54LS11	
	TI	SN54LS11	
DM54LS12	Motorola	SN54LS12	
	TI	SN54LS12	
DM54LS122	Motorola	SN54LS122	
	TI	SN54LS122	
DM54LS123	Motorola	SN54LS123	
	TI	SN54LS123	
DM54LS125	Fairchild	54LS125A	
	Motorola	SN54LS125	
		SN54LS125A	
	SGS	T54LS125	
	Signetics	54LS125A	
	TI	SN54LS125A	
DM54LS126	Fairchild	54LS126	
	Motorola	SN54LS126	
	SGS	54LS126	
		T54LS126	
	Signetics	54LS126	
	TI	SN54LS126	
DM54LS13	Fairchild	54LS13	
	Motorola	SN54LS13	
	SGS	T54LS13	
	TI	SN54LS13	
DM54LS132	Motorola	SN54LS132	
	SGS	T54LS132	
	Signetics	54LS132	
	TI	SN54LS132	
DM54LS136	Fairchild	54LS136	
	Motorola	SN54LS136	
	SGS	T54LS136	
	Signetics	54LS136	
	TI	SN54LS136	
DM54LS138	Fairchild	54LS138	
	Motorola	SN54LS138	
	SGS	T54LS138	
	Signetics	54LS138	
	TI	SN54LS138	
DM54LS139	Fairchild	54LS139	
	Motorola	SN54LS139	
	SGS	T54LS139	
	Signetics	54LS139	
	TI	SN54LS139A	
DM54LS14	Fairchild	54LS14	
	Motorola	SN54LS14	
	SGS	T54LS14	
	Signetics	54LS14	
	TI	SN54LS14	
DM54LS15	Fairchild	54LS15	
	Motorola	SN54LS15	
	SGS	T54LS15	
	TI	SN54LS15	
DM54LS151	Fairchild	54LS151	
	Motorola	SN54LS151	
	SGS	T54LS151	
	Signetics	54LS151	
	TI	SN54LS151	
DM54LS153	Fairchild	54LS153	
	Motorola	SN54LS153	
	SGS	T54LS153	
	Signetics	54LS153	
	TI	SN54LS153	
DM54LS154	Signetics	54LS154	
DM54LS155	Fairchild	54LS155	
	Motorola	SN54LS155	
	SGS	T54LS155	
	TI	SN54LS155A	
DM54LS156	Fairchild	54LS156	
	Motorola	SN54LS156	
	SGS	T54LS156	
	TI	SN54LS156	
DM54LS157	Fairchild	54LS157	
	Motorola	SN54LS157	
	SGS	T54LS157	
	Signetics	54LS157	
	TI	SN54LS157	
DM54LS158	Fairchild	54LS158	
	Motorola	SN54LS158	
	SGS	T54LS158	
	Signetics	54LS158	
	TI	SN54LS158	
DM54LS161A	Fairchild	54LS161A	
	Motorola	SN54LS161A	
	SGS	T54LS161	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM54LS161A			(Cont'd)
	Signetics	54LS161A	
	TI	SN54LS161A	
DM54LS162A	Fairchild	54LS162A	
	Motorola	SN54LS162A	
	SGS	T54LS162	
	Signetics	54LS162A	
	TI	SN54LS162A	
DM54LS163	Fairchild	54LS163A	
	Motorola	SN54LS163A	
	National	DM54LS163A	
	SGS	T54LS163	
	Signetics	54LS163A	
	TI	SN54LS163A	
DM54LS163A	Fairchild	54LS163A	
	Motorola	SN54LS163A	
	National	DM54LS163	
	SGS	T54LS163	
	Signetics	54LS163A	
	TI	SN54LS163A	
DM54LS168	Fairchild	54LS168	
	Motorola	SN54LS168	
	SGS	T54LS168	
DM54LS169	Fairchild	54LS169	
	Motorola	SN54LS169	
	SGS	T54LS169	
	TI	SN54LS169B	
DM54LS170	Fairchild	54LS170	
	SGS	T54LS170	
	TI	SN54LS170	
DM54LS173	Fairchild	54LS173	
	Motorola	SN54LS173A	
	Signetics	54LS173	
	TI	SN54LS173A	
DM54LS174	Fairchild	54LS174	
	Motorola	SN54LS174	
	SGS	T54LS174	
	Signetics	54LS174	
	TI	SN54LS174	
DM54LS175	Fairchild	54LS175	
	Motorola	SN54LS175	
	SGS	T54LS175	
	Signetics	54LS175	
	TI	SN54LS175	
DM54LS190	Motorola	SN54LS190	
	SGS	T54LS190	
	Signetics	54LS190	
	TI	SN54LS190	
DM54LS191	Motorola	SN54LS191	
	SGS	T54LS191	
	Signetics	54LS191	
	TI	SN54LS191	
DM54LS192	Fairchild	54LS192	
	Motorola	SN54LS192	
	SGS	T54LS192	
	Signetics	54LS192	
	TI	SN54LS192	
DM54LS193	Fairchild	54LS193	
	Motorola	SN54LS193	
	SGS	T54LS193	
	Signetics	54LS193	
	TI	SN54LS193	
DM54LS196	Motorola	SN54LS196	
	SGS	T54LS196	
	TI	SN54LS196	
DM54LS197	Motorola	SN54LS197	
	SGS	T54LS197	
	Signetics	54LS197	
	TI	SN54LS197	
DM54LS20	Fairchild	54LS20	
	Motorola	SN54LS20	
	SGS	T54LS20	
	Signetics	54LS20	
	TI	SN54LS20	
DM54LS21	Fairchild	54LS21	
	Motorola	SN54LS21	
	SGS	T54LS21	
	TI	SN54LS21	
DM54LS22	Fairchild	54LS22	
	SGS	T54LS22	
	TI	SN54LS22	
DM54LS221	Motorola	SN54LS221	
	Signetics	54LS221	
	TI	SN54LS221	
DM54LS245	Fairchild	54LS245	
	MMI	SN54LS245	
	Motorola	SN54LS245	
	Signetics	54LS245	
	TI	SN54LS245	
DM54LS247	Fairchild	54LS247	
	Motorola	SN54LS247	
	TI	SN54LS247	
DM54LS248	Fairchild	54LS248	
	Motorola	SN54LS248	
	Signetics	54LS248	
	TI	SN54LS248	
DM54LS249	Fairchild	54LS249	
	Motorola	SN54LS249	
	TI	SN54LS249	
DM54LS253	Fairchild	54LS253	
	Motorola	SN54LS253	
	National	DM7214	
	SGS	T54LS253	
	Signetics	54LS253	
	TI	SN54LS253	
DM54LS257	Fairchild	54LS257A	
	SGS	T54LS257	
DM54LS26	Fairchild	54LS26	
	Motorola	SN54LS26	
	SGS	T54LS26	
	TI	SN54LS26	
DM54LS266	Fairchild	54LS266	
	Motorola	SN54LS266	
	SGS	T54LS266	
	Signetics	54LS266	
	TI	SN54LS266	
DM54LS27	Fairchild	54LS27	
	Motorola	SN54LS27	
	SGS	T54LS27	
	TI	SN54LS27	
DM54LS279	Fairchild	54LS279	
	Motorola	SN54LS279	
	SGS	T54LS279	
	Signetics	54LS279	
	TI	SN54LS279A	
DM54LS283	Fairchild	54LS283	
	Motorola	SN54LS283	
	SGS	T54LS283	
	Signetics	54LS283	
	TI	SN54LS283	
DM54LS290	Motorola	SN54LS290	
	SGS	T54LS290	
	Signetics	54LS290	
	TI	SN54LS290	
DM54LS293	Motorola	SN54LS293	
	SGS	T54LS293	
	Signetics	54LS293	
	TI	SN54LS293	
DM54LS298	Fairchild	54LS298	
	Motorola	SN54LS298	
	SGS	54LS298	
		T54LS298	
	Signetics	54LS298	
	TI	SN54LS298	
DM54LS30	Fairchild	54LS30	
	Motorola	SN54LS30	
	SGS	T54LS30	
	Signetics	54LS30	
	TI	SN54LS30	
DM54LS32	Fairchild	54LS32	
	Motorola	SN54LS32	
	SGS	T54LS32	
	Signetics	54LS32	
	TI	SN54LS32	
DM54LS352	Fairchild	54LS352	
	Motorola	SN54LS352	
	SGS	T54LS352	
	TI	SN54LS352	
DM54LS353	Fairchild	54LS353	
	Motorola	SN54LS353	
	SGS	T54LS353	
		T54LS354	
	TI	SN54LS353	
DM54LS366	Fairchild	54LS366A	
	Motorola	SN54LS366A	
	SGS	T54LS366	
	Signetics	54LS366A	
	TI	SN54LS366A	
DM54LS367	Fairchild	54LS367A	
	Motorola	SN54LS367A	
	SGS	T54LS367	
	Signetics	54LS367	
		54LS367A	
	TI	SN54LS367A	
DM54LS368	Fairchild	54LS368A	
	Motorola	SN54LS368A	
	SGS	T54LS368	
	Signetics	54LS368	
		54LS368A	
	TI	SN54LS368A	
DM54LS37	Fairchild	54LS37	
	Motorola	SN54LS37	
	SGS	T54LS37	
	Signetics	54LS37	
	TI	SN54LS37	
DM54LS374	Fairchild	54LS374	
	MMI	SN54LS374	
	Motorola	SN54LS374	
	SGS	T54LS374	
	TI	SN54LS374	
DM54LS38	Fairchild	54LS38	
	Motorola	SN54LS38	
	SGS	T54LS38	
	TI	SN54LS38	
DM54LS386	Motorola	SN54LS386	
	Raytheon	RM8241	
	TI	SN54LS386	
DM54LS40	Fairchild	54LS40	
	Motorola	SN54LS40	
	SGS	T54LS40	
	TI	SN54LS40	
DM54LS42	Fairchild	54LS42	
	Motorola	SN54LS42	
	SGS	T54LS42	
	Signetics	54LS42	
	TI	SN54LS42	
DM54LS47	Fairchild	54LS47	
	Motorola	SN54LS47	
	TI	SN54LS47	
DM54LS48	Fairchild	54LS48	
	Motorola	SN54LS48	
	TI	SN54LS48	
DM54LS49	Fairchild	54LS49	
	Motorola	SN54LS49	
	TI	SN54LS49	
DM54LS51	Fairchild	54LS51	
	Motorola	SN54LS51	
	SGS	T54LS51	
	Signetics	54LS51	
	TI	SN54LS51	
DM54LS54	Fairchild	54LS54	
	Motorola	SN54LS54	
	SGS	T54LS54	
	TI	SN54LS54	
DM54LS55	Fairchild	54LS55	
	Motorola	SN54LS55	
	SGS	T54LS55	
DM54LS670	Fairchild	54LS670	
	Motorola	SN54LS670	
	SGS	T54LS670	
	Signetics	54LS670	
	TI	SN54LS670	
DM54LS73	Motorola	SN54LS73A	
	National	DM54LS73A	
	Signetics	54LS73	
	TI	SN54LS73A	
DM54LS73A	Motorola	SN54LS73A	
	National	DM54LS73	
	Signetics	54LS73	
	TI	SN54LS73A	
DM54LS74	Fairchild	54LS74	
	Motorola	SN54LS74A	
	National	DM54LS74A	
	SGS	T54LS74	
	Signetics	54LS74	
	TI	SN54LS74A	
DM54LS74A	Fairchild	54LS74	
	Motorola	SN54LS74A	
	National	DM54LS74	
	SGS	T54LS74	
	Signetics	54LS74	
	TI	SN54LS74A	
DM54LS75	Motorola	SN54LS75	
	Signetics	54LS75	
	TI	SN54LS75	
DM54LS76	Motorola	SN54LS76A	
	Signetics	54LS76	
	TI	SN54LS76A	
DM54LS77	Motorola	SN54LS77	
DM54LS78	Motorola	SN54LS78A	
	TI	SN54LS78A	
DM54LS83A	Fairchild	54LS83A	
	Motorola	SN54LS83A	
	SGS	T54LS83	
	Signetics	54LS83	
		54LS83A	
	TI	SN54LS83A	
DM54LS85	Fairchild	54LS85	
	Motorola	SN54LS85	
	Signetics	54LS85	
	TI	SN54LS85	
DM54LS86	Motorola	SN54LS86	
	SGS	T54LS86	
	Signetics	54LS86	
	TI	SN54LS86A	
DM54LS90	Motorola	SN54LS90	
	SGS	T54LS90	
	Signetics	54LS90	
	TI	SN54LS90	
DM54LS92	Motorola	SN54LS92	
	SGS	T54LS92	
	Signetics	54LS92	
	TI	SN54LS92	
DM54LS93	Motorola	SN54LS93	
	SGS	T54LS93	
	Signetics	54LS93	
	TI	SN54LS93	
DM54LS95B	Fairchild	54LS95B	
	Motorola	SN54LS95B	
	SGS	T54LS95	
	Signetics	54LS95B	
	TI	SN54LS95B	
DM54S03	Signetics	54S03	
	TI	SN54S03	
DM54S10	Fairchild	54S10	
	Signetics	54S10	
	TI	SN54S10	
DM54S133	Fairchild	54S133	
	Signetics	54S133	
	TI	SN54S133	
DM54S134	Fairchild	54S134	
	TI	SN54S134	
DM54S135	Fairchild	54S135	
	Signetics	54S135	
	TI	SN54S135	
DM54S138	Fairchild	54S138	
	Signetics	54S138	
	TI	SN54S138	
DM54S139	Fairchild	54S139	
	Signetics	54S139	
	TI	SN54S139	
DM54S140	Signetics	54S140	
	TI	SN54S140	
DM54S151	Fairchild	54S151	
	Signetics	54S151	
	TI	SN54S151	
DM54S153	Fairchild	54S153	
	Signetics	54S153	
	TI	SN54S153	
DM54S157	Fairchild	54S157	
	Signetics	54S157	
	TI	SN54S157	
DM54S158	Fairchild	54S158	
	Signetics	54S158	
	TI	SN54S158	
DM54S175	Fairchild	54S175	
	Signetics	54S175	
	TI	SN54S175	
DM54S188	AMD	AM27518	
		AM27LS18	
	National	74S188	
		DM7577	
	Signetics	N82S23	
		S82S23	
	TI	28SA030-25	
		38SA030	
		38SA030-25	
DM54S189	AMD	SN54S189	
	Signetics	54S189	
DM54S194	Fairchild	54S194	
	Signetics	54S134	
	TI	SN54S194	
DM54S195	Signetics	54S195	
	TI	SN54S195	
DM54S20	Fairchild	54S20	
	Signetics	54S20	
	TI	SN54S20	
DM54S200	Signetics	S82S16	
DM54S22	TI	SN54S22	
DM54S251	Signetics	54S251	
	TI	SN54S251	
DM54S257	Signetics	54S257	
	TI	SN54S257	
DM54S258	Fairchild	54S258	
	Signetics	54S258	
	TI	SN54S258	
DM54S280	Fairchild	54S280	
	Signetics	54S280	
	TI	SN54S280	
DM54S287	MMI	53S141	
	Signetics	S82S129	
DM54S288	National	DM7578	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM54S289	AMD	SN5489-1	
	National	DM5489	
		MM54S289	
	Signetics	S82S25	
DM54S299	TI	SN54S299	
DM54S30	Fairchild	54S30	
	TI	SN54S30	
DM54S387	AMD	AM27S20	
	MMI	5300-1	
		53S140	
		63S140	
	Signetics	N82S126	
		S82S126	
	TI	34SA10-25	
DM54S40	Fairchild	54S40	
	Signetics	54S40	
	TI	SN54S40	
DM54S470	Fujitsu	MB7117	
DM54S473	Fujitsu	MB7123	
DM54S474	Signetics	S82S141	
DM54S475	National	DM77S295	
		DM87S295	
DM54S51	Fairchild	54S51	
	Signetics	54S51	
	TI	SN54S51	
DM54S570	MMI	53S240	
	Signetics	S82S130	
DM54S571	MMI	53S241	
	Signetics	S82S131	
DM54S572	AMD	AM27S32	
	Fairchild	93452	
	Fujitsu	MB7121	
	Hitachi	HN25044	
	MMI	5352-1	
DM54S573	MMI	53S441	
	Motorola	MCM7643M	
	National	DM54S573A	
	Signetics	S82S137	
DM54S573A	MMI	53S441	
	Motorola	MCM7643M	
	National	DM54S573	
	Signetics	S82S137	
DM54S64	Fairchild	54S64	
	Signetics	54S64	
	TI	SN54S64	
DM54S65	Fairchild	54S65	
	Signetics	54S65	
	TI	SN54S65	
DM7093	Fairchild	54125	
	National	DM54125	
	TI	SN54125	
DM7094	National	DM54126	
	Signetics	54126	
	TI	SN54126	
DM7095	Signetics	S8T95	
	TI	SN54365A	
DM7096	TI	SN54366A	
DM7097	Signetics	S8T97	
	TI	SN54367A	
DM7098	Signetics	S8T98	
	TI	SN54368A	
DM7121	National	DM54251	
	TI	SN54251	
DM7160	National	DM8160	
DM7213	Fairchild	9311	
	National	DM74154	
		DM8311	
	Raytheon	RC9311	
	Signetics	**74154**	**(3003)**
	TI	SN74154	
DM7214	Fairchild	54LS253	
	Motorola	SN54LS253	
	National	DM54LS253	
	SGS	T54LS253	
	Signetics	54LS253	
	TI	SN54LS253	
DM7281	National	DM54177	
	Raytheon	RM8281	
	Signetics	S7281	
	TI	SN54177	
DM7400	Fairchild	7400	
	Signetics	**7400**	**(3003)**
	TI	SN7400	
	Toshiba	TC7400	
DM7401	Fairchild	7401	
	TI	SN7401	
DM7402	Fairchild	7402	
	Signetics	**7402**	**(3003)**
	TI	SN7402	
DM7403	Fairchild	7403	
	Signetics	**7403**	**(3003)**
	TI	SN7403	
DM7404	Fairchild	7404	
	Signetics	**7404**	**(3003)**
	TI	SN7404	
	Toshiba	TC7404	
DM7405	Fairchild	7405	
	Signetics	**7405**	**(3003)**
	TI	SN7405	
DM7406	Fairchild	7406	
	Signetics	**7406**	**(3003)**
	TI	SN7406	
DM7407	Fairchild	7407	
	Hitachi	HD7407	
	Signetics	**7407**	**(3003)**
	TI	SN7407	
DM7408	Fairchild	7408	
	Signetics	**7408**	**(3003)**
	TI	SN7408	
DM7409	Fairchild	7409	
	TI	SN7409	
DM7410	Fairchild	7410	
	Signetics	**7410**	**(3003)**
	TI	SN7410	
	Toshiba	TC7410	
DM74107	**Signetics**	**74107**	**(3003)**
	TI	SN74107	
DM74109	**Signetics**	**74109**	**(3003)**
	TI	SN74109	
DM7411	Fairchild	7411	
	Hitachi	HD7411	
	Signetics	**7411**	**(3003)**
DM74121	Fairchild	74121	
	Signetics	**74121**	**(3003)**
	TI	SN74121	
DM74123	Fairchild	74123	
	Signetics	**74123**	**(3003)**
	TI	SN74123	
DM74125	Fairchild	74125	
	National	DM8093	
	Signetics	**74125**	**(3003)**
	TI	SN74125	
DM74126	National	DM8094	
	Signetics	**74126**	**(3003)**
	TI	SN74126	
DM7413	**Signetics**	**7413**	**(3003)**
	TI	SN7413	
DM74132	Fairchild	74132	
	Signetics	**74132**	**(3003)**
	TI	SN74132	
DM7414	Fairchild	7414	
	Signetics	**7414**	**(3003)**
	TI	SN7414	
DM74141	Fairchild	93141	
	Hitachi	HD7441	
	National	DM7441	
	Signetics	74141	
		7441	
DM74145	Fairchild	74145	
	Signetics	**74145**	**(3003)**
	TI	SN74145	
DM74147	**GE/RCA**	**CD4508**	**(2634)**
	Motorola	MC14508	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**
		HEF4508	
		N82147	
	Sprague	SCL4508	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
DM74148	National	DM8318	
	Signetics	**74148**	**(3003)**
		N82148	
	TI	SN74148	
DM74150	Fairchild	74150	
	Signetics	**74150**	**(3003)**
	TI	SN74150	
DM74153	Fairchild	74153	
	Signetics	**74153**	**(3003)**
	TI	SN74153	
DM74155	Fairchild	74155	
	Signetics	**74155**	**(3003)**
	TI	SN74155	
DM74156	**Signetics**	**74156**	**(3003)**
	TI	SN74156	
DM74157	**Signetics**	**74157**	**(3003)**
	TI	SN74157	
DM7416	Fairchild	7416	
	Signetics	**7416**	**(3003)**
	TI	SN7416	
DM74160	**Signetics**	**74160**	**(3003)**
	TI	SN74160	
DM74161	Fairchild	74161	
	Signetics	**74161**	**(3003)**
	TI	SN74161	
DM74162	TI	SN74162	
DM74163	Fairchild	74163	
	Signetics	**74163**	**(3003)**
	TI	SN74163	
DM74165	Fairchild	74165	
	National	DM8590	
	Signetics	**74165**	**(3003)**
	TI	SN74165	
DM74166	Fairchild	74166	
	Signetics	**74166**	**(3003)**
	TI	SN74166	
DM7417	Fairchild	7417	
	Signetics	**7417**	**(3003)**
	TI	SN7417	
DM74170	Fairchild	74170	
	Hitachi	HD74170	
	Signetics	**74170**	**(3003)**
	TI	SN74170	
DM74173	Fairchild	74173	
	National	DM8551	
	Raytheon	RC8T10	
	Signetics	**N8T10**	**(3022)**
	TI	SN74173	
DM74174	Fairchild	74174	
	Signetics	**74174**	**(3003)**
	TI	SN74174	
DM74175	Fairchild	74175	
	TI	SN74175	
DM74176	Fairchild	96176	
	National	DM8280	
	Raytheon	RC8280	
	Signetics	74176	
	TI	SN74176	
DM74177	National	DM8281	
	Raytheon	RC8281	
	Signetics	74177	
	TI	SN74177	
DM74180	Fairchild	74180	
	Signetics	**74180**	**(3003)**
	TI	SN74180	
DM74181	Hitachi	HD74181	
	Raytheon	RC9341	
	Signetics	**74181**	**(3003)**
DM74190	**Signetics**	**74190**	**(3003)**
	TI	SN74190	
DM74191	**Signetics**	**74191**	**(3003)**
	TI	SN74191	
DM74192	National	DM8560	
	Raytheon	RC9360	
	Signetics	**74192**	**(3003)**
	TI	SN74192	
DM74194	**Signetics**	**74194**	**(3003)**
	TI	SN74194	
DM74195	**Signetics**	**74195**	**(3003)**
	TI	SN74195	
DM74196	National	DM8290	
	Raytheon	RC8290	
	Signetics	74196	
	TI	SN74196	
DM74197	Fairchild	74197	
	National	DM8291	
	Raytheon	RC8291	
	Signetics	74197	
	TI	SN74197	
DM74198	Signetics	74198	
	TI	SN74198	
DM74199	**Signetics**	**74199**	**(3003)**
	TI	SN74199	
DM7420	Fairchild	7420	
		9004	
	National	DM9004C	
	Signetics	**7420**	**(3003)**
	TI	SN7420	
	Toshiba	TC7420	
DM7423	TI	SN7423	
DM7425	Fairchild	7425	
	TI	SN7425	
DM74251	National	DM8121	
	TI	SN74251	
DM7426	Fairchild	μA75451	
	National	DM8810	
	Signetics	**7426**	**(3003)**
	TI	SN7426	
DM7427	Fairchild	7427	
	Signetics	**7427**	**(3003)**
	TI	SN7427	
DM7430	Fairchild	7430	
	Signetics	**7430**	**(3003)**
	TI	SN7430	
DM7432	Fairchild	7432	
	Signetics	**7432**	**(3003)**
	TI	SN7432	
DM7437	Fairchild	7437	
	Signetics	**7437**	**(3003)**
	TI	SN7437	
DM7438	Fairchild	7438	
	Signetics	**7438**	**(3003)**
	TI	SN7438	
DM7440	Fairchild	7440	
	Signetics	**7440**	**(3003)**
	TI	SN7440	
DM7441	Fairchild	93141	
	Hitachi	HD7441	
	National	DM74141	
	Signetics	74141	
		7441	
DM7442	Fairchild	7442	
	National	DM8842	
	Signetics	**7442**	**(3003)**
	TI	SN7442A	
DM7450	Fairchild	7450	
	Signetics	**7450**	**(3003)**
	TI	SN7450	
DM7451	Fairchild	7451	
	Hitachi	HD7451	
	Signetics	**7451**	**(3003)**
	TI	SN7451	
DM7454	TI	SN7454	
DM7470	Hitachi	HD7470	
	TI	SN7470	
DM7473	Fairchild	7473	
	Signetics	**7473**	**(3003)**
	TI	SN7473	
DM7474	Fairchild	7474	
	Signetics	**7474**	**(3003)**
	TI	SN7474	
DM7475	Fairchild	7475	
	Signetics	**7475**	**(3003)**
	TI	SN7475	
DM7476	Fairchild	7476	
	Signetics	**7476**	**(3003)**
	TI	SN7476	
DM7482	Hitachi	HD7482	
DM7485	Fairchild	7485	
	Signetics	**7485**	**(3003)**
	TI	SN7485	
DM7486	Fairchild	7486	
	Signetics	**7486**	**(3003)**
	TI	SN7486	
DM7489	Fairchild	7489	
	National	DM74S289	
		DM8589	
		MM74S289	
	Signetics	74S289	
		N82S25	
DM7496	**Signetics**	**7496**	**(3003)**
	TI	SN7496	
DM74ALS00	Motorola	SN74ALS00	
	Signetics	74ALS00	
	TI	SN74ALS00	
		SN74ALS00A	
DM74ALS01	TI	SN74ALS01	
DM74ALS02	Motorola	SN74ALS02	
	Signetics	74ALS02	
	TI	SN74ALS02	
DM74ALS03	TI	SN74ALS03A	
DM74ALS04	Motorola	SN74ALS04	
	Signetics	74ALS04	
	TI	SN74ALS04	
		SN74ALS04B	
DM74ALS05	TI	SN74ALS05A	
DM74ALS08	Motorola	SN74ALS08	
	Signetics	74ALS08	
	TI	SN74ALS08	
DM74ALS09	Motorola	SN74ALS09	
	TI	SN74ALS09A	
DM74ALS10	Signetics	74ALS10	
	TI	SN74ALS10	
		SN74ALS10A	
DM74ALS1000			
	TI	SN74ALS1000A	
DM74ALS1002			
	TI	SN74ALS1002A	
DM74ALS1003			
	TI	SN74ALS1003A	
DM74ALS1004			
	TI	SN74ALS1004	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM74ALS1005			
	TI	SN74ALS1005	
DM74ALS1008			
	TI	SN74ALS1008A	
DM74ALS1010			
	TI	SN74ALS1010A	
DM74ALS1011			
	TI	SN74ALS1011A	
DM74ALS1020			
	TI	SN74ALS1020A	
DM74ALS1032			
	TI	SN74ALS1032A	
DM74ALS1034			
	TI	SN74ALS1034	
DM74ALS1035			
	TI	SN74ALS1035	
DM74ALS109	TI	SN74ALS109A	
DM74ALS11	Signetics	74ALS11	
	TI	SN74ALS11	
		SN74ALS11A	
DM74ALS112	TI	SN74ALS112A	
DM74ALS113	TI	SN74ALS113A	
DM74ALS114	TI	SN74ALS114A	
DM74ALS12	TI	SN74ALS12A	
DM74ALS1242			
	TI	SN74ALS1242	
DM74ALS1243			
	TI	SN74ALS1243	
DM74ALS1244			
	TI	SN74ALS1244A	
DM74ALS1245			
	TI	SN74ALS1245A	
DM74ALS131	TI	SN74ALS131	
DM74ALS133	TI	SN74ALS133	
DM74ALS137	TI	SN74ALS137	
DM74ALS138	Signetics	74ALS138	
	TI	SN74ALS138	
DM74ALS15	TI	SN74ALS15A	
DM74ALS151	Mitsubishi	M74ALS151	
	Signetics	74ALS151	
	TI	SN74ALS151	
DM74ALS153	Mitsubishi	M74ALS153	
	Signetics	74ALS153	
	TI	SN74ALS153	
DM74ALS157	National	DM54ALS231	
	TI	SN54AS881A	
DM74ALS158	Mitsubishi	M74ALS158	
	National	DM54ALS353	
		DM54AS1000	
	Signetics	74ALS158	
	TI	SN54ALS353	
		SN74ALS158	
DM74ALS160	Motorola	SN74ALS160	
	TI	SN74ALS160B	
DM74ALS161	Motorola	SN74ALS161	
	Signetics	74ALS161	
	TI	SN74ALS161B	
DM74ALS162	Motorola	SN74ALS162	
	TI	SN74ALS162A	
DM74ALS1621			
	TI	SN74ALS1621	
DM74ALS163	Motorola	SN74ALS163	
	Signetics	74ALS163	
	TI	SN74ALS163A	
		SN74ALS163B	
DM74ALS1640			
	TI	SN74ALS1640A	
DM74ALS168	TI	SN74ALS168B	
DM74ALS169	TI	SN74ALS169B	
DM74ALS174	Mitsubishi	M74ALS174	
	Signetics	74ALS174	
	TI	SN74ALS174	
DM74ALS175	Mitsubishi	M74ALS175	
	Signetics	74ALS175	
	TI	SN74ALS175	
DM74ALS190	TI	SN74ALS190	
DM74ALS191	Mitsubishi	M74ALS191	
	Signetics	74ALS191	
	TI	SN74ALS191	
DM74ALS192	Motorola	SN74ALS192	
	TI	SN74ALS192	
DM74ALS193	Mitsubishi	M74ALS193	
	Motorola	SN74ALS193	
	Signetics	74ALS193	
	TI	SN74ALS193	
DM74ALS20	Signetics	74ALS20	
	TI	SN74ALS20A	
DM74ALS21	TI	SN74ALS21	
DM74ALS22	TI	SN74ALS22B	
DM74ALS231	National	DM54ALS465	
		DM54AS1004	
	TI	SN54AS1004A	
		SN74ALS231	
DM74ALS240	Mitsubishi	M74ALS240	
	Motorola	SN74ALS240	
	Signetics	74ALS240	
	TI	SN74ALS240A	
DM74ALS241	Mitsubishi	M74ALS241	
	Motorola	SN74ALS241	
	Signetics	74ALS241	
	TI	SN74ALS241A	
DM74ALS242	Mitsubishi	M74ALS163	
	Motorola	SN74ALS242	
	TI	SN74ALS163	
		SN74ALS242B	
DM74ALS243	Motorola	SN74ALS243	
	TI	SN74ALS243A	
DM74ALS244	Mitsubishi	M74ALS244	
	Motorola	SN74ALS244	
	Signetics	74ALS244	
	TI	SN74ALS244A	
DM74ALS245	Mitsubishi	M74ALS245	
	Motorola	SN74ALS245	
	Signetics	74ALS245	
	TI	SN74ALS245A	
DM74ALS251	Mitsubishi	M74ALS251	
	Signetics	74ALS251	
	TI	SN74ALS251	
DM74ALS253	Mitsubishi	M74ALS253	
	Signetics	74ALS253	
	TI	SN74ALS253	
DM74ALS257	Mitsubishi	M74ALS257	
	Signetics	74ALS257	
	TI	SN74ALS257	
DM74ALS258	Mitsubishi	M74ALS258	
	Signetics	74ALS258	
	TI	SN74ALS258	
DM74ALS27	Signetics	74ALS27	
	TI	SN74ALS27	
DM74ALS273	Mitsubishi	M74ALS273	
	Motorola	SN74ALS273	
	Signetics	74ALS273	
	TI	SN74ALS273	
DM74ALS28	TI	SN74ALS28A	
DM74ALS30	Signetics	74ALS30	
	TI	SN74ALS30	
DM74ALS32	Motorola	SN74ALS32	
	Signetics	74ALS32	
	TI	SN74ALS32	
DM74ALS33	TI	SN74ALS33A	
DM74ALS352	TI	SN74ALS352	
DM74ALS353	TI	SN74ALS353	
DM74ALS37	TI	SN74ALS37A	
DM74ALS373	Mitsubishi	M74ALS373	
	Motorola	SN74ALS373	
	Signetics	74ALS373	
	TI	SN74ALS373	
DM74ALS374	Mitsubishi	M74ALS374	
	Motorola	SN74ALS374	
	Signetics	74ALS374	
	TI	SN74ALS374	
DM74ALS377	Motorola	SN74ALS377	
DM74ALS38	Signetics	74ALS38	
	TI	SN74ALS38A	
DM74ALS40	TI	SN74ALS40A	
DM74ALS465	TI	SN74ALS465A	
DM74ALS466	TI	SN74ALS466A	
DM74ALS467	TI	SN74ALS467A	
DM74ALS468	TI	SN74ALS468A	
DM74ALS518	TI	SN74ALS518	
DM74ALS519	TI	SN74ALS519	
DM74ALS521	TI	SN74ALS521	
DM74ALS522	TI	SN74ALS522	
DM74ALS533	TI	SN74ALS533	
DM74ALS534	TI	SN74ALS534	
DM74ALS563	Signetics	74ALS563	
	TI	SN74ALS563	
DM74ALS564	Signetics	74ALS64	
	TI	SN74ALS564	
DM74ALS573	Motorola	SN74ALS573	
	Signetics	74ALS73	
	TI	SN74ALS573	
DM74ALS574	Motorola	SN74ALS574	
	TI	SN74ALS574	
DM74ALS576	Motorola	SN74ALS576	
	TI	SN74ALS576	
DM74ALS580	Motorola	SN74ALS580	
	TI	SN74ALS580A	
DM74ALS620	Mitsubishi	M74ALS620	
	Motorola	SN74ALS620	
DM74ALS620		(Cont'd)	
	Signetics	74ALS620	
	TI	SN74ALS620A	
DM74ALS621	Motorola	SN74ALS621	
	TI	SN74ALS621A	
DM74ALS623	Mitsubishi	M74ALS623	
	Motorola	SN74ALS623	
	Signetics	74ALS623	
	TI	SN74ALS623A	
DM74ALS640	Motorola	SN74ALS640	
	TI	SN74ALS640A	
DM74ALS641	Motorola	SN74ALS641	
	TI	SN74ALS641A	
DM74ALS642	Motorola	SN74ALS642	
	TI	SN74ALS642A	
DM74ALS643	Motorola	SN74ALS643	
	TI	SN74ALS643A	
DM74ALS644	Motorola	SN74ALS644	
	TI	SN74ALS644A	
DM74ALS645	TI	SN74ALS645A	
DM74ALS646	Motorola	SN74ALS646	
DM74ALS647	Motorola	SN74ALS647	
DM74ALS648	Motorola	SN74ALS648	
DM74ALS649	Motorola	SN74ALS649	
DM74ALS689	TI	SN74ALS689	
DM74ALS690	Motorola	SN74ALS690	
DM74ALS691	Motorola	SN74ALS691	
DM74ALS692	Motorola	SN74ALS692	
DM74ALS693	Motorola	SN74ALS693	
DM74ALS697	Motorola	SN74ALS697	
DM74ALS698	Motorola	SN74ALS698	
DM74ALS699	Motorola	SN74ALS699	
DM74ALS74	Motorola	SN74ALS74	
	TI	SN74ALS74A	
DM74ALS804	TI	SN74ALS804A	
DM74ALS805	TI	SN74ALS805A	
DM74ALS808	TI	SN74ALS808A	
DM74ALS810	TI	SN74ALS810	
DM74ALS811	TI	SN74ALS811	
DM74ALS832	TI	SN74ALS832A	
DM74ALS873	Motorola	SN74ALS873	
	TI	SN74ALS873B	
DM74ALS874	Motorola	SN74ALS874	
	TI	SN74ALS874B	
DM74ALS876	Motorola	SN74ALS876	
	TI	SN74ALS876A	
DM74ALS880	Motorola	SN74ALS880	
	TI	SN74ALS880A	
		SN74ALS880B	
DM74AS00	TI	SN74AS00	
DM74AS02	TI	SN74AS02	
DM74AS04	TI	SN74AS04	
DM74AS08	TI	SN74AS08	
DM74AS10	TI	SN74AS10	
DM74AS1000	TI	SN74AS1000	
DM74AS1004	TI	SN74AS1004	
DM74AS1008	TI	SN74AS1008	
DM74AS1032	TI	SN74AS1032	
DM74AS1034	TI	SN74AS1034	
DM74AS1036	TI	SN74AS1036	
DM74AS109	TI	SN74AS109	
DM74AS11	TI	SN74AS11	
DM74AS151	TI	SN74AS151	
DM74AS153	TI	SN74AS153	
DM74AS157	TI	SN74AS157	
DM74AS158	TI	SN74AS158	
DM74AS160	TI	SN74AS160	
DM74AS161	TI	SN74AS161	
DM74AS162	TI	SN74AS162	
DM74AS163	TI	SN74AS163	
DM74AS168	TI	SN74AS168	
DM74AS169	TI	SN74AS169	
DM74AS174	TI	SN74AS174	
DM74AS175	TI	SN74AS175	
DM74AS181	TI	SN74AS181B	
DM74AS182	TI	SN74AS182	
DM74AS20	TI	SN74AS20	
DM74AS21	TI	SN74AS21	
DM74AS230	TI	SN74AS230	
DM74AS231	TI	SN74AS231	
DM74AS240	TI	SN74AS240	
DM74AS241	TI	SN74AS241	
DM74AS242	TI	SN74AS242	
DM74AS243	TI	SN74AS243	
DM74AS244	TI	SN74AS244	
DM74AS245	TI	SN74AS245	
DM74AS250	TI	SN74AS250	
DM74AS253	TI	SN74AS253	
DM74AS257	TI	SN74AS257	
DM74AS258	TI	SN74AS258	
DM74AS2620	TI	SN74AS2620	
DM74AS2623	TI	SN74AS2623	
DM74AS264	TI	SN74AS264	
DM74AS2640	**TI**	**SN74AS2640**	**(3228)**
DM74AS2645	**TI**	**SN74AS2645**	**(3228)**
DM74AS27	TI	SN74AS27	
DM74AS280	TI	SN74AS280	
DM74AS282	TI	SN74AS282	
DM74AS286	TI	SN74AS286	
DM74AS30	TI	SN74AS30	
DM74AS32	TI	SN74AS32	
DM74AS34	TI	SN74AS34	
DM74AS352	TI	SN74AS352	
DM74AS353	TI	SN74AS353	
DM74AS373	TI	SN74AS373	
DM74AS374	TI	SN74AS374	
DM74AS533	TI	SN74AS533	
DM74AS534	TI	SN74AS534	
DM74AS573	TI	SN74AS573	
DM74AS574	TI	SN74AS574	
DM74AS575	TI	SN74AS575	
DM74AS576	TI	SN74AS576	
DM74AS577	TI	SN74AS577	
DM74AS580	TI	SN74AS580	
DM74AS620	TI	SN74AS620	
DM74AS621	TI	SN74AS621	
DM74AS622	TI	SN74AS622	
DM74AS623	TI	SN74AS623	
DM74AS638	TI	SN74AS638	
DM74AS639	TI	SN74AS639	
DM74AS640	TI	SN74AS640	
DM74AS641	TI	SN74AS641	
DM74AS642	TI	SN74AS642	
DM74AS643	TI	SN74AS643	
DM74AS644	TI	SN74AS644	
DM74AS645	TI	SN74AS645	
DM74AS646	TI	SN74AS646	
DM74AS648	TI	SN74AS648	
DM74AS651	TI	SN74AS651	
DM74AS652	TI	SN74AS652	
DM74AS74	TI	SN74AS74	
DM74AS804A	TI	SN74AS804B	
DM74AS805A	TI	74AS805B	
DM74AS808A	TI	SN74AS808B	
DM74AS810	TI	SN74AS810	
DM74AS811	TI	SN74AS811	
DM74AS873	TI	SN74AS873	
DM74AS874	TI	SN74AS874	
DM74AS876	TI	SN74AS876	
DM74AS878	TI	SN74AS878	
DM74AS879	TI	SN74AS879	
DM74AS880	TI	SN74AS880	
DM74AS881A	TI	SN74AS881A	
DM74AS95	TI	SN74AS95	
DM74H01	National	DM74H08	
DM74H08	National	DM74H01	
DM74H10	TI	SN74H10	
DM74L164	National	DM86L70	
DM74L192	National	DM85L60	
DM74L193	National	DM85L63	
DM74LS00	Fairchild	74LS00	
	Hitachi	HD74LS00	
	Motorola	SN74LS00	
	Panasonic	DN74LS00	
	SGS	T74LS00	
	Signetics	**74LS00**	**(3003)**
	TI	SN74LS00	
DM74LS01	Fairchild	74LS01	
	Hitachi	HD74LS01	
	Motorola	SN74LS01	
	Panasonic	DN74LS01	
	Signetics	**74LS01**	**(3003)**
	TI	SN74LS01	
DM74LS02	Fairchild	74LS02	
	Hitachi	HD74LS02	
	Motorola	SN74LS02	
	Panasonic	DN74LS02	
	SGS	T74LS02	
	Signetics	**74LS02**	**(3003)**
	TI	SN74LS02	
DM74LS03	Fairchild	74LS03	
	Hitachi	HD74LS03	
	Motorola	SN74LS03	
	Panasonic	DN74LS03	
	SGS	T74LS03	
	TI	SN74LS03	
DM74LS04	Fairchild	74LS04	
	Hitachi	HD74LS04	
	Motorola	SN74LS04	
	Panasonic	DN74LS04	
	SGS	T74LS04	

(Continued)

(Continued)

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM74LS04			(Cont'd)
	Signetics	**74LS04**	**(3003)**
	TI	SN74LS04	
DM74LS05	Fairchild	74LS05	
	Hitachi	HD74LS05	
	Motorola	SN74LS05	
	Panasonic	DN74LS05	
	SGS	T74LS05	
	Signetics	**74LS05**	**(3003)**
	TI	SN74LS05	
DM74LS08	Fairchild	74LS08	
	Hitachi	HD74LS08	
	Motorola	SN74LS08	
	Panasonic	DN74LS08	
	SGS	T74LS08	
	Signetics	**74LS08**	**(3003)**
	TI	SN74LS08	
DM74LS09	Fairchild	74LS09	
	Hitachi	HD74LS09	
	Motorola	SN74LS09	
	Panasonic	DN74LS09	
	SGS	T74LS09	
	TI	SN74LS09	
DM74LS10	Fairchild	74LS10	
	Hitachi	HD74LS10	
	Motorola	SN74LS10	
	Panasonic	DN74LS10	
	SGS	T74LS10	
	Signetics	**74LS10**	**(3003)**
	TI	SN74LS10	
DM74LS109	Fairchild	74LS109	
	Hitachi	HD74LS109	
	Motorola	SN74LS109	
	Panasonic	DN74LS109	
	SGS	T74LS109	
	Signetics	**74LS109**	**(3003)**
	TI	SN74LS109A	
DM74LS11	Fairchild	74LS11	
	Hitachi	HD74LS11	
	Motorola	SN74LS11	
	Panasonic	DN74LS11	
	SGS	T74LS11	
	Signetics	**74LS11**	**(3003)**
	TI	SN74LS11	
DM74LS112	Fairchild	74LS112	
	Hitachi	HD74LS112	
	Motorola	SN74LS112A	
	Panasonic	DN74LS112	
	SGS	T74LS112	
	Signetics	**74LS112**	**(3003)**
	TI	SN74LS112A	
DM74LS113	Hitachi	HD74LS113	
	Motorola	SN74LS113A	
	Panasonic	DN74LS113	
	SGS	T74LS113	
	Signetics	**74LS113**	**(3003)**
	TI	SN74LS113A	
DM74LS114	Hitachi	HD74LS114	
	Motorola	SN74LS114A	
	Panasonic	DN74LS114	
	SGS	T74LS114	
	TI	SN74LS114A	
DM74LS12	Hitachi	HD74LS12	
	Motorola	SN74LS12	
	Panasonic	DN74LS12	
	Signetics	74LS12	
	TI	SN74LS12	
DM74LS122	Motorola	SN74LS122	
	TI	SN74LS122	
DM74LS123	Hitachi	HD74LS123	
	Motorola	SN74LS123	
	Panasonic	DN74LS123	
	TI	SN74LS123	
DM74LS125	Fairchild	74LS125A	
	Motorola	SN74LS125A	
	Panasonic	DN74LS125A	
	SGS	T74LS125	
	Signetics	**74LS125A**	**(3003)**
	TI	SN74LS125A	
DM74LS126	Fairchild	74LS126	
	Motorola	SN74LS126A	
	SGS	T74LS126	
	Signetics	**74LS126A**	**(3003)**
	TI	SN74LS126A	
DM74LS13	Fairchild	74LS13	
	Hitachi	HD74LS13	
	Motorola	SN74LS13	
	Panasonic	DN74LS13	
	SGS	T74LS13	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM74LS13			(Cont'd)
	Signetics	**74LS13**	**(3003)**
	TI	SN74LS13	
DM74LS132	Fairchild	74LS132	
	Hitachi	HD74LS132	
	Motorola	SN74LS132	
	Panasonic	DN74LS132	
	SGS	T74LS132	
	Signetics	**74LS132**	**(3003)**
	TI	SN74LS132	
DM74LS136	Fairchild	74LS136	
	Hitachi	HD74LS136	
	Motorola	SN74LS136	
	Panasonic	DN74LS136	
	SGS	T74LS136	
	Signetics	**74LS136**	**(3003)**
	TI	SN74LS136	
DM74LS138	Fairchild	74LS138	
	Hitachi	HD74LS138	
	Motorola	SN74LS138	
	Panasonic	DN74LS138	
	SGS	T74LS138	
	Signetics	**74LS138**	**(3003)**
	TI	SN74LS138	
DM74LS139	Fairchild	74LS139	
	Hitachi	HD74LS139	
	Motorola	SN74LS139	
	Panasonic	DN74LS139	
	SGS	T74LS139	
	Signetics	**74LS139**	**(3003)**
	TI	SN74LS139A	
DM74LS14	Fairchild	74LS14	
	Hitachi	HD74LS14	
	Motorola	SN74LS14	
	Panasonic	DN74LS14	
	Signetics	**74LS14**	**(3003)**
	TI	SN74LS14	
DM74LS15	Fairchild	74LS15	
	Motorola	SN74LS15	
	Panasonic	DN74LS15	
	SGS	T74LS15	
	TI	SN74LS15	
DM74LS151	Fairchild	74LS151	
	Hitachi	HD74LS151	
		HD74LS151A	
	Motorola	SN74LS151	
	Panasonic	DN74LS151	
	SGS	T74LS151	
	Signetics	**74LS151**	**(3003)**
	TI	SN74LS151	
DM74LS153	Fairchild	74LS153	
	Hitachi	HD74LS153	
	Motorola	SN74LS153	
	Panasonic	DN74LS153	
	SGS	T74LS153	
	Signetics	**74LS153**	**(3003)**
	TI	SN74LS153	
DM74LS154	**Signetics**	**74LS154**	**(3003)**
DM74LS155	Fairchild	74LS155	
	Hitachi	HD74LS155	
	Motorola	SN74LS155	
	Panasonic	DN74LS155	
	Signetics	**74LS155**	**(3003)**
	TI	SN74LS155A	
DM74LS156	Fairchild	74LS156	
	Hitachi	HD74LS156	
	Motorola	SN74LS156	
	Panasonic	DN74LS156	
	SGS	T74LS156	
	Signetics	**74LS156**	**(3003)**
	TI	SN74LS156	
DM74LS157	Fairchild	74LS157	
	Hitachi	HD74LS157	
	Motorola	SN74LS157	
	Panasonic	DN74LS157	
	SGS	T74LS157	
	Signetics	**74LS157**	**(3003)**
	TI	SN74LS157	
DM74LS158	Fairchild	74LS158	
	Hitachi	HD74LS158	
	Motorola	SN74LS158	
	Panasonic	DN74LS158	
	SGS	T74LS158	
	Signetics	**74LS158**	**(3003)**
	TI	SN74LS158	
DM74LS160	Fairchild	74LS160	
	Hitachi	HD74LS160A	
	Motorola	SN74LS160A	
	Panasonic	DN74LS160A	
	SGS	T74LS160	
	Signetics	**74LS160**	**(3003)**
		74LS160A	**(3003)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM74LS160			(Cont'd)
	TI	SN74LS160A	
DM74LS161	Fairchild	74LS161A	
	Hitachi	HD74LS161A	
	Motorola	SN74LS161A	
	Panasonic	DN74LS161A	
	SGS	T74LS161	
	Signetics	**74LS161A**	**(3003)**
	TI	SN74LS161A	
DM74LS162	Fairchild	74LS162	
	Hitachi	HD74LS162A	
	Motorola	SN74LS162A	
	Panasonic	DN74LS162A	
	SGS	T74LS162	
	Signetics	**74LS162A**	**(3003)**
	TI	SN74LS162A	
DM74LS163	Fairchild	74LS163	
	Hitachi	HD74LS163	
		HD74LS163A	
	Motorola	SN74LS163A	
	Panasonic	DN74LS163A	
	SGS	T74LS163	
	Signetics	**74LS163A**	**(3003)**
	TI	SN74LS163A	
DM74LS164	Fairchild	74LS164	
	Hitachi	HD74LS164	
	Motorola	SN74LS164A	
	Panasonic	DN74LS164	
	SGS	T74LS164	
	Signetics	**74LS164**	**(3003)**
		74LS164A	**(3003)**
	TI	SN74LS164	
DM74LS169	Fairchild	74LS169	
	Hitachi	HD74LS169	
	Motorola	SN74LS169	
	SGS	T74LS169	
	Signetics	**74LS169A**	**(3003)**
	TI	SN74LS169	
DM74LS170	Fairchild	74LS170	
	Motorola	SN74LS170	
	Panasonic	DN74LS170	
	SGS	T74LS170	
	Signetics	**74LS170**	**(3003)**
	TI	SN74LS170	
DM74LS173	Fairchild	74LS173	
	Motorola	SN74LS173A	
	Panasonic	DN74LS173	
	SGS	T74LS173	
	Signetics	**74LS173**	**(3003)**
	TI	SN74LS173A	
DM74LS174	Fairchild	74LS174	
	Hitachi	HD74LS174	
	Motorola	SN74LS174	
	Panasonic	DN74LS174	
	SGS	T74LS174	
	Signetics	**74LS174**	**(3003)**
	TI	SN74LS174	
DM74LS189	Cypress	CY74S189	
DM74LS190	Fairchild	74LS190	
	Hitachi	HD74LS190	
	Motorola	SN74LS190	
	Panasonic	DN74LS190	
	SGS	T74LS190	
	TI	SN74LS190	
DM74LS191	Fairchild	74LS191	
	Hitachi	HD74LS191	
	Motorola	SN74LS191	
	Panasonic	DN74LS191	
	SGS	T74LS191	
	Signetics	**74LS191**	**(3003)**
	TI	SN74LS191	
DM74LS192	Fairchild	74LS192	
	Hitachi	HD74LS192	
	Motorola	SN74LS192	
	Panasonic	DN74LS192	
	SGS	T74LS192	
	Signetics	**74LS192**	**(3003)**
	TI	SN74LS192	
DM74LS193	Fairchild	74LS193	
	Hitachi	HD74LS193	
	Motorola	SN74LS193	
	Panasonic	DN74LS193	
	SGS	T74LS193	
	Signetics	**74LS193**	**(3003)**
	TI	SN74LS193	
DM74LS194	Fairchild	74LS194A	
	Hitachi	HD74LS194A	
	Motorola	SN74LS194A	
	Panasonic	DN74LS194A	
	SGS	T74LS194A	
	Signetics	**74LS194A**	**(3003)**
	TI	SN74LS194A	

Manufacturer Device	Replacement Source	Device	IC Master Page
DM74LS195	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
DM74LS196	Fairchild	74LS196	
	Hitachi	HD74LS196	
	Motorola	SN74LS196	
	Panasonic	DN74LS196	
	SGS	T74LS196	
	Signetics	N82S80	
	TI	SN74LS196	
DM74LS197	Fairchild	74LS197	
	Hitachi	HD74LS197	
	Motorola	SN74LS197	
	Panasonic	DN74LS197	
	SGS	T74LS197	
	Signetics	**74LS197**	**(3003)**
	TI	SN74LS197	
DM74LS20	Fairchild	74LS20	
	Hitachi	HD74LS20	
	Motorola	SN74LS20	
	Panasonic	DN74LS20	
	SGS	T74LS20	
	Signetics	**74LS20**	**(3003)**
	TI	SN74LS20	
DM74LS21	Fairchild	74LS21	
	Hitachi	HD74LS21	
	Motorola	SN74LS21	
	Panasonic	DN74LS21	
	SGS	T74LS21	
	Signetics	**74LS21**	**(3003)**
	TI	SN74LS21	
DM74LS22	Hitachi	HD74LS22	
	Motorola	SN74LS22	
	Panasonic	DN74LS22	
	SGS	T74LS22	
DM74LS221	Fairchild	74LS221	
	Hitachi	HD74LS221	
	Motorola	SN74LS221	
	TI	SN74LS221	
DM74LS247	Fairchild	74LS247	
	Hitachi	HD74LS247	
	Motorola	SN74LS247	
	TI	SN74LS247	
DM74LS248	Fairchild	74LS248	
	Hitachi	HD74LS248	
	Motorola	SN74LS248	
	SGS	T74LS248	
DM74LS249	Fairchild	74LS249	
	Hitachi	HD74LS249	
	Motorola	SN74LS249	
	SGS	T74LS249	
DM74LS251	Fairchild	74LS251	
	Hitachi	HD74LS251	
	Motorola	SN74LS251	
	Panasonic	DN74LS251	
	SGS	T74LS251	
	Signetics	**74LS251**	**(3003)**
	TI	SN74LS251	
DM74LS253	Fairchild	74LS253	
	Hitachi	HD74LS253	
	Motorola	SN74LS253	
	National	DM8214	
	Panasonic	DN74LS253	
	SGS	T74LS253	
	Signetics	**74LS253**	**(3003)**
	TI	SN74LS253	
DM74LS257	Fairchild	74LS257A	
	Hitachi	HD74LS257	
	Motorola	SN74LS257A	
	SGS	T74LS257	
	Signetics	**74LS257**	**(3003)**
		74LS257A	**(3003)**
	TI	SN74LS257B	
DM74LS258	Fairchild	74LS258A	
	Hitachi	HD74LS258	
	Motorola	SN74LS258A	
	Panasonic	DN74LS258A	
	SGS	T74LS258	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM74LS258			(Cont'd)
	Signetics	**74LS258**	**(3003)**
	TI	SN74LS258B	
DM74LS26	Fairchild	74LS26	
	Hitachi	HD74LS26	
	Motorola	SN74LS26	
	Panasonic	DN74LS26	
	SGS	T74LS26	
	Signetics	**74LS26**	**(3003)**
	TI	SN74LS26	
DM74LS266	Fairchild	74LS266	
	Motorola	SN74LS266	
	Panasonic	DN74LS266	
	Raytheon	RC8242	
	SGS	T74LS266	
	Signetics	**74LS266**	**(3003)**
		N8242	**(3022)**
	TI	SN74LS266	
DM74LS27	Fairchild	74LS27	
	Hitachi	HD74LS27	
	Motorola	SN74LS27	
	Panasonic	DN74LS27	
	SGS	T74LS27	
	Signetics	**74LS27**	**(3003)**
	TI	SN74LS27	
DM74LS279	Fairchild	74LS279	
	Hitachi	HD74LS279	
	Motorola	SN74LS279	
	Panasonic	DN74LS279	
	SGS	T74LS279	
	Signetics	74LS279	
	TI	SN74LS279A	
DM74LS283	Fairchild	74LS283	
	Hitachi	HD74LS283	
		HD74LS283A	
	Motorola	SN74LS283	
	Panasonic	DN74LS283	
	SGS	T74LS283	
	Signetics	**74LS283**	**(3003)**
	TI	SN74LS283	
DM74LS290	Fairchild	74LS290	
	Hitachi	HD74LS290	
	Motorola	SN74LS290	
	Panasonic	DN74LS290	
	SGS	T74LS290	
	Signetics	**74LS290**	**(3003)**
	TI	SN74LS290	
DM74LS293	Fairchild	74LS293	
	Hitachi	HD74LS293	
	Motorola	SN74LS293	
	Panasonic	DN74LS293	
	SGS	T74LS293	
	Signetics	**74LS293**	**(3003)**
	TI	SN74LS293	
DM74LS30	Fairchild	74LS30	
	Hitachi	HD74LS30	
	Motorola	SN74LS30	
	Panasonic	DN74LS30	
	SGS	T74LS30	
	Signetics	**74LS30**	**(3003)**
	TI	SN74LS30	
DM74LS352	Fairchild	74LS352	
	Motorola	SN74LS352	
	SGS	T74LS352	
	TI	SN74LS352	
DM74LS353	Fairchild	74LS353	
	Motorola	SN74LS353	
	SGS	T74LS353	
	TI	SN74LS353	
DM74LS365	Fairchild	74LS365A	
	Motorola	SN74LS365A	
	Panasonic	DN74LS365A	
	SGS	T74LS365	
		T74LS365A	
	Signetics	**74LS365**	**(3003)**
		74LS365A	**(3003)**
	TI	SN74LS365A	
DM74LS366	Fairchild	74LS366A	
	Motorola	SN74LS366A	
	Panasonic	DN74LS366A	
	SGS	T74LS366	
		T74LS366A	
	Signetics	**74LS366A**	**(3003)**
	TI	SN74LS366A	
DM74LS367	Fairchild	74LS367A	
	Hitachi	HD74LS367	
		HD74LS367A	
	Motorola	SN74LS367A	
	Panasonic	DN74LS367A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM74LS367			(Cont'd)
	SGS	T74LS367	
		T74LS367A	
	Signetics	**74LS367**	**(3003)**
		74LS367A	**(3003)**
	TI	SN74LS367A	
DM74LS368	Fairchild	74LS368A	
	Hitachi	HD74LS368	
	Motorola	SN74LS368A	
	Panasonic	DN74LS368A	
	SGS	T74LS368	
	Signetics	**74LS368**	**(3003)**
		74LS368A	**(3003)**
	TI	SN74LS368A	
DM74LS37	Fairchild	74LS37	
	Hitachi	HD74LS37	
	Motorola	SN74LS37	
	Panasonic	DN74LS37	
	SGS	T74LS37	
	Signetics	74LS37	
	TI	SN74LS37	
DM74LS374	Fairchild	74LS374	
	Motorola	SN74LS374	
	SGS	T74LS374	
	Signetics	**74LS374**	**(3003)**
	TI	SN74LS374	
DM74LS38	Fairchild	74LS38	
	Hitachi	HD74LS38	
	Motorola	SN74LS38	
	Panasonic	DN74LS38	
	SGS	T74LS38	
	Signetics	**74LS38**	**(3003)**
	TI	SN74LS38	
DM74LS386	Hitachi	HD74LS386	
	Motorola	SN74LS386	
	Panasonic	DN74LS386	
	TI	SN74LS386A	
DM74LS395	Fairchild	74LS395	
	Panasonic	DN74LS395A	
	SGS	T74LS395	
	Signetics	**74LS395**	**(3003)**
	TI	SN74LS395A	
DM74LS40	Fairchild	74LS40	
	Hitachi	HD74LS40	
	Motorola	SN74LS40	
	Panasonic	DN74LS40	
	SGS	T74LS40	
	Signetics	**74LS40**	**(3003)**
	TI	SN74LS40	
DM74LS42	Fairchild	74LS42	
	Hitachi	HD74LS42	
	Motorola	SN74LS42	
	Panasonic	DN74LS42	
	SGS	T74LS42	
	Signetics	**74LS42**	**(3003)**
	TI	SN74LS42	
DM74LS47	Fairchild	74LS47	
	Hitachi	HD74LS47	
	Motorola	SN74LS47	
	SGS	T74LS47	
	TI	SN74LS47	
DM74LS48	Fairchild	74LS48	
	Hitachi	HD74LS48	
	Motorola	SN74LS48	
	SGS	T74LS48	
	Signetics	74LS48	
DM74LS49	Hitachi	HD74LS49	
	Motorola	SN74LS49	
	SGS	T74LS49	
	TI	SN74LS49	
DM74LS51	Fairchild	74LS51	
	Hitachi	HD74LS51	
	Motorola	SN74LS51	
	Panasonic	DN74LS51	
	SGS	T74LS51	
	Signetics	**74LS51**	**(3003)**
	TI	SN74LS51	
DM74LS54	Fairchild	74LS54	
	Hitachi	HD74LS54	
	Motorola	SN74LS54	
	Panasonic	DN74LS54	
	SGS	T74LS54	
	Signetics	**74LS54**	**(3003)**
	TI	SN74LS54	
DM74LS55	Fairchild	74LS55	
	Hitachi	HD74LS55	
	Motorola	SN74LS55	
	Panasonic	DN74LS55	
	SGS	T74LS55	
	TI	SN74LS55	
DM74LS670	Fairchild	74LS670	
	Motorola	SN74LS670	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM74LS670			(Cont'd)
	SGS	T74LS670	
	Signetics	**74LS670**	**(3003)**
	TI	SN74LS670	
DM74LS73	Hitachi	HD74LS73	
	Motorola	SN74LS73A	
	Panasonic	DN74LS73	
	Signetics	**74LS73**	**(3003)**
	TI	SN74LS73A	
DM74LS74	Fairchild	74LS74	
	Hitachi	HD74LS74	
		HD74LS74A	
	Motorola	SN74LS74A	
	Panasonic	DN74LS74A	
	SGS	T74LS74	
	Signetics	74LS74	
	TI	SN74LS74A	
DM74LS75	Hitachi	HD74LS75	
	Motorola	SN74LS75	
	Panasonic	DN74LS75	
	Signetics	**74LS75**	**(3003)**
	TI	SN74LS75	
DM74LS76	Hitachi	HD74LS76	
	Motorola	SN74LS76A	
	Panasonic	DN74LS76	
	Signetics	**74LS76**	**(3003)**
	TI	SN74LS76A	
DM74LS78	Hitachi	HD74LS78	
	Motorola	SN74LS78A	
	Panasonic	DN74LS78	
	TI	SN74LS78A	
DM74LS797	Motorola	81LS97	
DM74LS798	Motorola	81LS98	
DM74LS83A	Fairchild	74LS83A	
	Hitachi	HD74LS183A	
		HD74LS83A	
	Motorola	SN74LS83A	
	Panasonic	DN74LS83A	
	SGS	T74LS83	
	Signetics	**74LS83**	**(3003)**
		74LS83A	**(3003)**
	TI	SN74LS83A	
DM74LS85	Fairchild	74LS85	
	Hitachi	HD74LS85	
	Motorola	SN74LS85	
	Panasonic	DN74LS85	
	Signetics	**74LS85**	**(3003)**
	TI	SN74LS85	
DM74LS86	Fairchild	74LS86	
	Hitachi	HD74LS86	
	Motorola	SN74LS86	
	Panasonic	DN74LS86	
	SGS	T74LS86	
	Signetics	**74LS86**	**(3003)**
	TI	SN74LS86A	
DM74LS90	Fairchild	74LS90	
	Motorola	SN74LS90	
	Panasonic	DN74LS90	
	SGS	T74LS90	
	Signetics	**74LS90**	**(3003)**
	TI	SN74LS90	
DM74LS92	Hitachi	HD74LS92	
	Motorola	SN74LS92	
	Panasonic	DN74LS92	
	SGS	T74LS92	
	Signetics	**74LS92**	**(3003)**
	TI	SN74LS92	
DM74LS93	Hitachi	HD74LS93	
	Motorola	SN74LS93	
	Panasonic	DN74LS93	
	SGS	T74LS93	
	Signetics	**74LS93**	**(3003)**
	TI	SN74LS93	
DM74LS95B	Fairchild	74LS95B	
	Hitachi	HD74LS95B	
	Motorola	SN74LS95B	
	Panasonic	DN74LS95B	
	SGS	T74LS95	
		T74LS95B	
	Signetics	**74LS95B**	**(3003)**
	TI	SN74LS95B	
DM74S00	Fairchild	74S00	
	Signetics	**74S00**	**(3003)**
	TI	SN74S00	
DM74S02	Fairchild	74S02	
	Signetics	**74S02**	**(3003)**
	TI	SN74S02	
		SN74S32	
DM74S03	Fairchild	74S03	
	Signetics	**74S03**	**(3003)**
	TI	SN74S03	
DM74S04	Fairchild	74S04	
	Signetics	**74S04**	**(3003)**
	TI	SN74S04	
DM74S05	Fairchild	74S05	
	Signetics	**74S05**	**(3003)**
	TI	SN74S05	
DM74S10	Fairchild	74S10	
	Signetics	**74S10**	**(3003)**
	TI	SN74S10	
DM74S11	Fairchild	74S11	
	Signetics	**74S11**	**(3003)**
	TI	SN74S11	
DM74S112	Fairchild	74S112	
	Motorola	SN74S112	
	Signetics	**74S112**	**(3003)**
	TI	SN74S112	
DM74S113	**Signetics**	**74S113**	**(3003)**
	TI	SN74S113	
DM74S114	TI	SN74S114	
DM74S133	Fairchild	74S133	
	Signetics	**74S133**	**(3003)**
	TI	SN74S133	
DM74S134	**Signetics**	**74S134**	**(3003)**
	TI	SN74S134	
DM74S135	**Signetics**	**74S135**	**(3003)**
	TI	SN74S135	
DM74S138	AMD	SN74S138	
	Fairchild	74S138	
	Signetics	**74S138**	**(3003)**
	TI	SN74S138	
DM74S140	**Signetics**	**74S140**	**(3003)**
	TI	SN74S140	
DM74S15	TI	SN74S15	
DM74S182	Fairchild	74S182	
	MMI	SN74S182	
	Signetics	**74S182**	**(3003)**
	TI	SN74S182	
DM74S188	AMD	AM27S18	
	Fujitsu	MB7111	
	Signetics	N82S23	
	TI	28SA030-25	
DM74S189	AMD	AM27LS03	
		AM27S03	
		SN74S189	
	Cypress	27LS03M	
		CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**
	National	DM7599	
		DM8599	
DM74S20	Fairchild	74S20	
	Signetics	**74S20**	**(3003)**
	TI	SN74S20	
DM74S22	TI	SN74S22	
DM74S251	AMD	SN74S251	
	Signetics	**74S251**	**(3003)**
	TI	SN74S251	
DM74S280	**Signetics**	**74S280**	**(3003)**
	TI	SN74S280	
DM74S287	AMD	27S21	
		AM27S21	
	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
	Signetics	N82S129A	
		S82S5129	
DM74S288	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
DM74S289	Fairchild	7489	
	National	DM7489	
		DM8589	
		MM74S289	
	Signetics	74S289	
		N82S25	
DM74S30	Fairchild	74S30	
	TI	SN74S30	
DM74S387	Fujitsu	MB7113	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM74S40	Fairchild	74S40	
	Signetics	**74S40**	**(3003)**
	TI	SN74S40	
DM74S472	AMD	AM27S29	
	Fujitsu	MB7124	
	MMI	635481	
		63S481	
	Raytheon	**29623**	**(2985)**
	Signetics	N825147A	
		N82S147	
DM74S473	AMD	AM27S28	
DM74S474	AMD	AM27S31	
	MMI	63S485	
	National	74S474	
	Signetics	N82S141	
DM74S475	AMD	AM27S30	
	National	DM77S475	
		DM87S475	
DM74S51	Fairchild	74S51	
	Signetics	**74S51**	**(3003)**
	TI	SN74S51	
DM74S570	AMD	AM27S12	
	Fujitsu	MB7115	
	MMI	63S240	
	National	74S570	
	Signetics	N82S130	
		S82S130	
DM74S571	AMD	AM27S13	
	Fujitsu	MB7116	
	MMI	63S241	
	National	74S571A	
	Signetics	N82S131	
DM74S573	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
	National	74S573	
	NEC	μPB426	
	Signetics	N82S137	
DM74S65	TI	SN74S65	
DM74S74	Fairchild	74S74	
	Hitachi	HD74S74	
	Signetics	**74S74**	**(3003)**
	TI	SN74S74	
DM74S86	Fairchild	74S86	
	Signetics	**74S86**	**(3003)**
	TI	SN74S86	
DM7551	Fairchild	54173	
	National	DM54173	
	Raytheon	RM8T10	
	TI	SN54173	
DM7560	National	DM54192	
	TI	SN54192	
DM7563	National	DM54193	
	TI	SN54193	
DM7570	Fairchild	54164	
	National	DM54164	
	Signetics	54164	
	TI	SN54164	
DM7577	AMD	AM27518	
		AM27LS18	
	National	74S188	
		DM54S188	
	Signetics	N82S23	
		S82S23	
	TI	28SA030-25	
		38SA030	
		38SA030-25	
DM7578	National	DM54S288	
DM7590	Fairchild	54165	
	National	DM54165	
	Signetics	54165	
	TI	SN54165	
DM7599	AMD	AM27LS03	
		AM27S03	
		SN74S189	
	Cypress	27LS03M	
		CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**
	National	DM74S189	
		DM8599	
DM76L70	National	DM54L164	
DM77S181	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM77S181			(Cont'd)
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
DM77S184	Fujitsu	MB7127	
DM77S185	**Raytheon**	**29651AM**	**(2985)**
	Signetics	S82S185	
DM77S190	AMD	AM27S190	
	Fujitsu	MB7137	
	Hitachi	HN25168	
	National	DM87S190	
DM77S191A	Thomson	TS71191	
DM77S195	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
DM77S281	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
DM77S291	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
DM77S291A	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM77S291A			(Cont'd)
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
DM77S295	National	DM54S475	
		DM87S295	
DM77S401	**Cypress**	**CY7C401**	**(2567)**
	Fairchild	74F413	
	IDT	**IDT72401**	**(2805, 2833)**
	MMI	57401	
		67C401	
		75401	
		C57401	
		C57L401	
		C67401	
		C67L401	
DM77S402	**Cypress**	**CY7C402**	**(2567)**
	IDT	**IDT72402**	**(2805, 2833)**
	MMI	57402	
		67C402	
		C57402	
		C57L402	
		C67402	
		C67L402	
DM77S475	AMD	AM27S30	
	National	DM74S475	
		DM87S475	
DM8093	Fairchild	74125	
	National	DM74125	
	Signetics	**74125**	**(3003)**
	TI	SN74125	
DM8094	National	DM74126	
	Signetics	**74126**	**(3003)**
	TI	SN74126	
DM8095	**Motorola**	**MC6885**	**(2951)**
		MC8T95	**(2951)**
	Signetics	**N8T95**	**(3022)**
	TI	SN74365	
DM8121	National	DM74251	
	TI	SN74251	
DM8160	National	DM7160	
DM8214	Fairchild	74LS253	
	Hitachi	HD74LS253	
	Motorola	SN74LS253	
	National	DM74LS253	
	Panasonic	DN74LS253	
	SGS	T74LS253	
	Signetics	**74LS253**	**(3003)**
	TI	SN74LS253	
DM8280	Fairchild	96176	
	National	DM74176	
	Raytheon	RC8280	
	Signetics	74176	
	TI	SN74176	
DM8281	National	DM74177	
	Raytheon	RC8281	
	Signetics	74177	
	TI	SN74177	
DM8290	National	DM74196	
	Raytheon	RC8290	
	Signetics	74196	
	TI	SN74196	
DM8291	Fairchild	74197	
	National	DM74197	
	Raytheon	RC8291	
	Signetics	74197	
	TI	SN74197	
DM8301	Fairchild	9031	
		9301	
	National	DM9301	
	Raytheon	RC8252	
	Signetics	S8252	
DM8309	Fairchild	9309	
	National	DM9309	
DM8311	Fairchild	9311	
	National	DM7213	
		DM74154	
	Raytheon	RC9311	
	Signetics	**74154**	**(3003)**
	TI	SN74154	
DM8312	Fairchild	9312	
	Raytheon	RC8230	
		RC9312	

Manufacturer Device	Replacement Source	Device	IC Master Page
DM8318	National	DM74148	
	Signetics	**74148**	**(3003)**
		N82148	
	TI	SN74148	
DM8322	Fairchild	9322	
	Raytheon	RC9322	
DM8551	Fairchild	74173	
	National	DM74173	
	Raytheon	RC8T10	
	Signetics	**N8T10**	**(3022)**
	TI	SN74173	
DM8560	National	DM74192	
	Raytheon	RC9360	
	Signetics	**74192**	**(3003)**
	TI	SN74192	
DM8578	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
DM8589	Fairchild	7489	
	National	DM7489	
		DM74S289	
		MM74S289	
	Signetics	74S289	
		N82S25	
DM8590	Fairchild	74165	
	National	DM74165	
	Signetics	**74165**	**(3003)**
	TI	SN74165	
DM8599	AMD	AM27LS03	
		AM27S03	
		SN74S189	
	Cypress	27LS03M	
		CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**
	National	DM74S189	
		DM7599	
DM85L60	National	DM74L192	
DM85L63	National	DM74L193	
DM8601	Fairchild	9601	
	National	DM9601	
	Raytheon	RF8601	
		RF9601	
	Signetics	N8T22	
		S8T22	
	TI	SN74122	
DM8602	Fairchild	9602	
	National	DM9602	
	Raytheon	RF8602	
		RF9602	
DM86L70	National	DM74L164	
DM878291	AMD	AM27S191	
		AM27S291	
		AM27S291A	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
	Motorola	MCM76	
	National	87S291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
DM87S180	AMD	AM27S180	
	Fujitsu	MB7131	
	National	DM87S229	
DM87S184	AMD	AM27S184	
DM87S185	AMD	27S185	
		AM2725S291	
		AM27S185	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM87S185			(Cont'd)
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**
	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
DM87S190	AMD	AM27S190	
	Fujitsu	MB7137	
	Hitachi	HN25168	
	National	DM77S190	
DM87S191	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
DM87S195	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
DM87S229	AMD	AM27S180	
	Fujitsu	MB7131	
	National	DM87S180	
DM87S281	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
DM87S291	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DM87S291			(Cont'd)
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
DM87S295	National	DM54S475	
		DM77S295	
DM87S321	AMD	27S43	
		AM27S43	
	Fujitsu	MB7142	
	MMI	53S3281	
		63S3281	
	National	77S321	
		87S321	
	Raytheon	**29671**	**(2985)**
	Waferscale	**WS57C43**	**(3376)**
DM87S402	**Cypress**	**CY7C402**	**(2567)**
	MMI	67402	
DM87S475	AMD	AM27S30	
	National	DM74S475	
		DM77S475	
DM87SR181	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
		S82HS189	
DM87SR25	AMD	AM21L49	
		AM27S25	
	Cypress	**CY7C225**	**(2565)**
	Fujitsu	MB7226	
	MMI	53RA481	
		63RA481	
	Motorola	MCM27S25	
	National	DM87SR474	
DM87SR474	AMD	AM21L49	
		AM27S25	
	Cypress	**CY7C225**	**(2565)**
	Fujitsu	MB7226	
	MMI	53RA481	
		63RA481	
	Motorola	MCM27S25	
	National	DM87SR25	
DM8810	Fairchild	μA75451	
	National	DM7426	
	Signetics	**7426**	**(3003)**
	TI	SN7426	
DM8842	Fairchild	7442	
	National	DM7442	
	Signetics	**7442**	**(3003)**
	TI	SN7442A	
DM8875A	TI	SN74284	
DM8875B	TI	SN74285	
DM8885	Dionics	DI230	
	ITT	505	
		ITT505	
	National	DM8889	
		DS8885	
DM8887	Dionics	DI513B	
		DI514	
		DI514B	
	Exar	XR6118	
	Motorola	MC3490	
	National	DS8887	
	OKI	MSL912	
	Sanyo	LB1290	
	Signetics	NE594	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
	Toshiba	TD62781	
DM8889	Dionics	DI230	
	ITT	505	
		ITT505	
	National	DM8885	
		DS8885	
DM8891	Dionics	DI604	
	National	DS8891	
	Sprague	UHPD495	

Manufacturer Device	Replacement Source	Device	IC Master Page
DM8897	Dionics	DI804	
	National	DS8897	
DM9004C	Fairchild	7420	
		9004	
	National	DM7420	
	Signetics	**7420**	**(3003)**
	TI	SN7420	
	Toshiba	TC7420	
DM9016C	Fairchild	5404	
		9016	
	National	DM5404	
DM9093	Fairchild	9093	
	Motorola	MC853	
		MC953	
	Raytheon	RM993	
DM9094	Fairchild	9094	
	Motorola	MC856	
		MC956	
	Raytheon	RM9094	
		RM994	
DM9097	Fairchild	9097	
	Motorola	MC855	
		MC955	
	Raytheon	RM997	
DM930	Fairchild	930	
		9930	
	Motorola	MC830	
		MC930	
	Raytheon	RM930	
DM9301	Fairchild	9031	
		9301	
	National	DM8301	
	Raytheon	RC8252	
	Signetics	S8252	
DM9309	Fairchild	9309	
	National	DM8309	
DM9311	Fairchild	54154	
	National	DM54154	
	Raytheon	RM9311	
	Signetics	54154	
	TI	SN54154	
DM9312	Raytheon	RM9312	
DM9316	Raytheon	RM9316	
DM9318	National	DM54148	
	Signetics	54148	
	TI	SN54148	
DM932	Fairchild	932	
		9932	
	Motorola	MC932	
	Raytheon	RM932	
DM9322	Raytheon	RM9322	
DM933	Fairchild	9933	
	Motorola	MC933	
DM935	Fairchild	9135	
		9935	
	Motorola	MC835	
		MC935	
DM936	Fairchild	936	
		9936	
	Motorola	MC936	
DM937	Fairchild	937	
		9937	
	Motorola	MC837	
		MC937	
DM939	Raytheon	RM939	
DM944	Fairchild	944	
		9944	
	Motorola	MC944	
DM945	Fairchild	945	
		9945	
	Motorola	MC945	
DM946	Fairchild	946	
		9946	
	Motorola	MC946	
DM948	Fairchild	948	
		9948	
	Motorola	MC948	
DM949	Fairchild	949	
	Motorola	MC949	
	Raytheon	RM949	
DM9567	Fairchild	9157	
	Motorola	MC857	
		MC957	
	National	DM957	
	Raytheon	RM957	
DM957	Fairchild	9157	
	Motorola	MC857	
		MC957	
	National	DM9567	
	Raytheon	RM957	

Manufacturer Device	Replacement Source	Device	IC Master Page
DM958	Fairchild	9158	
	Motorola	MC858	
		MC958	
	Raytheon	RM958	
DM9601	Fairchild	9601	
	National	DM8601	
	Raytheon	RF8601	
		RF9601	
	Signetics	N8T22	
		S8T22	
	TI	SN74122	
DM9602	Fairchild	9602	
	National	DM8602	
	Raytheon	RF8602	
		RF9602	
DM961	Fairchild	9961	
	Motorola	MC961	
DM962	Fairchild	962	
		9962	
	Motorola	MC962	
DM963	Fairchild	9963	
	Motorola	MC963	
	Raytheon	RM963	
DMPAL10H8	MMI	PAL10H8	
		PAL16A4	
	National	PAL16A4	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
DMPAL10L8	MMI	PAL10L8	
	National	PAL10L8	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
DMPAL12H6	MMI	PAL12H6	
	National	PAL12H6	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
DMPAL12L6	MMI	PAL12L6	
	National	PAL12L6	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
DMPAL14H4	MMI	PAL14H4	
	National	PAL14H4	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
DMPAL14L4	MMI	PAL14L4	
	National	PAL14L4	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
DMPAL16C1	MMI	PAL16C1	
	National	PAL16C1	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
DMPAL16H2	MMI	PAL16H2	
	National	PAL16H2	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
DMPAL16L2	MMI	PAL16L2	
	National	PAL16L2	
DMPAL16L8	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DMPAL16L8			(Cont'd)
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
DMPAL16L8A	AMD	AMPAL16L8A	
	Fairchild	16P8B2	
	MMI	87097	
	National	DMPAL16L8B2	
	TI	PAL16L825	
		TIBPAL16L8-30	**(4320)**
DMPAL16L8B2			
	AMD	AMPAL16L8A	
	Fairchild	16P8B2	
	MMI	87097	
	National	DMPAL16L8A	
	TI	PAL16L825	
		TIBPAL16L8-30	**(4320)**
DMPAL16R4	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
DMPAL16R42	AMD	AMPAL16R4A	
	Fairchild	16RP4B2	
	MMI	PAL16R4B2	
	National	DMPAL16R4A	
	TI	PAL16R425	
DMPAL16R4A	AMD	AMPAL16R4A	
	Fairchild	16RP4B2	
	MMI	PAL16R4B2	
	National	DMPAL16R42	
	TI	PAL16R425	
DMPAL16R6	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
DMPAL16R6A	AMD	AMPAL16R6A	
	Fairchild	16RP6B2	
	MMI	PAL16R6B2	
	TI	PAL16R625	
		TIBPAL16RS-30	
DMPAL16R8	Cypress	CYPAL16R8	
	Harris	**HPL16RC8**	**(2768)**
	Lattice	GAL16V8	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DMPAL16R8			(Cont'd)
	MMI	PAL16R8	
		PAL16R8A	
	Sprague	SPL16RC8	
	TI	SN74PAL16R8A	
		TIBPAL16R8-15	**(4320)**
		TIBPAL16R8-20	**(4320)**
		TIBPAL16R8-25	**(4320)**
		TIBPAL16R8-30	**(4320)**
DMPAL16R8A	AMD	AMPAL16R8A	
	Fairchild	16RP8B2	
	MMI	PAL16R8B2	
	National	DMPAL16R8B2	
	TI	PAL16R825	
DMPAL16R8B	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
DMPAL16R8B2			
	AMD	AMPAL16R8A	
	Fairchild	16RP8B2	
	MMI	PAL16R8B2	
	National	DMPAL16R8A	
	TI	PAL16R825	
DMPAL20L10	Cypress	CUPLDC20G10	
		PAL20L10	
	MMI	PAL20L10	
	National	PAL20L10	
	Sprague	SPL20LC10	
	TI	**TIBPAL20L10**	**(4320)**
		TIBPAL20L10-25	**(3217, 4320)**
DMPAL20X10	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X10	
		PALC22V10	
	National	PAL20X10	
	Sprague	SPL20XC10	
	TI	**TIBPAL20X10-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
DMPAL20X4	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X4	
		PALC22V10	
	National	PAL20X4	
	Sprague	SPL20XC4	
	TI	**TIBPAL20X4-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
DMPAL20X8	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X8	
		PALC22V10	
	National	PAL20X8	
	Sprague	SPL20XC8	
	TI	**TIBPAL20X8-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
DP8216	Intel	8216	
	National	INS8216	
	NEC	μPB8216	
DP8224	Intel	8224	
	National	INS8224	
DP8226	Intel	8226	
	Mitsubishi	M5L8226	
	National	INS8226	
	NEC	μPB8226	

Manufacturer Device	Replacement Source	Device	IC Master Page
DP8228	AMD	8228	
	Intel	8228	
	National	INS8228	
	NEC	μPB8228	
	TI	SN74S428	
		TIM8228	
DP8303	AMD	DP8303	
DP8304	AMD	DP8304	
	Fujitsu	MBL8286	
	Harris	**82C86H**	**(2733, 2768)**
	Intel	8286	
		82C86	
	MMI	82C86	
	NEC	μPB8286	
		μPD71086	
	OKI	82C86	
DP8340	SMC	COM9064	
DP8408	MMI	74S408	
DP8464	Exar	XR8464	
	MicroLinear	ML8464	
DP8480	TI	DP8480	
DP8481	TI	DP8481	
DS0025	National	MH0025	
DS0056	National	MH0056	
DS1488	Exar	XR1488	
	Fairchild	MC1488	
		μA212A	
		μA750	
	GoldStar	**GD75188**	**(2694)**
	Hitachi	HD75188	
	Signetics	MC1488	
		MC1489	
	SiliconG	SG75188	
		SG75788	
	TI	MC1488	
		MC1489	
		SN75188	
		SN75189	
DS1489	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		μA212A	
		μA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG2501A	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
DS1489A	Exar	XR1489A	
	Fairchild	UA150	
		UA212A	
		μA1489A	
	Motorola	**MC1489A**	**(2952, 2958)**
	SGS	MC1489	
	Signetics	MC1489A	
	SiliconG	SG1489A	
	TI	SN75189A	
DS14C88	TI	SN75C188	
DS14C89	TI	SN75C189A	
DS1603	AD	AD521	
		AD624	
	Burr-Brown	**INA110**	**(2537)**
	National	LM148	
		LM163	
	PMI	**AMP05**	**(2975)**
	TI	LM148	
DS1611	National	LM1611	
DS1612	National	LM1612	
DS1613	National	LM1613	
DS1614	National	LM1614	
DS26LS31	AMD	AM26LS31	
	Motorola	**AM26LS31**	**(2952)**
	TI	AM26LS31	
DS26LS32	AMD	AM26LS32	
	TI	AM26LS32A	
		AM26LS32AM	
DS26S10	AMD	AM26S10	
	Motorola	**MC26S10**	**(2952)**
	TI	AM26S10	
DS26S11	AMD	AM26S11	
	TI	AM26S11	

Manufacturer Device	Replacement Source	Device	IC Master Page
DS3486	**Motorola**	**MC3486**	**(2952, 2959)**
	TI	MC3486	
		SN75ALS195	
DS3487	**Motorola**	**MC3487**	**(2952, 2959)**
	TI	MC3487	
		SN75ALS194	
DS3611	National	LM3611	
	SiliconG	SG75471	
	Sprague	**UDN3611**	**(3203)**
	TI	SN75471	
DS3612	National	DS3632	
		LM3612	
	SiliconG	SG75472	
	Sprague	**UDN3612**	**(3203)**
	TI	SN75472	
DS3613	National	LM3613	
	Sprague	**UDN3613**	**(3203)**
	TI	SN75473	
DS3614	National	LM3614	
	SiliconG	SG75474	
	Sprague	**UDN3614**	**(3203)**
♦ DS36147	Motorola	DS36147	
♦ DS36177	Motorola	DS36177	
DS3625	Signetics	N8T25	
DS3632	National	DS3612	
		LM3612	
	SiliconG	SG75472	
	Sprague	**UDN3612**	**(3203)**
	TI	SN75472	
DS3650	**Motorola**	**MC3450**	**(2952, 2959)**
	TI	MC3450	
DS3651	**Motorola**	**MC3430**	**(2925)**
		MC3441	**(2952)**
DS3652	**Motorola**	**MC3452**	**(2952, 2959)**
	TI	MC3452	
DS3653	**Motorola**	**MC3432**	**(2925)**
DS3658	**GE/RCA**	**CA3219**	**(2650)**
	Hitachi	HAI3007	
	IPS	3658	
	SGS	L6222	
	TI	SN75437	
DS3668	TI	SN75435	
DS3669	**GE/RCA**	**CA3252**	**(2650, 2654)**
	IPS	3669	
	SGS	L9222	
	TI	SN75440	
DS3680	Fairchild	μA3680	
	TI	DS3680	
DS3695	Fairchild	μA8T28	
		μA96172	
		μA96173	
		μA96174	
		μA96175	
		μA96176	
		μA96177	
		μA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
DS3896	TI	SN75ALS056	
DS3897	TI	SN75ALS057	
DS55107	Motorola	MC55107	
	National	LM55107A	
	TI	SN55107A	
		SN55107B	
DS55108	Fairchild	55108	
	Motorola	MC55108	
	National	LM55108A	
	TI	SN55108A	
		SN55108B	
DS55121	Signetics	S8T13	
	TI	SN55121	
DS55122	TI	SN55122	
DS55325	Motorola	MC55325	
	SiliconG	SG55325	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DS55325			(Cont'd)
	TI	SN55325	
		SNJ55325	
DS55365	TI	SN55365	
DS55451	Fairchild	55451	
	Signetics	55451	
	SiliconG	SG55451	
		SG55451B	
	TI	SN55451	
DS55452	Fairchild	μA55452	
	Signetics	55452	
	SiliconG	SG55452	
	TI	SN55452	
		SNJ55452	
DS55453	Fairchild	55453	
	National	LM55453	
	Signetics	55453	
	SiliconG	SG55453	
	TI	SN55453	
		SNJ55453	
DS55454	Signetics	55454	
	SiliconG	SG55454	
		SG55454B	
	TI	SN55454	
DS55460	SiliconG	SG55460	
	TI	SNJ55460	
DS55461	SiliconG	SG55461	
	TI	SN55461	
		SNJ55461	
DS55462	Fairchild	μA55462	
	SiliconG	SG55462	
	TI	SN55462	
		SNJ55462	
DS55463	SiliconG	SG55463	
	TI	SN55463	
		SNJ55463	
DS55464	SiliconG	SG55464	
	TI	SN55464	
		SNJ55464	
DS55470	GE/RCA	CD22221	
	SiliconG	SG55470	
	SiliconSys	SSIK221	
	TI	SN55470	
		SNJ55470	
DS55471	National	DS8808	
		MH8808	
DS75107	Fairchild	75107	
	Motorola	**MC75107**	**(2952)**
	National	LM75107A	
	TI	SN75107B	
DS75108	Fairchild	75108	
	Motorola	**MC75108**	**(2952)**
	National	LM75108A	
	TI	SN75108B	
DS75113	TI	SN75113	
DS75121	National	N8T13	
	Signetics	**N8T13**	**(3022)**
	TI	SN75121	
DS75122	National	DS75123	
	Signetics	**N8T23**	**(3022)**
	TI	SN75123	
DS75123	National	DS75122	
	Signetics	**N8T23**	**(3022)**
	TI	SN75123	
DS75124	**Signetics**	**N8T24**	**(3022)**
	TI	SN75124	
DS75125	**Motorola**	**MC75125**	**(2952)**
	TI	SN75125	
		SN75ALS125	
DS75127	**Motorola**	**MC75127**	**(2952)**
	TI	SN75127	
		SN75ALS127	
DS75128	**Motorola**	**MC75128**	**(2952)**
	TI	SN75128	
DS75129	**Motorola**	**MC75129**	**(2952)**
	TI	SN75129	
DS75150	TI	SN75150	
DS75154	TI	SN75154	
DS75160A	TI	SN75160B	
		SN75ALS160	
DS75161A	TI	SN75161B	
		SN75ALS161	
DS75162A	TI	SN75162B	
		SN75ALS162	
DS75207	TI	SN75207B	
DS75325	Motorola	MC75325	
	SiliconG	SG55327	
		SG75325	
	TI	SN55327	
DS75450	Fairchild	75450	
	SiliconG	SG75450B	
DS75451	Fairchild	75451	
	SiliconG	SG75451	
	TI	SN75451	
DS75452	Fairchild	75452	
	SiliconG	SG75452A	
		SG75452B	
	TI	SN75452B	
DS75453	Fairchild	75453	
	Motorola	MC75453	
	National	LM75453	
	SiliconG	SG75453A	
		SG75453B	
	TI	SN75453B	
DS75454	SiliconG	SG75453B	
		SG75454B	
		SG7545A	
	TI	SN75454B	
DS75460	Motorola	MC75460	
	SiliconG	SG75460	
DS75461	Fairchild	μA75461	
	Motorola	MC75401	
	SiliconG	SG75461	
	TI	SN75461	
DS75462	Fairchild	μA75462	
	Motorola	MC75402	
	SiliconG	SG75462	
	TI	SN75462	
DS75463	Motorola	MC75403	
	SiliconG	SG75463	
	TI	SN75463	
DS75464	Motorola	MC75404	
	National	SG75464	
	SiliconG	SG75464	
DS75494	TI	SN75494	
DS75S24	Motorola	MC7524	
	Signetics	7524	
DS7820	AD	AD7820	
	Maxim	AD7820	
		MAX150	
	TI	SN55182	
DS7830	TI	SN55183	
DS8615	Motorola	MC12015	
DS8616	Plessey	SP8793	
DS8617	Motorola	MC12017	
DS8621	Motorola	MC12071	
DS8627	Plessey	SP8656	
DS8628	Plessey	SP8658	
DS8640	Signetics	SP380	
DS8808	National	DS55471	
		MH8808	
DS8820	TI	SN75182	
DS8830	TI	SN75183	
DS8834	**Signetics**	**N8T34**	**(3022)**
DS8836	**Signetics**	**N8T380**	**(3022)**
DS8837	**Motorola**	**MC3437**	**(2952)**
	Signetics	**N8T37**	**(3022)**
DS8885	Dionics	DI230	
	ITT	505	
		ITT505	
	National	DM8885	
		DM8889	
DS8887	Dionics	DI513B	
		DI514	
		DI514B	
	Exar	XR6118	
	Motorola	MC3490	
	National	DM8887	
	OKI	MSL912	
	Sanyo	LB1290	
	Signetics	NE594	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
	Toshiba	TD62781	
DS8889	Dionics	DI230	
DS8891	Dionics	DI604	
	National	DM8891	
	Sprague	UHPD495	
DS8897	Dionics	DI804	
	National	DM8897	
DS8923A	**AT&T**	**41LK**	**(2494)**
DS8T26A	Fairchild	μA8T26A	
	Motorola	**MC8T26A**	**(2951)**
	Signetics	**N8T26A**	**(3022)**
DS8T28	Fairchild	μA8T28	
		μA96172	
		μA96173	
		μA96174	
		μA96175	
		μA96176	
DS8T28	Fairchild		(Cont'd)
		μA96177	
		μA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
ETC5067	Thomson	TP3067	
IDM2901A	Fairchild	F2901A	
	Thomson	TS2901	
	Waferscale	**WS5901**	**(3376)**
IDM2909	**Cypress**	**CY7C909**	**(2569)**
	Thomson	TS2909	
INS1771	Western	FD1771	
INS2651	Signetics	SCN2651	
	SMC	COM2651	
INS2652	Signetics	INS2652	
INS8035	Intel	8035	
	NEC	μPD8035	
	Signetics	SCN8035	
	Toshiba	**TMP8035**	**(3306)**
INS8048	Intel	8048	
	NEC	μPD8048	
	Signetics	SCN8048	
	Toshiba	**TMP8048**	**(3306)**
INS8049	Intel	8049	
	NEC	μPD8049	
	Signetics	**SCN8049**	**(3076)**
	Toshiba	**TMP8049**	**(3306)**
INS8060	National	ISP8A/600	
	Signetics	ISP8A/600	
INS8216	Intel	8216	
	National	DP8216	
	NEC	μPB8216	
INS8224	Intel	8224	
	National	DP8224	
INS8226	Intel	8226	
	Mitsubishi	M5L8226	
	National	DP8226	
	NEC	μPB8226	
INS8228	AMD	8228	
	Intel	8228	
	National	DP8228	
	NEC	μPB8228	
	TI	SN74S428	
		TIM8228	
INS8251	AMD	8251	
	Intel	P8251	
	NEC	μPD8251A	
	OKI	MSM82C51A	
	S-MOS	SMC82C51AC	
	SMC	COM8251A	
	Toshiba	**TMP8251**	**(3306)**
INS8253	AMD	8253	
	Intel	8253	
	NEC	μPD8253	
	Toshiba	**TMP8253**	**(3306)**
INS8259	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
ISP8A/600	National	INS8060	
	Signetics	ISP8A/600	
JAN101A	National	DM54AS74	
	SiliconG	JAN101A	
	TI	SN54AS74	
LF11201	AD	ADG201	
	GE/Intersil	**DG201**	**(2679)**
		DG201A	**(2679)**
LF11201	GE/Intersil		(Cont'd)
		IH201	
		IH5201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	DG201A	
		MAX331	
	MicroPwr	MP201	
	National	LF13201	
	PMI	**SW201**	**(2975)**
	Siliconix	DG201A	
LF11508	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF13508	
	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
LF11509	GE/Intersil	ICL6109	
		IH6208	**(2681)**
	Harris	**HI509**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX359	
		MAX369	
	MicroPwr	MP7509DI	
	National	LF13509	
	PMI	**MUX24**	**(2975)**
	Siliconix	DG509A	
	TeledyneP	4553	
LF12333	**PMI**	**SW06**	**(2975)**
LF13201	AD	ADG201	
	GE/Intersil	**DG201**	**(2679)**
		DG201A	**(2679)**
		IH201	
		IH5201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	DG201A	
		MAX331	
	MicroPwr	MP201	
	National	LF11201	
	PMI	**SW201**	**(2975)**
	Siliconix	DG201A	
LF13202	Maxim	DG202	
		MAX332	
	PMI	**SW02**	**(2975)**
		SW202	**(2975)**
	Siliconix	DG202	
LF13508	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
LF13509	GE/Intersil	ICL6109	
		IH6208	**(2681)**
	Harris	**HI509**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX359	
		MAX369	
	MicroPwr	MP7509DI	
	National	LF11509	
	PMI	**MUX24**	**(2975)**
	Siliconix	DG509A	
	TeledyneP	4553	
LF155	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LF155	LinearTech	(Cont'd)	
		LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
		LF411	
	Thomson	LF155	
LF155A	LinearTech	LF155A	
	PMI	**PM155A**	**(2971)**
LF156	**Burr-Brown**	**OPA156A**	**(2532)**
	LinearTech	LF156	
		OP16	
	MicroPwr	MPOP16	
	PMI	**OP16**	**(2971)**
	Thomson	LF156	
LF156A	AD	AD544	
	Burr-Brown	**OPA156A**	**(2532)**
	Fairchild	LF156A	
	LinearTech	LF156A	
	National	OPA101	
	PMI	**OP43**	**(2970)**
		PM156A	**(2971)**
	TI	TL081	
LF157A	AMD	27S29	
	Fairchild	LF157A	
	National	545472	
		74S472	
		LF351	
		LF353	
	PMI	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
LF198	AMD	LF198	
	LinearTech	LF198	
	Signetics	LF198	
LF255	MicroPwr	MP255	
	PMI	PM255	
	Thomson	LM255	
LF256	Thomson	LM256	
LF298	**Burr-Brown**	**SHC298**	**(2543)**
	Datel	SHMLM2	
LF347	TI	LF347	
LF347B	TI	LF347B	
LF351	AMD	27S29	
	Fairchild	LF157A	
	National	545472	
		74S472	
		LF157A	
		LF353	
	PMI	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
LF353	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
		LF411	
	Thomson	LF155	
LF355	LinearTech	LF355	
	Motorola	**LF355**	**(2920)**
	PMI	**OP43**	**(2970)**
		PM355	
	Thomson	LF355	
LF355A	LinearTech	LF355A	
	PMI	PM355A	
LF356	LinearTech	LF356	
	Motorola	**LF356**	**(2920)**
	PMI	PM356	
	Thomson	LF356	
LF356A	**Burr-Brown**	**OPA356A**	**(2532)**
	LinearTech	LF356A	
	PMI	PM356A	
LF398	LinearTech	LF398	
	National	LM298	
	PMI	**SMP10**	**(2975)**
	Signetics	LF398	
		NE5537	
LF411	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF353	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
		LF411	
	Thomson	LF155	
LF411C	TI	LF411C	
LF412	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	NEC	μPC1458	
		μPC251	
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
LF4126	TI	LF4126	
LF441	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LM4250	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
	Thomson	μA776	
LF442	TI	TL062	
	Thomson	TL062	
	Toshiba	TA75062	
LH0002	Elantec	EL2002	
		EL2003	**(2591, 2595)**
		ELH0002	**(2592)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	Hytek	HY0002	
	LinearTech	LT1010	
	Micra	MC0002	
		MC0021	
	OEI	9910	
	TeledyneC	LH0002	
LH0003	Micra	MC0003	
LH0004	Micra	MC0004	
LH0021	**Elantec**	**ELH0021**	**(2593)**
LH0022	AD	AD506	
		AD542	
	National	LH740A	
		LM0052	
	TeledyneP	1424	
		1425	
LH0024	Micra	MC0024	
LH0032	AD	ADLH0032	
		HOS-060	
		HOS050	
		MOS050	
	Elantec	**ELH0032**	**(2593)**
	Harris	**HA2542**	**(2737, 2747, 2750)**
	Micra	MC0032	
LH0032		(Cont'd)	
	TeledyneC	LH0032	
	TeledyneP	0032	
LH0033	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	OEI	AH001	
	TeledyneC	LH0033	
	TeledyneP	1359	
LH0041	**Elantec**	**ELH0041**	**(2593)**
		LH0041	
	Micra	MC0041	
LH0042	AD	AD0042	
		AD503	
	GE/Intersil	AD503	
		LH0042	
LH0052	AD	AD547	
	Harris	**HA5170**	**(2706, 2737, 2747)**
	PMI	**OP41**	**(2970)**
		OP43	**(2970)**
LH0062	AD	AD528	
LH0063	Maxim	LH0063	
	OEI	9963	
LH0101	**Apex**	**PA02**	**(2458)**
	Burr-Brown	**3571**	**(2536)**
		3572	**(2536)**
	Elantec	**ELH0101**	**(2593)**
	Maxim	LH0101	
LH2101	GE/Intersil	LH2101	
	Raytheon	LH2101	
LH2108	GE/Intersil	LH2108	
	LinearTech	LH2108	
	PMI	**PM2108**	**(2970, 2972)**
LH2108A	GE/Intersil	LH2108A	
	PMI	**PM2108A**	**(2970, 2972)**
LH2110	GE/Intersil	LH2110	
LH2111	Raytheon	LH2111	
LH2208A	GE/Intersil	LH2208A	
	MicroPwr	MP2208A	
LH2308	GE/Intersil	LH2308	
LH2308A	GE/Intersil	LH2308A	
LH2310	GE/Intersil	LH2310	
LH2311	GE/Intersil	LH2311	
LH740A	AD	AD506	
		AD542	
	National	LH0022	
		LM0052	
	TeledyneP	1424	
		1425	
LH741A	AD	AD741S	
	Burr-Brown	3500	
	LinearTech	LM107	
	National	LM107	
	PMI	PM741	
	Raytheon	RC741	
	SiliconG	SG107	
	Thomson	LM107	
LM0052	AD	AD506	
		AD542	
	National	LH0022	
		LH740A	
	TeledyneP	1424	
		1425	
LM10	LinearTech	LM10	
	MCE	MCELM10	
LM101A	LinearTech	LM101A	
LM104	SiliconG	SG104	
	Thomson	LM104	
LM105	Fairchild	μA105	
	GE/Intersil	LM105	
	SiliconG	SG105	
	Thomson	LM105	
LM106	TI	LM106	
LM107	AD	AD741S	
	Burr-Brown	3500	
	LinearTech	LM107	
	National	LH741A	
	PMI	PM741	
	Raytheon	RC741	
	SiliconG	SG107	
	Thomson	LM107	
LM108	AD	AD108	
	Fairchild	μA108	
	GE/Intersil	LM108	
	LinearTech	LM108	
	MicroPwr	MP108	
	Motorola	**LM108**	**(2919)**
	PMI	**PM108**	**(2970)**
	SiliconSys	SSI108	
LM109	Fairchild	μA109	
	IPS	**IP140-5**	**(2854)**
	Motorola	**LM109**	**(2926)**
	SiliconG	SG109	
	Thomson	LM109	
		SFC2109	
LM11	LinearTech	LM11	
	Motorola	**LM11**	**(2920)**
LM111	AD	AD111	
	Fairchild	μA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
LM113	AD	AD589	
	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM185-1	
		LM385-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM313	
	TeledyneP	TSC9491	
	TeledyneS	9491	
		TSC9491	
LM117	Fairchild	μA117	
	IPS	**IP117**	**(2854)**
	LinearTech	LM117	
	MCE	MCELM117	
	Motorola	**LM117**	**(2929)**
	SiliconG	SG117	
	TI	TL117	
	Thomson	LM117	
	Unitrode	**UC117**	**(3325)**
LM117A	LinearTech	LT117A	
	Motorola	**LM117A**	**(2929)**
	SiliconG	SG117A	
LM118	LinearTech	LM118	
LM119	LinearTech	LM119	
		LT119	
	PMI	**PM119**	**(2975)**
	Signetics	LM119	
LM120	Fairchild	μA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM320-05	
		LM7905	
		LM79M05	
	NEC	μPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	μA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
LM120-05	National	LM220-05	
		LM220-05	
	SiliconG	SG120-05	
		SG220-05	
LM120-08	SiliconG	SG120-08	
LM120-12	**IPS**	**IP120-12**	**(2854)**
	SiliconG	SG120-12	
	Unitrode	UC120-12	
LM120-15	**IPS**	**IP120-15**	**(2854)**
	SiliconG	SG120-15	
	Unitrode	UC120-15	
LM120-18	SiliconG	SG120-18	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM120-20	SiliconG	SG120-20	
LM120-5	SiliconG	SG120-5	
LM123	Fairchild	SH123	
		UA138	
		μA123	
	IPS	**IP123**	**(2854)**
	LinearTech	LM123	
		LT123	
	Motorola	**LM123**	**(2927)**
		MC78T05	**(2926)**
	SiliconG	SG123	
		SG123A	
LM124A	Fairchild	μA124	
	GE/RCA	**CA124**	**(2645)**
	LinearTech	LT1014	
	SiliconG	SG124	
	TI	LM124	
LM129	LinearTech	LM129	
LM1303	Exar	XR4739	
	Fairchild	μA739	
		μA749	
	Raytheon	RC4739	
	SGS	TBA231	
	TI	SN76131	
		SN76149	
LM1310	Exar	XR1310	
	TI	SN76115	
	Toshiba	TA7157	
LM133	LinearTech	LT1033	
	National	LM333	
LM134	LinearTech	LM134	
LM136	LinearTech	LM136	
LM13600	Exar	XR13600	
	Signetics	NE5517	
LM137	**IPS**	**IP137**	**(2854)**
	LinearTech	LM137	
		LT137	
	MCE	MCELM137	
	Motorola	**LM137**	**(2929)**
	SiliconG	SG137	
		SG137A	
	Thomson	LM137	
	Unitrode	**UC137**	**(3325)**
LM138	**IPS**	**IP138**	**(2854)**
	LinearTech	LM138	
	Micropac	MLM138	
	SiliconG	SG138	
LM139	Fairchild	μA139	
	GE/RCA	**CA139**	**(2647)**
	Motorola	**LM139**	**(2925)**
	PMI	**CMP04**	**(2975)**
		PM139	**(2975)**
	Raytheon	LM139	
	Signetics	LM139	
	TI	LM139	
LM1391	GE/RCA	CA1391	
	Motorola	**MC1391**	**(2948)**
LM1394	GE/RCA	CA1394	
LM139A	**GE/RCA**	**CA139A**	**(2647)**
	Motorola	**LM139A**	**(2925)**
	PMI	**CMP04**	**(2975)**
		PM139A	**(2975)**
	TI	LM139A	
LM140	Exar	XR146	
LM140-05	SiliconG	SG140-05	
	Unitrode	UC140-05	
LM140-06	SiliconG	SG140-06	
LM140-08	SiliconG	SG140-08	
LM140-12	**IPS**	**IP140-12**	**(2854)**
	Motorola	**LM140-12**	**(2926, 2928)**
	SiliconG	SG140-12	
	Unitrode	UC140-12	
LM140-15	**IPS**	**IP140-15**	**(2854)**
	Motorola	**LM140-15**	**(2926, 2928)**
	SiliconG	SG140-15	
	Unitrode	UC140-15	
LM140-18	SiliconG	SG140-18	
LM140-20	SiliconG	SG140-20	
LM140-24	**GoldStar**	**GL7905**	**(2701)**
	Gould	μA7905	
	SiliconG	SG140-24	
	Toshiba	TA79005	
LM1414	Motorola	MC1414	
	Toshiba	TD62004	
LM143	Datel	AM464-2M	
	Harris	**HA2640**	**(2706, 2738, 2748)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM143			(Cont'd)
	Motorola	**MC1536**	**(2921)**
	National	LM1536	
	SiliconG	SG143	
		SG1536	
LM1436	**Datel**	**AM464-2**	**(2577)**
	Harris	HA2645	
	Motorola	**MC1436**	**(2920, 2958)**
	National	LM343	
	SiliconG	SG1436	
		SG343	
	TeledyneP	1332	
LM1458	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
LM146-2	Raytheon	LM146-2	
LM148	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
		RM4158	
	TI	LM148	
LM1496	**Motorola**	**MC1496**	**(2939, 2958)**
	Plessey	SL1496	
	Signetics	MC1496	
	SiliconG	SG1496	
LM150	**IPS**	**IP150**	**(2854)**
	LinearTech	LM150	
		LT150	
	Motorola	**LM150**	**(2929)**
	SiliconG	SG150	
	Unitrode	**UC150**	**(3325)**
LM1514	Motorola	MC1514	
	TI	TL514M	
LM1524	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	μA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	
	SGS	SG1524	
		UC1524A	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524**	**(3323)**
		UC1524A	**(3323)**
LM1536	Datel	AM464-2M	
	Harris	**HA2640**	**(2706, 2738, 2748)**
	Motorola	**MC1536**	**(2921)**
	National	LM143	
	SiliconG	SG143	
		SG1536	
LM158A	**GE/RCA**	**CA158A**	**(2645)**
	LinearTech	LT1013	
	Motorola	**LM158**	**(2922)**
	Raytheon	RM4139	
	Signetics	LM158	
	TI	LM158	

Manufacturer Device	Replacement Source	Device	IC Master Page
LM1596	Fairchild	μA796	
	Motorola	**MC1596**	**(2939)**
	SiliconG	SG1596	
LM160	Fairchild	μA760	
	PMI	**CMP05**	**(2975)**
LM1611	National	DS1611	
LM1612	National	DS1612	
LM1613	National	DS1613	
LM1614	National	DS1614	
LM163	AD	AD521	
		AD624	
	Burr-Brown	**INA110**	**(2537)**
	National	DS1603	
		LM148	
	PMI	**AMP05**	**(2975)**
	TI	LM148	
LM1709	Fairchild	μA709	
	Motorola	**MC1709**	**(2919)**
	National	LM709	
	NEC	μPC55	
	TI	μ709	
		μA709	
	Toshiba	TA7502	
LM1800	Fairchild	μA705	
	Sanyo	LA705	
		LA758	
	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
	TI	SN76111	
		SN76116	
LM1820	TI	SN76635	
LM1829	GE/RCA	CA3126	
	National	LM3126	
LM185	LinearTech	LM185	
	Maxim	ICL8069	
	MicroPwr	MP5010	
LM1870	Signetics	LM1870	
LM193A	**Motorola**	**LM193**	**(2925)**
	Signetics	LM193	
	TI	LM193	
LM194	MicroPwr	MPT02A	
	National	LM3942	
	PMI	**MAT02**	**(2975)**
LM196	Micropac	MLM196	
LM199	LinearTech	LM199	
LM199A	LinearTech	LM199A	
LM2002	National	LM2002A	
		LM383	
		LM383A	
	Sprague	ULN3701	
		ULN3702	
LM2002A	National	LM2002	
		LM383	
		LM383A	
	Sprague	ULN3701	
		ULN3702	
LM201A	TI	LM201A	
LM204	SGS	LS204	
	SiliconG	SG204	
	Thomson	LM204	
LM205	Ferranti	ZN515	
	SiliconG	SG205	
	SiliconSys	SSI6284	
LM207	Ferranti	ZNREF050	
	SiliconG	SG207	
	SiliconSys	SSI6505	
	TI	LM207	
LM208A	AD	AD208A	
	Fairchild	UA208A	
	Motorola	**LM208A**	**(2919, 2958)**
	PMI	PM208A	
LM209	Fairchild	μA209	
	Ferranti	ZN437	
	Motorola	**LM208**	**(2919, 2958)**
	SiliconG	SG209	
	SiliconSys	SSI6410	
LM211	AD	AD211	
	Motorola	**LM211**	**(2925, 2958)**
	PMI	PM211	
	Signetics	LM211	
	SiliconG	SG211	
	TI	LM211	
	Thomson	LM211	
LM2111	GE/RCA	CA2111A	
	National	LM2113	
	Signetics	N5111	
	Sprague	ULN2111	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM2111			(Cont'd)
	TI	SN76642	
		SN76643	
LM2113	GE/RCA	CA2111A	
	National	LM2111	
	Signetics	N5111	
	Sprague	ULN2111	
	TI	SN76642	
		SN76643	
LM217	**IPS**	**IP217**	**(2854)**
	MCE	MCELM217	
	Motorola	**LM217**	**(2929)**
	SGS	LM217	
	SiliconG	SG217	
		SG217A	
	Thomson	LM217	
	Unitrode	**UC217**	**(3325)**
LM218	TI	LM218	
	Thomson	LM218	
LM219	Signetics	LM219	
	Thomson	LM219	
LM220-05	National	LM120-05	
		LM220-05	
	SiliconG	SG120-05	
		SG220-05	
LM220-08	SiliconG	SG220-08	
LM220-12	**IPS**	**IP220-12**	**(2854)**
	SiliconG	SG220-12	
LM220-15	**IPS**	**IP220-15**	**(2854)**
	SiliconG	SG220-15	
LM220-18	SiliconG	SG220-18	
LM220-20	SiliconG	SG220-20	
LM220-5	SiliconG	SG220-5	
LM220-05	National	LM120-05	
		LM220-05	
	SiliconG	SG120-05	
		SG220-05	
LM223	Fairchild	SH223	
		μA223	
	IPS	**IP223**	**(2854)**
	Motorola	**LM223**	**(2927)**
	SiliconG	SG223	
	Thomson	LM223	
LM234	LinearTech	LM234	
LM237	**IPS**	**IP237**	**(2854)**
	MCE	MCELM237	
	Motorola	**LM237**	**(2929)**
	SiliconG	SG237	
		SG237A	
	Unitrode	**UC237**	**(3325)**
LM238	Fairchild	μA238	
	IPS	**IP238**	**(2854)**
	SiliconG	SG238	
LM239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
		μA239	
	GE/RCA	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	PMI	**CMP04**	**(2975)**
		PM239	
	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	
LM239A	**GE/RCA**	**CA239A**	**(2647)**
	Motorola	**LM239A**	**(2925, 2958)**
	PMI	**CMP04**	**(2975)**
LM240-05	Ferranti	ZN502	
	National	LM240-5	
	SiliconG	SG240-05	
	SiliconSys	SSI6070C	
LM240-06	SiliconG	SG240-06	
LM240-08	SiliconG	SG240-08	
LM240-12	SiliconG	SG240-12	
LM240-15	SiliconG	SG240-15	
LM240-18	SiliconG	SG240-18	
LM240-20	**IDT**	**IDT7243**	**(2806)**
	SiliconG	SG240-20	
	VLSI Tech	VL2044	
LM240-24	SiliconG	SG240-24	
	TeledyneP	TSC7541	
LM240-5	Ferranti	ZN502	
	National	LM240-05	
	SiliconG	SG240-05	
	SiliconSys	SSI6070C	
LM246	Exar	XR246	
	Thomson	LM246	
LM248	Thomson	LM248	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM250	**IPS**	**IP250**	**(2854)**
	Motorola	**LM250**	**(2929)**
	SiliconG	SG250	
	Unitrode	**UC250**	**(3325)**
LM2524	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	μA2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
LM258A	**GE/RCA**	**CA258A**	**(2645)**
	Motorola	**LM258**	**(2922, 2958)**
	PMI	**OP221**	**(2970, 2972)**
	Signetics	LM258	
	TI	LM258	
	Thomson	LM258	
LM285	Maxim	ICL8069	
	MicroPwr	MP5010	
	Motorola	LM285	
LM2900	Hitachi	HA17301	
	Motorola	**LM2900**	**(2924)**
		MC3301	**(2924)**
	National	LM3301	
	Raytheon	LM2900	
		RC3301	
	TI	LM2900	
LM2901	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
LM2902	Fairchild	μA2902	
		μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM324	
	NEC	μPC324	
		μPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
LM2903	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM2903			(Cont'd)
	National	LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM2907	Cherry	CS2907-D14	
LM2917	Cherry	CS2917	
	Exar	XR2917	
LM293	**Motorola**	**LM293**	**(2925, 2958)**
	Signetics	LM293	
	TI	LM293	
LM2930	SGS	LM2930	
LM2930A	SGS	LM2930A	
LM2931	SGS	LM2931	
LM2931A	SGS	LM2931A	
LM2935	SGS	LM2935	
LM298	LinearTech	LF398	
	National	LF398	
	PMI	**SMP10**	**(2975)**
	Signetics	LF398	
		NE5537	
LM301	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
LM3011	GE/RCA	CA3011	
	Motorola	MC1590	
LM3018	**GE/RCA**	**CA3018**	**(2648)**
	Thomson	SFC2018	
LM3019	**GE/RCA**	**CA3019**	**(2649)**
LM301A	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
LM304	SiliconG	SG304	
	Thomson	LM304	
LM3045	Fairchild	UA3045	
	Plessey	SL3086	
	Sanyo	LA3045	
	SGS	LM3045	
	Sprague	ULS2045	
LM3046	Fairchild	μA3046	
		μA3086	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM3046			(Cont'd)
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
LM305	Fairchild	μA305	
	Ferranti	ZNREF025	
	SiliconG	SG305	
	SiliconSys	SSI6505	
LM3054	Fairchild	μA3054	
	GE/RCA	**CA3054**	**(2647, 2649)**
	Motorola	**CA3054**	**(2948)**
	Sprague	ULN2054	
	Thomson	SFC2054	
LM305A	SiliconG	SG305A	
LM306	TI	LM306	
LM3064	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	LSC1008	
		M5140	
	NEC	μPC1382	
	Sanyo	LA1365	
	TI	SN76666	
	Toshiba	TA7176	
LM3066	TI	SN76266	
LM307	Ferranti	ZNREF100	
	LinearTech	LM307	
	SiliconG	SG307	
	SiliconSys	SSI6507	
	TI	LM307	
LM3075	TI	SN76675	
LM308	AD	AD308	
	Burr-Brown	3500	
		3501	
	Fairchild	μA308	
	GE/Intersil	AD308	
		LM308	
	Motorola	**LM308**	**(2919, 2958)**
	Raytheon	LM308	
LM3086	**GE/RCA**	**CA3086**	**(2648)**
	Plessey	SL3086	
	Sanyo	LA3086	
	SiliconG	SG3086	
		SG3886	
	Sprague	ULN2086	
	Thomson	SFC2086	
LM308A	AD	AD308A	
	Fairchild	μA308A	
	LinearTech	LM308A	
	Motorola	**LM308A**	**(2919, 2958)**
	PMI	PM308A	
LM309	Fairchild	μA309	
	Ferranti	ZN447	
	Motorola	**LM309**	**(2926)**
	SiliconG	SG309	
	SiliconSys	SSI6050	
LM311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM311			(Cont'd)
	Toshiba	TA75393	
LM3126	GE/RCA	CA3126	
	National	LM1829	
LM313	AD	AD589	
	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM185-1	
		LM385-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM113	
	TeledyneP	TSC9491	
	TeledyneS	9491	
		TSC9491	
LM317	Fairchild	μA317	
	IPS	**IP317**	**(2854)**
	LinearTech	LM317	
	MCE	MCELM317	
	Motorola	**LM317**	**(2929)**
	SGS	LM317	
	SiliconG	SG317	
	TI	LM317	
	Thomson	LM317	
		TDB0117	
	Unitrode	**UC317**	**(3325)**
LM317M	**Motorola**	**LM317M**	**(2929)**
LM318	AD	AD518	
	LinearTech	LM318	
	NEC	μPC318	
	TI	LM318	
	Thomson	LM318	
LM320-05	Fairchild	μA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM7905	
		LM79M05	
	NEC	μPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	μA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
LM320-08	SiliconG	SG320-08	
LM320-12	SiliconG	SG320-12	
	Unitrode	UC320-12	
LM320-15	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320T15	
		LM7915	
	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
LM320-18	SiliconG	SG320-18	
LM320-20	SiliconG	SG320-20	
LM320-5	SiliconG	SG320-5	
LM320MP12	Fairchild	μA7912	
		μA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	μA7824	
		μA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM7912	
		LM79M12	
	NEC	μPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Device	Replacement Source	Device	IC Master Page
LM320MP12			(Cont'd)
	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
LM320T15	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM7915	
	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
LM323	Fairchild	SH0323	
		SH323	
		μA323	
		μA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	SiliconG	SG323	
	Thomson	LM323	
LM323A	SiliconG	SG323A	
LM324	Fairchild	μA324	
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17324	
	Motorola	**MC33174**	**(2924, 2959)**
	PMI	**OP421**	**(2970, 2972)**
	Samsung	LM324	
	SGS	LM324	
	SiliconG	SG324	
	Thomson	LM324	
	Toshiba	TA79502	
LM324A	Samsung	LM324A	
	SGS	LM324A	
	TI	LM324A	
LM329	LinearTech	LM329	
LM3301	Hitachi	HA17301	
	Motorola	**LM2900**	**(2924)**
		MC3301	**(2924)**
	National	LM2900	
	Raytheon	LM2900	
		RC3301	
	TI	LM2900	
LM3302	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
LM333	LinearTech	LT1033	
	National	LM133	
LM334	LinearTech	LM334	
LM336	LinearTech	LM336	
LM336-2	Ferranti	REF25	
	LinearTech	LM336-2	
		LM385-2	

(Continued)

Device	Replacement Source	Device	IC Master Page
LM336-2			(Cont'd)
	Motorola	LM385-2	
	National	LM385-2	
LM336-5	Ferranti	REF50	
LM337	**IPS**	**IP337**	**(2854)**
	LinearTech	LM337	
		LT337	
	MCE	MCELM337	
	Motorola	**LM337**	**(2929)**
	SiliconG	SG337	
		SG337A	
	TI	LM337	
	Thomson	LM337	
	Unitrode	**UC337**	**(3325)**
LM337HV	SiliconG	SG337HV	
LM338	Fairchild	μA338	
	IPS	**IP338**	**(2854)**
	LinearTech	LM338	
		LT338	
	Micropac	MLM338	
	SiliconG	SG338	
LM339	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	NEC	μPC137	
		μPC177	
		μPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
LM340-05	SiliconG	SG340-04	
LM340-08	Fairchild	μA75453	
	SiliconG	SG340-08	
		SG75453	
LM340-12	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
LM340-15	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
LM340-18	NEC	μPC7818	
	SiliconG	SG340-18	
		SG7818	
		SG7818A	
	TI	LM340-18	
	Thomson	μA7818	
LM340-20	SiliconG	SG340-20	

Device	Replacement Source	Device	IC Master Page
LM340-24	**Motorola**	**LM340-24**	**(2926, 2928)**
	SiliconG	SG340-24	
LM340-5	Fairchild	μA7805	
	GoldStar	GL7805	
	Gould	μA7805	
	IPS	**IP7805**	**(2854)**
	National	LM7805	
	Samsung	MC7805	
	SiliconG	SG7805	
		SG7805A	
	TI	μA7805	
	Toshiba	TA78005	
		TA79005	
	Unitrode	**UC7805**	**(3325)**
LM3401	**GE/RCA**	**CA3401**	**(2645)**
	Motorola	**MC3401**	**(2923, 2959)**
	National	LM3900	
	Raytheon	LM3900	
		RC3401	
	TI	LM3900	
LM340LA-12	Fairchild	μA78L12	
	Motorola	**MC78L12**	**(2927, 2959)**
	National	LM78L12	
	NEC	μPC78L12	
	TI	μA78L12	
	Thomson	μA7812	
	Toshiba	TA78L012	
LM340LA-15	Fairchild	μA7815	
	GoldStar	GL7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340T-15	
		LM78L15	
	NEC	μPC78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	SN75555	
		μA78L15	
	Toshiba	TA78L015	
LM340LA-5	Fairchild	μA78L05	
	Motorola	**MC78L05**	**(2926, 2959)**
	National	LM78L05	
	NEC	μPC78L05	
	TI	μA78L05	
	Thomson	μA7805	
	Toshiba	TA78L006	
LM340T-15	Fairchild	μA7815	
	GoldStar	GL7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	
		LM78L15	
	NEC	μPC78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	SN75555	
		μA78L15	
	Toshiba	TA78L015	
LM341-12	Fairchild	μA78M12	
	Motorola	**MC78M12**	**(2927, 2959)**
	National	LM342-12	
		LM78M12	
	NEC	μPC78M12	
	Samsung	MC78M12	
	Sanyo	L78M12	
	SGS	L78M12	
		L78M12CV	
	TI	μA78M12	
	Toshiba	TA78M12	
LM341-15	Fairchild	μA78M15	
	Motorola	**MC78M15**	**(2928, 2959)**
	National	LM342-15	
		LM78M15	
	NEC	μPC78M15	
	Samsung	MC78M15	
	Sanyo	L78M15	
	SGS	L78M15	
		L78M15CV	
	TI	μA78M15	
	Toshiba	TA78M15	
LM341-5	Fairchild	μA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM342-05	
		LM78M05	

(Continued)

Device	Replacement Source	Device	IC Master Page
LM341-5			(Cont'd)
	NEC	μPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	TI	μA78M05	
	Toshiba	TA78M05	
LM342-05	Fairchild	μA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM78M05	
	NEC	μPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	TI	μA78M05	
	Toshiba	TA78M05	
LM342-12	Fairchild	μA78M12	
	Motorola	**MC78M12**	**(2927, 2959)**
	National	LM341-12	
		LM78M12	
	NEC	μPC78M12	
	Samsung	MC78M12	
	Sanyo	L78M12	
	SGS	L78M12	
		L78M12CV	
	TI	μA78M12	
	Toshiba	TA78M12	
LM342-15	Fairchild	μA78M15	
	Motorola	**MC78M15**	**(2928, 2959)**
	National	LM341-15	
		LM78M15	
	NEC	μPC78M15	
	Samsung	MC78M15	
	Sanyo	L78M15	
	SGS	L78M15	
		L78M15CV	
	TI	μA78M15	
	Toshiba	TA78M15	
LM343	**Datel**	**AM464-2**	**(2577)**
	Harris	HA2645	
	Motorola	**MC1436**	**(2920, 2958)**
	National	LM1436	
	SiliconG	SG1436	
		SG343	
	TeledyneP	1332	
LM346	Thomson	LM346	
LM348	Exar	XR4751	
	Fairchild	μA348	
	GE/Intersil	LM348	
	GoldStar	**GL348**	**(2700)**
	Motorola	**LM348**	**(2923, 2958)**
		MC4741	**(2923, 2959)**
	Raytheon	HA4741	
	TI	LM348	
LM350	Fairchild	μA350	
		μA78HGA	
	IPS	**IP350**	**(2854)**
	LinearTech	LM350	
		LT350	
	Motorola	**LM350**	**(2929)**
	SiliconG	SG350	
	TI	LM350	
	Unitrode	**UC350**	**(3325)**
LM3524	Cherry	CS3524	
	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	SGS	SG3524	
		UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM3524			(Cont'd)
	TI	SG3524	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
LM358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358A	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
LM358A	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
LM361	**Signetics**	**NE529**	**(3125)**
LM3611	National	DS3611	
	SiliconG	SG75471	
	Sprague	**UDN3611**	**(3203)**
	TI	SN75471	
LM3612	National	DS3612	
		DS3632	
	SiliconG	SG75472	
	Sprague	**UDN3612**	**(3203)**
	TI	SN75472	
LM3613	National	DS3613	
	Sprague	**UDN3613**	**(3203)**
	TI	SN75473	
LM3614	National	DS3614	
	SiliconG	SG75474	
	Sprague	**UDN3614**	**(3203)**
LM376	Fairchild	μA376	
LM377	TI	SN76177	
LM380	Sprague	ULN2280	
LM381	Signetics	NE542	
LM382	Signetics	NE542	
LM383	National	LM2002	
		LM2002A	
		LM383A	
	Sprague	ULN3701	
		ULN3702	
LM383A	National	LM2002	
		LM2002A	
		LM383	
	Sprague	ULN3701	
		ULN3702	
LM384	Sprague	ULN3784	
LM385	LinearTech	LM385	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	Motorola	**LM385**	**(2958)**
LM385-1	Fairchild	54AC00	
	Ferranti	REF12	
	GE/RCA	CD54AC00	
	LinearTech	LM385-1	
LM385-2	Ferranti	REF25	
	LinearTech	LM336-2	
		LM385-2	
	Motorola	LM385-2	
	National	LM336-2	
LM386	MCE	MCE386	
LM387	Signetics	NE542	
LM3900	**GE/RCA**	**CA3401**	**(2645)**
	Motorola	**MC3401**	**(2923, 2959)**
	National	LM3401	
	Raytheon	LM3900	
		RC3401	
	TI	LM3900	
LM393	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	NEC	μPC277	
		μPC393	
	SGS	LM393	
	TI	LM393	
	Toshiba	TA75393	
LM3942	MicroPwr	MPT02A	
	National	LM194	
	PMI	**MAT02**	**(2975)**
LM396	Micropac	MLM396	
LM399	LinearTech	LM399	
LM399A	LinearTech	LM399A	
LM4250	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
	Thomson	μA776	
LM4500	Motorola	TCA4500	
	Siemens	TCA4500	
LM55107A	Motorola	MC55107	
	National	DS55107	
	TI	SN55107A	
		SN55107B	
LM55108A	Fairchild	55108	
	Motorola	MC55108	
	National	DS55108	
	TI	SN55108A	
		SN55108B	
LM5522	Motorola	MC5522	
		MC5523	
LM5524	Fairchild	MC5524	
	Motorola	MC5524	
	Raytheon	RM5524	
	TI	SNJ5524	
LM5525	Fairchild	MC5525	
	Motorola	MC5525	
LM5528	Fairchild	MC5528	
	Motorola	MC5528	
LM5529	Fairchild	MC5529	
	Motorola	MC5529	
LM5534	Fairchild	MC5534	
	Motorola	MC5534	
LM5535	Motorola	MC5535	
LM5539	Motorola	MC5539	
LM55453	Fairchild	55453	
	National	DS55453	
	Signetics	55453	
	SiliconG	SG55453	
	TI	SN55453	
		SNJ55453	
LM555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
LM555			(Cont'd)
	Thomson	NE555	
	Toshiba	TA7555	
LM556	**GoldStar**	**GLC556**	**(2700)**
	NCR	NCR65C00-1	
	NEC	μPC556	
	Rockwell	**R65C10**	**(2988)**
	TI	NE556	
LM565	Signetics	NE565	
		SE565	
LM566	Signetics	NE566	
		SE566	
LM567	Exar	XR2567	
		XR567	
	MCE	MCE567	
	Samsung	LM567	
	Signetics	NE567	
		SE567	
LM709	Fairchild	μA709	
	Motorola	**MC1709**	**(2919)**
	National	LM1709	
	NEC	μPC55	
	TI	μ709	
		μA709	
	Toshiba	TA7502	
LM723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	μA723	
	SiliconG	SG723	
	TI	μA723	
		μA723M	
	Thomson	SFC2723	
		μA723	
LM725	Fairchild	μA725	
	PMI	**OP06**	**(2970)**
	Raytheon	RM725	
LM733	Fairchild	μA733	
	GE/Intersil	μA733	
	Hitachi	HA17733	
	Motorola	**MC1733**	**(2920)**
		NE592	**(2960)**
	Signetics	μA733	
	SiliconG	SG1401	
	TI	μA733	
		μA733M	
LM741	AD	AD741	
	Fairchild	μA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	NEC	μPC151	
		μPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	μA741	
	SiliconG	SG741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
LM747	Fairchild	μA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	NEC	μPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	μA747	
	TeledyneS	747	
	TI	μA747	
		μA747M	
LM748	Fairchild	μA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
	SGS	LM748	
		LS148	
	SiliconG	SG201	
	TI	LM201	
		LM748	
		SN72748P	
		μA748	
	Thomson	LM201	
		LM748	
LM75107A	Fairchild	75107	
	Motorola	**MC75107**	**(2952)**
	National	DS75107	
	TI	SN75107B	
LM75108A	Fairchild	75108	
	Motorola	**MC75108**	**(2952)**
	National	DS75108	
	TI	SN75108B	
LM75110	Fairchild	75110	
	Motorola	**MC75S110**	**(2952)**
	TI	SN75110A	
LM7521	Fairchild	7521	
	Motorola	MC7521	
LM7523	Motorola	MC7523	
	Raytheon	RC7523	
LM7525	Fairchild	7525	
	Motorola	MC7525	
LM7529	Fairchild	7529	
	Motorola	MC7529	
	Raytheon	RC7529	
LM7535	Motorola	MC7535	
LM7538	Fairchild	7538	
	Motorola	MC7538	
LM7539	Fairchild	7539	
	Motorola	MC7539	
LM75453	Fairchild	75453	
	Motorola	MC75453	
	National	DS75453	
	SiliconG	SG75453A	
		SG75453B	
	TI	SN75453B	
LM7805	Fairchild	μA7805	
	GoldStar	GL7805	
	Gould	μA7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
	Samsung	MC7805	
	SiliconG	SG7805	
		SG7805A	
	TI	μA7805	
	Toshiba	TA78005	
		TA79005	
	Unitrode	**UC7805**	**(3325)**
LM7806	Fairchild	μA7806	
	Motorola	**MC7806**	**(2927)**
	NEC	μPC7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806	
		SG7806A	
	TI	μA7806	
	Thomson	μA7806	
	Toshiba	TA78006	
LM7808	Fairchild	μA7808	
	GoldStar	GL7808	
	Gould	μA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	NEC	μPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	μA7808	
	Thomson	μA7808	
	Toshiba	TA78008	
LM7809	Fairchild	μA7809	
	GoldStar	GL7809	
	Gould	μA7809	
	Hitachi	HA17809	
	Motorola	MC7809	
	NEC	μPC7809	
	TI	μA7809	
	Toshiba	TA78009	
LM7810	Fairchild	μA7810	
	SGS	L7810	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM7810			(Cont'd)
	TI	µA7810	
	Toshiba	TA78010	
LM7812	Fairchild	µA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
	NEC	µPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	µA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
LM7815	Fairchild	µA78L15	
	GoldStar	GL7815	
	Gould	µA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
	NEC	µPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		µA7815	
	Thomson	µA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
LM7818	Fairchild	µA7818	
	Motorola	**MC7818**	**(2928)**
	Samsung	MC7818	
	SGS	L7818	
	TI	µA7818	
	Toshiba	TA78018	
LM7820	Fairchild	µA7820	
		µA7910	
	SGS	L7820	
	SiliconG	SG7820	
		SG7820A	
	TI	µA7820	
		µA7910	
	Toshiba	TA78020	
LM7824	Fairchild	µA7824	
	GoldStar	GL7824	
	Gould	µA7824	
	Motorola	**MC7824**	**(2928)**
	NEC	µPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
		µA7824	
	Thomson	µA7824	
	Toshiba	TA78024	
LM78L05	Fairchild	µA78L05	
	Motorola	**MC78L05**	**(2926, 2959)**
	National	LM340LA-5	
	NEC	µPC78L05	
	TI	µA78L05	
	Thomson	µA7805	
	Toshiba	TA78L006	
LM78L06	Fairchild	µA78L06	
	TI	µA78L06	
		µA87L06	
	Toshiba	TA78L012	
LM78L08	Fairchild	µA78L08	
	Motorola	**MC78L08**	**(2959)**
	NEC	µPC78L08	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM78L08			(Cont'd)
	TI	µA78L08	
	Toshiba	TA78L008	
LM78L09	Fairchild	µA78L09	
	TI	µA78L09	
	Toshiba	TA78L009	
LM78L10	Fairchild	µA78L10	
	TI	µA78L10	
	Toshiba	TA78L010	
LM78L12	Fairchild	µA78L12	
	Motorola	**MC78L12**	**(2927, 2959)**
	National	LM340LA-12	
	NEC	µPC78L12	
	TI	µA78L12	
	Thomson	µA7812	
	Toshiba	TA78L012	
LM78L15	Fairchild	µA7815	
	GoldStar	GL7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	
		LM340T-15	
	NEC	µPC78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	SN75555	
		µA78L15	
	Toshiba	TA78L015	
LM78L18	Fairchild	µA78L18	
	Motorola	**MC78L18**	**(2928)**
	TI	µA78L18	
		µA78m20	
	Toshiba	TA78L018	
LM78L20	Fairchild	µA78L20	
	TI	µA78L20	
	Toshiba	TA78L024	
		TA78L20	
LM78M05	Fairchild	µA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
	NEC	µPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	TI	µA78M05	
	Toshiba	TA78M05	
LM78M06	Fairchild	µA78M06	
	Motorola	**MC78M06**	**(2927)**
	Samsung	MC78M06	
	Sanyo	L78M06	
	SGS	L78M06	
		L78M06CV	
	TI	µA78M06	
	Toshiba	TA78M06	
LM78M08	Fairchild	µA78M08	
	Motorola	MC78M08	
	NEC	µPC78M08	
	Samsung	MC78M08	
	Sanyo	L78M08	
	SGS	L78M08	
		L78M08CV	
	TI	µA78M08	
	Toshiba	TA78M08	
LM78M09	Fairchild	µA78M09	
	SGS	L78M09	
	TI	µA78M09	
	Toshiba	TA78M09	
LM78M10	Fairchild	µA78M10	
	National	LM7910	
	SGS	L78M10	
	TI	µA78M10	
	Toshiba	TA78M10	
LM78M12	Fairchild	µA78M12	
	Motorola	**MC78M12**	**(2927, 2959)**
	National	LM341-12	
		LM342-12	
	NEC	µPC78M12	
	Samsung	MC78M12	
	Sanyo	L78M12	
	SGS	L78M12	
		L78M12CV	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM78M12			(Cont'd)
	TI	µA78M12	
	Toshiba	TA78M12	
LM78M15	Fairchild	µA78M15	
	Motorola	**MC78M15**	**(2928, 2959)**
	National	LM341-15	
		LM342-15	
	NEC	µPC78M15	
	Samsung	MC78M15	
	Sanyo	L78M15	
	SGS	L78M15	
		L78M15CV	
	TI	µA78M15	
	Toshiba	TA78M15	
LM78M20	Fairchild	µA78M20	
	Motorola	**MC78M20**	**(2928)**
	SGS	L78M20	
	TI	µA78M20	
	Toshiba	TA78M20	
LM7905	Fairchild	µA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	µA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM79M05	
	NEC	µPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	µA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
LM7906	Fairchild	µA7906	
	GoldStar	GL7806	
	Gould	µA7806	
	Motorola	MC7906	
	NEC	µPC7806	
	Samsung	MC7906	
	SGS	L7906	
	TI	µA7906	
	Toshiba	TA78006	
LM7908	Fairchild	MC7908	
		µA7908	
		µA79M08	
	Motorola	MC7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908	
		SG7908A	
	TI	µA7908	
		µA79M08	
	Toshiba	TA79008	
LM7909	Fairchild	µA7909	
	GoldStar	**GL7909**	**(2701)**
	Gould	µA7909	
	NEC	µPC7909	
	SGS	L7909	
	TI	µA7909	
	Toshiba	TA7900	
		TA79009	
LM7910	Fairchild	µA78M10	
	National	LM78M10	
	SGS	L78M10	
	TI	µA78M10	
	Toshiba	TA78M10	
LM7912	Fairchild	µA7912	
		µA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	µA7824	
		µA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM79M12	
	NEC	µPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	µA7912	
	Thomson	µA7912	
	Toshiba	TA78024	
		TA79012	

Manufacturer Device	Replacement Source	Device	IC Master Page
LM7915	Fairchild	µA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	µA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
	NEC	µPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	µA7915	
	Thomson	µA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
LM7918	Fairchild	µA7918	
	Motorola	MC7918	
	Samsung	MC7918	
	SGS	L7918	
	SiliconG	SG7918	
		SG7918A	
	TI	µA7918	
	Toshiba	TA79018	
LM7920	Fairchild	µA7920	
	SGS	L7920	
	SiliconG	SG7920	
		SG7920A	
	SiliconSys	SSI957	
	TI	µA7920	
	Toshiba	TA79020	
LM7924	Fairchild	74LS195A	
		µA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	µA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
	NEC	µPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		µA7924	
	Toshiba	TA79024	
LM79M05	Fairchild	µA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	µA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
	NEC	µPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	µA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
LM79M12	Fairchild	µA7912	
		µA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	µA7824	
		µA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
	NEC	µPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	µA7912	
	Thomson	µA7912	
	Toshiba	TA78024	
		TA79012	
LP111	TI	LP111	
LP211	TI	LP211	
LP311	TI	LP311	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LP339	TI	LP339	
LP365	TI	LP365	
MC1508	AD	AD1508	
	Datel	**DACIC8BM**	**(2576)**
	Motorola	**MC1508**	**(2938)**
	PMI	DAC1508	
	Signetics	MC1508	
		SE5008	
		SE5009	
♦ MCA1300	**Motorola**	**MCA1300**	**(4282)**
MCA500	**Motorola**	**MCA500**	**(4282)**
♦ MF10	**Exar**	**XR1010**	**(2602)**
	Harris	HA10	
	LinearTech	LT1060	
	Maxim	MF10	
	MicroLinear	ML2110	
MF10-100	**Exar**	**XR1001**	**(2602)**
	National	MF4	
MF10-50	Exar	XR1002	
MF4	**Exar**	**XR1001**	**(2602)**
	National	MF10-100	
MH0025	National	DS0025	
MH0056	National	DS0056	
MH8808	National	DS55471	
		DS8808	
MM1101	AMD	AM1101ADM	
	Intel	1101	
	NCM	NCM1101Z	
	Thomson	MK6027P	
MM1702	AMD	AM1702A	
MM2102A	Fairchild	2102H	
	Panasonic	MN2102	
♦ MM2114	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
♦ MM2114	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
♦ MM2114	Toshiba	TC5513	
		TC5514	
		TMM2114	
♦ MM2114	UMC	UM6104	
MM2142	**Harris**	**HM6514**	**(2704, 2762, 2768)**
MM2147	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
	Intel	2147	
	Motorola	MCM6147	
	National	NMC2141	
	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
MM2532	Hitachi	HN462532	
	National	NMC2532	
		TDA2530	
		TDA2532	
	Plessey	TDA2530	
MM2716	**Harris**	**HM6616**	**(2768)**
	Hitachi	HN462716	
	OKI	MSM2716	
	SGS	M2716	
	Thomson	ET2716	
MM2732	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		2732A	
		M2732	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM2732			(Cont'd)
	National	NMC2732	
	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
MM4230	National	SM10248	
	NCM	NCM4230Z	
MM52164	GIM	RO3-9364	
	Hitachi	HN48364	
	Mitsubishi	M58334	
	NEC	μPD2364	
	Rockwell	R2364A	
	Signetics	2664	
		26S64	
MM52264	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
MM5280	Panasonic	MN1001	
MM5290	AMD	AM9016	
	Fairchild	F16K	
		F4116	
	Hitachi	HM4716	
	ITT	ITT4116	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
MM5322	NCM	NCM4322Z	
MM5450	SGS	M5450	
MM5451	SGS	M5451	
MM5453	Motorola	MC145453	
MM5480	SGS	M5480	
MM5481	SGS	M5481	
		SG2525A	
	SiliconG	SG2525A	
MM54C04	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
MM54C14	Fairchild	F400014	
		F40014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14106	
		MC14584	
	National	CD40106	
		CD4584	
		MM74C14	
	SGS	HCC/HCF40106	
	Signetics	HEF40106	
	Sprague	SCL4584	
MM54C173	Fairchild	F4076	
	GE/RCA	**CD4076**	**(2634)**
	Motorola	MC14076	
	National	CD4076	
		MM74C173	
	SGS	HCC/HCF4076	
	Signetics	HEF4076	
	Solitron	CM4076	
	Sprague	SCL4076	
	Toshiba	**TC4076**	**(3308)**

Manufacturer Device	Replacement Source	Device	IC Master Page
MM54C175	Fairchild	F40175	
	Motorola	MC14175	
	National	CD40175	
		MM74C175	
	Signetics	HEF40175	
	Toshiba	**TC40175**	**(3308)**
MM54C192	Fairchild	F40192	
	National	MM74C192	
MM54C193	Fairchild	F40193	
	GE/RCA	**CD40193**	**(2635)**
	National	CD40193	
		MM74C193	
	SGS	HCC/HCF40193	
	Signetics	HEF40193	
	Sprague	SCL4193	
	Toshiba	**TC40193**	**(3308)**
MM54GC393	**GE/RCA**	**CD54HC393**	**(2632)**
	Motorola	MC54HC393	
	Signetics	54HC393	
	TI	SN54HC393	
MM54HC00	**GE/RCA**	**CD54HC00**	**(2631)**
	Motorola	MC54HC00	
	Signetics	54HC00	
	Sprague	SS54HC00	
	TI	SN54HC00	
MM54HC02	**GE/RCA**	**CD54HC02**	**(2631)**
	Motorola	MC54HC02	
	Signetics	54HC02	
	TI	SN54HC02	
MM54HC03	**GE/RCA**	**CD54HC03**	**(2631)**
	Motorola	54HC03	
	TI	SN54HC03	
MM54HC04	**GE/RCA**	**CD54HC04**	**(2631)**
	Motorola	MC54HC04	
	Signetics	54HC04	
	TI	SN54HC04	
MM54HC08	**GE/RCA**	**CD54HC08**	**(2631)**
	Motorola	MC54HC08	
	Signetics	54HC08	
	TI	SN54HC08	
MM54HC10	**GE/RCA**	**CD54HC10**	**(2631)**
	Motorola	MC54HC10	
	Signetics	54HC10	
	TI	SN54HC10	
MM54HC107	**GE/RCA**	**CD54HC107**	**(2631)**
	Motorola	MC54HC107	
	Signetics	54HC107	
	TI	SN54HC107	
MM54HC109	**GE/RCA**	**CD54HC109**	**(2631)**
	Motorola	MC54HC109	
	Signetics	54HC109	
	TI	SN54HC109	
MM54HC11	**GE/RCA**	**CD54HC11**	**(2631)**
	Motorola	MC54HC11	
	Signetics	54HC11	
	TI	SN54HC11	
MM54HC112	**GE/RCA**	**CD54HC112**	**(2631)**
	Motorola	MC54HC112	
	Signetics	54HC112	
	TI	SN54HC112	
MM54HC123	**GE/RCA**	**CD54HC123**	**(2632)**
	Motorola	MC54HC123	
	Signetics	54HC123	
MM54HC125	Fairchild	54HC125	
	GE/RCA	**CD54HC125**	**(2631)**
		CDHC125	
	Motorola	MC54HC125	
	TI	SN54HC125	
MM54HC132	Fairchild	54HC132	
	GE/RCA	**CD54HC132**	**(2631)**
	Motorola	MC54HC132	
	Signetics	54HC132	
	TI	SN54HC132	
MM54HC133	Motorola	MC54HC133	
	Signetics	54HC133	
	TI	SN54HC133	
MM54HC137	**GE/RCA**	**CD54HC137**	**(2632)**
	Motorola	MC54HC137	
	Sprague	SN54HC137	
		SS54HC137	
	TI	SN54HC137	
MM54HC138	**GE/RCA**	**CD54HC138**	**(2632)**
	Motorola	MC54HC138	
	Signetics	54HC138	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM54HC138			(Cont'd)
	Sprague	SS54HC138	
	TI	SN54HC138	
MM54HC139	**GE/RCA**	**CD54HC139**	**(2632)**
	Motorola	MC54HC139	
	Signetics	54HC139	
	Sprague	SS54HC139	
	TI	SN54HC139	
MM54HC14	**GE/RCA**	**CD54HC14**	**(2631)**
	Motorola	MC54HC14	
	Signetics	54HC14	
	TI	SN54HC14	
MM54HC147	**GE/RCA**	**CD54HC147**	**(2632)**
	Motorola	MC54HC147	
	Signetics	54HC147	
MM54HC151	**GE/RCA**	**CD54HC151**	**(2632)**
	Motorola	MC54HC151	
	Signetics	54HC151	
	TI	SN54HC151	
MM54HC153	**GE/RCA**	**CD54HC153**	**(2632)**
	Motorola	MC54HC153	
	Signetics	54HC153	
	TI	SN54HC153	
MM54HC154	**GE/RCA**	**CD54HC154**	**(2632)**
	Motorola	MC54HC154	
	Signetics	54HC154	
MM54HC158	**GE/RCA**	**CD54HC158**	**(2632)**
	Motorola	MC54HC158	
	Signetics	54HC158	
	TI	SN54HC158	
MM54HC160	**GE/RCA**	**CD54HC160**	**(2632)**
	Motorola	MC54HC160	
	Signetics	54HC160	
	TI	SN54HC160	
MM54HC161	**GE/RCA**	**CD54HC161**	**(2632)**
	Motorola	MC54HC161	
	Signetics	54HC161	
	TI	SN54HC161	
MM54HC162	**GE/RCA**	**CD54HC162**	**(2632)**
	Motorola	MC54HC162	
	Signetics	54HC162	
	TI	SN54HC162	
MM54HC163	**GE/RCA**	**CD54HC163**	**(2632)**
	Motorola	MC54HC163	
	Signetics	54HC163	
MM54HC164	**GE/RCA**	**CD54HC164**	**(2631)**
	Motorola	MC54HC164	
	Signetics	54HC164	
	TI	SN54HC164	
MM54HC165	**GE/RCA**	**CD54HC165**	**(2631)**
	Motorola	MC54HC165	
	Signetics	54HC165	
	TI	SN54HC165	
MM54HC173	**GE/RCA**	**CD54HC173**	**(2631)**
	Motorola	MC54HC173	
	Signetics	54HC173	
	TI	SN54HC173	
MM54HC174	**GE/RCA**	**CD54HC174**	**(2631)**
	Motorola	MC54HC174	
	Signetics	54HC174	
	TI	SN54HC174	
MM54HC175	**GE/RCA**	**CD54HC175**	**(2631)**
	Motorola	MC54HC175	
	Signetics	54HC175	
	TI	SN54HC175	
MM54HC192	**GE/RCA**	**CD54HC192**	**(2632)**
	Motorola	MC54HC192	
	Signetics	54HC192	
	TI	SN54HC192	
MM54HC193	**GE/RCA**	**CD54HC193**	**(2632)**
	Motorola	MC54HC193	
	Signetics	54HC193	
	TI	SN54HC193	
MM54HC194	**GE/RCA**	**CD54HC194**	**(2631)**
	Motorola	MC54HC194	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM54HC194			(Cont'd)
	Signetics	54HC194	
	TI	SN54HC194	
MM54HC195	**GE/RCA**	**CD54HC195**	**(2631)**
	Motorola	MC54HC195	
	Signetics	54HC195	
	TI	SN54HC195	
MM54HC20	**GE/RCA**	**CD54HC20**	**(2631)**
	Motorola	MC54HC20	
	Signetics	54HC20	
	TI	SN54HC20	
MM54HC221	**GE/RCA**	**CD54HC221**	**(2632)**
	Motorola	MC54HC221	
	Signetics	54HC221	
MM54HC237	**GE/RCA**	**CD54HC237**	**(2632)**
	Motorola	MC54HC237	
	Sprague	SN54HC237	
	TI	SN54HC237	
MM54HC240	**GE/RCA**	**CD54HC240**	**(2631)**
	Motorola	MC54HC240	
	Signetics	54HC240	
	Sprague	SS54HC240	
	Supertex	SI54HC240	
	TI	SN54HC240	
MM54HC241	**GE/RCA**	**CD54HC241**	**(2631)**
	Motorola	MC54HC241	
	Signetics	54HC241	
	Sprague	SS54HC241	
	Supertex	SI54HC241	
	TI	SN54HC241	
MM54HC242	**GE/RCA**	**CD54HC242**	**(2631)**
	Motorola	MC54HC242	
	Signetics	54HC242	
	TI	SN54HC242	
MM54HC243	Fairchild	54HC243	
	GE/RCA	**CD54HC243**	**(2631)**
	Motorola	MC54HC243	
	Signetics	54HC243	
	TI	SN54HC243	
MM54HC244	**GE/RCA**	**CD54HC244**	**(2631)**
	Motorola	MC54HC244	
	Signetics	54HC244	
	Sprague	SS54HC244	
	Supertex	SI54HC244	
	TI	SN54HC244	
MM54HC245	**GE/RCA**	**CD54HC245**	**(2631)**
	Motorola	MC54HC245	
	Signetics	54HC245	
	Sprague	SS54HC245	
	TI	SN54HC245	
MM54HC251	**GE/RCA**	**CD54HC251**	**(2632)**
	Motorola	MC54HC251	
	Signetics	54HC251	
	TI	SN54HC251	
MM54HC253	**GE/RCA**	**CD54HC253**	**(2632)**
	Motorola	MC54HC253	
	Signetics	54HC253	
	TI	SN54HC253	
MM54HC257	**GE/RCA**	**CD54HC257**	**(2632)**
	Motorola	MC54HC257	
	Signetics	54HC257	
	TI	SN54HC257	
MM54HC259	**GE/RCA**	**CD54HC259**	**(2632)**
	Motorola	MC54HC259	
	Signetics	54HC259	
	TI	SN54HC259	
MM54HC266	Motorola	MC54HC266	
	Signetics	54HC266	
	TI	SN54HC266	
MM54HC27	**GE/RCA**	**CD54HC27**	**(2631)**
	Motorola	MC54HC27	
	Signetics	54HC27	
	TI	SN54HC27	
MM54HC280	**GE/RCA**	**CD54HC280**	**(2632)**
	Motorola	MC54HC280	
MM54HC280			(Cont'd)
	Signetics	54HC280	
	TI	SN54HC280	
MM54HC299	**GE/RCA**	**CD54HC299**	**(2631)**
	Motorola	MC54HC299	
	Signetics	54HC299	
MM54HC30	**GE/RCA**	**CD54HC30**	**(2631)**
	Motorola	MC54HC30	
	Signetics	54HC30	
	TI	SN54HC30	
MM54HC32	**GE/RCA**	**CD54HC32**	**(2631)**
	Motorola	MC54HC32	
	Signetics	54HC32	
	TI	SN54HC32	
MM54HC354	**GE/RCA**	**CD54HC354**	**(2632)**
	Motorola	MC54HC354	
	Signetics	54HC354	
MM54HC356	**GE/RCA**	**CD54HC356**	**(2632)**
	Motorola	MC54HC356	
	Signetics	54HC356	
MM54HC365	**GE/RCA**	**CD54HC365**	**(2631)**
	Motorola	MC54HC365	
	Signetics	54HC365	
	TI	SN54HC365	
MM54HC366	**GE/RCA**	**CD54HC366**	**(2631)**
	Motorola	MC54HC366	
	Signetics	54HC366	
	TI	SN54HC366	
MM54HC367	**GE/RCA**	**CD54HC367**	**(2631)**
	Motorola	MC54HC367	
	Signetics	54HC367	
	TI	SN54HC367	
MM54HC368	**GE/RCA**	**CD54HC368**	**(2631)**
	Motorola	MC54HC368	
	Signetics	54HC368	
	TI	SN54HC368	
MM54HC373	**GE/RCA**	**CD54HC373**	**(2632)**
	Motorola	MC54HC373	
	Signetics	54HC373	
	Sprague	SS54HC373	
	Supertex	SI54HC373	
	TI	SN54HC373	
MM54HC374	**GE/RCA**	**CD54HC374**	**(2631)**
	Motorola	MC54HC374	
	Signetics	54HC374	
	Sprague	SS54HC374	
	Supertex	SI54HC374	
	TI	SN54HC374	
MM54HC390	**GE/RCA**	**CD54HC390**	**(2632)**
	Motorola	MC54HC390	
	Signetics	54HC390	
	TI	SN54HC390	
MM54HC4002			
	GE/RCA	**CD54HC4002**	**(2631)**
	Motorola	MC54HC4002	
	Signetics	54HC4002	
	TI	SN54HC4002	
MM54HC4016			
	GE/RCA	CD54HC4016	
	Motorola	MC54HC4016	
	TI	SN54HC4016	
MM54HC4017			
	GE/RCA	**CD54HC4017**	**(2632)**
	Motorola	MC54HC4017	
	Signetics	54HC4017	
MM54HC4020			
	GE/RCA	**CD54HC4020**	**(2632)**
	Signetics	54HC4020	
MM54HC404	GE/RCA	CD54HC404	
	Motorola	MC54HC404	
	TI	SN54HC404	
MM54HC4040			
	GE/RCA	**CD54HC4040**	**(2632)**
	Motorola	MC54HC4040	
	Signetics	54HC4040	
MM54HC4049			
	GE/RCA	**CD54HC4049**	**(2631)**
	Motorola	MC54HC4049	
	Signetics	54HC4049	
MM54HC4050			
	GE/RCA	**CD54HC4050**	**(2631)**
	Motorola	MC54HC4050	
	Signetics	54HC4050	
MM54HC4060			
	GE/RCA	**CD54HC4060**	**(2632)**
	Motorola	MC54HC4060	
	Signetics	54HC4060	
MM54HC4066			
	GE/RCA	**CD54HC4066**	**(2631)**
	Motorola	MC54HC4066	
	TI	SN54HC4066	
MM54HC4075			
	GE/RCA	**CD54HC4075**	**(2631)**
	Motorola	MC54HC4075	
	TI	SN54HC4075	
MM54HC4078			
	Motorola	MC54HC4078	
	TI	SN54HC4078A	
MM54HC42	**GE/RCA**	**CD54HC42**	**(2632)**
	Motorola	MC54HC42	
	Signetics	54HC42	
	TI	SN54HC42	
MM54HC4514			
	GE/RCA	**CD54HC4514**	**(2632)**
	Motorola	MC54HC4514	
	Signetics	54HC4514	
MM54HC4538			
	GE/RCA	**CD54HC4538**	**(2632)**
	Motorola	MC54HC4538	
	Signetics	54HC4538	
MM54HC51	Motorola	54HC51	
	TI	SN54HC51	
MM54HC533	**GE/RCA**	**CD54HC533**	**(2632)**
	Motorola	MC54HC533	
	Signetics	54HC533	
	Sprague	SS54HC533	
	TI	SN54HC533	
MM54HC534	**GE/RCA**	**CD54HC534**	**(2631)**
	Motorola	MC54HC534	
	Signetics	54HC534	
	Sprague	SS54HC534	
	TI	SN54HC534	
MM54HC563	**GE/RCA**	**CD54HC563**	**(2632)**
	Signetics	54HC563	
	Sprague	SS54HC563	
	TI	SN54HC563	
MM54HC564	**GE/RCA**	**CD54HC564**	**(2631)**
	Motorola	MC54HC564	
	Signetics	54HC564	
	Sprague	SS54HC564	
	TI	SN54HC564	
MM54HC573	**GE/RCA**	**CD54HC573**	**(2632)**
	Motorola	MC54HC573	
	Signetics	54HC573	
	Sprague	SS54HC573	
	TI	SN54HC573	
MM54HC574	**GE/RCA**	**CD54HC574**	**(2631)**
	Motorola	MC54HC574	
	Signetics	54HC574	
	Sprague	SS54HC574	
	TI	SN54HC574	
MM54HC595	Motorola	MC54HC595	
	TI	SN54HC595	
MM54HC640	**GE/RCA**	**CD54HC640**	**(2631)**
	Motorola	MC54HC640	
	Signetics	54HC640	
	Sprague	SS54HC640	
	TI	SN54HC640	
MM54HC643	**GE/RCA**	**CD54HC643**	**(2631)**
	Motorola	MC54HC643	
	Signetics	54HC643	
	TI	SN54HC643	
MM54HC645	Signetics	54HC645	
	Sprague	SS54HC645	
	TI	SN54HC645	
MM54HC646	**GE/RCA**	**CD54HC646**	**(2631)**
	Motorola	MC54HC646	
	Signetics	54HC646	
MM54HC648	**GE/RCA**	**CD54HC648**	**(2631)**
	Motorola	MC54HC648	
	Signetics	54HC648	
MM54HC688	Fairchild	54HC688	
	GE/RCA	**CD54HC688**	**(2632)**
	Motorola	MC54HC688	
	Signetics	54HC688	
	TI	SN54HC688	
MM54HC73	**GE/RCA**	**CD54HC73**	**(2631)**
	Motorola	MC54HC73	
	Signetics	54HC73	
MM54HC74	**GE/RCA**	**CD54HC74**	**(2631)**
	Motorola	MC54HC74	
	Signetics	54HC74	
	TI	SN54HC74	
MM54HC75	**GE/RCA**	**CD54HC75**	**(2632)**
	Motorola	MC54HC75	
	Signetics	54HC75	
	TI	SN54HC75	
MM54HC76	Motorola	MC54HC76	
	Signetics	54HC76	
MM54HC85	**GE/RCA**	**CD54HC85**	**(2632)**
	Motorola	MC54HC85	
	Signetics	54HC85	
MM54HC86	**GE/RCA**	**CD54HC86**	**(2631)**
	Motorola	MC54HC86	
	Signetics	54HC86	
	TI	SN54HC86	
MM54HCT04	Fairchild	54HCT04	
	GE/RCA	**CD54HCT04**	**(2631)**
	Motorola	MC54HCT04	
	Signetics	54HCT04	
	TI	SN54HCT04	
MM54HCT138			
	CTI	54HCT138	
	GE/RCA	**CD54HCT138**	**(2632)**
	Mitel	MD54HCT138	
	Motorola	MC54HCT138	
	Signetics	54HCT138	
	Sprague	SS54HCT138	
	Supertex	54HCT138	
	TI	SN54HCT138	
MM54HCT139			
	CTI	54HCT139	
	GE/RCA	**CD54HCT139**	**(2632)**
	Mitel	MD54HCT139	
	Signetics	54HCT139	
	Sprague	SS54HCT139	
	Supertex	54HCT139	
MM54HCT240			
	CTI	54HCT240	
	GE/RCA	**CD54HCT240**	**(2631)**
	Hitachi	HD54HCT240	
	Micrel	MC54HCT240	
		MIC54HCT240	
	Mitel	MD54HCT240	
	Motorola	MC54HCT240	
	Signetics	54HCT240	
	Supertex	SI54HCT240	
	TI	SN54HCT240	
MM54HCT241			
	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	OKI	MSM37256A	
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**
	Vitelic	V51C256	
		V51C257	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM54HCT244			
	CTI	54HCT244	
	GE/RCA	**CD54HCT244**	**(2631)**
	Micrel	MIC54HCT244	
	Mitel	MD54HCT244	
	Motorola	MC54HCT244	
	Signetics	54HCT244	
	Sprague	SS54HCT244	
	Supertex	SI54HCT244	
	TI	SN54HCT244	
MM54HCT245			
	CTI	54HCT245	
	GE/RCA	**CD54HCT245**	**(2631)**
	Mitel	MD54HCT245	
	Motorola	MC54HCT245	
	Signetics	54HCT245	
	Sprague	SS54HCT245	
	Supertex	54HCT245	
	TI	SN54HCT245	
MM54HCT373			
	CTI	54HCT373	
	GE/RCA	**CD54HCT373**	**(2632)**
	Micrel	MIC54HCT373	
	Mitel	MD54HCT373	
	Motorola	MC54HCT373	
	Signetics	54HCT373	
	Sprague	SS54HCT373	
	Supertex	SI54HCT373	
	TI	SN54HCT373	
MM54HCT374			
	CTI	54HCT374	
	GE/RCA	54HCT374	
		CD54HCT374	**(2631)**
	Micrel	MIC54HCT374	
		MICHCT374	
	Mitel	MD54HCT374	
	Motorola	MC54HCT374	
	Sprague	SS54HCT374	
	Supertex	SI54HCT374	
	TI	SN54HCT374	
MM54HCT540			
	CTI	54HCT540	
	GE/RCA	**CD54HCT540**	**(2631)**
	Mitel	MD54HCT540	
	Motorola	MC54HCT540	
	Signetics	54HCT540	
	Sprague	SS54HCT540	
	Supertex	54HCT540	
	TI	SN54HCT540	
MM54HCT541			
	CTI	54HCT541	
	GE/RCA	**CD54HCT541**	**(2631)**
	Mitel	MD54HCT541	
	Motorola	MC54HCT541	
	Signetics	54HCT541	
	Sprague	SS54HCT541	
	Supertex	54HCT541	
	TI	SN54HCT541	
MM54HCT544			
	Mitel	MD54HCT544	
MM54S289	AMD	SN5489-1	
	National	DM5489	
		DM54S289	
	Signetics	S82S25	
MM58438	Gould	S4521	
	Hughes	HLCD0438	
MM58538	Hughes	HLCD0538	
MM58539	Hughes	HLCD0539	
MM58540	Hughes	HLCD0540	
MM58548	Hughes	HLCD0548	
MM74C00	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	Motorola	MC14011	
	National	CD4011	
	OKI	MSM4011	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
MM74C02	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
MM74C02			(Cont'd)
	Motorola	MC14001	
	National	CD4001	
	OKI	MSM4001	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
MM74C04	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
MM74C08	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	CD4081	
	OKI	MSM4081	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
MM74C10	Fairchild	F4023	
	GE/RCA	**CD4023**	**(2633)**
	Motorola	MC14023	
	National	CD4023	
	SGS	HCC/HCF4023	
	Signetics	HEF4023	
	Solitron	CM4023	
	Sprague	SCL4023	
	Toshiba	**TC4023**	**(3308)**
MM74C14	Fairchild	F400014	
		F40014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14106	
		MC14584	
	National	CD40106	
		CD4584	
		MM54C14	
	SGS	HCC/HCF40106	
	Signetics	HEF40106	
	Sprague	SCL4584	
MM74C164	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	CD4015	
	OKI	MSM4015	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
MM74C173	Fairchild	F4076	
	GE/RCA	**CD4076**	**(2634)**
	Motorola	MC14076	
	National	CD4076	
		MM54C173	
	SGS	HCC/HCF4076	
	Signetics	HEF4076	
	Solitron	CM4076	
	Sprague	SCL4076	
	Toshiba	**TC4076**	**(3308)**
MM74C175	Fairchild	F40175	
	Motorola	MC14175	
	National	CD40175	
		MM54C175	
	Signetics	HEF40175	
	Toshiba	**TC40175**	**(3308)**
MM74C192	Fairchild	F40192	
	National	MM54C192	
MM74C193	Fairchild	F40193	
	GE/RCA	**CD40193**	**(2635)**
	National	CD40193	
		MM54C193	
	SGS	HCC/HCF40193	
	Signetics	HEF40193	
	Sprague	SCL4193	
	Toshiba	**TC40193**	**(3308)**
MM74C195	Fairchild	F40195	
	National	CD40195	
MM74C221	Fairchild	F4528	
	Motorola	MC14528	
	National	CD4528	
	SGS	HCC/HCF4098	
	Signetics	HEF4528	
	Toshiba	**TC4528**	**(3308)**
MM74C32	Fairchild	F4071	
	GE/RCA	**CD4071**	**(2633)**
	Motorola	MC14071	
	National	CD4071	
	OKI	MSM4071	
	Sanyo	LC4071	
	SGS	HCC/HCF4071	
	Signetics	HEF4071	
	Solitron	CM4071	
	Sprague	SCL4071	
MM74C42	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	CD4028	
	OKI	MSM4028	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	
	Solitron	CM4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
MM74C74	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	CD4013	
	OKI	MSM4013	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
	Signetics	HEF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
MM74C76	Fairchild	F4027	
	GE/RCA	**CD4027**	**(2634)**
	Motorola	MC14027	
	National	CD4027	
	OKI	MSM4027	
	Sanyo	LC4027	
	SGS	HCC/HCF4027	
	Signetics	HEF4027	
	Solitron	CM4027	
	Sprague	SCL4027	
MM74C83	Fairchild	F4008	
	GE/RCA	**CD4008**	**(2636)**
	Motorola	MC14008	
	National	CD4008	
	SGS	HCC/HCF4008	
	Signetics	HEF4008	
	Solitron	CM4008	
	Sprague	SCL4008	
	Toshiba	**TC4008**	**(3308)**
MM74C85	Fairchild	F40085	
	GE/RCA	**CD4585**	**(2636)**
	Motorola	MC14585	
	SGS	HCC/HCF4585	
	Signetics	HEF4585	
	Sprague	SCL4585	
	Toshiba	**TC4585**	**(3308)**
MM74C86	Fairchild	F4070	
	GE/RCA	**CD4070**	**(2633, 2636)**
	Motorola	MC14070	
	National	CD4070	
	SGS	HCC/HCF4070	
	Signetics	HEF4070	
	Solitron	CM4070	
	Sprague	SCL4070	
MM74C89	Fairchild	F40089	
MM74C920	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	
MM74C930	**Harris**	**HM6518**	**(2704, 2762)**
	Motorola	6518	
MM74C945	Maxim	MM74C945	
MM74C947	Maxim	MM74C947	
MM74HC00	**GE/RCA**	**CD74HC00**	**(2631)**
	Hitachi	HD74HC00	
	Motorola	MC74HC00	
	SGS	M74HC00	
	Signetics	**74HC00**	**(3003)**
	TI	SN74HC00	
	Toshiba	TC40H000	
MM74HC02	**GE/RCA**	**CD74HC02**	**(2631)**
	Hitachi	HD74HC02	
	Motorola	MC74HC02	
	SGS	M74HC02	
	Signetics	**74HC02**	**(3003)**
	TI	SN74HC02	
	Toshiba	TC40H002	
MM74HC03	**GE/RCA**	**CD74HC03**	**(2631)**
	Motorola	MC74HC03	
	SGS	M74HC03	
	TI	SN74HC03	
	Toshiba	**TC74HC03**	**(3307)**
MM74HC04	**GE/RCA**	**CD74HC04**	**(2631)**
	Hitachi	HD74HC04	
	Motorola	MC74HC04	
	SGS	M74HC04	
	TI	SN74HC04	
	Toshiba	TC40H004	
MM74HC08	**GE/RCA**	**CD74HC08**	**(2631)**
	Hitachi	HD74HC08	
	Motorola	MC74HC08	
	SGS	M74HC08	
	Signetics	**74HC08**	**(3003)**
	TI	SN74HC08	
MM74HC10	**GE/RCA**	**CD74HC10**	**(2631)**
	Hitachi	HD74HC10	
	Motorola	MC74HC10	
	SGS	M74HC10	
	Signetics	**74HC10**	**(3003)**
	TI	SN74HC10	
	Toshiba	TC40H010	
MM74HC107	**GE/RCA**	**CD74HC107**	**(2631)**
	Hitachi	HD74HC107	
	Motorola	MC74HC107	
	SGS	M74HC107	
	Signetics	**74HC107**	**(3003)**
	TI	SN74HC107	
	Toshiba	TC40H107	
MM74HC109	**GE/RCA**	**CD74HC109**	**(2631)**
	Hitachi	HD74HC109	
	Motorola	MC74HC109	
	SGS	M74HC109	
	Signetics	**74HC109**	**(3003)**
	TI	SN74HC109	
	Toshiba	**TC74HC109**	**(3307)**
MM74HC11	**GE/RCA**	**CD74HC11**	**(2631)**
	Hitachi	HD74HC11	
	Motorola	MC74HC11	
	SGS	M74HC11	
	Signetics	**74HC11**	**(3003)**
	TI	SN74HC11	
	Toshiba	TC40H011	
MM74HC112	**GE/RCA**	**CD74HC112**	**(2631)**
	Hitachi	HD74HC112	
	Motorola	MC74HC112	
	SGS	M74HC112	
	Signetics	**74HC112**	**(3003)**
	TI	SN74HC112	
MM74HC113	Hitachi	HD74HC113	
	Motorola	MC74HC113	
	SGS	M74HC113	
	TI	SN74HC113	
MM74HC123	Hitachi	HD74HC123	
	Motorola	MC74HC123A	
	SGS	M74HC123	
	Signetics	**74HC123**	**(3003)**
	TI	SN74HC123	
MM74HC125	**GE/RCA**	**CD74HC125**	**(2631)**
	Hitachi	HD74HC125	
	Motorola	MC74HC125	
	SGS	M74HC125	
	TI	SN74HC125	
	Toshiba	**TC74HC125**	**(3307)**
MM74HC126	**GE/RCA**	**CD74HC126**	**(2631)**
	Hitachi	HD74HC126	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM74HC126			(Cont'd)
	Motorola	MC74HC126	
	SGS	M74HC126	
	Toshiba	**TC74HC126**	**(3307)**
MM74HC132	**GE/RCA**	**CD74HC132**	**(2631)**
	Hitachi	HD74HC132	
	Motorola	MC74HC132	
	SGS	M74HC132	
	Signetics	**74HC132**	**(3003)**
	TI	SN74HC132	
MM74HC133	Motorola	MC74HC133	
	SGS	M74HC133	
	TI	SN74HC133	
MM74HC137	Hitachi	HD74HC137	
	Motorola	MC74HC137	
	SGS	M74HC137	
	Toshiba	**TC74HC137**	**(3307)**
MM74HC138	**GE/RCA**	**CD74HC138**	**(2632)**
	Hitachi	HD74HC138	
	Motorola	MC74HC138	
	SGS	M74HC138	
	Signetics	**74HC138**	**(3003)**
	Sprague	SS74HC138	
	TI	SN74HC138	
MM74HC139	**GE/RCA**	**CD74HC139**	**(2632)**
	Hitachi	HD74HC139	
	SGS	M74HC139	
	Signetics	**74HC139**	**(3003)**
	Sprague	SS74HC139	
	TI	SN74HC139	
	Toshiba	TC40H139	
MM74HC14	**GE/RCA**	**CD74HC14**	**(2631)**
	Hitachi	HD74HC14	
	Motorola	MC74HC14	
	SGS	M74HC14	
	Signetics	**74HC14**	**(3003)**
	TI	SN74HC14	
MM74HC147	**GE/RCA**	**CD74HC147**	**(2632)**
	Hitachi	HD74HC147	
	Motorola	MC74HC147	
	SGS	M74HC147	
	Signetics	**74HC147**	**(3003)**
	TI	SN74HC147	
MM74HC151	**GE/RCA**	**CD74HC151**	**(2632)**
	Hitachi	HD74HC151	
	Motorola	MC74HC151	
	SGS	M74HC151	
	Signetics	**74HC151**	**(3003)**
	TI	SN74HC151	
	Universal	US74HC151	
MM74HC153	**GE/RCA**	**CD74HC153**	**(2632)**
	Hitachi	HD74HC153	
	Motorola	MC74HC153	
	SGS	M74HC153	
	Signetics	**74HC153**	**(3003)**
	TI	SN74HC153	
	Toshiba	TC40H153	
MM74HC154	**GE/RCA**	**CD74HC154**	**(2632)**
	Hitachi	HD74HC154	
	Motorola	MC74HC154	
	SGS	M74HC154	
	Signetics	**74HC154**	**(3003)**
	TI	SN74HC154	
MM74HC157	**GE/RCA**	**CD74HC157**	**(2632)**
	Hitachi	HD74HC157	
	Motorola	MC74HC157	
	SGS	M74HC157	
	Signetics	**74HC157**	**(3003)**
	TI	SN74HC157	
	Toshiba	TC40H157	
MM74HC158	**GE/RCA**	**CD74HC158**	**(2632)**
	Hitachi	HD74HC158	
	Motorola	MC74HC158	
	SGS	M74HC158	
	Signetics	**74HC158**	**(3003)**
	TI	SN74HC158	
	Toshiba	TC40H158	
MM74HC160	**GE/RCA**	**CD74HC160**	**(2632)**
	Motorola	MC74HC160	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM74HC160			(Cont'd)
	SGS	M74HC160	
	Signetics	**74HC160**	**(3003)**
	TI	SN74HC160	
MM74HC161	**GE/RCA**	**CD74HC161**	**(2632)**
	Hitachi	HD74HC161	
	Motorola	MC74HC161	
	SGS	M74HC161	
	Signetics	**74HC161**	**(3003)**
	TI	SN74HC161	
MM74HC162	**GE/RCA**	**CD74HC162**	**(2632)**
	Hitachi	HD74HC162	
	Motorola	MC74HC162	
	SGS	M74HC162	
	Signetics	**74HC162**	**(3003)**
	TI	SN74HC162	
MM74HC163	**GE/RCA**	**CD74HC163**	**(2632)**
	Hitachi	HD74HC163	
	Motorola	MC74HC163	
	SGS	M74HC163	
	Signetics	**74HC163**	**(3003)**
	TI	SN74HC163	
MM74HC164	**GE/RCA**	**CD74HC164**	**(2631)**
	Hitachi	HD74HC164	
	Motorola	MC74HC164	
	SGS	M74HC164	
	Signetics	**74HC164**	**(3003)**
	TI	SN74HC164	
MM74HC165	**GE/RCA**	**CD74HC165**	**(2631)**
	Hitachi	HD74HC165	
	Motorola	MC74HC165	
	SGS	M74HC165	
	Signetics	**74HC165**	**(3003)**
	TI	SN74HC165	
MM74HC173	**GE/RCA**	**CD74HC173**	**(2631)**
	Hitachi	HD74HC173	
	Motorola	MC74HC173	
	SGS	M74HC173	
	Signetics	**74HC173**	**(3003)**
	TI	SN74HC173	
MM74HC174	**GE/RCA**	**CD74HC174**	**(2631)**
	Hitachi	HD74HC174	
	Motorola	MC74HC174	
	SGS	M74HC174	
	Signetics	**74HC174**	**(3003)**
	TI	SN74HC174	
	Toshiba	TC40H174	
MM74HC175	**GE/RCA**	**CD74HC175**	**(2631)**
	Hitachi	HD74HC175	
	Motorola	MC74HC175	
	SGS	M74HC175	
	Signetics	**74HC175**	**(3003)**
	TI	SN74HC175	
	Toshiba	TC40H175	
MM74HC192	**GE/RCA**	**CD74HC192**	**(2632)**
	Hitachi	HD74HC192	
	Motorola	MC74HC192	
	SGS	M74HC192	
	Signetics	**74HC192**	**(3003)**
	TI	SN74HC192	
	Toshiba	TC40H192	
MM74HC193	**GE/RCA**	**CD74HC193**	**(2632)**
	Hitachi	HD74HC193	
	Motorola	MC74HC193	
	SGS	M74HC193	
	Signetics	**74HC193**	**(3003)**
	TI	SN74HC193	
	Toshiba	TC40H193	
MM74HC194	**GE/RCA**	**CD74HC194**	**(2631)**
	Hitachi	HD74HC194	
	Motorola	MC74HC194	
	SGS	M74HC194	
	Signetics	**74HC194**	**(3003)**
	TI	SN74HC194	
MM74HC195	**GE/RCA**	**CD74HC195**	**(2631)**
	Hitachi	HD74HC195	
	Motorola	MC74HC195	
	SGS	M74HC195	
	Signetics	**74HC195**	**(3003)**
	TI	SN74HC195	

Manufacturer Device	Replacement Source	Device	IC Master Page
MM74HC20	**GE/RCA**	**CD74HC20**	**(2631)**
	Hitachi	HD74HC20	
	Motorola	MC74HC20	
	SGS	M74HC20	
	Signetics	**74HC20**	**(3003)**
	TI	SN74HC20	
	Toshiba	TC40H020	
MM74HC221	**GE/RCA**	**CD74HC221**	**(2632)**
	Motorola	MC74HC221A	
	SGS	M74HC221	
	Signetics	**74HC221**	**(3003)**
MM74HC240	**GE/RCA**	**CD74HC240**	**(2631)**
	Hitachi	HD74HC240	
	Mitel	MD74HC240	
	Motorola	MC74HC240	
	SGS	M74HC240	
	Signetics	**74HC240**	**(3003)**
	Sprague	SS74HC240	
	Supertex	SI74HC240	
	TI	SN74HC240	
	Toshiba	TC40H240	
MM74HC241	**GE/RCA**	**CD74HC241**	**(2631)**
	Hitachi	HD74HC241	
	Mitel	MD74HC241	
	Motorola	MC74HC241	
	SGS	M74HC241	
	Signetics	**74HC241**	**(3003)**
	Sprague	SS74HC241	
	Supertex	SI74HC241	
	TI	SN74HC241	
MM74HC242	**GE/RCA**	**CD74HC242**	**(2631)**
	Hitachi	HD74HC242	
	Motorola	MC74HC242	
	SGS	M74HC242	
	Signetics	**74HC242**	**(3003)**
	TI	SN74HC242	
MM74HC243	**GE/RCA**	**CD74HC243**	**(2631)**
	Hitachi	HD74HC243	
	Motorola	MC74HC243	
	SGS	M74HC243	
		M74HC245	
	Signetics	**74HC243**	**(3003)**
	TI	SN74HC243	
MM74HC244	**GE/RCA**	**CD74HC244**	**(2631)**
	Hitachi	HD74HC244	
	Mitel	MD74HC244	
	Motorola	MC74HC244	
	SGS	M74HC244	
	Signetics	**74HC244**	**(3003)**
	Sprague	SS74HC244	
	Supertex	SI74HC244	
	TI	SN74HC244	
MM74HC245	**GE/RCA**	**CD74HC245**	**(2631)**
	Hitachi	HD74HC245	
	Motorola	MC74HC245	
	Signetics	**74HC245**	**(3003)**
	Sprague	SS74HC245	
	TI	SN74HC245	
MM74HC251	**GE/RCA**	**CD74HC251**	**(2632)**
	Hitachi	HD74HC251	
	Motorola	MC74HC251	
	SGS	M74HC251	
	Signetics	**74HC251**	**(3003)**
	TI	SN74HC251	
MM74HC253	**GE/RCA**	**CD74HC253**	**(2632)**
	Hitachi	HD74HC253	
	Motorola	MC74HC253	
	SGS	M74HC253	
	Signetics	**74HC253**	**(3003)**
	TI	SN74HC253	
MM74HC257	**GE/RCA**	**CD74HC257**	**(2632)**
	Hitachi	HD74HC257	
	Motorola	MC74HC257	
	SGS	M74HC257	
	Signetics	**74HC257**	**(3003)**
	TI	SN74HC257	
MM74HC259	**GE/RCA**	**CD74HC259**	**(2632)**
	Hitachi	HD74HC259	
	Motorola	MC74HC259	
	Signetics	**74HC259**	**(3003)**
	TI	SN74HC259	

Manufacturer Device	Replacement Source	Device	IC Master Page
MM74HC266	Hitachi	HD74HC266	
	Motorola	MC74HC266	
	SGS	M74HC266	
	Signetics	74HC266	
	TI	SN74HC266	
MM74HC27	**GE/RCA**	**CD74HC27**	**(2631)**
	Hitachi	HD74HC27	
	Motorola	MC74HC27	
	SGS	M74HC27	
	Signetics	**74HC27**	**(3003)**
	TI	SN74HC27	
	Toshiba	TC40H027	
	Universal	US74HC27	
MM74HC280	**GE/RCA**	**CD74HC280**	**(2632)**
	Hitachi	HD74HC280	
	Motorola	MC74HC280	
	SGS	M74HC280	
	Signetics	**74HC280**	**(3003)**
	TI	SN74HC280	
MM74HC299	**GE/RCA**	**CD74HC299**	**(2631)**
	Motorola	MC74HC299	
	SGS	M74HC299	
	Signetics	**74HC299**	**(3003)**
MM74HC30	**GE/RCA**	**CD74HC30**	**(2631)**
	Hitachi	HD74HC30	
	Motorola	MC74HC30	
	SGS	M74HC30	
	Signetics	**74HC30**	**(3003)**
	TI	SN74HC30	
MM74HC32	**GE/RCA**	**CD74HC32**	**(2631)**
	Hitachi	HD74HC32	
	Motorola	MC74HC32	
	SGS	M74HC32	
	Signetics	**74HC32**	**(3003)**
	TI	SN74HC32	
	Toshiba	TC40H032	
MM74HC354	**GE/RCA**	**CD74HC354**	**(2632)**
	Hitachi	HD74HC354	
	Motorola	MC74HC354	
	SGS	M74HC354	
	Signetics	**74HC354**	**(3003)**
	TI	SN74HC354	
MM74HC356	**GE/RCA**	**CD74HC356**	**(2632)**
	Hitachi	HD74HC356	
	Motorola	MC74HC356	
	SGS	M74HC356	
	Signetics	**74HC356**	**(3003)**
	TI	SN74HC356	
MM74HC365	**GE/RCA**	**CD74HC365**	**(2631)**
	Hitachi	HD74HC365	
	Motorola	MC74HC365	
	SGS	M74HC365	
	TI	SN74HC365	
MM74HC366	**GE/RCA**	**CD74HC366**	**(2631)**
	Hitachi	HD74HC366	
	Motorola	MC74HC366	
	SGS	M74HC366	
	Signetics	**74HC366**	**(3003)**
	TI	SN74HC366	
MM74HC367	**GE/RCA**	**CD74HC367**	**(2631)**
	Hitachi	HD74HC367	
	Motorola	MC74HC367	
	SGS	M74HC367	
	Signetics	**74HC367**	**(3003)**
	TI	SN74HC367	
MM74HC368	**GE/RCA**	**CD74HC368**	**(2631)**
	Hitachi	HD74HC368	
	Motorola	MC74HC368	
	SGS	M74HC368	
	Signetics	**74HC368**	**(3003)**
	TI	SN74HC368	
MM74HC373	**GE/RCA**	**CD74HC373**	**(2632)**
	Hitachi	HD74HC373	
	Mitel	MD74HC373	
	Motorola	MC74HC373	
	SGS	M74HC373	
	Signetics	**74HC373**	**(3003)**
	Sprague	SS74HC373	
	Supertex	SI74HC373	
	TI	SN74HC373	
MM74HC374	**GE/RCA**	**CD74HC374**	**(2631)**
	Hitachi	HD74HC374	
	Mitel	MD74HC374	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM74HC374			(Cont'd)
	Motorola	MC74HC374	
	SGS	M74HC374	
	Signetics	**74HC374**	**(3003)**
	Sprague	SS74HC374	
	TI	SN74HC374	
MM74HC390	**GE/RCA**	**CD74HC390**	**(2632)**
	Hitachi	HD74HC390	
	Motorola	MC74HC390	
	SGS	M74HC390	
	Signetics	**74HC390**	**(3003)**
	TI	SN74HC390	
MM74HC393	**GE/RCA**	**CD74HC393**	**(2632)**
	Hitachi	HD74HC393	
	Motorola	MC74HC393	
	SGS	M74HC393	
	Signetics	**74HC393**	**(3003)**
	TI	SN74HC393	
MM74HC4002			
	GE/RCA	**CD74HC4002**	**(2631)**
	Motorola	MC74HC4002	
	SGS	M74HC4002	
	Signetics	**74HC4002**	**(3003)**
	TI	SN74HC4002	
MM74HC4017			
	GE/RCA	**CD74HC4017**	**(2632)**
	Motorola	MC74HC4017	
	SGS	M74HC4017	
	Signetics	**74HC4017**	**(3003)**
	TI	SN74HC4017	
MM74HC4020			
	GE/RCA	**CD74HC4020**	**(2632)**
	Hitachi	HD74HC4020	
	Motorola	MC74HC4020	
	SGS	M74HC4020	
	Signetics	**74HC4020**	**(3003)**
	TI	SN74HC4020	
MM74HC4040			
	GE/RCA	**CD74HC4040**	**(2632)**
	Hitachi	HD74HC4040	
	Motorola	MC74HC4040	
	SGS	M74HC4040	
	Signetics	**74HC4040**	**(3003)**
	TI	SN74HC4040	
MM74HC4049			
	GE/RCA	**CD74HC4049**	**(2631)**
	Motorola	MC74HC4049	
	SGS	M74HC4049	
	Signetics	**74HC4049**	**(3003)**
	TI	SN74HC4049	
MM74HC4060			
	GE/RCA	**CD74HC4060**	**(2632)**
	Motorola	MC74HC4060	
	SGS	M74HC4060	
	Signetics	**74HC4060**	**(3003)**
	TI	SN74HC4060	
MM74HC4075			
	GE/RCA	**CD74HC4075**	**(2631)**
	Motorola	MC74HC4075	
	Signetics	74HC4075	
	TI	SN74HC4075	
	Toshiba	**TC74HC4075**	**(3307)**
MM74HC4078			
	Motorola	MC74HC4078	
	SGS	M74HC4078	
	TI	SN74HC4078A	
	Toshiba	**TC74HC4078**	**(3307)**
MM74HC42	**GE/RCA**	**CD74HC42**	**(2632)**
	Hitachi	HD74HC42	
	Motorola	MC74HC42	
	SGS	M74HC42	
	Signetics	**74HC42**	**(3003)**
	TI	SN74HC42	
MM74HC4514			
	GE/RCA	**CD74HC4514**	**(2632)**
	Hitachi	HD74HC4514	
	Motorola	MC74HC4514	
	SGS	M74HC4514	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM74HC4514			(Cont'd)
	Signetics	**74HC4514**	**(3003)**
	TI	SN74HC4514	
MM74HC4538			
	GE/RCA	**CD74HC4538**	**(2632)**
	Motorola	MC74HC4538	
	SGS	M74HC4538	
	Signetics	**74HC4538**	**(3003)**
MM74HC4543			
	Cypress	**CY7C172**	**(2562, 2564)**
	GE/RCA	**CD74HC4543**	**(2632)**
	IDT	**IDT71682**	**(2802)**
	Motorola	MC74HC4543	
	Performance	P4C1682	
	SGS	M74HC4543	
	Signetics	PC74HC4543	
	Toshiba	**TC74HC4543**	**(3307)**
MM74HC51	Hitachi	HD74HC51	
	Motorola	MC74HC51	
	TI	SN74HC51	
	Toshiba	**TC74HC51**	**(3307)**
MM74HC533	**GE/RCA**	**CD74HC533**	**(2632)**
	Hitachi	HD74HC533	
	Motorola	MC74HC533	
	SGS	M74HC533	
	Signetics	**74HC533**	**(3003)**
	Sprague	SS74HC533	
	TI	SN74HC533	
MM74HC534	**GE/RCA**	**CD74HC534**	**(2631)**
	Hitachi	HD74HC534	
	Motorola	MC74HC534	
	SGS	M74HC534	
	Signetics	**74HC534**	**(3003)**
	Sprague	SS74HC534	
	TI	SN74HC534	
MM74HC563	**GE/RCA**	**CD74HC563**	**(2632)**
	Hitachi	HD74HC563	
	Motorola	MC74HC563	
	SGS	M74HC563	
	Signetics	**74HC563**	**(3003)**
	Sprague	SS74HC563	
	TI	SN74HC563	
MM74HC564	**GE/RCA**	**CD74HC564**	**(2631)**
	Hitachi	HD74HC564	
	Motorola	MC74HC564	
	SGS	M74HC564	
	Signetics	**74HC564**	**(3003)**
	Sprague	SS74HC564	
	TI	SN74HC564	
MM74HC573	**GE/RCA**	**CD74HC573**	**(2632)**
	Hitachi	HD74HC573	
	Motorola	MC74HC573	
	SGS	M74HC573	
	Signetics	**74HC573**	**(3003)**
	Sprague	SS74HC573	
	TI	SN74HC573	
	Toshiba	**TC74HC573**	**(3307)**
MM74HC574	**GE/RCA**	**CD74HC574**	**(2631)**
	Hitachi	HD74HC574	
	Motorola	MC74HC574	
	SGS	M74HC574	
	Signetics	**74HC574**	**(3003)**
	Sprague	SS74HC574	
	TI	SN74HC574	
MM74HC58	Motorola	MC74HC58	
	TI	SN74HC58	
MM74HC597	**GE/RCA**	**CD74HC597**	**(2631)**
	Hitachi	HD74HC597	
	Motorola	MC74HC597	
	SGS	M74HC597	
	Signetics	PC74HC597	
	TI	SNN74HC597	
	Toshiba	**TC74HC597**	**(3307)**
MM74HC620	Hitachi	HD74HC620	
	Motorola	MC74HC620	
	TI	SN74HC620	
	Toshiba	**TC74HC620**	**(3307)**
MM74HC623	Hitachi	HD74HC623	
	Motorola	MC74HC623	
	TI	SN74HC623	
	Toshiba	**TC74HC623**	**(3307)**

Manufacturer Device	Replacement Source	Device	IC Master Page
MM74HC640	**GE/RCA**	**CD74HC640**	**(2631)**
	Hitachi	HD74HC640	
	Motorola	MC74HC640	
	Signetics	**74HC640**	**(3003)**
	Sprague	SS74HC640	
	TI	SN74HC640	
MM74HC643	**GE/RCA**	**CD74HC643**	**(2631)**
	Hitachi	HD74HC643	
	Motorola	MC74HC643	
	SGS	M74HC643	
	Signetics	**74HC643**	**(3003)**
	Sprague	SS74HC643	
	TI	SN74HC643	
MM74HC645	Sprague	SS74HC645	
	TI	SN74HC645	
MM74HC646	**GE/RCA**	**CD74HC646**	**(2631)**
	Hitachi	HD74HC646	
	Motorola	MC74HC646	
	SGS	M74HC646	
	Signetics	**74HC646**	**(3003)**
	TI	SN74HC646	
MM74HC648	**GE/RCA**	**CD74HC648**	**(2631)**
	Hitachi	HD74HC648	
	Motorola	MC74HC648	
	Signetics	**74HC648**	**(3003)**
	TI	SN74HC648	
MM74HC688	**GE/RCA**	**CD74HC688**	**(2632)**
	Motorola	MC74HC688	
	SGS	M74HC688	
	Signetics	**74HC688**	**(3003)**
	TI	SN74HC688	
	Toshiba	**TC74HC688**	**(3307)**
MM74HC7266			
	GE/RCA	**CD74HC7266**	**(2631)**
	Motorola	MC74HC7266	
	Signetics	PC74HC7266	
	TI	SN74HC7266	
	Toshiba	**TC74HC7266**	**(3307)**
MM74HC73	**GE/RCA**	**CD74HC73**	**(2631)**
	Hitachi	HD74HC73	
	Motorola	MC74HC73	
	SGS	M74HC73	
	Signetics	**74HC73**	**(3003)**
	TI	SN74HC73	
	Toshiba	**TC74HC73**	**(3307)**
MM74HC74	**GE/RCA**	**CD74HC74**	**(2631)**
	Hitachi	HD74HC74	
	Motorola	MC74HC74	
	SGS	M74HC74	
	Signetics	**74HC74**	**(3003)**
	TI	SN74HC74	
	Toshiba	TC40H074	
MM74HC75	**GE/RCA**	**CD74HC75**	**(2632)**
	Hitachi	HD74HC75	
	Motorola	MC74HC75	
	SGS	M74HC75	
	Signetics	**74HC75**	**(3003)**
	TI	SN74HC75	
	Toshiba	**TC74HC75**	**(3307)**
MM74HC76	Hitachi	HD74HC76	
	Motorola	MC74HC76	
	SGS	M74HC76	
	TI	SN74HC76	
	Toshiba	TC40H076	
MM74HC77	Hitachi	HD74HC77	
	TI	SN74HC77	
	Toshiba	**TC74HC77**	**(3307)**
MM74HC85	**GE/RCA**	**CD74HC85**	**(2632)**
	Motorola	MC74HC85	
	SGS	M74HC85	
	Signetics	**74HC85**	**(3003)**
	TI	SN74HC85	
MM74HC86	**GE/RCA**	**CD74HC86**	**(2631)**
	Hitachi	HD74HC86	
	Motorola	MC74HC86	
	SGS	M74HC86	
	Signetics	**74HC86**	**(3003)**
	TI	SN74HC86	
MM74HC942	Sierra	SC11002	
MM74HC943	Sierra	SC11003	
MM74HCT05	Motorola	MC74HCT05	
MM74HCT138			
	CTI	74HCT138	
	GE/RCA	**CD74HCT138**	**(2632)**
	Hitachi	HD74HCT138	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM74HCT138			(Cont'd)
	Mitel	MD74HCT138	
	Plessey	MV74HCT138	
	SGS	M74HCT138	
	Signetics	**74HCT138**	**(3003)**
	Sprague	SS74HCT138	
	TI	SN74HCT138	
	Toshiba	TC74HCT138	
MM74HCT139			
	GE/RCA	**CD74HCT139**	**(2632)**
	IDT	IDT74HCT139	
	Mitel	MD74HCT139	
	Plessey	MV74HCT139	
	Signetics	**74HCT139**	**(3003)**
	Sprague	SS74HCT139	
	Supertex	74HCT139	
MM74HCT160			
	GE/RCA	**CD74HCT160**	**(2632)**
	Signetics	**74HCT160**	**(3003)**
MM74HCT240			
	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
MM74HCT241			
	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
MM74HCT244			
	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
MM74HCT245			
	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
MM74HCT373			
	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM74HCT373			(Cont'd)
	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
MM74HCT374			
	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
MM74HCT540			
	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
MM74HCT541			
	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
MM74HCT574			
	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
MM74S289	Fairchild	7489	
	National	DM7489	
		DM74S289	
		DM8589	
	Signetics	74S289	
		N82S25	
MM80C98	Fairchild	F40098	
MM8629	Plessey	SP8629	
MMC2116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MMC2116			(Cont'd)
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MS32082	TI	TI32082	
MS32201	TI	TI32201	
N8T13	National	DS75121	
	Signetics	**N8T13**	**(3022)**
	TI	SN75121	
NM2102	Fujitsu	8401	
	GE/Intersil	6508	
		IM6508-1	
	Harris	**HM6508**	**(2704, 2762)**
	National	6508	
		74C929	
	Toshiba	5508	
NM2147	AMD	AM2141	
		AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NMC6504	
	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
NM2148	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
NM2148			(Cont'd)
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
NM52132	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
NM52264	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
NMC2114A	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
♦ NMC2116	AMD	AM9128	
		AM9218	
♦ NMC2116	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ NMC2116	Fujitsu	MB8128	
		MB8416	
♦ NMC2116	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ NMC2116	Hitachi	HM6116	
		HM6166	
♦ NMC2116	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ NMC2116	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ NMC2116	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ NMC2116	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ NMC2116	National	MMC2116	
	NEC	μPD4016	
		μPD446	
♦ NMC2116	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ NMC2116	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ NMC2116	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ NMC2116	Stantel-STC	STC6116	
		STC6166	
♦ NMC2116	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ NMC2116	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ NMC2116	Vitelic	V61C16	
		V62C16	
NMC2141	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
NMC2147H	AMD	AM2147	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM6147H	
	Intel	2147H	
	Matra-Harris	HN65747	
NMC2148	AMD	AM2148	
		AM2149	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
NMC2148			(Cont'd)
	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
	Thomson	ET2148	
	UMC	UM2148	
NMC2532	Hitachi	HN462532	
	National	MM2532	
		TDA2530	
		TDA2532	
	Plessey	TDA2530	
NMC2564	VLSI Tech	VT2366	
NMC2732	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		2732A	
		M2732	
	National	MM2732	
	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
NMC27C256	AMD	AM27256	
		AM27C256	
	Intel	27256	
		27C256	**(2861)**
		M27256	
		M27C256	
	SEEQ	**27C256**	**(2991)**
	SGS	M27256	
	TI	**SMJ27C256**	**(3220)**
	VLSI Tech	VT27C256	
	Waferscale	**WS27C256**	**(3376)**
NMC4164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
NMC5257A	AMD	AM9044	
	Harris	**HM6504**	**(2704, 2762, 2768)**
NMC5295	Fairchild	F100422	
	Fujitsu	MB8118	
		MBM100422	
		MBM100422A	
	Hitachi	HM100422	
	National	DM100422	
	NEC	μPB100422	
NMC6164	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
NMC6164	Hitachi		(Cont'd)
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
♦ NMC6503	Rockwell	R6503	
NMC6504	AMD	AM2141	
		AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
♦ NMC6514	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
♦ NMC6514	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
♦ NMC6514	Toshiba	TC5513	
		TC5514	
		TMM2114	
♦ NMC6514	UMC	UM6104	
NMC9306	National	COP494	
	Sierra	SC22001	
	Xicor	**X2444**	**(3388, 3400)**
NMC9346	GIM	ER5911	
	Hyundai	**HY93C46**	**(2770)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
NMC9346			(Cont'd)
	National	COP495	
	NCR	59346	
		NCR59308	
	SGS	M9346	
	Sierra	SC22011	
NMC93C56	Sierra	SC22056	
NMC93C66	Sierra	SC22057	
NMC95C12	Sierra	SC22304	
NMC95C14	Sierra	SC22300	
♦ NMC9716	**Xicor**	**X2816**	**(3390, 3406)**
NMC9816A	EXEL	XL2816	
		XL2816A	
	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	Intel	2816B	
	Samsung	KM2816A	
	SEEQ	**2816**	**(2991)**
		2816A	**(2991)**
		M2816A	
	Xicor	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**
NMC9817	AMD	AM2817A	
	EXEL	XL2817A	
	GIM	28C17	
	Samsung	KM2817A	
	SEEQ	**2817A**	**(2991)**
		DQ2817A	
NMC98C10	Sierra	SC22101	
NMC98C40	Sierra	SC22104	
NMC98C64A	GIM	28CP64	
NS32016	TI	TI32016	
NS32032	TI	TI32032	
NS32081	TI	TI32081	
NS32082	TI	TI32082	
NS32201	TI	TI32201	
NS32202	TI	TI32202	
NS32456	Fairchild	F68456	
NS32488	Fairchild	F681488	
NS80CX48	Intel	8748	
	NEC	μPD8748	
NS8464	AMD	AM6012	
	Exar	XR3464	
	Ferranti	ZN6012	
	PMI	**DAC312**	**(2974)**
	Signetics	AM6012	
NSC800	SMC	MPU800	
NSC810	SMC	MPU810	
NSC830	SMC	MPU830	
NSC831	SMC	MPU831	
OPA101	AD	AD544	
	Burr-Brown	**OPA156A**	**(2532)**
	Fairchild	LF156A	
	LinearTech	LF156A	
	National	LF156A	
	PMI	**OP43**	**(2970)**
		PM156A	**(2971)**
	TI	TL081	
PAL10L8	MMI	PAL10L8	
	National	DMPAL10L8	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL12H6	MMI	PAL12H6	
	National	DMPAL12H6	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL12L10	MMI	PAL12L10	
	Sprague	SPL12LC10	
PAL12L6	MMI	PAL12L6	
	National	DMPAL12L6	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL14H4	MMI	PAL14H4	
	National	DMPAL14H4	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
PAL14H4			(Cont'd)
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL14L4	MMI	PAL14L4	
	National	DMPAL14L4	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL14L8	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL14L8	
		PALC22V10	
	Signetics	**PLS173**	**(3155, 3172)**
	Sprague	SPL14LC8	
	TI	**TIBPAL22V10**	**(4320)**
PAL16A4	MMI	PAL10H8	
		PAL16A4	
	National	DMPAL10H8	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL16C1	MMI	PAL16C1	
	National	DMPAL16C1	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL16H2	MMI	PAL16H2	
	National	DMPAL16H2	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PAL16L2	MMI	PAL16L2	
	National	DMPAL16L2	
PAL16L6	MMI	PAL12L16	
		PAL16L6	
	Signetics	**PLS173**	**(3155, 3172)**
PAL16R4	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
PAL16R6	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
PAL16X4	MMI	PAL16X4	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

National Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
PAL20C1	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20C1	
		PALC22V10	
	TI	**TIBPAL22V10**	**(4320)**
PAL20L10	Cypress	CUPLDC20G10	
		PAL20L10	
	MMI	PAL20L10	
	National	DMPAL20L10	
	Sprague	SPL20LC10	
	TI	**TIBPAL20L10**	**(4320)**
		TIBPAL20L10-25	**(3217, 4320)**
PAL20L2	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20L2	
		PALC22V10	
	Sprague	SPL20LC2	
	TI	**TIBPAL22V10**	**(4320)**
PAL20L8	Cypress	CUPLDC20G10	
	Fairchild	F100165	
	Hitachi	HD100165	
		HM6288	
	MMI	PAL20L8	
		PAL20L8B	
	Signetics	**100165**	**(3020)**
	Sprague	SPL20LC8	
	TI	PAL20L8	
		TIBPAL20L8-20	**(3217, 4320)**
	Toshiba	TC55416	
PAL20R4	Fairchild	54AC174	
	GE/RCA	CD54AC174	
	Lattice	GAL20V8	
PAL20R8	Cypress	CUPLDC20G10	
	Fairchild	F100166	
	Hitachi	HD100166	
	MMI	PAL20R8	
		PAL20R8B	
	Sprague	SPL20RC8	
	TI	PAL20R8	
		TIBPAL20R8-20	**(3217, 4320)**
PAL20X10	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X10	
		PALC22V10	
	National	DMPAL20X10	
	Sprague	SPL20XC10	
	TI	**TIBPAL20X10-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
PAL20X4	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X4	
		PALC22V10	
	National	DMPAL20X4	
	Sprague	SPL20XC4	
	TI	**TIBPAL20X4-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
PAL20X8	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X8	
		PALC22V10	
	National	DMPAL20X8	
	Sprague	SPL20XC8	
	TI	**TIBPAL20X8-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
PAL26L6	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PALC22V10	
	TI	**TIBPAL22V10**	**(4320)**
S82S117	National	S82S17	
S82S17	National	S82S117	
SCX6224	National	SCX6225	
SCX6225	National	SCX6224	
SCX6306	Motorola	HCA6306	
SCX6312	Motorola	HCA6312	
SCX6324	Motorola	HCA6324	
	National	SCX6325	
SCX6325	Motorola	HCA6324	
	National	SCX6324	
SCX6348	Motorola	HCA6348	
SG75464	Motorola	MC75404	
	National	DS75464	
	SiliconG	SG75464	
SM10248	National	MM4230	
	NCM	NCM4230Z	
SN5491	Fairchild	5491	
	Motorola	MC5491	
	Signetics	5491	
	TI	SN5491	
TBA120	Siemens	TBA120	
	Telefunken	TBA120	
♦ TBA440	Plessey	TBA440	
♦ TBA530	Plessey	TBA530	
	Telefunken	TBA530	
♦ TBA540	Plessey	TBA540	
	Telefunken	TBA540	
♦ TBA560	Plessey	TBA560	
	Telefunken	TBA560	
TBA950	ITT	TBA950	
♦ TBA990	Plessey	TBA990	
TDA2522	Plessey	TDA2522	
TDA2523	Plessey	TDA2523	
TDA2530	Hitachi	HN462532	
	National	MM2532	
		NMC2532	
		TDA2532	
	Plessey	TDA2530	
TDA2532	Hitachi	HN462532	
	National	MM2532	
		NMC2532	
		TDA2530	
	Plessey	TDA2530	
TDA2560	Plessey	TDA2560	
TDA2591	Telefunken	TDA2591	
TDA2593	Plessey	TDA2593	
	Signetics	TDA2593	
	Telefunken	TDA2593	
	Thomson	TDA2593	
TDA440	Plessey	TDA440	
	SGS	TDA440	
TP3020	Intel	ID2910	
TP3021	Intel	ID2911	
	TI	TMC2911A	
TP3040	CMD Micro	G8912B	
	Intel	2912	
		ID2912	
	Plessey	MV8912	
	TI	TCM2912C	
	Thomson	ETC5040	
TP3051	Sierra	SC11305	
	Thomson	ETC5051	
TP3052	Intel	82716	
	Matra-Harris	82716	
		HC3052	
TP3053	Matra-Harris	HC3053	
TP3054	Fairchild	µA3054	
	Sierra	SC11301	
	Sprague	ULN3054	
	Thomson	ETC5054	
TP3056	Sierra	SC11306	
	Thomson	ETC5056	
TP3057	Fairchild	µA3057	
	Matra-Harris	HC3057	
	Sierra	SC11302	
	Thomson	ETC5057	
TP3064	Sierra	SC11311	
	Thomson	ETC5064	
TP3067	Sierra	SC11312	
TP5089	Gould	S25089	
	ITT	SBA5089	
	Samsung	MK5089	
	Sharp	LR4089	
	Stantel-STC	STC5089	
	TI	TCM5089	
	Thomson	MK5089	
	UMC	UM5089	
TP50981	CTI	52981	
	Samsung	KS5804	
TP5116	Fairchild	5116	
	SGS	M5116	
TP5156	CTI	MA556	
	Fairchild	5156	
	SGS	M5156	
	Thomson	MK5156	
TP5380	**GoldStar**	**GM5380**	**(2701)**
µA7805	GoldStar	GL7805	
	Gould	S8981	
		µA7805	
µA7805			(Cont'd)
	Hitachi	HA17805	
	Mitel	MT8981	
µA7806	GoldStar	GL7806	
	Gould	S8975	
		µA7806	
	Hitachi	HA17806	
	Mitel	MT8975	
µA7807	Gould	S8978	
	Hitachi	HA17807	
	Mitel	MT8978	
µA7808	GoldStar	GL7808	
	Gould	S8940	
		µA7808	
	Hitachi	HA17808	
	Mitel	MT8940	
	Motorola	**MC7808**	**(2927)**
µA7812	GoldStar	GL7812	
	Gould	S8970	
	Hitachi	HA17812	
	Mitel	MT8970	
µA7815	EG&G-Reticon		
		R5632	
		RM5632A	**(2590)**
	Exar	**XR2126**	**(2605)**
		XR2127	**(2605)**
	Gould	S35212	
		S35212A	
	Hitachi	HA17815	
	Mitel	MT35212A	
	Sierra	SC11000	
		SC11005	
µA7818	Hitachi	HA17818	
	SMC	FDC9229	
	VDA	V3829	
	VLSI Tech	V86	
µA7824	**AD**	**AD674**	**(2411)**
	Burr-Brown	ADC674A	
	GoldStar	GL7824	
	Gould	µA7824	
	Harris	**HI674A**	**(2703, 2738, 2745)**
	Hitachi	HA17824	

NCM Corporation

NCM1101Z	AMD	AM1101ADM	
	Intel	1101	
	National	MM1101	
	Thomson	MK6027P	
NCM2009Z	Sharp	LR3465	
NCM4230Z	National	MM4230	
		SM10248	
NCM4231Z	TI	TMS3101	
		TMS3127	
NCM4322Z	National	MM5322	
NCM6001Z	Telefunken	U2029	

NCR Microelectronics

59306	SGS	M9306	
59346	GIM	ER5911	
	Hyundai	**HY93C46**	**(2770)**
	National	COP495	
		NMC9346	
	NCR	NCR59308	
	SGS	M9346	
	Sierra	SC22011	
MCR5380	AMD	AM5380	
MCR8386	Western	WD5386	
♦ NCR1400	GIM	ER1400	
♦ NCR2051	GIM	ER2051	
NCR23128	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NEC	µPD23128E	
		µPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
NCR23256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
NCR23256			(Cont'd)
	Mitsubishi	M5M23256	
	NCR	NCR23257	
	NEC	µPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
NCR23257	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
	NEC	µPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
NCR2332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
NCR2364	Gould	S2364	
	Hitachi	HN48364	
	OKI	MSM3864	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**
	Sharp	LH2364A	
	Signetics	2364	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
NCR2365	NEC	µPD2364E	
	Signetics	2364	
		2664	
	VLSI Tech	VT2365	
NCR23C512	NEC	µPD23C512	
	VLSI Tech	**VT23512**	**(3362)**
♦ NCR3400	GIM	ER3400	
	Hughes	HNVM3104A	
NCR52004	Intel	2004	
	Xicor	**X2004**	**(3387, 3399)**
NCR52210	**Xicor**	**X2210**	**(3386, 3396)**
NCR52212	**Xicor**	**X2212**	**(3386, 3397)**
NCR5264	AMD	AM28645	
	EXEL	XL2865A	
	GIM	28C64	
	Motorola	28C64	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

NCR Microelectronics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
NCR5264			(Cont'd)
	Samsung	KM2865A	
	SEEQ	DQ2864	
NCR52801	GIM	ER59256	
NCR52832	SEEQ	52B23	
NCR53C80	VDA	V8580	
NCR59308	GIM	ER5911	
	Hyundai	**HY93C46**	**(2770)**
	National	COP495	
		NMC9346	
	NCR	59346	
	SGS	M9346	
	Sierra	SC22011	
NCR6500-12	**GoldStar**	**GL3273**	**(2700)**
	Motorola	**MC3373**	**(2948)**
	Rockwell	**R6500-12**	**(2988)**
		R6500-13	**(2988)**
		R6500-15	**(2988)**
NCR6500/1	**Rockwell**	**R6500/1**	**(2988)**
NCR6500/11	**Rockwell**	**R6500/11**	**(2988)**
NCR65C00-1	**GoldStar**	**GLC556**	**(2700)**
	National	LM556	
	NEC	μPC556	
	Rockwell	**R65C10**	**(2988)**
	TI	NE556	
NCR8489	GIM	AY3-8913	
	TI	SN76489	
		SN76489A	
NMOS5380	**Calmos**	**CA53C80**	**(2553)**
	LogicDev	L5380	

NEC Electronics

Manufacturer Device	Replacement Source	Device	IC Master Page
27128C	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
2764C	Hitachi	HN482764P	
	Intel	P2764	
	Toshiba	TMM2464	
MC-120	**Dense-Pac**	**DPS41288**	**(2580)**
		DPS412S88	
	EDI	EDH8M8128	
		EDI8M8128	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
MC120	EDI	88128	
	Hitachi	HM66204	
MC411000	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC411000	Hitachi		(Cont'd)
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MC411000A1	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MC41256	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC41256			(Cont'd)
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MC41256A4	**Dense-Pac**	**DPD44256**	**(2581)**
	Fujitsu	MB85203	
		MB85204	
	Hitachi	HB561004A	
	MicronTech	MT4259	
	TI	TM4256EC4	
MC41256A8	**Dense-Pac**	**DPD42568**	**(2581)**
	Hitachi	HB561008B	
	MicronTech	MT8259	
	Mitsubishi	MH25608A	
	OKI	MSC2304KS8	
		MSC2304YS8	
	TI	TM4256FL8	
		TM4256GU8	
MC41256A9	Dense-Pac	DPD42569	
	Hitachi	HB561003	
		HB561009	
	MicronTech	MT9259	
	Mitsubishi	MH25609A	
	OKI	MSC2304KS9	
		MSC2304YS9	
	TI	TM4256EL9	
		TM4256GU9	
MC421000	Hitachi	HB56A19	
	TI	TX4C1024	
	Toshiba	THM81000	
		THM91000	
TMX4C1024	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		μPD411000	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TMX4C1024	NEC		(Cont'd)
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
UPC571	**Signetics**	**NE571**	**(3099)**
μP4369	Cypress	CY7C183	
	Fujitsu	MB81C79	
		MB81C79A	
	Toshiba	TMM2089	
μPA2002	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
μPB100422	Fairchild	F100422	
	Fujitsu	MB8118	
		MBM100422	
		MBM100422A	
	Hitachi	HM100422	
	National	DM100422	
		NMC5295	
μPB100470	AMD	AM100470	
	Fujitsu	MBM100470A	
μPB100474	AMD	AM100474	
	Fairchild	F100474	
	Fujitsu	MBM100474	
		MBM100474A	
	Hitachi	100474	
		HM100474	
μPB100480	AMD	AM100480	
	Hitachi	HM100480	
μPB100484	AMD	AM100484	
	Fujitsu	MBM100484	
	Hitachi	HM100484	
μPB10422	Fujitsu	MBM10422A	
	National	DM10422	
μPB10470	AMD	AM10470	
	Fujitsu	MBM10470A	
	Hitachi	HM10470	
	Motorola	MCM10470	
	National	DM10470	
μPB10474	AMD	AM10474	
	Fairchild	F10474	
	Fujitsu	MBM10474A	
	Hitachi	HM10474	
	Motorola	MCM10474	
	National	DM10474	
μPB10480	AMD	AM10480	
	Fairchild	F10480	
	Fujitsu	MBM10480	
	Hitachi	HM10480	
μPB10484	Fairchild	F10484	
	Fujitsu	MBM10484	
	Hitachi	HM10484	
μPB426	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
	National	74S573	
		DM74S573	
	Signetics	N82S137	
μPB429	AMD	AM27S191	
		AM27S291	
		AM27S291A	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

NEC Electronics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
μPB429			(Cont'd)
	MMI	63S1681	
		63S1681A	
	Motorola	MCM76	
	National	87S291	
		DM878291	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
μPB8212	AMD	AM8212	
	Calmos	**CA82C12**	**(2553)**
	Intel	8212	
	OKI	MSM82C12	
♦ μPB8214	National	INS8214	
μPB8216	Intel	8216	
	National	DP8216	
		INS8216	
μPB8226	Intel	8226	
	Mitsubishi	M5L8226	
	National	DP8226	
		INS8226	
μPB8228	AMD	8228	
	Intel	8228	
	National	DP8228	
		INS8228	
	TI	SN74S428	
		TIM8228	
μPB8282	Fujitsu	MBL8282	
	Harris	**82C82**	**(2733, 2768)**
	Intel	8282	
		82C82	
	MMI	82C82	
	NEC	μPD71082	
	OKI	82C82	
μPB8284	**Calmos**	**CA82C84**	**(2553)**
	Fujitsu	MBL8284	
	Harris	**82C84**	**(2734, 2768, 4249)**
		82C84A	**(2734, 2768, 4249)**
	Intel	8284	
		82C84	
		82C84A	
	NEC	μPD71084	
		μPD8284	
	OKI	MSM82C84	
μPB8286	AMD	DP8304	
	Fujitsu	MBL8286	
	Harris	**82C86H**	**(2733, 2768)**
	Intel	8286	
		82C86	
	MMI	82C86	
	National	DP8304	
	NEC	μPD71086	
	OKI	82C86	
μPB8288	AMD	8288	
	Calmos	**CA82C88**	**(2553)**
	Fujitsu	MBL8288	
	Harris	**82C88**	**(2734, 2768, 4249)**
	Intel	8288	
		82C88	
	NEC	μPD71088	
		μPD8288	
	OKI	82C88	
		MSM82C88	
μPB8289	Fujitsu	MBL8289	
	Harris	**82C89**	**(2734, 2768)**
	Intel	8289	
μPC1042	Hitachi	HA17524	
μPC1251	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
μPC1251			(Cont'd)
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
μPC137	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC177	
		μPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
μPC1382	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	LSC1008	
		M5140	
	National	LM3064	
	Sanyo	LA1365	
	TI	SN76666	
	Toshiba	TA7176	
μPC139362	**GoldStar**	**GL3813**	**(2699)**
μPC1418	Fairchild	μA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	μA747	
	TeledyneS	747	
	TI	μA747	
		μA747M	
μPC1458	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
μPC151	AD	AD741	
	Fairchild	μA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	μPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	μA741	
	SiliconG	SG741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
μPC1555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
μPC1555			(Cont'd)
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
μPC157	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
μPC177	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
μPC2002	Hitachi	TDA2002	
	SGS	TDA2002	
μPC2005	SGS	TDA2005	
μPC251	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	μPC1458	
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
μPC277	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	μPC393	
	SGS	LM393	
	TI	LM393	
	Toshiba	TA75393	
μPC301	AD	AD301	
	Fairchild	μA301	
		μA301A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
μPC301			(Cont'd)
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
μPC301A	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
μPC311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
μPC318	AD	AD518	
	LinearTech	LM318	
	National	LM318	
	TI	LM318	
	Thomson	LM318	
μPC319	Signetics	LM319	
	Thomson	LM319	
μPC324	Fairchild	μA2902	
		μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	μPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

NEC Electronics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
μPC324			(Cont'd)
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
μPC339	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
μPC358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	μPC1251	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
μPC393	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	μPC277	
	SGS	LM393	
	TI	LM393	
	Toshiba	TA75393	
μPC393C	**GoldStar**	**GM3043**	**(2700)**
	NEC	μPD1943	
μPC4071	AnalogSys	MA333	
	Fairchild	μA771	
	Motorola	**MC34001**	**(2920, 2959)**
	NEC	μPC4081	
	TI	TL071	
		TL081C	
	Toshiba	TA75071	
μPC4072	AnalogSys	MA336	
	Fairchild	μA772	
	Motorola	**MC34002**	**(2922)**
	NEC	μPC4082	
	SGS	TL072	
	TI	TL072	
		TL082C	
	Toshiba	TA75072	
		TA75074	
μPC4074	SGS	TL074	
	Toshiba	TA75074	
μPC4081	AnalogSys	MA333	
	Fairchild	μA771	
	Motorola	**MC34001**	**(2920, 2959)**
	NEC	μPC4071	
	TI	TL071	
		TL081C	
	Toshiba	TA75071	
μPC4082	AnalogSys	MA336	
	Fairchild	μA772	
	Motorola	**MC34002**	**(2922)**
	NEC	μPC4072	
	SGS	TL072	
	TI	TL072	
		TL082C	
	Toshiba	TA75072	
		TA75074	
μPC4084	AnalogSys	MA374	
	Fairchild	μA774	
	Motorola	**MC33074**	**(2924)**
		MC34004	**(2923, 2959)**
		MC34004A	**(2923, 2959)**
		MC34074	**(2923, 2960)**
	TI	TL074	
		TL084BC	
μPC451	Fairchild	μA2902	
		μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	μPC324	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
μPC4558	**GoldStar**	**GL4558**	**(2700)**
	Motorola	**MC4558**	**(2922, 2959)**
	Raytheon	RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	RC4558	
		RM4558	
		TL45558	
	Thomson	MC4558	
	Toshiba	TA75558	
μPC55	Fairchild	μA709	
	Motorola	**MC1709**	**(2919)**
	National	LM1709	
		LM709	
	TI	μ709	
		μA709	
	Toshiba	TA7502	
μPC556	**GoldStar**	**GLC556**	**(2700)**
	National	LM556	
	NCR	NCR65C00-1	
	Rockwell	**R65C10**	**(2988)**
	TI	NE556	
μPC603	PMI	DAC01C	
μPC610	PMI	DAC02C	
μPC617	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
μPC624	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
μPC624			(Cont'd)
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
μPC741	AD	AD741	
	Fairchild	μA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	μPC151	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	μA741	
	SiliconG	SG741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
μPC7805	GoldStar	GL7805	
		GL7905	**(2701)**
	Gould	μA7805	
		μA7905	
	Motorola	**MC7805**	**(2926)**
	SiliconG	SG7805	
	Toshiba	TA78005	
		TA79005	
μPC7806	Fairchild	μA7806	
	Motorola	**MC7806**	**(2927)**
	National	LM7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806	
		SG7806A	
	TI	μA7806	
	Thomson	μA7806	
	Toshiba	TA78006	
μPC7808	Fairchild	μA7808	
	GoldStar	GL7808	
	Gould	μA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	μA7808	
	Thomson	μA7808	
	Toshiba	TA78008	
μPC7809	Fairchild	μA7809	
	GoldStar	GL7809	
	Gould	μA7809	
	Hitachi	HA17809	
	Motorola	MC7809	
	National	LM7809	
	TI	μA7809	
	Toshiba	TA78009	
μPC7812	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
μPC7812			(Cont'd)
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
μPC7815	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
μPC7818	National	LM340-18	
	SiliconG	SG340-18	
		SG7818	
		SG7818A	
	TI	LM340-18	
	Thomson	μA7818	
μPC7824	Fairchild	μA7824	
	GoldStar	GL7824	
	Gould	μA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
		μA7824	
	Thomson	μA7824	
	Toshiba	TA78024	
μPC78L05	Fairchild	μA78L05	
	Motorola	**MC78L05**	**(2926, 2959)**
	National	LM340LA-5	
		LM78L05	
	TI	μA78L05	
	Thomson	μA7805	
	Toshiba	TA78L006	
μPC78L08	Fairchild	μA78L08	
	Motorola	**MC78L08**	**(2959)**
	National	LM78L08	
	TI	μA78L08	
	Toshiba	TA78L008	
μPC78L12	Fairchild	μA78L12	
	Motorola	**MC78L12**	**(2927, 2959)**
	National	LM340LA-12	
		LM78L12	
	TI	μA78L12	
	Thomson	μA7812	
	Toshiba	TA78L012	
μPC78L15	Fairchild	μA7815	
	GoldStar	GL7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	
		LM340T-15	
		LM78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	SN75555	
		μA78L15	
	Toshiba	TA78L015	
μPC78M05	Fairchild	μA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

NEC Electronics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
μPC78M05			(Cont'd)
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	TI	μA78M05	
	Toshiba	TA78M05	
μPC78M08	Fairchild	μA78M08	
	Motorola	MC78M08	
	National	LM78M08	
	Samsung	MC78M08	
	Sanyo	L78M08	
	SGS	L78M08	
		L78M08CV	
	TI	μA78M08	
	Toshiba	TA78M08	
μPC78M12	Fairchild	μA78M12	
	Motorola	**MC78M12**	**(2927, 2959)**
	National	LM341-12	
		LM342-12	
		LM78M12	
	Samsung	MC78M12	
	Sanyo	L78M12	
	SGS	L78M12	
		L78M12CV	
	TI	μA78M12	
	Toshiba	TA78M12	
μPC78M15	Fairchild	μA78M15	
	Motorola	**MC78M15**	**(2928, 2959)**
	National	LM341-15	
		LM342-15	
		LM78M15	
	Samsung	MC78M15	
	Sanyo	L78M15	
	SGS	L78M15	
		L78M15CV	
	TI	μA78M15	
	Toshiba	TA78M15	
μPC7905	Fairchild	μA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	μA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
μPC7909	Fairchild	μA7909	
	GoldStar	**GL7909**	**(2701)**
	Gould	μA7909	
	National	LM7909	
	SGS	L7909	
	TI	μA7909	
	Toshiba	TA7900	
		TA79009	
μPC7912	Fairchild	μA7912	
		μA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	μA7824	
		μA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
μPC7915	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
μPC7915			(Cont'd)
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
μPC7924	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
μPD1943	**GoldStar**	**GM3043**	**(2700)**
	NEC	μPC393C	
μPD2114	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
μPD2147	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
μPD2167	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD4311	
	Sharp	**LH5167**	**(2993)**
μPD2167			(Cont'd)
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
μPD231000	**Cypress**	**PALC16R4**	**(4217)**
	GoldStar	**GM231024**	**(2692)**
	Hitachi	HM62301	
	Mitel	M5M231000	
	MMI	PALC16R4Q-25	
	Toshiba	TC53100	
μPD23128E	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
μPD232000	**Toshiba**	**TC532000**	**(3305)**
μPD2364	GIM	RO3-9364	
	Hitachi	HN48364	
	Mitsubishi	M58334	
	National	MM52164	
	Rockwell	R2364A	
	Signetics	2664	
		26S64	
μPD2364E	NCR	NCR2365	
	Signetics	2364	
		2664	
	VLSI Tech	VT2365	
μPD23C1000	Fujitsu	MB831000	
		MB831124	
	GIM	RO91000	
	Hitachi	HN62301	
	Toshiba	**TC531000**	**(3305)**
	VLSI Tech	VT23C1024	
μPD23C128E	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
μPD23C256E	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
μPD23C512	NCR	NCR23C512	
	VLSI Tech	**VT23512**	**(3362)**
μPD27128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
μPD27128			(Cont'd)
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
μPD27256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-	
		R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
μPD27256-3	AMD	AM27256-3	
	GIM	27256-3	
	Intel	27256-3	
μPD2732	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		2732A	
		M2732	
	National	MM2732	
		NMC2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
μPD2764	Mitel	M5L2764	
μPD27C1000	AMD	AM27C1024	
	Fujitsu	MBM27C1000	
		MBM27C1024	
	Hitachi	HN27C301G	
	Mitsubishi	M5M27C101K	
	NEC	μPD27C1024	
	Toshiba	TC571001	
μPD27C1001	**Fujitsu**	**MBM27C1001**	**(2620)**
	Hitachi	HN27C1016	
	Mitsubishi	M5M27C100K	
	Toshiba	**TC571000**	**(3304)**
μPD27C1024	AMD	AM27C1024	
	Fujitsu	MBM27C1000	
		MBM27C1024	
	Hitachi	HN27C301G	
	Mitsubishi	M5M27C101K	
	NEC	μPD27C1000	
	Toshiba	TC571001	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

NEC Electronics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
µPD27C256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	µPD27256	
		µPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
µPD27C256A	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	µPD27256	
		µPD27C256	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
µPD27C512	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	Panatech	TMS27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	

Manufacturer Device	Replacement Source	Device	IC Master Page
µPD27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
µPD28C64	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
µPD4016	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	µPD446	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µPD4016			(Cont'd)
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
µPD411000	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		µPD411000C	
		µPD411001	
		µPD421000	
		µPD421001	
		µPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
µPD411000C	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µPD411000C			(Cont'd)
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		µPD411000	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
µPD411001	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		µPD411000	
		µPD411000C	
		µPD421000	
		µPD421001	
		µPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
µPD41254	Fujitsu	MB81461	
	Hitachi	HM53461	
		HM53462	
		HM53464	
	Mitsubishi	M5M4C264	
		MB81461	
	NEC	µPD41264	
		µPD42264	
	Samsung	KM41464	
	TI	**TMS4461**	**(3259)**

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

NEC Electronics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
μPD41256	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
μPD41257	Fujitsu	MB81257	
	Hitachi	HM50257	
	Mitsubishi	MSM4257	
	Motorola	MCM6256	
		MCM6257	
	Samsung	KM41257	
	TI	**TMS4256**	**(3259)**
		TMS4257	**(3259)**
	Toshiba	TMM41257	
	Vitelic	V51C256	
		V51C257	
μPD41264	Fujitsu	MB81461	
	Hitachi	HM53461	
		HM53462	
		HM53464	
	Mitsubishi	M5M4C264	
		MB81461	
	NEC	μPD41254	
		μPD42264	
	Samsung	KM41464	
	TI	**TMS4461**	**(3259)**
μPD41416	Fujitsu	MB81416	
	Hitachi	HM48416	
	Inmos	IMS2620	
	Mitsubishi	M5M4416	
	TI	TMS4416	
μPD414256	**TI**	**TMS44C256**	**(3259)**
μPD41464	NEC	μPD41254	
μPD416	AMD	AM9016	
	Fairchild	F16K	
		F4116	
	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
μPD4164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
μPD4168	Inmos	IMS2630	

Manufacturer Device	Replacement Source	Device	IC Master Page
μPD421000	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
μPD421001	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
μPD421001	Toshiba		(Cont'd)
		TC511002	
		TMM411001C	
μPD421002	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
μPD42264	Fujitsu	MB81461	
	Hitachi	HM53461	
		HM53462	
		HM53464	
	Mitsubishi	M5M4C264	
		MB81461	
	NEC	μPD41254	
		μPD41264	
	Samsung	KM41464	
	TI	**TMS4461**	**(3259)**
μPD42356	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
μPD424256	Hitachi	HM514256	

Manufacturer Device	Replacement Source	Device	IC Master Page
μPD42832	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	GoldStar	GM76C256	
	Hitachi	HM62256P	
		HM65256	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Toshiba	TC51832	
		TMM41832	
μPD4311	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
μPD4314	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
μPD43254	Cypress	CY7C194	
	Fujitsu	MB81C84	
	Inmos	**IMS1820**	**(2791)**
	IDT	**IDT71258**	**(2802)**
	Lattice	SR256K4	
	Mitsubishi	M5M5258	
μPD43256	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256P	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
	Lattice	256K8	
	Mitel	M5M5256	
	S-MOS	**SRM20256C**	**(3201)**
	Toshiba	**TC55257**	**(3303)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

NEC Electronics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
μPD43256 (Cont'd)	**Toshiba**	**TC55257P**	**(3303)**
		TC55416	
	Vitelic	V62C256	
μPD4361	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
μPD4362	AMD	AM99C164	
		AM99C165	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	Inmos	**IMS1620**	**(2787)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR4K4	
		SR64K4	
	Motorola	MCM6288	
		MCM62L88	
	Performance	P4C188	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
μPD4363	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	54LS152	
	Hitachi	HM6789	
	Inmos	**IMS1624**	**(2788)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR64E4	
	Motorola	MCM6290	
	SGS	T54LS152	
	Toshiba	TC55417	
	Vitelic	V61C62	
μPD4364	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4464	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
μPD4364 (Cont'd)	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
μPD446	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	

Manufacturer Device	Replacement Source	Device	IC Master Page
μPD4464	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
μPD449	Fujitsu	MB8418	
		MBM8418	
	Hitachi	HM6117	
	S-MOS	**SRM2018**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
	Toshiba	TC5518	
		TC5518B	
μPD4511	Fairchild	F4511	
	GE/RCA	**CD4511**	**(2635)**
	Motorola	MC14511	
	National	CD4511	
	SGS	HCC/HCF4511	
	Signetics	HEF4511	
	Solitron	CM4511	
	Sprague	SCL4511	
	Toshiba	**TC4511**	**(3308)**
μPD5101	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
	National	MM74C920	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	

Manufacturer Device	Replacement Source	Device	IC Master Page
μPD555	AdvLinear	ALD1502	
		ALD1504	
		ALD555	
		ALD555-1	
	GE/Intersil	**ICM7555**	**(2670)**
		ICM7555M	**(2670)**
	Maxim	ICM7555	
	TI	TLC555	
μPD556	AdvLinear	ALD2502	
		ALD2504	
	GE/Intersil	**ICM7556**	**(2670)**
		ICM7556M	**(2670)**
	Maxim	ICM7556	
	TI	TLC552C	
		TLC552M	
		TLC556C	
		TLC556M	
μPD6514	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
μPD6950	**GE/RCA**	**CA3318**	**(2651)**
		CA8808	
	Hitachi	HA19209	
	MicroPwr	MP7684	
	Motorola	**MC10319**	**(2937)**
μPD70108-51-8	Zilog	70108	
μPD70116-51-8	Zilog	70116	
μPD71051	Intel	82C51	
	OKI	82C51	
μPD71054	**Calmos**	**CA82C54**	**(2553)**
	Harris	**82C54**	**(2731, 2768, 4249)**
	Intel	8254	
		82C54	
	OKI	82C54	
	S-MOS	SMC82C54AC	
μPD71055	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
μPD71057	Intel	82C57	
	OKI	82C57	
μPD71082	Fujitsu	MBL8282	
	Harris	**82C82**	**(2733, 2768)**
	Intel	8282	
		82C82	
	MMI	82C82	
	NEC	μPB8282	
	OKI	82C82	
μPD71083	**Harris**	**82C83H**	**(2733, 2768)**
	Intel	8283	
		82C83	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

NEC Electronics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
µPD71083			(Cont'd)
	MMI	82C83	
	OKI	82C83	
µPD71084	**Calmos**	**CA82C84**	**(2553)**
	Fujitsu	MBL8284	
	Harris	**82C84**	**(2734, 2768, 4249)**
		82C84A	**(2734, 2768, 4249)**
	Intel	8284	
		82C84	
		82C84A	
	NEC	µPB8284	
		µPD8284	
	OKI	MSM82C84	
µPD71086	AMD	DP8304	
	Fujitsu	MBL8286	
	Harris	**82C86H**	**(2733, 2768)**
	Intel	8286	
		82C86	
	MMI	82C86	
	National	DP8304	
	NEC	µPB8286	
	OKI	82C86	
µPD71088	AMD	8288	
	Calmos	**CA82C88**	**(2553)**
	Fujitsu	MBL8288	
	Harris	**82C88**	**(2734, 2768, 4249)**
	Intel	8288	
		82C88	
	NEC	µPB8288	
		µPD8288	
	OKI	82C88	
		MSM82C88	
µPD72065	NEC	µPD7654A	
		µPD765A	
	Rockwell	**R6765A**	**(2990)**
	SMC	FDC72C65	
		FDC765A	
	Zilog	Z765A	
µPD72066	Intel	8272	
	Rockwell	**R6765**	**(2990)**
	SMC	FDC72C65	
		FDC765A	
µPD7210	SMC	COM7210	
µPD7220A	Zilog	Z7220A	
µPD7261A	SMC	HDC7261	
µPD7265	SMC	FDC7265	
µPD765	SMC	FDC765	
µPD7654A	NEC	µPD72065	
		µPD765A	
	Rockwell	**R6765A**	**(2990)**
	SMC	FDC72C65	
		FDC765A	
	Zilog	Z765A	
µPD765A	NEC	µPD72065	
		µPD7654A	
	Rockwell	**R6765A**	**(2990)**
	SMC	FDC72C65	
		FDC765A	
	Zilog	Z765A	
µPD7720	Gould	S7720	
µPD7720A	Gould	7720	
µPD780	**GoldStar**	**Z8400**	**(2691)**
		Z8430	**(2691)**
	SGS	Z80ACPU	
		Z80ACTC	
		Z8400	
		Z84C00	
	Sharp	LH0080	
	Thomson	MK3880	
	Toshiba	**TMPZ84C00**	**(3306)**
	Zilog	**Z8400**	**(3417)**
		Z84C00	**(3417)**
µPD8035	Intel	8035	
	National	INS8035	
	Signetics	SCN8035	
	Toshiba	**TMP8035**	**(3306)**
µPD8041A	Intel	8041A	
µPD8048	Intel	8048	
	National	INS8048	
	Signetics	SCN8048	
	Toshiba	**TMP8048**	**(3306)**
µPD8049	Intel	8049	
	National	INS8049	
	Signetics	**SCN8049**	**(3076)**
	Toshiba	**TMP8049**	**(3306)**
µPD8085	AMD	8085A	
	Calmos	**CA80C85**	**(2553)**
	Devtek	DS8085	
	Intel	8085	
		8085A	
	OKI	MSM8085	
	Toshiba	**TMP8085**	**(3306)**
		TMP8085A	**(3306)**
µPD80C48	**GoldStar**	**Z8440**	**(2691)**
	Intel	80C48	
	Toshiba	**TMP80C48**	**(3306)**
µPD80C49	Intel	80C49	
	Signetics	SCC80C49	
	Toshiba	**TMP80C49**	**(3306)**
µPD80C50	Intel	80C50	
	SiliconSys	SSI80C50	
	Toshiba	**TMP80C50**	**(3306)**
µPD8155	AMD	8155	
	Harris	HS81C55	
	Intel	8155	
	Toshiba	**TMP8155**	**(3306)**
µPD8156	AMD	8156	
	Harris	HS81C56	
	Intel	8156	
µPD8156-2	Intel	8156-2	
µPD8237	AMD	8237	
	Calmos	**CA82C37**	**(2553)**
	Harris	**82C37**	**(2731, 2768, 4249)**
	Intel	8037	
	OKI	MSM82C37	
µPD8237A	Intel	8237-5	
µPD8243	Intel	8243	
	Toshiba	**TMP8243**	**(3306)**
µPD8251A	AMD	8251	
	Intel	P8251	
	National	INS8251	
	OKI	MSM82C51A	
	S-MOS	SMC82C51AC	
	SMC	COM8251A	
	Toshiba	**TMP8251**	**(3306)**
µPD8253	AMD	8253	
	Intel	8253	
	National	INS8253	
	Toshiba	**TMP8253**	**(3306)**
µPD8255	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	µPD71055	
		µPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
µPD8255A	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	µPD71055	
		µPD8255	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
µPD8255A-21-5			
	Intel	8255A	
µPD8257	Intel	8257	
µPD8259	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µPD8259			(Cont'd)
	National	INS8259	
	NEC	µPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
µPD8259A	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	National	INS8259	
	NEC	µPD8259	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
µPD8279-5	AMD	8279-5	
	Intel	8279	
µPD8284	**Calmos**	**CA82C84**	**(2553)**
	Fujitsu	MBL8284	
	Harris	**82C84**	**(2734, 2768, 4249)**
		82C84A	**(2734, 2768, 4249)**
	Intel	8284	
		82C84	
		82C84A	
	NEC	µPB8284	
		µPD71084	
	OKI	MSM82C84	
µPD8287	AMD	8287	
	Harris	**82C87H**	**(2733, 2768)**
	Intel	8287	
		82C87	
	MMI	82C87	
	NEC	µPS71087	
	OKI	82C87	
µPD8288	AMD	8288	
	Calmos	**CA82C88**	**(2553)**
	Fujitsu	MBL8288	
	Harris	**82C88**	**(2734, 2768, 4249)**
	Intel	8288	
		82C88	
	NEC	µPB8288	
		µPD71088	
	OKI	82C88	
		MSM82C88	
µPD8741A	Intel	8741A	
µPD8748	Intel	8748	
	National	NS80CX48	
µPD8755	Intel	8755	
µPD8755A	Intel	8755A	
µPS71087	AMD	8287	
	Harris	**82C87H**	**(2733, 2768)**
	Intel	8287	
		82C87	
	MMI	82C87	
	NEC	µPD8287	
	OKI	82C87	
µUPD4016	Matra-Harris	HM6116	

OKI Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
5104	AMD	AM2141	
		AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
	Rockwell	R6504	
	Toshiba	TMM315	
5114	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
5114			(Cont'd)
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
82C51	Intel	82C51	
	NEC	µPD71051	
82C54	**Calmos**	**CA82C54**	**(2553)**
	Harris	**82C54**	**(2731, 2768, 4249)**
	Intel	8254	
		82C54	
	NEC	µPD71054	
	S-MOS	SMC82C54AC	
82C55	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	µPD71055	
		µPD8255	
		µPD8255A	
	OKI	MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
82C57	Intel	82C57	
	NEC	µPD71057	
82C82	Fujitsu	MBL8282	
	Harris	**82C82**	**(2733, 2768)**
	Intel	8282	
		82C82	
	MMI	82C82	
	NEC	µPB8282	
		µPD71082	
82C83	**Harris**	**82C83H**	**(2733, 2768)**
	Intel	8283	
		82C83	
	MMI	82C83	
	NEC	µPD71083	
82C86	AMD	DP8304	
	Fujitsu	MBL8286	
	Harris	**82C86H**	**(2733, 2768)**
	Intel	8286	
		82C86	
	MMI	82C86	
	National	DP8304	
	NEC	µPB8286	
		µPD71086	
82C87	AMD	8287	
	Harris	**82C87H**	**(2733, 2768)**
	Intel	8287	
		82C87	
	MMI	82C87	
	NEC	µPD8287	
		µPS71087	
82C88	AMD	8288	
	Calmos	**CA82C88**	**(2553)**
	Fujitsu	MBL8288	
	Harris	**82C88**	**(2734, 2768, 4249)**
	Intel	8288	
		82C88	
	NEC	µPB8288	
		µPD71088	
		µPD8288	
	OKI	MSM82C88	
M5M2716	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

OKI Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
M5M2716			(Cont'd)
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
M5M37256	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	MSM37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
M80C31	AMD	P80C31	
	Fujitsu	MBL80C31	
	Harris	P80C31	
	Intel	80C31	
		P80C31	
	Siemens	SAB80C31	
	Signetics	SC80C31	
M80C51	Fujitsu	MBL80C51	
	Intel	80C51	
		P80C51	
	Matra-Harris	P80C51	
	Siemens	SAB80C51	
	Signetics	SC80C51	
MSC2304KS8	**Dense-Pac**	**DPD42568**	**(2581)**
	Hitachi	HB561008B	
	MicronTech	MT8259	
	Mitsubishi	MH25608A	
	NEC	MC41256A8	
	OKI	MSC2304YS8	
	TI	TM4256FL8	
		TM4256GU8	
MSC2304KS9	Dense-Pac	DPD42569	
	Hitachi	HB561003	
		HB561009	
	MicronTech	MT9259	
	Mitsubishi	MH25609A	
	NEC	MC41256A9	
	OKI	MSC2304YS9	
	TI	TM4256EL9	
		TM4256GU9	
MSC2304YS8	**Dense-Pac**	**DPD42568**	**(2581)**
	Hitachi	HB561008B	
	MicronTech	MT8259	
	Mitsubishi	MH25608A	
	NEC	MC41256A8	
	OKI	MSC2304KS8	
	TI	TM4256FL8	
		TM4256GU8	
MSC2304YS9	Dense-Pac	DPD42569	
	Hitachi	HB561003	
		HB561009	
	MicronTech	MT9259	
	Mitsubishi	MH25609A	
	NEC	MC41256A9	
	OKI	MSC2304KS9	
	TI	TM4256EL9	
		TM4256GU9	
MSL912	Dionics	DI513B	
		DI514	
		DI514B	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSL912			(Cont'd)
	Exar	XR6118	
	Motorola	MC3490	
	National	DM8887	
		DS8887	
	Sanyo	LB1290	
	Signetics	NE594	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
	Toshiba	TD62781	
MSM2114	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
MSM2128	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM2128	Toshiba		(Cont'd)
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MSM2716	**Harris**	**HM6616**	**(2768)**
	Hitachi	HN462716	
	National	MM2716	
	SGS	M2716	
	Thomson	ET2716	
MSM2732	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		2732A	
		M2732	
	National	MM2732	
		NMC2732	
	NEC	μPD2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
MSM2764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
MSM2764A	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM2764A			(Cont'd)
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
MSM27C256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
MSM27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
MSM3716	AMD	AM9016	
	Fairchild	F16K	
		F4116	
	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

OKI Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM3716			(Cont'd)
	Stantel-STC	STC4116	
	Toshiba	TMM416	
MSM37256	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
MSM37256A	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**
	Vitelic	V51C256	
		V51C257	
MSM37257A	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
MSM3764	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM3764			(Cont'd)
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
MSM38256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
MSM3864	Gould	S2364	
	Hitachi	HN48364	
	NCR	NCR2364	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**
	Sharp	LH2364A	
	Signetics	2364	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
MSM4001	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
	Motorola	MC14001	
	National	CD4001	
		MM74C02	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
MSM4011	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	Motorola	MC14011	
	National	CD4011	
		MM74C00	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
MSM4013	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	CD4013	
		MM74C74	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
	Signetics	HEF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
MSM4015	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	CD4015	
		MM74C164	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
MSM4019	Fairchild	F4019	
	GE/RCA	**CD4019**	**(2633, 2635)**
	National	CD4019	
	Sanyo	LC4019	
	SGS	HCC/HCF4019	
	Signetics	HEF4019	
	Solitron	CM4019	
	Sprague	SCL4019	
	Toshiba	**TC4019**	**(3308)**
MSM4027	Fairchild	F4027	
	GE/RCA	**CD4027**	**(2634)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM4027			(Cont'd)
	Motorola	MC14027	
	National	CD4027	
		MM74C76	
	Sanyo	LC4027	
	SGS	HCC/HCF4027	
	Signetics	HEF4027	
	Solitron	CM4027	
	Sprague	SCL4027	
MSM4028	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	CD4028	
		MM74C42	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	
	Solitron	CM4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
MSM4049	Fairchild	F4049	
	GE/RCA	**CD4049**	**(2633)**
	Motorola	MC14049	
	National	CD4049	
	Sanyo	LC4049	
	SGS	HCC/HCF4049	
	Signetics	HEF4049	
	Solitron	CM4049	
	Sprague	SCL4049	
	Toshiba	**TC4049**	**(3308)**
MSM4069	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
		MM74C04	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
MSM4071	Fairchild	F4071	
	GE/RCA	**CD4071**	**(2633)**
	Motorola	MC14071	
	National	CD4071	
		MM74C32	
	Sanyo	LC4071	
	SGS	HCC/HCF4071	
	Signetics	HEF4071	
	Solitron	CM4071	
	Sprague	SCL4071	
MSM4081	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	CD4081	
		MM74C08	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
MSM41256	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM37257A	
	Panasonic	MM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
MSM41464	Fujitsu	MB81464	
	Hitachi	HM50464	
		HM50465	
	Inmos	IMS2820	
	MicronTech	MT4064	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM41464			(Cont'd)
	Mitsubishi	M5M4464	
		MSM4464P	
	NEC	μPD41464	
	Samsung	KM41464	
	TI	SMJ4469	
		TMS4464	**(3259)**
	Toshiba	TMM41464	
MSM4520	Fairchild	F4520	
	GE/RCA	**CD4520**	**(2635)**
	Motorola	MC14520	
	National	CD4520	
	Sanyo	LC4520	
	SGS	HCC/HCF4520	
	Signetics	HEF4520	
	Solitron	CM4520	
	Sprague	SCL4520	
	Toshiba	**TC4520**	**(3308)**
MSM4538	Motorola	MC14538	
	National	CD4538	
	Signetics	HEF4538	
MSM5104	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
	NEC	μPD2147	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
MSM5114	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
♦ MSM5115	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
♦ MSM5115	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
♦ MSM5115	Toshiba	TC5513	
		TC5514	
		TMM2114	
♦ MSM5115	UMC	UM6104	
MSM5126	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

OKI Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM5126			(Cont'd)
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MSM5127	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM5127			(Cont'd)
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MSM5128	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM5128			(Cont'd)
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MSM5129	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM514257	**GE/Intersil**	**IH5148**	**(2679)**
	Maxim	IH5148	
	Mitsubishi	M5M44C258	
	TI	**TMS44C257**	**(3259)**
MSM5164	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
MSM5165	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

OKI Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM5165	Mitsubishi		(Cont'd)
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
MSM5188	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM5188			(Cont'd)
	VLSI Tech	**VT20C98**	**(3352)**
MSM8085	AMD	8085A	
	Calmos	**CA80C85**	**(2553)**
	Devtek	DS8085	
	Intel	8085	
		8085A	
	NEC	μPD8085	
	Toshiba	**TMP8085**	**(3306)**
		TMP8085A	**(3306)**
MSM82C12	AMD	AM8212	
	Calmos	**CA82C12**	**(2553)**
	Intel	8212	
	NEC	μPB8212	
MSM82C37	AMD	8237	
	Calmos	**CA82C37**	**(2553)**
	Harris	**82C37**	**(2731, 2768, 4249)**
	Intel	8037	
	NEC	μPD8237	
MSM82C51A	AMD	8251	
	Intel	P8251	
	National	INS8251	
	NEC	μPD8251A	
	S-MOS	SMC82C51AC	
	SMC	COM8251A	
	Toshiba	**TMP8251**	**(3306)**
MSM82C55	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
MSM82C55A	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
MSM82C59	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59A	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**
MSM82C59A	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
	S-MOS	SMC82C59AC	
	Toshiba	**TMP8259**	**(3306)**

Manufacturer Device	Replacement Source	Device	IC Master Page
MSM82C84	**Calmos**	**CA82C84**	**(2553)**
	Fujitsu	MBL8284	
	Harris	**82C84**	**(2734, 2768, 4249)**
		82C84A	**(2734, 2768, 4249)**
	Intel	8284	
		82C84	
		82C84A	
	NEC	μPB8284	
		μPD71084	
		μPD8284	
MSM82C88	AMD	8288	
	Calmos	**CA82C88**	**(2553)**
	Fujitsu	MBL8288	
	Harris	**82C88**	**(2734, 2768, 4249)**
	Intel	8288	
		82C88	
	NEC	μPB8288	
		μPD71088	
		μPD8288	
	OKI	82C88	

Optical Electronics Inc.

Manufacturer Device	Replacement Source	Device	IC Master Page
9910	Elantec	EL2002	
		EL2003	**(2591, 2595)**
		ELH0002	**(2592)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	Hytek	HY0002	
	LinearTech	LT1010	
	Micra	MC0002	
		MC0021	
	National	LH0002	
	TeledyneC	LH0002	
♦ 9932	AD	ADLH0032	
		HOS-060	
		HOS050	
		MOS050	
♦ 9932	**Elantec**	**ELH0032**	**(2593)**
	Harris	**HA2542**	**(2737, 2747, 2750)**
	Micra	MC0032	
	National	LH0032	
	TeledyneC	LH0032	
	TeledyneP	0032	
9963	Maxim	LH0063	
	National	LH0063	
AH001	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	TeledyneC	LH0033	
	TeledyneP	1359	
AH0605	**Burr-Brown**	**OPA605**	**(2535)**

Panasonic

Manufacturer Device	Replacement Source	Device	IC Master Page
DN74LS00	Fairchild	74LS00	
	Hitachi	HD74LS00	
	Motorola	SN74LS00	
	National	DM74LS00	
	SGS	T74LS00	
	Signetics	**74LS00**	**(3003)**
	TI	SN74LS00	
DN74LS01	Fairchild	74LS01	
	Hitachi	HD74LS01	
	Motorola	SN74LS01	
	National	DM74LS01	
	Signetics	**74LS01**	**(3003)**
	TI	SN74LS01	
DN74LS02	Fairchild	74LS02	
	Hitachi	HD74LS02	
	Motorola	SN74LS02	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DN74LS02			(Cont'd)
	National	DM74LS02	
	SGS	T74LS02	
	Signetics	**74LS02**	**(3003)**
	TI	SN74LS02	
DN74LS03	Fairchild	74LS03	
	Hitachi	HD74LS03	
	Motorola	SN74LS03	
	National	DM74LS03	
	SGS	T74LS03	
	TI	SN74LS03	
DN74LS04	Fairchild	74LS04	
	Hitachi	HD74LS04	
	Motorola	SN74LS04	
	National	DM74LS04	
	SGS	T74LS04	
	Signetics	**74LS04**	**(3003)**
	TI	SN74LS04	
DN74LS05	Fairchild	74LS05	
	Hitachi	HD74LS05	
	Motorola	SN74LS05	
	National	DM74LS05	
	SGS	T74LS05	
	Signetics	**74LS05**	**(3003)**
	TI	SN74LS05	
DN74LS08	Fairchild	74LS08	
	Hitachi	HD74LS08	
	Motorola	SN74LS08	
	National	DM74LS08	
	SGS	T74LS08	
	Signetics	**74LS08**	**(3003)**
	TI	SN74LS08	
DN74LS09	Fairchild	74LS09	
	Hitachi	HD74LS09	
	Motorola	SN74LS09	
	National	DM74LS09	
	SGS	T74LS09	
	TI	SN74LS09	
DN74LS10	Fairchild	74LS10	
	Hitachi	HD74LS10	
	Motorola	SN74LS10	
	National	DM74LS10	
	SGS	T74LS10	
	Signetics	**74LS10**	**(3003)**
	TI	SN74LS10	
DN74LS109	Fairchild	74LS109	
	Hitachi	HD74LS109	
	Motorola	SN74LS109	
	National	DM74LS109	
	SGS	T74LS109	
	Signetics	**74LS109**	**(3003)**
	TI	SN74LS109A	
DN74LS11	Fairchild	74LS11	
	Hitachi	HD74LS11	
	Motorola	SN74LS11	
	National	DM74LS11	
	SGS	T74LS11	
	Signetics	**74LS11**	**(3003)**
	TI	SN74LS11	
DN74LS112	Fairchild	74LS112	
	Hitachi	HD74LS112	
	Motorola	SN74LS112A	
	National	DM74LS112	
	SGS	T74LS112	
	Signetics	**74LS112**	**(3003)**
	TI	SN74LS112A	
DN74LS113	Hitachi	HD74LS113	
	Motorola	SN74LS113A	
	National	DM74LS113	
	SGS	T74LS113	
	Signetics	**74LS113**	**(3003)**
	TI	SN74LS113A	
DN74LS114	Hitachi	HD74LS114	
	Motorola	SN74LS114A	
	National	DM74LS114	
	SGS	T74LS114	
	TI	SN74LS114A	
DN74LS12	Hitachi	HD74LS12	
	Motorola	SN74LS12	
	National	DM74LS12	
	Signetics	74LS12	
	TI	SN74LS12	
DN74LS123	Hitachi	HD74LS123	
	Motorola	SN74LS123	
	National	DM74LS123	
	TI	SN74LS123	
DN74LS125A	Fairchild	74LS125A	
	Motorola	SN74LS125A	
	National	DM74LS125	
	SGS	T74LS125	
	Signetics	**74LS125A**	**(3003)**
	TI	SN74LS125A	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Panasonic (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
DN74LS13	Fairchild	74LS13	
	Hitachi	HD74LS13	
	Motorola	SN74LS13	
	National	DM74LS13	
	SGS	T74LS13	
	Signetics	**74LS13**	**(3003)**
	TI	SN74LS13	
DN74LS132	Fairchild	74LS132	
	Hitachi	HD74LS132	
	Motorola	SN74LS132	
	National	DM74LS132	
	SGS	T74LS132	
	Signetics	**74LS132**	**(3003)**
	TI	SN74LS132	
DN74LS136	Fairchild	74LS136	
	Hitachi	HD74LS136	
	Motorola	SN74LS136	
	National	DM74LS136	
	SGS	T74LS136	
	Signetics	**74LS136**	**(3003)**
	TI	SN74LS136	
DN74LS138	Fairchild	74LS138	
	Hitachi	HD74LS138	
	Motorola	SN74LS138	
	National	DM74LS138	
	SGS	T74LS138	
	Signetics	**74LS138**	**(3003)**
	TI	SN74LS138	
DN74LS139	Fairchild	74LS139	
	Hitachi	HD74LS139	
	Motorola	SN74LS139	
	National	DM74LS139	
	SGS	T74LS139	
	Signetics	**74LS139**	**(3003)**
	TI	SN74LS139A	
DN74LS14	Fairchild	74LS14	
	Hitachi	HD74LS14	
	Motorola	SN74LS14	
	National	DM74LS14	
	Signetics	**74LS14**	**(3003)**
	TI	SN74LS14	
DN74LS145	Motorola	SN74LS145	
	TI	SN74LS145	
DN74LS15	Fairchild	74LS15	
	Motorola	SN74LS15	
	National	DM74LS15	
	SGS	T74LS15	
	TI	SN74LS15	
DN74LS151	Fairchild	74LS151	
	Hitachi	HD74LS151	
		HD74LS151A	
	Motorola	SN74LS151	
	National	DM74LS151	
	SGS	T74LS151	
	Signetics	**74LS151**	**(3003)**
	TI	SN74LS151	
DN74LS153	Fairchild	74LS153	
	Hitachi	HD74LS153	
	Motorola	SN74LS153	
	National	DM74LS153	
	SGS	T74LS153	
	Signetics	**74LS153**	**(3003)**
	TI	SN74LS153	
DN74LS155	Fairchild	74LS155	
	Hitachi	HD74LS155	
	Motorola	SN74LS155	
	National	DM74LS155	
	Signetics	**74LS155**	**(3003)**
	TI	SN74LS155A	
DN74LS156	Fairchild	74LS156	
	Hitachi	HD74LS156	
	Motorola	SN74LS156	
	National	DM74LS156	
	SGS	T74LS156	
	Signetics	**74LS156**	**(3003)**
	TI	SN74LS156	
DN74LS157	Fairchild	74LS157	
	Hitachi	HD74LS157	
	Motorola	SN74LS157	
	National	DM74LS157	
	SGS	T74LS157	
	Signetics	**74LS157**	**(3003)**
	TI	SN74LS157	
DN74LS158	Fairchild	74LS158	
	Hitachi	HD74LS158	
	Motorola	SN74LS158	
	National	DM74LS158	
	SGS	T74LS158	
	Signetics	**74LS158**	**(3003)**
	TI	SN74LS158	
DN74LS160A	Fairchild	74LS160	
	Hitachi	HD74LS160A	
	Motorola	SN74LS160A	
	National	DM74LS160	
	SGS	T74LS160	
	Signetics	**74LS160**	**(3003)**
		74LS160A	**(3003)**
	TI	SN74LS160A	
DN74LS161A	Fairchild	74LS161A	
	Hitachi	HD74LS161A	
	Motorola	SN74LS161A	
	National	DM74LS161	
	SGS	T74LS161	
	Signetics	**74LS161A**	**(3003)**
	TI	SN74LS161A	
DN74LS162A	Fairchild	74LS162	
	Hitachi	HD74LS162A	
	Motorola	SN74LS162A	
	National	DM74LS162	
	SGS	T74LS162	
	Signetics	**74LS162A**	**(3003)**
	TI	SN74LS162A	
DN74LS163A	Fairchild	74LS163	
	Hitachi	HD74LS163	
		HD74LS163A	
	Motorola	SN74LS163A	
	National	DM74LS163	
	SGS	T74LS163	
	Signetics	**74LS163A**	**(3003)**
	TI	SN74LS163A	
DN74LS164	Fairchild	74LS164	
	Hitachi	HD74LS164	
	Motorola	SN74LS164A	
	National	DM74LS164	
	SGS	T74LS164	
	Signetics	**74LS164**	**(3003)**
		74LS164A	**(3003)**
	TI	SN74LS164	
DN74LS170	Fairchild	74LS170	
	Motorola	SN74LS170	
	National	DM74LS170	
	SGS	T74LS170	
	Signetics	**74LS170**	**(3003)**
	TI	SN74LS170	
DN74LS173	Fairchild	74LS173	
	Motorola	SN74LS173A	
	National	DM74LS173	
	SGS	T74LS173	
	Signetics	**74LS173**	**(3003)**
	TI	SN74LS173A	
DN74LS174	Fairchild	74LS174	
	Hitachi	HD74LS174	
	Motorola	SN74LS174	
	National	DM74LS174	
	SGS	T74LS174	
	Signetics	**74LS174**	**(3003)**
	TI	SN74LS174	
DN74LS175	Fairchild	74LS175	
	Hitachi	HD74LS175	
	Motorola	SN74LS175	
	SGS	T74LS175	
	Signetics	**74LS175**	**(3003)**
	TI	SN74LS175	
DN74LS190	Fairchild	74LS190	
	Hitachi	HD74LS190	
	Motorola	SN74LS190	
	National	DM74LS190	
	SGS	T74LS190	
	TI	SN74LS190	
DN74LS191	Fairchild	74LS191	
	Hitachi	HD74LS191	
	Motorola	SN74LS191	
	National	DM74LS191	
	SGS	T74LS191	
	Signetics	**74LS191**	**(3003)**
	TI	SN74LS191	
DN74LS192	Fairchild	74LS192	
	Hitachi	HD74LS192	
	Motorola	SN74LS192	
	National	DM74LS192	
	SGS	T74LS192	
	Signetics	**74LS192**	**(3003)**
	TI	SN74LS192	
DN74LS193	Fairchild	74LS193	
	Hitachi	HD74LS193	
	Motorola	SN74LS193	
	National	DM74LS193	
	SGS	T74LS193	
	Signetics	**74LS193**	**(3003)**
	TI	SN74LS193	
DN74LS194A	Fairchild	74LS194A	
	Hitachi	HD74LS194A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DN74LS194A			(Cont'd)
	Motorola	SN74LS194A	
	National	DM74LS194	
	SGS	T74LS194A	
	Signetics	**74LS194A**	**(3003)**
	TI	SN74LS194A	
DN74LS195A	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
DN74LS196	Fairchild	74LS196	
	Hitachi	HD74LS196	
	Motorola	SN74LS196	
	National	DM74LS196	
	SGS	T74LS196	
	Signetics	N82S80	
	TI	SN74LS196	
DN74LS197	Fairchild	74LS197	
	Hitachi	HD74LS197	
	Motorola	SN74LS197	
	National	DM74LS197	
	SGS	T74LS197	
	Signetics	**74LS197**	**(3003)**
	TI	SN74LS197	
DN74LS20	Fairchild	74LS20	
	Hitachi	HD74LS20	
	Motorola	SN74LS20	
	National	DM74LS20	
	SGS	T74LS20	
	Signetics	**74LS20**	**(3003)**
	TI	SN74LS20	
DN74LS21	Fairchild	74LS21	
	Hitachi	HD74LS21	
	Motorola	SN74LS21	
	National	DM74LS21	
	SGS	T74LS21	
	Signetics	**74LS21**	**(3003)**
	TI	SN74LS21	
DN74LS22	Hitachi	HD74LS22	
	Motorola	SN74LS22	
	National	DM74LS22	
	SGS	T74LS22	
DN74LS240	Fairchild	74LS240	
	Hitachi	HD74LS240	
	Motorola	SN74LS240	
	SGS	T74LS240	
	Signetics	**74LS240**	**(3003)**
	TI	SN74LS240	
DN74LS241	Fairchild	74LS241	
	Hitachi	HD74LS241	
	Motorola	SN74LS241	
	SGS	T74LS241	
	Signetics	**74LS241**	**(3003)**
	TI	SN74LS241	
DN74LS244	Fairchild	74LS244	
	Hitachi	HD74LS244	
	Motorola	SN74LS244	
	SGS	T74LS244	
	Signetics	**74LS244**	**(3003)**
	TI	SN74LS244	
DN74LS251	Fairchild	74LS251	
	Hitachi	HD74LS251	
	Motorola	SN74LS251	
	National	DM74LS251	
	SGS	T74LS251	
	Signetics	**74LS251**	**(3003)**
	TI	SN74LS251	
DN74LS253	Fairchild	74LS253	
	Hitachi	HD74LS253	
	Motorola	SN74LS253	
	National	DM74LS253	
		DM8214	
	SGS	T74LS253	
	Signetics	**74LS253**	**(3003)**
	TI	SN74LS253	
DN74LS258A	Fairchild	74LS258A	
	Hitachi	HD74LS258	
	Motorola	SN74LS258A	
	National	DM74LS258	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DN74LS258A			(Cont'd)
	SGS	T74LS258	
	Signetics	**74LS258**	**(3003)**
	TI	SN74LS258B	
DN74LS26	Fairchild	74LS26	
	Hitachi	HD74LS26	
	Motorola	SN74LS26	
	National	DM74LS26	
	SGS	T74LS26	
	Signetics	**74LS26**	**(3003)**
	TI	SN74LS26	
DN74LS260	SGS	T74LS260	
	TI	SN74LS260	
DN74LS266	Fairchild	74LS266	
	Motorola	SN74LS266	
	National	DM74LS266	
	Raytheon	RC8242	
	SGS	T74LS266	
	Signetics	**74LS266**	**(3003)**
		N8242	**(3022)**
	TI	SN74LS266	
DN74LS27	Fairchild	74LS27	
	Hitachi	HD74LS27	
	Motorola	SN74LS27	
	National	DM74LS27	
	SGS	T74LS27	
	Signetics	**74LS27**	**(3003)**
	TI	SN74LS27	
DN74LS279	Fairchild	74LS279	
	Hitachi	HD74LS279	
	Motorola	SN74LS279	
	National	DM74LS279	
	SGS	T74LS279	
	Signetics	74LS279	
	TI	SN74LS279A	
DN74LS280	Hitachi	HD74LS280	
	Motorola	SN74LS280	
	SGS	T74LS280	
	TI	SN74LS280	
DN74LS283	Fairchild	74LS283	
	Hitachi	HD74LS283	
		HD74LS283A	
	Motorola	SN74LS283	
	National	DM74LS283	
	SGS	T74LS283	
	Signetics	**74LS283**	**(3003)**
	TI	SN74LS283	
DN74LS290	Fairchild	74LS290	
	Hitachi	HD74LS290	
	Motorola	SN74LS290	
	National	DM74LS290	
	SGS	T74LS290	
	Signetics	**74LS290**	**(3003)**
	TI	SN74LS290	
DN74LS293	Fairchild	74LS293	
	Hitachi	HD74LS293	
	Motorola	SN74LS293	
	National	DM74LS293	
	SGS	T74LS293	
	Signetics	**74LS293**	**(3003)**
	TI	SN74LS293	
DN74LS30	Fairchild	74LS30	
	Hitachi	HD74LS30	
	Motorola	SN74LS30	
	National	DM74LS30	
	SGS	T74LS30	
	Signetics	**74LS30**	**(3003)**
	TI	SN74LS30	
DN74LS33	Fairchild	74LS33	
	Motorola	SN74LS33	
	SGS	T74LS33	
	Signetics	**74LS33**	**(3003)**
	TI	SN74LS33	
DN74LS365A	Fairchild	74LS365A	
	Motorola	SN74LS365A	
	National	DM74LS365	
	SGS	T74LS365	
		T74LS365A	
	Signetics	**74LS365**	**(3003)**
		74LS365A	**(3003)**
	TI	SN74LS365A	
DN74LS366A	Fairchild	74LS366A	
	Motorola	SN74LS366A	
	National	DM74LS366	
	SGS	T74LS366	
		T74LS366A	
	Signetics	**74LS366A**	**(3003)**
	TI	SN74LS366A	
DN74LS367A	Fairchild	74LS367A	
	Hitachi	HD74LS367	
		HD74LS367A	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Panasonic			**(Cont'd)**
DN74LS367A			(Cont'd)
	Motorola	SN74LS367A	
	National	DM74LS367	
	SGS	T74LS367	
		T74LS367A	
	Signetics	**74LS367**	**(3003)**
		74LS367A	**(3003)**
	TI	SN74LS367A	
DN74LS368A	Fairchild	74LS368A	
	Hitachi	HD74LS368	
	Motorola	SN74LS368A	
	National	DM74LS368	
	SGS	T74LS368	
	Signetics	**74LS368**	**(3003)**
		74LS368A	**(3003)**
	TI	SN74LS368A	
DN74LS37	Fairchild	74LS37	
	Hitachi	HD74LS37	
	Motorola	SN74LS37	
	National	DM74LS37	
	SGS	T74LS37	
	Signetics	74LS37	
	TI	SN74LS37	
DN74LS373	Fairchild	74LS373	
	Motorola	SN74LS373	
	SGS	T74LS373	
	Signetics	**74LS373**	**(3003)**
	TI	SN74LS373	
DN74LS38	Fairchild	74LS38	
	Hitachi	HD74LS38	
	Motorola	SN74LS38	
	National	DM74LS38	
	SGS	T74LS38	
	Signetics	**74LS38**	**(3003)**
	TI	SN74LS38	
DN74LS386	Hitachi	HD74LS386	
	Motorola	SN74LS386	
	National	DM74LS386	
	TI	SN74LS386A	
DN74LS390	Fairchild	74LS390	
	Motorola	SN74LS390	
	SGS	T74LS390	
	TI	SN74LS390	
DN74LS393	Fairchild	74LS393	
	Motorola	SN74LS393	
	SGS	T74LS393	
	Signetics	**74LS393**	**(3003)**
	TI	SN74LS393	
DN74LS395A	Fairchild	74LS395	
	National	DM74LS395	
	SGS	T74LS395	
	Signetics	**74LS395**	**(3003)**
	TI	SN74LS395A	
DN74LS40	Fairchild	74LS40	
	Hitachi	HD74LS40	
	Motorola	SN74LS40	
	National	DM74LS40	
	SGS	T74LS40	
	Signetics	**74LS40**	**(3003)**
	TI	SN74LS40	
DN74LS42	Fairchild	74LS42	
	Hitachi	HD74LS42	
	Motorola	SN74LS42	
	National	DM74LS42	
	SGS	T74LS42	
	Signetics	**74LS42**	**(3003)**
	TI	SN74LS42	
DN74LS490	Fairchild	74LS490	
	Motorola	SN74LS490	
	SGS	T74LS490	
	Signetics	**74LS490**	**(3003)**
DN74LS51	Fairchild	74LS51	
	Hitachi	HD74LS51	
	Motorola	SN74LS51	
	National	DM74LS51	
	SGS	T74LS51	
	Signetics	**74LS51**	**(3003)**
	TI	SN74LS51	
DN74LS54	Fairchild	74LS54	
	Hitachi	HD74LS54	
	Motorola	SN74LS54	
	National	DM74LS54	
	SGS	T74LS54	
	Signetics	**74LS54**	**(3003)**
	TI	SN74LS54	
DN74LS55	Fairchild	74LS55	
	Hitachi	HD74LS55	
	Motorola	SN74LS55	
	National	DM74LS55	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DN74LS55			(Cont'd)
	SGS	T74LS55	
	TI	SN74LS55	
DN74LS73	Hitachi	HD74LS73	
	Motorola	SN74LS73A	
	National	DM74LS73	
	Signetics	**74LS73**	**(3003)**
	TI	SN74LS73A	
DN74LS74A	Fairchild	74LS74	
	Hitachi	HD74LS74	
		HD74LS74A	
	Motorola	SN74LS74A	
	National	DM74LS74	
	SGS	T74LS74	
	Signetics	74LS74	
	TI	SN74LS74A	
DN74LS75	Hitachi	HD74LS75	
	Motorola	SN74LS75	
	National	DM74LS75	
	Signetics	**74LS75**	**(3003)**
	TI	SN74LS75	
DN74LS76	Hitachi	HD74LS76	
	Motorola	SN74LS76A	
	National	DM74LS76	
	Signetics	**74LS76**	**(3003)**
	TI	SN74LS76A	
DN74LS78	Hitachi	HD74LS78	
	Motorola	SN74LS78A	
	National	DM74LS78	
	TI	SN74LS78A	
DN74LS83A	Fairchild	74LS83A	
	Hitachi	HD74LS183A	
		HD74LS83A	
	Motorola	SN74LS83A	
	National	DM74LS83A	
	SGS	T74LS83	
	Signetics	**74LS83**	**(3003)**
		74LS83A	**(3003)**
	TI	SN74LS83A	
DN74LS85	Fairchild	74LS85	
	Hitachi	HD74LS85	
	Motorola	SN74LS85	
	National	DM74LS85	
	Signetics	**74LS85**	**(3003)**
	TI	SN74LS85	
DN74LS86	Fairchild	74LS86	
	Hitachi	HD74LS86	
	Motorola	SN74LS86	
	National	DM74LS86	
	SGS	T74LS86	
	Signetics	**74LS86**	**(3003)**
	TI	SN74LS86A	
DN74LS90	Fairchild	74LS90	
	Motorola	SN74LS90	
	National	DM74LS90	
	SGS	T74LS90	
	Signetics	**74LS90**	**(3003)**
	TI	SN74LS90	
DN74LS92	Hitachi	HD74LS92	
	Motorola	SN74LS92	
	National	DM74LS92	
	SGS	T74LS92	
	Signetics	**74LS92**	**(3003)**
	TI	SN74LS92	
DN74LS93	Hitachi	HD74LS93	
	Motorola	SN74LS93	
	National	DM74LS93	
	SGS	T74LS93	
	Signetics	**74LS93**	**(3003)**
	TI	SN74LS93	
DN74LS95B	Fairchild	74LS95B	
	Hitachi	HD74LS95B	
	Motorola	SN74LS95B	
	National	DM74LS95B	
	SGS	T74LS95	
		T74LS95B	
	Signetics	**74LS95B**	**(3003)**
	TI	SN74LS95B	
MM41256	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MM41256	OKI		(Cont'd)
		MSM37257A	
		MSM41256	
	Samsung	KM41256	
		KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
MN1001	National	MM5280	
MN2102	Fairchild	2102H	
	National	MM2102A	
MN23256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
MN23257	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
MN2332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
MN2364	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN4864	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MN2364			(Cont'd)
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
♦ MN2716	**Harris**	**HM6616**	**(2768)**
	Hitachi	HN462716	
	National	MM2716	
	OKI	MSM2716	
	SGS	M2716	
	Thomson	ET2716	
MN411000	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
MN4864	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
MN74HC4067			
	GE/RCA	**CD74HC4067**	**(2632)**
	Signetics	74HC4067	
MN74HC4075			
	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	GE/RCA	**CD74HC4075**	**(2631)**
		CDM5167	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Panasonic (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MN74HC4075			(Cont'd)
	GoldStar	GM7616	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MC74HC4075	
	SGS	M74HC4075	
	Sharp	**LH5167**	**(2993)**
	Signetics	PC74HC4075	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Toshiba	**TC74HC4075**	**(3307)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
MNS101	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
	National	MM74C920	
	NEC	μPD5101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	
♦ OM200	Signetics	OM200	

Panatech Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
PS6168	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
TMS27C512	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Signetics	S82S130	
	TI	**TMS27C512**	**(3257)**
	Toshiba	TMM27512	

Performance Semiconductor Corp.

Manufacturer Device	Replacement Source	Device	IC Master Page
P4C116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
P4C164	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
P4C164			(Cont'd)
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
P4C168	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
P4C1682	**Cypress**	**CY7C172**	**(2562, 2564)**
	GE/RCA	**CD74HC4543**	**(2632)**
	IDT	**IDT71682**	**(2802)**
	Motorola	MC74HC4543	
	National	MM74HC4543	
	SGS	M74HC4543	
	Signetics	PC74HC4543	
	Toshiba	**TC74HC4543**	**(3307)**
P4C169	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
P4C169			(Cont'd)
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
P4C170	AMD	99C60	
		AM99CL68	
	Cypress	**CY7C170**	**(2562)**
	Motorola	MCM6270	
	Thomson	MK4170	
		MK41H78	
	Toshiba	TMM2078	
		TMM2078D	
	Vitelic	V61C68	
P4C187	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
P4C188	AMD	AM99C164	
		AM99C165	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	Inmos	**IMS1620**	**(2787)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR4K4	
		SR64K4	
	Motorola	MCM6288	
		MCM62L88	
	NEC	μPD4362	
	S-MOS	SRM2274	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
P4C198	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	F100182	
	Hitachi	HD100182	
		HM6789	
	Inmos	IMS1629	
	IDT	**IDT6198**	**(2802)**
		IDT7198	**(2802)**
	Motorola	MCM6290	
	NEC	μPD4363	
	Vitelic	V61C62	
P4C1981	**Cypress**	**CY7C161**	**(2562)**
	Fairchild	F100183	
	Hitachi	HD100183	
	IDT	**IDT71981**	**(2802)**
P4C1982	**Cypress**	**CY7C162**	**(2562)**
	Fairchild	F100415	
	Fujitsu	MBM100415	
	Hitachi	HM100415	
	IDT	**IDT71982**	**(2803)**

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Performance Semiconductor Corp. (Cont'd)			
P4C422	AMD	AM93422	
	Cypress	**CY7C122**	**(2561, 2564)**
		CY93422	
	Fairchild	93422	
	Motorola	MCM93422	
	Performance	P93U422	
P54PCT240A	**IDT**	**IDT54FCT240A**	**(2808)**
	VTC	**V54FCT240A**	**(3370)**
P54PCT244A	**IDT**	**IDT54FCT244A**	**(2808)**
	VTC	**V54FCT244A**	**(3370)**
P54PCT245A	**IDT**	**IDT54FCT245A**	**(2808)**
	VTC	**V54FCT245A**	**(3370)**
P54PCT373A	**IDT**	**IDT54FCT373A**	**(2808)**
	VTC	**V54FCT373A**	**(3370)**
P54PCT374A	**IDT**	**IDT54FCT374A**	**(2808)**
	VTC	**V54FCT374A**	**(3370)**
P54PCT533A	**IDT**	**IDT54FCT533A**	**(2808, 2810)**
	VTC	**V54FCT533A**	**(3370)**
P54PCT640A	**IDT**	**IDT54FCT640A**	**(2809)**
	VTC	**V54FCT640A**	**(3370)**
P54PCT645A	**IDT**	**IDT54FCT645A**	**(2809)**
	VTC	**V54FCT645A**	**(3370)**
P74PCT240	**IDT**	**IDT74FCT240**	**(2808)**
	VTC	**V74FCT240**	**(3370)**
P74PCT244	**IDT**	**IDT74FCT244**	**(2808)**
	VTC	**V74FCT244**	**(3370)**
P74PCT374	**IDT**	**IDT74FCT374**	**(2808)**
	VTC	**V74FCT374**	**(3370)**
P74PCT533	**IDT**	**IDT74FCT533**	**(2808, 2810)**
	VTC	**V74FCT533**	**(3370)**
P74PCT534	**IDT**	**IDT74FCT534**	**(2808, 2810)**
	VTC	**V74FCT534**	**(3370)**
P74PCT640	**IDT**	**IDT74FCT640**	**(2809)**
	VTC	**V74FCT640**	**(3370)**
P74PCT645	**IDT**	**IDT74FCT645**	**(2809)**
	VTC	**V74FCT645**	**(3370)**
P93U422	AMD	AM93422	
	Cypress	**CY7C122**	**(2561, 2564)**
		CY93422	
	Fairchild	93422	
	Motorola	MCM93422	
	Performance	P4C422	
Plessey Semiconductors			
MB8860	CMD Micro	G8860	
	Mitel	MT8860	
MJ2813	AMD	AM2813	
MJ2841	AMD	AM2841	
	Fairchild	3341A	
		CY3341AC	
MP3812	AMD	AM2812	
MV3506	Gould	S3506	
MV3507	Gould	S3507	
MV4320	ITT	DF320	
	Mitel	MT4320	
MV4325	Mitel	MT4325	
MV4332	Mitel	MD4332	
	Sanyo	STK4332	
MV74HCT137	CTI	74HCT137	
	GE/RCA	**CD74HCT137**	**(2632)**
	SGS	M74HCT137	
	Supertex	74HCT137	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MV74HCT137			(Cont'd)
	TI	SN74HCT137	
	Toshiba	TC74HCT137	
MV74HCT138	CTI	74HCT138	
	GE/RCA	**CD74HCT138**	**(2632)**
	Hitachi	HD74HCT138	
	Mitel	MD74HCT138	
	National	MM74HCT138	
	SGS	M74HCT138	
	Signetics	**74HCT138 (3003)**	
	Sprague	SS74HCT138	
	TI	SN74HCT138	
	Toshiba	TC74HCT138	
MV74HCT139	**GE/RCA**	**CD74HCT139**	**(2632)**
	IDT	IDT74HCT139	
	Mitel	MD74HCT139	
	National	MM74HCT139	
	Signetics	**74HCT139 (3003)**	
	Sprague	SS74HCT139	
	Supertex	74HCT139	
MV74HCT237	**GE/RCA**	**CD74HCT237**	**(2632)**
	Supertex	74HCT237	
	TI	SN74HCT237	
MV74HCT238	CTI	74HCT238	
	GE/RCA	**CD74HCT238**	**(2632)**
	Signetics	**74HCT238 (3003)**	
	Sprague	SS74HCT238	
	TI	SN74HCT238	
MV74HCT240	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240 (3003)**	
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
MV74HCT241	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241 (3003)**	
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
MV74HCT244	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244 (3003)**	
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
MV74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245 (3003)**	
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
MV74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MV74HCT373			(Cont'd)
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373 (3003)**	
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
MV74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374 (3003)**	
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
MV74HCT533	CTI	74HCT533	
	GE/RCA	**CD74HCT533**	**(2632)**
	Hitachi	HD74HCT533	
	Micrel	MIC74HCT533	
	Motorola	MC74HCT533	
	Signetics	**74HCT533 (3003)**	
	Sprague	SS74HCT533	
	TI	SN74HCT533	
MV74HCT534	CTI	74HCT534	
	GE/RCA	**CD74HCT534**	**(2631)**
	Hitachi	HD74HCT534	
	Micrel	MIC74HCT534	
	Motorola	MC74HCT534	
	Signetics	**74HCT534 (3003)**	
	Sprague	SS74HCT534	
	TI	SN74HCT534	
MV74HCT540	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540 (3003)**	
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
MV74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541 (3003)**	
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
MV74HCT563	CTI	74HCT563	
	GE/RCA	**CD74HCT563**	**(2632)**
	Hitachi	HD74HCT563	
	Micrel	MIC74HCT563	
	SGS	M74HCT563	
	Signetics	**74HCT563 (3003)**	
	Sprague	SS74HCT563	
	TI	SN74HCT563	
	Toshiba	TC74HCT563	
MV74HCT564	CTI	74HCT564	
	GE/RCA	**CD74HCT564**	**(2631)**
	Hitachi	HD74HCT564	
	Micrel	MIC74HCT564	
	Plessey	MV74HCT573	
	SGS	M74HCT564	
	Signetics	**74HCT564 (3003)**	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MV74HCT564			(Cont'd)
	Sprague	SS74HCT564	
	TI	SN74HCT564	
MV74HCT573	CTI	74HCT564	
	GE/RCA	**CD74HCT564**	**(2631)**
	Hitachi	HD74HCT564	
	Micrel	MIC74HCT564	
	Plessey	MV74HCT564	
	SGS	M74HCT564	
	Signetics	**74HCT564 (3003)**	
	Sprague	SS74HCT564	
	TI	SN74HCT564	
MV74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574 (3003)**	
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
MV74SC245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
	SGS	M74HCT245	
	Signetics	**74HCT245 (3003)**	
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
MV74SC373	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
	SGS	M74HCT373	
	Signetics	**74HCT373 (3003)**	
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
MV74SC374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
	SGS	M74HCT374	
	Signetics	**74HCT374 (3003)**	
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
MV8204	Cherry	CS8204	
	Samsung	KA2410	
MV8804	Fairchild	F8804	
	Mitel	MT8804	
MV8865	CMD Micro	G8865	
	Mitel	MT8865	
	Thomson	MK8865	
MV8870	**CMD Micro**	**G8870**	**(2547)**
	Mitel	MT8870	
	Sierra	SC11270	
		SC11271	
MV8912	CMD Micro	G8912B	
	Intel	2912	
		ID2912	
	National	TP3040	
	TI	TCM2912C	
	Thomson	ETC5040	
MV8960	Mitel	MT8960	
MV8961	Mitel	MT8961	
MV8962	Mitel	MT8962	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Plessey Semiconductors (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MV8963	Mitel	MT8963	
MV8964	Mitel	MT8964	
MV8965	Mitel	MT8965	
PIC1655A	SiliconG	SG75450B	
SL1496	**Motorola**	**MC1496**	**(2939, 2958)**
	National	LM1496	
	Signetics	MC1496	
	SiliconG	SG1496	
SL2364C	Gould	S2364	
	Hitachi	HN48364	
	NCR	NCR2364	
	OKI	MSM3864	
	S-MOS	**SMM2364**	**(3201)**
	Sharp	LH2364A	
	Signetics	2364	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
SL3046	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
♦ SL3081	**GE/RCA**	**CA3081**	**(2648, 2653)**
	Sprague	ULN2081	
♦ SL3082	**GE/RCA**	**CA3082**	**(2648, 2653)**
	Sprague	ULN2082	
♦ SL3083	**GE/RCA**	**CA3083**	**(2648)**
	SiliconG	SG3083	
		SG3183	
♦ SL3083	Sprague	ULN2083	
SL3086	**GE/RCA**	**CA3086**	**(2648)**
	National	LM3086	
	Sanyo	LA3086	
	SiliconG	SG3086	
		SG3886	
	Sprague	ULN2086	
	Thomson	SFC2086	
SL3127	**GE/RCA**	**CA3127**	**(2648)**
SL3146	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
♦ SL3183	**GE/RCA**	**CA3083**	**(2648)**
	SiliconG	SG3083	
		SG3183	
♦ SL3183	Sprague	ULN2083	
SL562	AD	AD741	
	Fairchild	μA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	μPC151	
		μPC741	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SL562			(Cont'd)
	Signetics	μA741	
	SiliconG	SG741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
SP1648	Motorola	MC1648	
SP1650	Motorola	MC1650	
SP1651	Motorola	MC1651	
SP1658	Motorola	MC1658	
SP1660	Motorola	MC1660	
SP1662	Motorola	MC1662	
SP1664	Motorola	MC1664	
SP1666	Motorola	MC1666	
SP1668	Motorola	MC1668	
SP1670	Fairchild	11C70	
	Motorola	MC1670	
SP1672	Motorola	MC1672	
SP1674	Motorola	MC1674	
SP1692	Motorola	MC1692	
SP4632	**AD**	**AD7576**	**(2414)**
	Maxim	AD7576	
	Plessey	SP4653	
	SEEQ	**8023**	**(2991)**
	Siemens	S062P	
		SDA2211	
		SDA4212	
	Telefunken	μ684	
		μ686BS	
SP4653	**AD**	**AD7576**	**(2414)**
	Maxim	AD7576	
	Plessey	SP4632	
	SEEQ	**8023**	**(2991)**
	Siemens	S062P	
		SDA2211	
		SDA4212	
	Telefunken	μ684	
		μ686BS	
SP8610	Fairchild	11C05	
	Motorola	MC1699	
	Plessey	SP8616	
SP8616	Fairchild	11C05	
	Motorola	MC1699	
	Plessey	SP8610	
SP8629	National	MM8629	
SP8640	Plessey	SP8647	
SP8647	Plessey	SP8640	
SP8656	National	DS8627	
SP8658	National	DS8628	
SP8680	Fairchild	11C90	
	Plessey	SP8685	
SP8685	Fairchild	11C90	
	Plessey	SP8680	
SP8740	Fairchild	11C91	
SP8793	National	DS8616	
TAB1042	Exar	XR4202	
♦ TBA120	National	TBA120	
	Siemens	TBA120	
	Telefunken	TBA120	
TBA530	Telefunken	TBA530	
TBA540	Telefunken	TBA540	
TBA560	Telefunken	TBA560	
TBA750	Signetics	TBA750	
TBA800	Fairchild	TBA800	
	SGS	TBA800	
	Telefunken	TDA800	
TBA920	Thomson	TBA920	
TDA1085	**Motorola**	**TDA1085**	**(2936)**
TDA1085A	**Motorola**	**TDA1085A**	**(2936)**
TDA2522	National	TDA2522	
TDA2523	National	TDA2523	
TDA2530	Hitachi	HN462532	
	National	MM2532	
		NMC2532	
		TDA2530	
		TDA2532	
TDA2540	Signetics	TDA2540	
	Thomson	TBA2540	
TDA2541	Signetics	TDA2541	
	Thomson	TDA2541	
TDA2560	National	TDA2560	
♦ TDA2591	National	TDA2591	
	Telefunken	TDA2591	
TDA2593	National	TDA2593	
	Signetics	TDA2593	
	Telefunken	TDA2593	
	Thomson	TDA2593	
TDA440	National	TDA440	
	SGS	TDA440	

Polycore Electronics

Manufacturer Device	Replacement Source	Device	IC Master Page
PL293	**IPS**	**IP293**	**(2854)**
	SGS	L293	
	TI	L293	
		SN754410	

Precision Monolithics Inc.

Manufacturer Device	Replacement Source	Device	IC Master Page
0P11	MicroPwr	MP0P11	
	Motorola	MC471CP	
0P27	AD	AD510	
		AD517	
	Burr-Brown	OP27	
		OPA27	**(2532)**
	Harris	**HA5127**	**(2737, 2747, 2768)**
		HAOP27	
	LinearTech	LT1007	
		OP27	
	Maxim	OP27	
	PMI	**OP27**	**(2970)**
	Raytheon	**RC714**	**(2979)**
	TI	LT1007	
0P37	**Burr-Brown**	**OPA37**	**(2532)**
	Harris	**HA5137**	**(2737, 2747, 2768)**
		HAOP37	
		MA5147	
	LinearTech	LT1037	
		OP37	
	Maxim	OP37	
	PMI	**OP37**	**(2970)**
	TI	LT1037	
AD7521	AD	AD7521	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	**DACHA12B**	**(2576)**
	GE/Intersil	**AD7521**	**(2668)**
	HybridSys	DAC331-12	
	Maxim	AD7521	
	MicroPwr	MP7521	
	National	AD7521	
		DAC1220	
		DAC1221	
		DAC1222	
ADC910	AD	AD571	
		AD573	
	Fairchild	μA571	
	MCE	MCE571	
AMP05	AD	AD521	
		AD624	
	Burr-Brown	**INA110**	**(2537)**
	National	DS1603	
		LM148	
		LM163	
	TI	LM148	
CMP05	Fairchild	μA760	
	National	LM160	
DAC01	MicroPwr	DAC01	
		MP5520	
DAC01C	NEC	μPC603	
DAC02C	NEC	μPC610	
DAC08	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	DAC1408	
	Raytheon	DAC08	
	Signetics	MC1408	
DAC10	**Datel**	**DACIC10B**	**(2576)**
	Raytheon	DAC10	
DAC100	AD	ADDAC100	

Manufacturer Device	Replacement Source	Device	IC Master Page
DAC1408	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
	Raytheon	DAC08	
	Signetics	MC1408	
DAC1508	AD	AD1508	
	Datel	**DACIC8BM**	**(2576)**
	Motorola	**MC1508**	**(2938)**
	National	MC1508	
	Signetics	MC1508	
		SE5008	
		SE5009	
DAC312	AMD	AM6012	
	Exar	XR3464	
	Ferranti	ZN6012	
	National	NS8464	
	Signetics	AM6012	
DAC8408	AD	AD7225	
	MicroPwr	MP7628	
DAC88	Exar	XR541	
	Fairchild	FGC8000	
	MicroLinear	ML541	
	SiliconSys	SSI541	
DMX88	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	**MUX08**	**(2975)**
		MUX88	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
MAT02	MicroPwr	MPT02A	
	National	LM194	
		LM3942	
MUX08	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX88	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
MUX16	AD	AD7506	
	Datel	**MV1606**	**(2577)**
		MX1606	**(2577)**
	GE/Intersil	**IH6116**	**(2681)**
	Harris	**HI506**	**(2703, 2738, 2748)**
	MicroPwr	MP7506	
	Motorola	MC7506	
	Siliconix	DG506A	
MUX24	GE/Intersil	ICL6109	
		IH6208	**(2681)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Precision Monolithics Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MUX24			(Cont'd)
	Harris	**HI509**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX359	
		MAX369	
	MicroPwr	MP7509DI	
	National	LF11509	
		LF13509	
	Siliconix	DG509A	
	TeledyneP	4553	
MUX28	AD	AD7507	
	Datel	**MVD807**	**(2577)**
		MXD807	**(2577)**
	GE/Intersil	**IH6216**	**(2681)**
	Harris	**HI507**	**(2703, 2738, 2748)**
	MicroPwr	MP7507	
	Siliconix	DG507A	
	TeledyneP	4551	
MUX88	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX08	**(2975)**
	Siliconix	DG508A	
	TeledyneP	4554	
OP01	MicroPwr	MPOP01	
OP02	MicroPwr	MPOP02	
♦ OP03	MicroPwr	MPOP03	
OP05	AD	AD510	
	LinearTech	OP05	
	MicroPwr	MPOP05	
OP06	Fairchild	μA725	
	National	LM725	
	Raytheon	RM725	
OP07	**LSIComp**	**LS7232**	**(2867)**
	Siemens	S576B	
OP08	AD	AD517	
	LinearTech	LT1008	
	MicroPwr	MPOP08	
OP09	Fairchild	μA4136	
	MicroPwr	MPOP09	
OP10	LinearTech	LT1002	
	MicroPwr	MPOP10	
OP11	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP421**	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
		RM4158	
	TI	LM148	
OP12	LinearTech	LT1012	
	MicroPwr	MPOP12	
	TI	OP12	
OP14	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
OP14			(Cont'd)
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
OP15	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP43**	**(2970)**
	TI	LF353	
		LF411	
	Thomson	LF155	
OP20	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
	PMI	**OP22**	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
	Thomson	μA776	
OP207	LinearTech	LT1002	
	MicroPwr	MP207	
		MPOP207	
OP22	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
	PMI	**OP20**	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
	Thomson	μA776	
OP220	**GE/Intersil**	**ICL7621**	**(2673)**
	Maxim	ICL7621	
	PMI	**OP221**	**(2970, 2972)**
	TI	TLC252	
		TLC272	
OP221	**GE/Intersil**	**ICL7621**	**(2673)**
	Maxim	ICL7621	
	PMI	**OP220**	**(2970, 2972)**
	TI	TLC252	
		TLC272	
OP227	LinearTech	OP227	
	MicroPwr	MPOP227	
♦ OP24	Motorola	OP24G	
OP27	AD	AD510	
		AD517	
	Burr-Brown	OP27	
		OPA27	**(2532)**
	Harris	**HA5127**	**(2737, 2747, 2768)**
		HAOP27	
	LinearTech	LT1007	
		OP27	
	Maxim	OP27	
	PMI	OP27	
	Raytheon	**RC714**	**(2979)**
	TI	LT1007	
OP37	**Burr-Brown**	**OPA37**	**(2532)**
	Harris	**HA5137**	**(2737, 2747, 2768)**
		HAOP37	
		MA5147	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
OP37			(Cont'd)
	LinearTech	LT1037	
		OP37	
	Maxim	OP37	
	PMI	OP37	
	TI	LT1037	
OP41	AD	AD547	
	Harris	**HA5170**	**(2706, 2737, 2747)**
	National	LH0052	
	PMI	**OP43**	**(2970)**
OP421	Fairchild	μA324	
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17324	
	Motorola	**MC33174**	**(2924, 2959)**
	National	LM324	
	Samsung	LM324	
	SGS	LM324	
	SiliconG	SG324	
	Thomson	LM324	
	Toshiba	TA79502	
OP43	AD	AD544	
	Burr-Brown	**OPA156A**	**(2532)**
	Fairchild	LF156A	
	LinearTech	LF156A	
	National	LF156A	
		OPA101	
	PMI	**PM156A**	**(2971)**
	TI	TL081	
OP470	**Harris**	**HA5104**	**(2706, 2737, 2747)**
PM108	AD	AD108	
	Fairchild	μA108	
	GE/Intersil	LM108	
	LinearTech	LM108	
	MicroPwr	MP108	
	Motorola	**LM108**	**(2919)**
	National	LM108	
	SiliconSys	SSI108	
PM108A	AD	AD108A	
	Fairchild	UA108A	
	LinearTech	LM108A	
	Motorola	**LM108A**	**(2919)**
PM111	AD	AD111	
	Fairchild	μA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
PM119	LinearTech	LM119	
		LT119	
	National	LM119	
	Signetics	LM119	
PM139	Fairchild	μA139	
	GE/RCA	**CA139**	**(2647)**
	Motorola	**LM139**	**(2925)**
	National	LM139	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM139	
	Signetics	LM139	
	TI	LM139	
PM139A	**GE/RCA**	**CA139A**	**(2647)**
	Motorola	**LM139A**	**(2925)**
	National	LM139A	
	PMI	**CMP04**	**(2975)**
	TI	LM139A	
PM148	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
	Raytheon	LM148	
		RM4156	
		RM4158	
	TI	LM148	
PM155A	LinearTech	LF155A	
	National	LF155A	

Manufacturer Device	Replacement Source	Device	IC Master Page
PM156A	AD	AD544	
	Burr-Brown	**OPA156A**	**(2532)**
	Fairchild	LF156A	
	LinearTech	LF156A	
	National	LF156A	
		OPA101	
	PMI	**OP43**	**(2970)**
	TI	TL081	
PM157A	AMD	27S29	
	Fairchild	LF157A	
	National	545472	
		74S472	
		LF157A	
		LF351	
		LF353	
	Raytheon	29621	
	TI	LF351	
		LF353	
PM208A	AD	AD208A	
	Fairchild	UA208A	
	Motorola	**LM208A**	**(2919, 2958)**
	National	LM208A	
PM2108	GE/Intersil	LH2108	
	LinearTech	LH2108	
	National	LH2108	
PM2108A	GE/Intersil	LH2108A	
	National	LH2108A	
PM211	AD	AD211	
	Motorola	**LM211**	**(2925, 2958)**
	National	LM211	
	Signetics	LM211	
	SiliconG	SG211	
	TI	LM211	
	Thomson	LM211	
♦ PM2208	National	LH2208	
♦ PM2208A	GE/Intersil	LH2208A	
	MicroPwr	MP2208A	
	National	LH2208A	
♦ PM2308	GE/Intersil	LH2308	
	National	LH2308	
♦ PM2308A	GE/Intersil	LH2308A	
	National	LH2308A	
PM239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
		μA239	
	GE/RCA	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	
PM255	MicroPwr	MP255	
	National	LF255	
	Thomson	LM255	
PM308A	AD	AD308A	
	Fairchild	μA308A	
	LinearTech	LM308A	
	Motorola	**LM308A**	**(2919, 2958)**
	National	LM308A	
PM339A	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
PM355	LinearTech	LF355	
	Motorola	**LF355**	**(2920)**
	National	LF355	
	PMI	**OP43**	**(2970)**
	Thomson	LF355	
PM355A	LinearTech	LF355A	
	National	LF355A	
PM356	LinearTech	LF356	
	Motorola	**LF356**	**(2920)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Precision Monolithics Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
PM356			(Cont'd)
	National	LF356	
	Thomson	LF356	
PM356A	**Burr-Brown**	**OPA356A**	**(2532)**
	LinearTech	LF356A	
	National	LF356A	
PM562	AD	AD562	
	Datel	**DAC562**	**(2576)**
	Harris	**HI562A**	**(2703, 2738, 2749)**
PM7224	AD	AD7224	
	Maxim	AD7224	
PM7226	AD	AD7226	
PM741	AD	AD741S	
	Burr-Brown	3500	
	LinearTech	LM107	
	National	LH741A	
		LM107	
	Raytheon	RC741	
	SiliconG	SG107	
	Thomson	LM107	
PM747	Fairchild	μA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	μPC1418	
	PMI	**OP04**	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	μA747	
	TeledyneS	747	
	TI	μA747	
		μA747M	
PM7524	AD	AD7524	
	GE/Intersil	AD7524	
	Maxim	AD7524	
	MicroPwr	MP7524	
PM7528	AD	AD7528	
	Ferranti	ZN7528	
	Maxim	AD7528	
	MicroPwr	MP7528	
PM7531	AD	AD7531	
		AD8531	
	Burr-Brown	**DAC7541A**	**(2541)**
	GE/Intersil	AS7531	
	Maxim	AD7531	
	MicroPwr	MP7531	
PM7533	AD	AD7533	
	Datel	**DAC7533**	**(2576)**
	GE/Intersil	**AD7533**	**(2668)**
	Maxim	AD7533	
	MicroPwr	MP7533	
		MP7633	
	National	AD7533	
PM7541	**Burr-Brown**	**DAC7541A**	**(2541)**
	TeledyneS	TSC7541	
PM7542	AD	AD7542	
	Maxim	AD7542	
	MicroPwr	MP7542	
PM7543	AD	AD7543	
	Maxim	AD7543	
	MicroPwr	MP7543	
PM7545	AD	AD7545	
	Burr-Brown	**DAC7545**	**(2541)**
	Maxim	AD7545	
	MicroPwr	MP7545	
PM7548	AD	AD7548	
	Maxim	AD7548	
PM7645	MicroPwr	MP7645	
REF01	AD	AD581	
		ADREF01	
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01AZ**	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
REF01AZ	AD	AD581	
		ADREF01	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
REF01AZ			(Cont'd)
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
	Raytheon	REF01	
	TeledyneS	TSC9495	
REF01EZ	LinearTech	REF01E	
	Motorola	MC1400AU10	
REF02	AD	ADREF02	
	Gennum	REF02	
	Maxim	REF02	
	MicroPwr	MPREF02	
	Raytheon	REF02	
REF02AZ	LinearTech	REF02A	
REF02EZ	AD	ADREF02	
	Gennum	REF02	
	LinearTech	LT1019-5	
		LTREF02	
		REF02E	
	Maxim	REF02	
	MicroPwr	MP5532	
		MPREF02	
	PMI	**REF02**	**(2975)**
	Raytheon	REF02	
	TeledyneS	TSC9496	
REF10	**Burr-Brown**	**REF10**	**(2540)**
	LinearTech	LT1021	
RPT82	Exar	C277	
		XRC277	
	PMI	**RPT83**	**(2975)**
	Signetics	N82S147	
RPT83	Exar	C277	
		XRC277	
	PMI	**RPT82**	**(2975)**
	Signetics	N82S147	
SMP10	AD	AD583	
	Datel	**SHMIC-1**	**(2577)**
	Harris	HA2475	
	PMI	**SMP11**	**(2975)**
	TeledyneP	4856	
SMP11	AD	AD583	
	Datel	**SHMIC-1**	**(2577)**
	Harris	HA2475	
	PMI	**SMP10**	**(2975)**
	TeledyneP	4856	
SW05	AD	ADG200	
	GE/Intersil	**DG200**	**(2679)**
		IH200	
		IH5200	
	Harris	**HI200**	**(2707, 2737, 2747)**
	Siliconix	DG200A	
SW06	National	LF12333	
SW201	AD	ADG201	
	GE/Intersil	**DG201**	**(2679)**
		DG201A	**(2679)**
		IH201	
		IH5201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	DG201A	
		MAX331	
	MicroPwr	MP201	
	National	LF11201	
		LF13201	
	Siliconix	DG201A	
SW202	Maxim	DG202	
		MAX332	
	National	LF13202	
	PMI	**SW02**	**(2975)**
	Siliconix	DG202	
SW7510	AD	AD7510	
	MicroPwr	MP7510DI	
SW7511	AD	AD7511	
	MicroPwr	MP7511DI	

Raytheon Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 29611	AMD	AM27S13	
	Fujitsu	MB7116	
	MMI	63S241	
	National	74S571A	
		DM74S571	
♦ 29611	Signetics	N82S131	
29621	AMD	27S29	
	Fairchild	LF157A	
	National	545472	
		74S472	
		LF157A	
		LF351	
		LF353	
	PMI	**PM157A**	**(2971)**
	TI	LF351	
		LF353	
29623	AMD	AM27S29	
	Fujitsu	MB7124	
	MMI	635481	
		63S481	
	National	DM74S472	
	Signetics	N825147A	
		N82S147	
29631	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631AM**	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
29631AM	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
29632	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
29651	AMD	27S185	
		AM2725S291	
		AM27S185	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
29651AM	National	DM77S185	
	Signetics	S82S185	
29653	AMD	27PS185	
29671	AMD	27S43	
		AM27S43	
	Fujitsu	MB7142	
	MMI	53S3281	
		63S3281	
	National	77S321	
		87S321	
		DM87S321	
	Waferscale	**WS57C43**	**(3376)**
29681	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681A**	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
29681A	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
29683	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
29683A	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Raytheon Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
29683A			(Cont'd)
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
		JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
29VP864	AMD	27S49	
		AM27S49	
	Cypress	**CY7C264**	**(2565)**
	Fairchild	32Z565	
		93Z565	
		93Z665	
	Fujitsu	7144H	
		MB7144	
♦ 54LS192	Fairchild	54LS192	
	Motorola	SN54LS192	
	National	DM54LS192	
	SGS	T54LS192	
	Signetics	54LS192	
	TI	SN54LS192	
DAC08	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Signetics	MC1408	
DAC10	**Datel**	**DACIC10B**	**(2576)**
	PMI	**DAC10**	**(2974)**
HA4741	Exar	XR4751	
	Fairchild	μA348	
	GE/Intersil	LM348	
	GoldStar	**GL348**	**(2700)**
	Motorola	**LM348**	**(2923, 2958)**
		MC4741	**(2923, 2959)**
	National	LM348	
	TI	LM348	
LH2101	GE/Intersil	LH2101	
	National	LH2101	
LH2111	National	LH2111	
LM101	AMD	LM101	
	AD	AD101	
	Fairchild	μA101	
	GE/Intersil	AD101	
	LinearTech	LM101	
	Motorola	LM101	
	SGS	LS101	
	SiliconG	SG101	
	Thomson	LM101	
♦ LM107	AD	AD741S	
	Burr-Brown	3500	
	LinearTech	LM107	
	National	LH741A	
		LM107	
♦ LM107	PMI	PM741	
	Raytheon	RC741	
	SiliconG	SG107	
	Thomson	LM107	
LM111	AD	AD111	
	Fairchild	μA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	PMI	**PM111**	**(2975)**
	Signetics	LM111	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM111			(Cont'd)
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
♦ LM13600	Exar	XR13600	
	National	LM13600	
	Signetics	NE5517	
LM139	Fairchild	μA139	
	GE/RCA	**CA139**	**(2647)**
	Motorola	**LM139**	**(2925)**
	National	LM139	
	PMI	**CMP04**	**(2975)**
		PM139	**(2975)**
	Signetics	LM139	
	TI	LM139	
♦ LM146	Exar	XR146	
	National	LM140	
LM146-2	National	LM146-2	
LM148	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	RM4156	
		RM4158	
	TI	LM148	
LM239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
		μA239	
	GE/RCA	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	
♦ LM246	Exar	XR246	
	National	LM246	
	Thomson	LM246	
LM2900	Hitachi	HA17301	
	Motorola	**LM2900**	**(2924)**
		MC3301	**(2924)**
	National	LM2900	
		LM3301	
	Raytheon	RC3301	
	TI	LM2900	
LM2901	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
LM2902	Fairchild	μA2902	
		μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM2902			(Cont'd)
	NEC	μPC324	
		μPC451	
	PMI	**OP421**	**(2970, 2972)**
	SGS	LM2902	
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
LM301	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
LM308	AD	AD308	
	Burr-Brown	3500	
		3501	
	Fairchild	μA308	
	GE/Intersil	AD308	
		LM308	
	Motorola	**LM308**	**(2919, 2958)**
	National	LM308	
LM311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM339	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
♦ LM346	National	LM346	
	Thomson	LM346	
LM3900	**GE/RCA**	**CA3401**	**(2645)**
	Motorola	**MC3401**	**(2923, 2959)**
	National	LM3401	
		LM3900	
	Raytheon	RC3401	
	TI	LM3900	

Manufacturer Device	Replacement Source	Device	IC Master Page
OP07	AD	AD517	
		OP07	
	Fairchild	μA714	
	Harris	**HA5130**	**(2737, 2747)**
		HA5135	**(2706)**
	LinearTech	LT1001	
		OP07	
	Maxim	MAX400	
		OP07	
	Micra	MC0021	
	MicroPwr	MPOP07	
	TI	OP07D	
OP27	Burr-Brown	OP27	
	LinearTech	OP27	
	Maxim	OP27	
	MicroPwr	MPOP27	
	PMI	**OP27**	**(2970)**
	TI	OP27	
OP37	Burr-Brown	OP37	
	LinearTech	OP37	
	Maxim	OP37	
	MicroPwr	MPOP37	
		MPOP37	
	TI	OP37	
RC3301	Hitachi	HA17301	
	Motorola	**LM2900**	**(2924)**
		MC3301	**(2924)**
	National	LM2900	
		LM3301	
	Raytheon	LM2900	
	TI	LM2900	
RC3302	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
RC3401	**GE/RCA**	**CA3401**	**(2645)**
	Motorola	**MC3401**	**(2923, 2959)**
	National	LM3401	
		LM3900	
	Raytheon	LM3900	
	TI	LM3900	
RC4136	CMD Micro	G65SC51	
	GoldStar	**GL4559**	**(2700)**
	TI	RC4136	
RC4151	Exar	XR4151	
	Raytheon	RM4151	
		RV4151	
	TI	XR4151	
RC4157	**Harris**	**HA5112**	**(2706, 2737, 2747)**
		HA5114	**(2706, 2737, 2747)**
		MA2650	
RC4191	Raytheon	RC4192	
		RC4193	
RC4192	Raytheon	RC4191	
		RC4193	
RC4193	Raytheon	RC4191	
		RC4192	
RC4194	Exar	XR4194	
	MCE	MCE4194	
	Raytheon	RM4194	
RC4195	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		μA212A	
		μA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Raytheon Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
RC4195	SiliconG		(Cont'd)
		SG2501A	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
RC4391	Maxim	MAX4391	
♦ RC4531	AnalogSys	MA332	
	Datel	**AM453-2C**	**(2577)**
	Exar	XR5534	
	Raytheon	RC5534	
	Signetics	**NE5534**	**(3091)**
		NE5534A	**(3091)**
♦ RC4531	SSM	SSM2134	
	TI	NE5534	
		NE5534A	
RC4558	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
RC4559	TI	RC4559	
RC4560	**Exar**	**XR4560**	**(2607)**
RC4739	Exar	XR4739	
	Fairchild	μA739	
		μA749	
	National	LM1303	
	SGS	TBA231	
	TI	SN76131	
		SN76149	
RC4805	**PMI**	**CMP05**	**(2975)**
RC5534	AnalogSys	MA332	
	Datel	**AM453-2C**	**(2577)**
	Exar	XR5534	
	Signetics	**NE5534**	**(3091)**
		NE5534A	**(3091)**
	SSM	SSM2134	
	TI	NE5534	
		NE5534A	
RC555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
♦ RC709	Fairchild	μA709	
	Motorola	**MC1709**	**(2919)**
	National	LM1709	
		LM709	
♦ RC709	NEC	μPC55	
	TI	μ709	
		μA709	
♦ RC709	Toshiba	TA7502	
RC714	AD	AD510	
		AD517	
	Burr-Brown	OP27	
		OPA27	**(2532)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
RC714			(Cont'd)
	Harris	**HA5127**	**(2737, 2747, 2768)**
		HAOP27	
	LinearTech	LT1007	
		OP27	
	Maxim	OP27	
	PMI	0P27	
		OP27	**(2970)**
	TI	LT1007	
RC723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	μA723	
	SiliconG	SG723	
	TI	μA723	
		μA723M	
	Thomson	SFC2723	
		μA723	
RC741	AD	AD741S	
	Burr-Brown	3500	
	LinearTech	LM107	
	National	LH741A	
		LM107	
	PMI	PM741	
	SiliconG	SG107	
	Thomson	LM107	
RC747	Fairchild	μA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	μPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RM747	
	Signetics	μA747	
	TeledyneS	747	
	TI	μA747	
		μA747M	
RC7523	Motorola	MC7523	
	National	LM7523	
RC7528	Motorola	MC7528	
	Thomson	SFC2528	
RC7529	Fairchild	7529	
	Motorola	MC7529	
	National	LM7529	
RC8230	Fairchild	9312	
	National	DM8312	
	Raytheon	RC9312	
RC8234	**Signetics**	**N8234**	**(3022)**
RC8242	Fairchild	74LS266	
	Motorola	SN74LS266	
	National	DM74LS266	
	Panasonic	DN74LS266	
	SGS	T74LS266	
	Signetics	**74LS266**	**(3003)**
		N8242	**(3022)**
	TI	SN74LS266	
RC8243	Signetics	N8243	
RC8250	National	8250A	
RC8252	Fairchild	9031	
		9301	
	National	DM8301	
		DM9301	
	Signetics	S8252	
RC8262	**Signetics**	**N8262**	**(3022)**
RC8266	**Signetics**	**N8266**	**(3022)**
RC8271	**Signetics**	**N8271**	**(3022)**
RC8273	**Signetics**	**N8273**	**(3022)**
RC8274	**Signetics**	**N8274**	**(3022)**
♦ RC8277	Fairchild	9328	
RC8280	Fairchild	96176	
	National	DM74176	
		DM8280	
	Signetics	74176	
	TI	SN74176	
RC8281	National	DM74177	
		DM8281	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
RC8281			(Cont'd)
	Signetics	74177	
	TI	SN74177	
RC8290	National	DM74196	
		DM8290	
	Signetics	74196	
	TI	SN74196	
RC8291	Fairchild	74197	
	National	DM74197	
		DM8291	
	Signetics	74197	
	TI	SN74197	
RC8T09	**Signetics**	**N8T09**	**(3022)**
RC8T10	Fairchild	74173	
	National	DM74173	
		DM8551	
	Signetics	**N8T10**	**(3022)**
	TI	SN74173	
RC8T20	**Signetics**	**N8T20**	**(3022)**
RC9304	Raytheon	RM9304	
RC9308	Fairchild	9308	
	TI	SN74116	
RC9311	Fairchild	9311	
	National	DM7213	
		DM74154	
		DM8311	
	Signetics	**74154**	**(3003)**
	TI	SN74154	
RC9312	Fairchild	9312	
	National	DM8312	
	Raytheon	RC8230	
RC9316	Fairchild	9316	
RC9322	Fairchild	9322	
	National	DM8322	
RC9341	Hitachi	HD74181	
	National	DM74181	
	Signetics	**74181**	**(3003)**
RC9360	National	DM74192	
		DM8560	
	Signetics	**74192**	**(3003)**
	TI	SN74192	
REF01	AD	AD581	
		ADREF01	
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	TeledyneS	TSC9495	
REF02	AD	ADREF02	
	Gennum	REF02	
	LinearTech	LT1019-5	
		LTREF02	
		REF02E	
	Maxim	REF02	
	MicroPwr	MP5532	
		MPREF02	
	PMI	**REF02**	**(2975)**
		REF02EZ	**(2975)**
	TeledyneS	TSC9496	
RF8601	Fairchild	9601	
	National	DM8601	
		DM9601	
	Raytheon	RF9601	
	Signetics	N8T22	
		S8T22	
	TI	SN74122	
RF8602	Fairchild	9602	
	National	DM8602	
		DM9602	
	Raytheon	RF9602	
RF9601	Fairchild	9601	
	National	DM8601	
		DM9601	
	Raytheon	RF8601	
	Signetics	N8T22	
		S8T22	
	TI	SN74122	
RF9602	Fairchild	9602	
	National	DM8602	
		DM9602	
	Raytheon	RF8602	
RL7050	LSI Logic	LL7050	
	Toshiba	TC17G005	

Manufacturer Device	Replacement Source	Device	IC Master Page
RL7080	LSI Logic	LL7080	
	Toshiba	TC17G008	
RL71000	LSI Logic	LL71000	
	Toshiba	TC17G100	
RL7140	LSI Logic	LL7140	
	Toshiba	TC17G014	
RL7220	LSI Logic	LL7220	
	Toshiba	TC17G022	
RL7320	LSI Logic	LL7320	
	Toshiba	TC17G032	
RL7420	LSI Logic	LL7420	
	Toshiba	TC17G042	
RL7600	LSI Logic	LL7600	
	Toshiba	TC17G060	
RM1537	**Motorola**	**MC1537**	**(2921)**
RM3403	Exar	XR3403M	
♦ RM4131	**Elantec**	**EHA2600**	**(2594)**
	Harris	**HA2600**	**(2706, 2737, 2747)**
	Hitachi	HA17741	
	Motorola	**MC1556**	**(2921)**
		ML1556	
♦ RM4131	Signetics	SE556	
	TeledyneP	1326	
	TI	MC1556	
		SE556M	
RM4136	Exar	XR4136M	
	TI	RM4136	
RM4137	Signetics	MC3503	
	TI	MC3503	
RM4139	**GE/RCA**	**CA158A**	**(2645)**
	LinearTech	LT1013	
	Motorola	**LM158**	**(2922)**
	National	LM158A	
	Signetics	LM158	
	TI	LM158	
RM4151	Exar	XR4151	
	Raytheon	RC4151	
		RV4151	
	TI	XR4151	
RM4156	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4158	
	TI	LM148	
RM4158	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
	TI	LM148	
RM4194	Exar	XR4194	
	MCE	MCE4194	
	Raytheon	RC4194	
RM4558	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Raytheon Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
RM4558	TI		(Cont'd)
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
RM5524	Fairchild	MC5524	
	Motorola	MC5524	
	National	LM5524	
	TI	SNJ5524	
RM5534	**Datel**	**AM453-2M**	**(2577)**
	Harris	**HA5101**	**(2737, 2747, 2759)**
	Signetics	SE5534	
		SE5534A	
RM555	Exar	XR555M	
	GE/Intersil	SE555	
	Motorola	MC1555	
	Signetics	SE555	
	TI	SE555	
		SE555M	
♦ RM709	Fairchild	µA709	
	Motorola	**MC1709**	**(2919)**
	National	LM1709	
		LM709	
♦ RM709	NEC	µPC55	
	TI	µ709	
		µA709	
♦ RM709	Toshiba	TA7502	
RM723	Fairchild	µA723	
		µA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	µA723	
	SiliconG	SG723	
	TI	µA723	
		µA723M	
	Thomson	SFC2723	
		µA723	
RM725	Fairchild	µA725	
	National	LM725	
	PMI	**OP06**	**(2970)**
RM741	AD	AD741	
	Fairchild	µA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	µPC151	
		µPC741	
	Plessey	SL562	
	PMI	OP02	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	µA741	
	SiliconG	SG741	
	TI	µA741	
		µA741M	
	Thomson	µA741	
	Toshiba	TA7504	
RM747	Fairchild	µA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	µPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
	Signetics	µA747	
	TeledyneS	747	
	TI	µA747	
		µA747M	
RM8202	Signetics	S8202	
♦ RM8230	National	DM9312	
	Raytheon	RM9312	
RM8231	Signetics	S8231	
RM8241	Motorola	SN54LS386	
	National	DM54LS386	
	TI	SN54LS386	
RM8250	Signetics	S8250	
♦ RM8252	Fairchild	9031	
		9301	
♦ RM8252	National	DM8301	
		DM9301	
♦ RM8252	Raytheon	RC8252	
	Signetics	S8252	
RM8262	Signetics	S8262	
RM8266	Signetics	S8266	
RM8270	Signetics	S8270	
	TI	SN54178	
RM8271	Signetics	S8271	
	TI	SN54179	
♦ RM8277	Signetics	S8277	
RM8280	National	DM54176	
	Signetics	54176	
		S8280	
	TI	SN54176	
RM8281	National	DM54177	
		DM7281	
	Signetics	S7281	
	TI	SN54177	
RM8T09	Signetics	S8T09	
RM8T10	Fairchild	54173	
	National	DM54173	
		DM7551	
	TI	SN54173	
RM9094	Fairchild	9094	
	Motorola	MC856	
		MC956	
	National	DM9094	
	Raytheon	RM994	
RM930	Fairchild	930	
		9930	
	Motorola	MC830	
		MC930	
	National	DM930	
RM9304	Raytheon	RC9304	
RM9310	National	DM54160	
	Signetics	54160	
	TI	SN54160	
RM9311	Fairchild	54154	
	National	DM54154	
		DM9311	
	Signetics	54154	
	TI	SN54154	
RM9312	National	DM9312	
RM9316	National	DM9316	
RM932	Fairchild	932	
		9932	
	Motorola	MC932	
	National	DM932	
RM9322	National	DM9322	
RM934	Motorola	MC934	
RM9341	National	DM54181	
	Signetics	54181	
	TI	SN54181	
RM9342	National	DM54182	
	TI	SN54182	
RM939	National	DM939	
RM941	Fairchild	9941	
	Motorola	MC941	
RM949	Fairchild	949	
	Motorola	MC949	
	National	DM949	
RM951	Fairchild	9951	
	Motorola	MC851	
		MC852	
		MC951	
RM952	Fairchild	9099	
	Motorola	MC952	
	Raytheon	RM999	
RM957	Fairchild	9157	
	Motorola	MC857	
		MC957	
	National	DM9567	
		DM957	
RM958	Fairchild	9158	
	Motorola	MC858	
		MC958	
	National	DM958	
RM963	Fairchild	9963	
	Motorola	MC963	
	National	DM963	
RM993	Fairchild	9093	
	Motorola	MC853	
		MC953	
	National	DM9093	
RM994	Fairchild	9094	
	Motorola	MC856	
		MC956	
	National	DM9094	
	Raytheon	RM9094	
RM997	Fairchild	9097	
	Motorola	MC855	
		MC955	
	National	DM9097	
RM999	Fairchild	9099	
	Motorola	MC952	
	Raytheon	RM952	
RV4136	TI	RV4136	
RV4151	Exar	XR4151	
	Raytheon	RC4151	
		RM4151	
	TI	XR4151	
SP3724	Fairchild	FQ3724	
	Motorola	MQ3724	
SP3725	Fairchild	FQ3725	
	Motorola	MQ3725	
	National	DH3725	
XR2207	Exar	XR2207	
XR2211	Exar	XR2211	

RIFA

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ MK5089	Plessey	MV5089	
♦ PBD3523-11	Exar	XR2001	
		XR2001C	
		XR2201	
♦ PBD3523-11	Fairchild	µA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
♦ PBD3523-11	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
♦ PBD3523-11	SiliconG	SG2001	
		SG2021	
♦ PBD3523-11	**Sprague**	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
♦ PBD3523-11	TI	ULN2001	
		ULN2001A	
♦ PBD3523-11	Toshiba	TD62001	
		TD62101	
♦ PBD3523-13	Exar	XR2003	
	SiliconG	SG2023	
	Sprague	**ULN2023**	**(3203)**
		ULQ2003	
		ULS2023	
♦ PBD3523-13	TI	SN75468	
♦ PBD352302	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
♦ PBD352302	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
♦ PBD352302	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
♦ PBD352302	**Sprague**	**ULN2004**	**(3203)**
		ULS2004	
♦ PBD352302	TI	ULN2004	
		ULN2004A	
♦ PBD352302	Toshiba	TD62004	
		TD62104	
♦ PBD352303	Exar	XR2003C	
		XR2203	
♦ PBD352303	Fairchild	MC1413	
		µA9667	
♦ PBD352303	Mitsubishi	M52523	
		M54523	
♦ PBD352303	**Motorola**	**MC1413**	**(2954, 2958)**
		ULN2003	
♦ PBD352303	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
♦ PBD352303	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
♦ PBD352303	Telefunken	TDA2003	
	TI	ULN2003	
♦ PBD352303			(Cont'd)
	Toshiba	TD62003	
		TD62103	
♦ PBD352304	Exar	XR2002C	
		XR2202	
♦ PBD352304	Fairchild	MC1412	
		µA9666	
♦ PBD352304	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
♦ PBD352304	NEC	µPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
♦ PBD352304	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
♦ PBD352304	TI	ULN2002	
		ULN2002A	
♦ PBD352304	Toshiba	TD62002	
♦ PBD352311	SiliconG	SG2021	
	Sprague	**ULN2021**	**(3203)**
		ULS2021	
♦ PBD352311	TI	SN75466	
♦ PBD352312	SiliconG	SG2024	
	Sprague	**ULN2024**	**(3203)**
		ULS2024	
♦ PBD352312	TI	SN75469	
♦ PBD3524-14	SiliconG	SG2002	
		SG2022	
♦ PBD3524-14	**Sprague**	**ULN2022**	**(3203)**
		ULS2022	
♦ PBD3524-14	TI	SN75467	
♦ PBD353811	**Motorola**	**ULN2801**	**(2954)**
	SGS	ULN2801	
	SiliconG	SG2801	
	Sprague	ULS2801	
	Toshiba	TD62081	
♦ PBD353812	**Motorola**	**ULN2804**	**(2954)**
	SGS	ULN2804	
	SiliconG	SG2804	
	Sprague	**ULN2804**	**(3203)**
		ULS2804	
♦ PBD353812	Toshiba	TD62084	
♦ PBD353813	SGS	ULN2803	
	SiliconG	SG2803	
		SG2813	
♦ PBD353813	**Sprague**	**ULN2803**	**(3203)**
		ULS2803	
♦ PBD353813	Toshiba	TD62083	
♦ PBD353814	Hitachi	HM27128	
	Mitel	M5L27128	
	SGS	ULN2802	
	SiliconG	SG2802	
	Sprague	**ULN2802**	**(3203)**
		ULS2802	
♦ PBD353814	Toshiba	TD62082	
		TMN27128	
PBL3535	**GoldStar**	**GL6801**	**(2701)**
	TRW-LSI	MPY008H	
		MPY08H	
		TMC208K	
PBL3717	SGS	PBL3717	
	Thomson	TA3717	
	Unitrode	**UC3717**	**(3326)**
PBL3726	**GoldStar**	**GL6901**	**(2701)**
	MMI	M2064-33	
	Xilinx	**XC2064-33**	**(4346)**
PBL3736	AMD	AM7950	
PBL3770	Unitrode	UC3770	
RL3525A	Cherry	CS3525A	
	Exar	**XR3525A**	**(2607)**
	IPS	**IP3525A**	**(2854)**
	LinearTech	LT3525A	
	Motorola	**SG3525A**	**(2931)**
	SGS	SG3525A	
	SiliconG	SG3525A	
	Siliconix	PWM25	
	TI	SG3525A	
	Unitrode	**UC3525A**	**(3323)**
RL3846	LinearTech	UC3846	
	SiliconG	SG3846	
	Unitrode	**UC3846**	**(3323)**
♦ TBL3717	Plessey	TDA3717	

Rockwell Semiconductor Products

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 8050	Intel	80C50	
	NEC	µPD80C50	
	SiliconSys	SSI80C50	
	Toshiba	**TMP80C50**	**(3306)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Rockwell Semiconductor Products (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 8060	SiliconG	SG75434	
	SiliconSys	SSI80C60	
♦ R23128	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
♦ R23128	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
♦ R23128	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
♦ R2332	Gould	S2333	
♦ R2364	NCR	NCR2365	
	NEC	μPD2364E	
	Signetics	2364	
		2664	
♦ R2364	VLSI Tech	VT2365	
R2364A	GIM	RO3-9364	
	Hitachi	HN48364	
	Mitsubishi	M58334	
	National	MM52164	
	NEC	μPD2364	
	Signetics	2664	
		26S64	
♦ R2364B	Fairchild	F3568	
		F3569	
		F3570	
♦ R2364B	GIM	RO3-9365	
		RO9864	
♦ R2364B	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
♦ R2364B	National	MM52264	
		NM52264	
♦ R2364B	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
♦ R2364B	Supertex	23SC64	
		23SC64/A	
		CM6400	
♦ R2364B	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
♦ R2764	AMD	AM2764	
		AM27C64	
♦ R2764	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
♦ R2764	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
♦ R2764	**Hyundai**	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
♦ R2764	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
♦ R2764	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
♦ R2764	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
♦ R2764	Thomson	ET2764	
		TS27C64	
♦ R2764	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
♦ R2764	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
♦ R27C32	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		2732A	
		M2732	
♦ R27C32	National	MM2732	
		NMC2732	
♦ R27C32	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
R27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
♦ R5213	National	NMC9716E	
♦ R5213/2816	**Xicor**	**X2816**	**(3390, 3406)**
♦ R52B33	Fujitsu	MBM28C64	
	SEEQ	**52B33**	**(2991)**
♦ R5516A/2816A	EXEL	XL2816	
		XL2816A	
♦ R5516A/2816A	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	Intel	2816B	
	National	NMC9816A	
	Samsung	KM2816A	
	SEEQ	**2816**	**(2991)**
		2816A	**(2991)**
		M2816A	
♦ R5516A/2816A	**Xicor**	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**
R6500-12	**GoldStar**	**GL3273**	**(2700)**
	Motorola	**MC3373**	**(2948)**
	NCR	NCR6500-12	
	Rockwell	**R6500-13**	**(2988)**
		R6500-15	**(2988)**
R6500-13	**GoldStar**	**GL3273**	**(2700)**
	Motorola	**MC3373**	**(2948)**
	NCR	NCR6500-12	
	Rockwell	**R6500-12**	**(2988)**
		R6500-15	**(2988)**
R6500-15	**GoldStar**	**GL3273**	**(2700)**
	Motorola	**MC3373**	**(2948)**
	NCR	NCR6500-12	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
R6500-15			(Cont'd)
	Rockwell	**R6500-12**	**(2988)**
		R6500-13	**(2988)**
R6500/1	NCR	NCR6500/1	
R6500/11	NCR	NCR6500/11	
R6500/1E	**Rockwell**	**R6500/1EC**	**(2988)**
R6500/1EC	**Rockwell**	**R6500/1E**	**(2988)**
R6502	Commodore	MPS6502	
R6504	AMD	AM2141	
		AM9244	
	Cypress	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
	OKI	5104	
	Toshiba	TMM315	
R6507	Commodore	MPS6507	
R6512	Commodore	MPS6512	
R6514	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
R6520	Motorola	MC6820	
R6522	Commodore	MPS6522	
R6532	Commodore	MPS6532	
R6551	Commodore	MP6551	
		MPS6551	
	Gould	S6551	
	Harris	**HM6551**	**(2704, 2763)**
	National	6551	
		74C920	
	Sprague	BCM5101	
		SCM5101	
	Toshiba	5101	
R65C02	**CMD Micro**	**G65SC02**	**(2552)**
R65C10	**GoldStar**	**GLC556**	**(2700)**
	National	LM556	
	NCR	NCR65C00-1	
	NEC	μPC556	
	TI	NE556	
R65C21	CMD Micro	G65SC21	
R65C22	CMD Micro	G65SC22	
	Rockwell	**R65C24**	**(2990)**
		R65NC22	
R65C24	CMD Micro	G65SC22	
	Rockwell	**R65C22**	**(2990)**
		R65NC22	
R65C51	**Rockwell**	**R65C52**	**(2990)**
R65C52	**Rockwell**	**R65C51**	**(2990)**
R65NC22	CMD Micro	G65SC22	
	Rockwell	**R65C22**	**(2990)**
		R65C24	**(2990)**
R65SC102	**CMD Micro**	**G65SC102**	**(2552)**
R65SC112	**CMD Micro**	**G65SC112**	**(2552)**
R6765	Intel	8272	
	NEC	μPD72066	
	SMC	FDC72C65	
		FDC765A	
R6765A	NEC	μPD72065	
		μPD7654A	
		μPD765A	
	SMC	FDC72C65	
		FDC765A	
	Zilog	Z765A	

Manufacturer Device	Replacement Source	Device	IC Master Page
R68000	Hitachi	HD68000	
	Motorola	**MC68000**	**(2896)**
	Signetics	SCN68000	
	Thomson	**TS68000**	**(3281)**
♦ R87C32	National	NMC27C32	
♦ R87C64	AMD	AM2764	
		AM27C64	
♦ R87C64	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
♦ R87C64	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
♦ R87C64	**Hyundai**	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
♦ R87C64	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
♦ R87C64	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
♦ R87C64	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
♦ R87C64	Thomson	ET2764	
		TS27C64	
♦ R87C64	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
♦ R87C64	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**

S MOS Systems

6116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

S MOS Systems (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
6116			(Cont'd)
	Performance	P4C116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
SLA6080	IMI	6080	
SLA6140	IMI	IMI6140	
SLA6170	IMI	IMI6170	
SLA6270	IMI	IMI6270	
SLA6330	IMI	IMI6330	
SLA6430	IMI	IMI6430	
SLA6620	IMI	IMI6620	
SMC82C51AC	AMD	8251	
	Intel	P8251	
	National	INS8251	
	NEC	μPD8251A	
	OKI	MSM82C51A	
	SMC	COM8251A	
	Toshiba	**TMP8251**	**(3306)**
SMC82C54AC	**Calmos**	**CA82C54**	**(2553)**
	Harris	**82C54**	**(2731, 2768, 4249)**
	Intel	8254	
		82C54	
	NEC	μPD71054	
	OKI	82C54	
SMC82C55AC	AMD	8255	
	Calmos	**CA82C55**	**(2553)**
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	Toshiba	**TMP8255**	**(3306)**
		TMP82C55	**(3306)**
SMC82C59AC	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	Toshiba	**TMP8259**	**(3306)**
SMM2326	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SMM2326			(Cont'd)
	S-MOS	**SMM6325**	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
SMM2364	Gould	S2364	
	Hitachi	HN48364	
	NCR	NCR2364	
	OKI	MSM3864	
	Plessey	SL2364C	
	Sharp	LH2364A	
	Signetics	2364	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
SMM2365	Hitachi	HN61364	
	Toshiba	TC5364	
SMM6325	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
SMM6326	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
SPM27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	SEEQ	**2764**	**(2991)**
		5133	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SPM27C64			(Cont'd)
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
SRM2016	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	5117	
		M5M8725	
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
		MK6116	
	Toshiba	TC5516	
		TC5517	
		TC5517A	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	
SRM2017	Fujitsu	MB8417	
	Sprague	SCM20C16	
		SCM21C16	
	Toshiba	TC5516A	
SRM2018	Fujitsu	MB8418	
		MBM8418	
	Hitachi	HM6117	
	NEC	μPD449	
	Sprague	SCM20C16	
		SCM21C16	
	Toshiba	TC5518	
		TC5518B	
SRM20256	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256C**	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
SRM20256C	AMD	AM99C328	
	Cypress	CY7C198	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SRM20256C			(Cont'd)
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
SRM2064	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2264**	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
SRM2114	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

S MOS Systems (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SRM2114			(Cont'd)
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
SRM2261	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
SRM2264	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SRM2264			(Cont'd)
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
SRM2267	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	**SRM2367**	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
SRM2274	AMD	AM99C164	
		AM99C165	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HN6288	
	Inmos	**IMS1620**	**(2787)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR4K4	
		SR64K4	
	Motorola	MCM6288	
		MCM62L88	
	NEC	μPD4362	
	Performance	P4C188	
	TI	SMJ64C64	
	Toshiba	TC55416	
		TC55417	
	VLSI Tech	CT64KS4	
SRM2367	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SRM2367			(Cont'd)
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
♦ SRM6504	AMD	AM2141	
		AM9244	
♦ SRM6504	**Cypress**	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
♦ SRM6504	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
♦ SRM6504	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	

Samsung Semiconductor

74HCT240	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
74HCT241	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
74HCT244	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
KA2410	Cherry	CS8204	
	Plessey	MV8204	
KA2411	Cherry	CS8205	
	Exar	XRT8205	
KA2413	Thomson	PBD3535	
♦ KM2816	**Xicor**	**X2816**	**(3390, 3406)**
KM2816A	EXEL	XL2816	
		XL2816A	
	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	Intel	2816B	
	National	NMC9816A	
	SEEQ	**2816**	**(2991)**
		2816A	**(2991)**
		M2816A	
	Xicor	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**

Manufacturer Device	Replacement Source	Device	IC Master Page
KM2817A	AMD	AM2817A	
	EXEL	XL2817A	
	GIM	28C17	
	National	NMC9817	
	SEEQ	**2817A**	**(2991)**
		DQ2817A	
KM2864A	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
KM2864AH	SEEQ	DQ52B33H	
	SiliconG	SG75433	
	Xicor	**X2864H**	**(3391, 3408)**
KM2865A	AMD	AM28645	
	EXEL	XL2865A	
	GIM	28C64	
	Motorola	28C64	
	NCR	NCR5264	
	SEEQ	DQ2864	
KM2865AH	SEEQ	DQ2864H	
KM41256	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41257	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
KM41257	Fujitsu	MB81256	
	Hitachi	HM50256	
		HM50257	
	Mitsubishi	M5M4256	
		M5M4257	
		MSM4257	
	Motorola	MCM6256	
		MCM6257	
		MCM6257B	
		MT1259	
	NEC	μPD41256	
		μPD41257	
	OKI	M5M37256	
		MSM37256	
		MSM37257A	
		MSM41256	
	Panasonic	MM41256	
	Samsung	KM41256	
	TI	**TMS4257**	**(3259)**
	Toshiba	TMM41256	
	Vitelic	V51C256	
		V51C257	
	Western	WCM41256	
KM41464	Fujitsu	MB81464	
	Hitachi	HM50464	
		HM50465	
	Inmos	IMS2820	
	MicronTech	MT4064	
	Mitsubishi	M5M4464	
		MSM4464P	
	NEC	μPD41464	
	OKI	MSM41464	
	TI	SMJ4469	
		TMS4464	**(3259)**
	Toshiba	TMM41464	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Samsung Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ KM4164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
♦ KM4164	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
♦ KM4164	Hitachi	HM4864	
		HM4864A	
♦ KM4164	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
♦ KM4164	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
♦ KM4164	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
♦ KM4164	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
♦ KM4164	Vitelic	V51C64	
KM4164A	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
KM4164B	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
KM6264	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
KM6264			(Cont'd)
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
♦ KM6266	Toshiba	TMM5565	
♦ KM6816	AMD	AM9128	
		AM9218	
♦ KM6816	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ KM6816	Fujitsu	MB8128	
		MB8416	
♦ KM6816	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ KM6816	Hitachi	HM6116	
		HM6166	
♦ KM6816	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ KM6816	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ KM6816	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ KM6816	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ KM6816	National	MMC2116	
	NEC	μPD4016	
		μPD446	
♦ KM6816	OKI	MSM2128	
		MSM5126	
		MSM5127	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ KM6816	OKI		(Cont'd)
		MSM5128	
		MSM5129	
♦ KM6816	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ KM6816	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ KM6816	Stantel-STC	STC6116	
		STC6166	
♦ KM6816	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ KM6816	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ KM6816	Vitelic	V61C16	
		V62C16	
KS51000	TI	TMS1000	
KS52000	Sharp	SM4A	
KS5804	CTI	52981	
	National	TP50981	
KS7126	**GE/Intersil**	**ICL7126**	**(2666)**
	Maxim	ICL7126	
	TeledyneS	TSC7126	
LM324	Fairchild	μA324	
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17324	
	Motorola	**MC33174**	**(2924, 2959)**
	National	LM324	
	PMI	**OP421**	**(2970, 2972)**
	SGS	LM324	
	SiliconG	SG324	
	Thomson	LM324	
	Toshiba	TA79502	
LM324A	National	LM324A	
	SGS	LM324A	
	TI	LM324A	
LM567	Exar	XR2567	
		XR567	
	MCE	MCE567	
	National	LM567	
	Signetics	NE567	
		SE567	
LM567L	Exar	XRL567	
LM723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	SGS	L123	
		LM723	
	Signetics	μA723	
	SiliconG	SG723	
	TI	μA723	
		μA723M	
	Thomson	SFC2723	
		μA723	
LM741	AD	AD741	
	Fairchild	μA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	μPC151	
		μPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	SGS	LM741	
		LS141	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM741			(Cont'd)
	Signetics	μA741	
	SiliconG	SG741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
LS285A	SGS	LS285A	
MC1458	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	μPC1458	
		μPC251	
	Samsung	MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
MC3361	**Motorola**	**MC3361**	**(2939, 2959)**
	Signetics	MC3361	
	Sprague	ULN3862	
MC4558	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	μPC1458	
		μPC251	
	Samsung	MC1458	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
MC7805	Fairchild	μA7805	
	GoldStar	GL7805	
	Gould	μA7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
		LM7805	
	SiliconG	SG7805	
		SG7805A	
	TI	μA7805	
	Toshiba	TA78005	
		TA79005	
	Unitrode	**UC7805**	**(3325)**
MC7806	Fairchild	μA7806	
	Motorola	**MC7806**	**(2927)**
	National	LM7806	
	NEC	μPC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806	
		SG7806A	
	TI	μA7806	
	Thomson	μA7806	
	Toshiba	TA78006	
MC7808	Fairchild	μA7808	
	GoldStar	GL7808	
	Gould	μA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	NEC	μPC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	μA7808	
	Thomson	μA7808	
	Toshiba	TA78008	
MC7812	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Samsung Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC7812	**IPS**		**(Cont'd)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
MC7815	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
MC7818	Fairchild	μA7818	
	Motorola	**MC7818**	**(2928)**
	National	LM7818	
	SGS	L7818	
	TI	μA7818	
	Toshiba	TA78018	
MC7824	Fairchild	μA7824	
	GoldStar	GL7824	
	Gould	μA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	μPC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
		μA7824	
	Thomson	μA7824	
	Toshiba	TA78024	
MC78M05	Fairchild	μA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	μPC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	TI	μA78M05	
	Toshiba	TA78M05	
MC78M06	Fairchild	μA78M06	
	Motorola	**MC78M06**	**(2927)**
	National	LM78M06	
	Sanyo	L78M06	
	SGS	L78M06	
		L78M06CV	
	TI	μA78M06	
	Toshiba	TA78M06	
MC78M08	Fairchild	μA78M08	
	Motorola	MC78M08	
	National	LM78M08	
	NEC	μPC78M08	
	Sanyo	L78M08	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MC78M08			(Cont'd)
	SGS	L78M08	
		L78M08CV	
	TI	μA78M08	
	Toshiba	TA78M08	
MC78M12	Fairchild	μA78M12	
	Motorola	**MC78M12**	**(2927, 2959)**
	National	LM341-12	
		LM342-12	
		LM78M12	
	NEC	μPC78M12	
	Sanyo	L78M12	
	SGS	L78M12	
		L78M12CV	
	TI	μA78M12	
	Toshiba	TA78M12	
MC78M15	Fairchild	μA78M15	
	Motorola	**MC78M15**	**(2928, 2959)**
	National	LM341-15	
		LM342-15	
		LM78M15	
	NEC	μPC78M15	
	Sanyo	L78M15	
	SGS	L78M15	
		L78M15CV	
	TI	μA78M15	
	Toshiba	TA78M15	
MC78M18	Fairchild	μA78M18	
	Motorola	MC78M18	
	Sanyo	L78M18	
	SGS	L78M18	
	TI	μA78M18	
	Toshiba	TA78M18	
MC78M24	Fairchild	μA78M24	
	Motorola	**MC78M24**	**(2928)**
	Sanyo	L78M24	
	SGS	L78M24	
		L78M24CV	
	TI	μA78M24	
	Toshiba	TA78M24	
MC7902	Fairchild	μA7902	
MC7905	Fairchild	MC7905	
		μA7905	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	Motorola	MC7905	
	SGS	L7905	
	SiliconG	SG7905	
		SG7905A	
MC7906	Fairchild	μA7906	
	GoldStar	GL7806	
	Gould	μA7806	
	Motorola	MC7906	
	National	LM7906	
	NEC	μPC7806	
	SGS	L7906	
	TI	μA7906	
	Toshiba	TA78006	
MC7908	Fairchild	MC7908	
		μA7908	
		μA79M08	
	Motorola	MC7908	
	National	LM7908	
	SGS	L7908	
	SiliconG	SG7908	
		SG7908A	
	TI	μA7908	
		μA79M08	
	Toshiba	TA79008	
MC7912	Fairchild	μA7912	
		μA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	μA7824	
		μA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	μPC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	

Manufacturer Device	Replacement Source	Device	IC Master Page
MC7915	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	μPC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
MC7918	Fairchild	μA7918	
	Motorola	MC7918	
	National	LM7918	
	SGS	L7918	
	SiliconG	SG7918	
		SG7918A	
	TI	μA7918	
	Toshiba	TA79018	
MK5089	Gould	S25089	
	ITT	SBA5089	
	National	TP5089	
	Sharp	LR4089	
	Stantel-STC	STC5089	
	TI	TCM5089	
	Thomson	MK5089	
	UMC	UM5089	
NE555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
NE556	Mitsubishi	M5E556	
	SGS	NE556	
	Signetics	NE556	
	TI	NE556	
	Thomson	NE556	

Sanyo Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
L78M05	Fairchild	μA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	μPC78M05	
	Samsung	MC78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	TI	μA78M05	
	Toshiba	TA78M05	
L78M06	Fairchild	μA78M06	
	Motorola	**MC78M06**	**(2927)**
	National	LM78M06	
	Samsung	MC78M06	
	SGS	L78M06	
		L78M06CV	
	TI	μA78M06	
	Toshiba	TA78M06	
L78M08	Fairchild	μA78M08	
	Motorola	MC78M08	
	National	LM78M08	
	NEC	μPC78M08	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
L78M08			(Cont'd)
	Samsung	MC78M08	
	SGS	L78M08	
		L78M08CV	
	TI	μA78M08	
	Toshiba	TA78M08	
L78M12	Fairchild	μA78M12	
	Motorola	**MC78M12**	**(2927, 2959)**
	National	LM341-12	
		LM342-12	
		LM78M12	
	NEC	μPC78M12	
	Samsung	MC78M12	
	SGS	L78M12	
		L78M12CV	
	TI	μA78M12	
	Toshiba	TA78M12	
L78M15	Fairchild	μA78M15	
	Motorola	**MC78M15**	**(2928, 2959)**
	National	LM341-15	
		LM342-15	
		LM78M15	
	NEC	μPC78M15	
	Samsung	MC78M15	
	SGS	L78M15	
		L78M15CV	
	TI	μA78M15	
	Toshiba	TA78M15	
L78M18	Fairchild	μA78M18	
	Motorola	MC78M18	
	Samsung	MC78M18	
	SGS	L78M18	
	TI	μA78M18	
	Toshiba	TA78M18	
L78M24	Fairchild	μA78M24	
	Motorola	**MC78M24**	**(2928)**
	Samsung	MC78M24	
	SGS	L78M24	
		L78M24CV	
	TI	μA78M24	
	Toshiba	TA78M24	
LA1150	Sprague	ULN2243	
LA1240	Hitachi	HA1197	
LA1260	**GoldStar**	**GL5808**	**(2699)**
LA1352	**Motorola**	**MC1352**	**(2948)**
LA1365	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	LSC1008	
		M5140	
	National	LM3064	
	NEC	μPC1382	
	TI	SN76666	
	Toshiba	TA7176	
LA3045	Fairchild	UA3045	
	National	LM3045	
	Plessey	SL3086	
	SGS	LM3045	
	Sprague	ULS2045	
LA3046	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
LA3086	**GE/RCA**	**CA3086**	**(2648)**
	National	LM3086	
	Plessey	SL3086	
	SiliconG	SG3086	
		SG3886	
	Sprague	ULN2086	
	Thomson	SFC2086	
LA3220	**GoldStar**	**GL5501**	**(2699)**
LA6358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Sanyo Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LA6358			(Cont'd)
	National	LM358	
		LM358A	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
LA6393	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	μPC393	
	Signetics	LM393	
	TI	LM393	
	Toshiba	TA75393	
LA705	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA758	
	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
	TI	SN76111	
		SN76116	
LA7520	**GoldStar**	**GL3120**	**(2699)**
LA7530	**GoldStar**	**GL3130**	**(2699)**
LA758	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
	TI	SN76111	
		SN76116	
LA7620	Atmel	27HC64	
		AT27HC64	
	GIM	27HC64	
	GoldStar	**GL3620**	**(2699)**
		GM27HC64	**(2692)**
	ICT	27CX641	
	Sharp	**LH5763**	**(2994)**
	Waferscale	**WS57C64**	**(3376)**
LA7911	**GoldStar**	**GL3711**	**(2699)**
LB1211	Toshiba	TD62501	
LB1212	Toshiba	TD62502	
LB1213	Toshiba	TD62503	
LB1214	Toshiba	TD62504	
LB1215	Toshiba	TD62505	
LB1216	Toshiba	TD62506	
LB1217	Toshiba	TD62507	
LB1231	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
LB1232	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LB1232			(Cont'd)
	Toshiba	TD62002	
LB1233	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
LB1234	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
LB1260	Mitsubishi	M54535	
LB1271	Mitsubishi	M54527	
LB1274	Toshiba	TD62006	
LB1275	Mitsubishi	M54517	
	Sprague	**ULN2801**	**(3203)**
	Toshiba	TD62081	
		TD62105	
LB1288	Mitsubishi	M54516	
LB1290	Dionics	DI513B	
		DI514	
		DI514B	
	Exar	XR6118	
	Motorola	MC3490	
	National	DM8887	
		DS8887	
	OKI	MSL912	
	Signetics	NE594	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
	Toshiba	TD62781	
LB1294	Toshiba	TD62706	
LB8555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
LC3514	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LC3514			(Cont'd)
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
LC4001B	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
	Motorola	MC14001	
	National	CD4001	
		MM74C02	
	OKI	MSM4001	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
LC4011	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	Motorola	MC14011	
	National	CD4011	
		MM74C00	
	OKI	MSM4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
LC4013	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	CD4013	
		MM74C74	
	OKI	MSM4013	
	SGS	HCC/HCF4013	
	Signetics	HEF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
LC4015	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	CD4015	
		MM74C164	
	OKI	MSM4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
LC4016	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
LC4019	Fairchild	F4019	
	GE/RCA	**CD4019**	**(2633, 2635)**
	National	CD4019	
	OKI	MSM4019	
	SGS	HCC/HCF4019	
	Signetics	HEF4019	
	Solitron	CM4019	
	Sprague	SCL4019	
	Toshiba	**TC4019**	**(3308)**
LC4027	Fairchild	F4027	
	GE/RCA	**CD4027**	**(2634)**
	Motorola	MC14027	
	National	CD4027	
		MM74C76	
	OKI	MSM4027	
	SGS	HCC/HCF4027	
	Signetics	HEF4027	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LC4027			(Cont'd)
	Solitron	CM4027	
	Sprague	SCL4027	
LC4028	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	CD4028	
		MM74C42	
	OKI	MSM4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	
	Solitron	CM4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
LC4049	Fairchild	F4049	
	GE/RCA	**CD4049**	**(2633)**
	Motorola	MC14049	
	National	CD4049	
	OKI	MSM4049	
	SGS	HCC/HCF4049	
	Signetics	HEF4049	
	Solitron	CM4049	
	Sprague	SCL4049	
	Toshiba	**TC4049**	**(3308)**
LC4066	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
LC4069	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
		MM74C04	
	OKI	MSM4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
LC4071	Fairchild	F4071	
	GE/RCA	**CD4071**	**(2633)**
	Motorola	MC14071	
	National	CD4071	
		MM74C32	
	OKI	MSM4071	
	SGS	HCC/HCF4071	
	Signetics	HEF4071	
	Solitron	CM4071	
	Sprague	SCL4071	
LC4081	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	CD4081	
		MM74C08	
	OKI	MSM4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
LC4520	Fairchild	F4520	
	GE/RCA	**CD4520**	**(2635)**
	Motorola	MC14520	
	National	CD4520	
	OKI	MSM4520	
	SGS	HCC/HCF4520	
	Signetics	HEF4520	
	Solitron	CM4520	
	Sprague	SCL4520	
	Toshiba	**TC4520**	**(3308)**
LC7150	Motorola	MC145160	
STK4332	Mitel	MD4332	
	Plessey	MV4332	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

SEEQ Technology, Inc.

Manufacturer Device	Replacement Source	Device	IC Master Page
27128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
27256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
2764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
2764			(Cont'd)
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
27C256	AMD	AM27256	
		AM27C256	
	Intel	27256	
		27C256	**(2861)**
		M27256	
		M27C256	
	National	NMC27C256	
	SGS	M27256	
	TI	**SMJ27C256**	**(3220)**
	VLSI Tech	VT27C256	
	Waferscale	**WS27C256**	**(3376)**
2804	Atmel	2804	
	GIM	28C04	
	Xicor	2804	
		X2804	**(3389, 3405)**
2816	EXEL	XL2816	
		XL2816A	
	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	Intel	2816B	
	National	NMC9816A	
	Samsung	KM2816A	
	SEEQ	**2816A**	**(2991)**
		M2816A	
	Xicor	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**
2816A	EXEL	XL2816	
		XL2816A	
	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	Intel	2816B	
	National	NMC9816A	
	Samsung	KM2816A	
	SEEQ	**2816**	**(2991)**
		M2816A	
	Xicor	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**
2817A	AMD	AM2817A	
	EXEL	XL2817A	
	GIM	28C17	
	National	NMC9817	
	Samsung	KM2817A	
	SEEQ	DQ2817A	
28256	AMD	28C256	
	Atmel	28C256	
	GIM	28CP256A	
	SEEQ	**28C256**	**(2991)**
	Xicor	**X28256**	**(3393, 3412)**
		X28C256	**(3394, 3413)**
2864	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**28C64**	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
28C256	AMD	28C256	
	Atmel	28C256	
	GIM	28CP256A	
	SEEQ	28256	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
28C256			(Cont'd)
	Xicor	**X28256**	**(3393, 3412)**
		X28C256	**(3394, 3413)**
28C64	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		DQ52B33	
	Xicor	**X2864A**	**(3391, 3408)**
36C16	Cypress	7C291	
	EXEL	46C16	
	TI	27C292	
	Waferscale	57C291	
5133	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
52B23	NCR	NCR52832	
52B33	Fujitsu	MBM28C64	
8023	**AD**	**AD7576**	**(2414)**
	Maxim	AD7576	
	Plessey	SP4632	
		SP4653	
	Siemens	S062P	
		SDA2211	
		SDA4212	
	Telefunken	μ684	
		μ686BS	
8023A	Intel	82501	
DQ2817A	AMD	AM2817A	
	EXEL	XL2817A	
	GIM	28C17	
	National	NMC9817	
	Samsung	KM2817A	
	SEEQ	**2817A**	**(2991)**
DQ2864	AMD	AM28645	
	EXEL	XL2865A	
	GIM	28C64	
	Motorola	28C64	
	NCR	NCR5264	
	Samsung	KM2865A	
DQ2864H	Samsung	KM2865AH	
DQ52B33	AMD	AM2864A	
		AM9864	
	Atmel	28C64	
	EXEL	**XL2864A**	**(4228)**
		XLS2864A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
DQ52B33			(Cont'd)
	Fujitsu	MBM28C64	
	Hitachi	HM58064	
		HN58064	
	IDT	IDT7M7864	
	Intel	I2864A	
	NEC	μPD28C64	
	Samsung	KM2864A	
	SEEQ	**2864**	**(2991)**
		28C64	**(2991)**
	Xicor	**X2864A**	**(3391, 3408)**
DQ52B33H	Samsung	KM2864AH	
	SiliconG	SG75433	
	Xicor	**X2864H**	**(3391, 3408)**
M27128	AMD	AM27128	
	Intel	M27128	
		M27C128	
	TI	**SMJ27C128**	**(3220)**
	VLSI Tech	VT27C128	
	Waferscale	**WS27C128**	**(3376)**
M2816A	EXEL	XL2816	
		XL2816A	
	GIM	28C16	
	Harris	**HM6616**	**(2768)**
	IDT	**IDT78C16A**	**(2807, 2838)**
	Intel	2816B	
	National	NMC9816A	
	Samsung	KM2816A	
	SEEQ	**2816**	**(2991)**
		2816A	**(2991)**
	Xicor	**X2816**	**(3390, 3406)**
		X2816A	**(3390, 3406)**
		X2816AM	**(3390, 3406)**

SGS Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
54LS10	Fairchild	54LS10	
	Motorola	SN54LS10	
	National	DM54LS10	
	SGS	T54LS10	
	Signetics	54LS10	
	TI	SN54LS10	
54LS109	Fairchild	54LS109	
	Motorola	SN54LS109	
	National	DM54LS109	
	SGS	T54LS109	
	Signetics	54LS109	
	TI	SN54LS109	
54LS126	Fairchild	54LS126	
	Motorola	SN54LS126	
	National	DM54LS126	
	SGS	T54LS126	
	Signetics	54LS126	
	TI	SN54LS126	
54LS298	Fairchild	54LS298	
	Motorola	SN54LS298	
	National	DM54LS298	
	SGS	T54LS298	
	Signetics	54LS298	
	TI	SN54LS298	
CA3046	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
HCC/HCF4000			
	GE/RCA	**CD4000**	**(2633)**
	Motorola	MC14000	
	National	CD4000	
	Signetics	HEF400	
	Solitron	CM4000	
	Sprague	SCL4000	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HCC/HCF4001			
	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
	Motorola	MC14001	
	National	CD4001	
		MM74C02	
	OKI	MSM4001	
	Sanyo	LC4001B	
	Signetics	HEF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
HCC/HCF4002			
	Fairchild	F4002	
	GE/RCA	**CD4002**	**(2633)**
	Motorola	MC14002	
	National	CD4002	
	Signetics	HEF4002	
	Solitron	CM4002	
	Sprague	SCL4002	
	Toshiba	**TC4002**	**(3308)**
HCC/HCF4006			
	Fairchild	F4006	
	GE/RCA	**CD4006**	**(2634)**
	National	CD4006	
	Signetics	HEF4006	
	Solitron	CM4006	
	Sprague	SCL4006	
	Toshiba	**TC4006**	**(3308)**
HCC/HCF4007			
	Fairchild	F4007	
	GE/RCA	**CD4007**	**(2633)**
	Motorola	MC14007	
	National	CD4007	
	Signetics	HEF4007	
	Solitron	CM4007	
	Sprague	SCL4007	
	Toshiba	**TC4007**	**(3308)**
HCC/HCF4008			
	Fairchild	F4008	
	GE/RCA	**CD4008**	**(2636)**
	Motorola	MC14008	
	National	CD4008	
		MM74C83	
	Signetics	HEF4008	
	Solitron	CM4008	
	Sprague	SCL4008	
	Toshiba	**TC4008**	**(3308)**
HCC/HCF4009			
	GE/RCA	**CD4009**	**(2633)**
	Motorola	MC14009	
	National	CD4009	
	Solitron	CM4009	
	Sprague	SCL4009	
	Toshiba	**TC4009**	**(3308)**
HCC/HCF4010			
	GE/RCA	**CD4010**	**(2633)**
	Motorola	MC14010	
	National	CD4010	
	Solitron	CM4010	
	Sprague	SCL4010	
	Toshiba	**TC4010**	**(3308)**
HCC/HCF40101			
	Fairchild	F4531	
	Motorola	MC14531	
	Signetics	HEF4531	
	Sprague	SCL4531	
	Toshiba	**TC4531**	**(3308)**
HCC/HCF40106			
	Fairchild	F400014	
		F40014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14106	
		MC14584	
	National	CD40106	
		CD4584	
		MM54C14	
		MM74C14	
	Signetics	HEF40106	
	Sprague	SCL4584	
HCC/HCF40107			
	Toshiba	TC40107	
HCC/HCF40108			
	Motorola	MC14580	
HCC/HCF4011			
	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	Motorola	MC14011	
	National	CD4011	
		MM74C00	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HCC/HCF4011			(Cont'd)
	OKI	MSM4011	
	Sanyo	LC4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
HCC/HCF40110			
	Cypress	**CY7C264**	**(2565)**
	Signetics	**N82HS641**	**(3182)**
HCC/HCF4012			
	Fairchild	F4012	
	GE/RCA	**CD4012**	**(2633)**
	Motorola	MC14012	
	National	CD4012	
	Signetics	HEF4012	
	Solitron	CM4012	
	Sprague	SCL4012	
	Toshiba	**TC4012**	**(3308)**
HCC/HCF4013			
	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	CD4013	
		MM74C74	
	OKI	MSM4013	
	Sanyo	LC4013	
	Signetics	HEF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
HCC/HCF4014			
	Fairchild	F4014	
	GE/RCA	**CD4014**	**(2634)**
	Motorola	MC14014	
	National	CD4014	
	Signetics	HEF4014	
	Solitron	CM4014	
	Sprague	SCL4014	
	Toshiba	**TC4014**	**(3308)**
HCC/HCF4015			
	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	CD4015	
		MM74C164	
	OKI	MSM4015	
	Sanyo	LC4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
HCC/HCF4016			
	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
HCC/HCF4017			
	Fairchild	F4017	
	GE/RCA	**CD4017**	**(2635)**
	Motorola	MC14017	
	National	CD4017	
	Signetics	HEF4017	
	Solitron	CM4017	
	Sprague	SCL4017	
	Toshiba	**TC4017**	**(3308)**
HCC/HCF4018			
	Fairchild	F4018	
	GE/RCA	**CD4018**	**(2635)**
	Motorola	MC14018	
	National	CD4018	
	Signetics	HEF4018	
	Solitron	CM4018	
	Sprague	SCL4018	
	Toshiba	**TC4018**	**(3308)**

Manufacturer Device	Replacement Source	Device	IC Master Page
HCC/HCF40181			
	GE/RCA	**CD40181**	**(2636)**
	Motorola	MC14581	
	National	74C181	
	Sprague	SCL4581	
HCC/HCF40182			
	Fairchild	F4582	
	GE/RCA	**CD40182**	**(2636)**
	Motorola	MC14582	
	National	74C182	
	Sprague	SCL4582	
HCC/HCF4019			
	Fairchild	F4019	
	GE/RCA	**CD4019**	**(2633, 2635)**
	National	CD4019	
	OKI	MSM4019	
	Sanyo	LC4019	
	Signetics	HEF4019	
	Solitron	CM4019	
	Sprague	SCL4019	
	Toshiba	**TC4019**	**(3308)**
HCC/HCF40192			
	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
HCC/HCF40193			
	Fairchild	F40193	
	GE/RCA	**CD40193**	**(2635)**
	National	CD40193	
		MM54C193	
		MM74C193	
	Signetics	HEF40193	
	Sprague	SCL4193	
	Toshiba	**TC40193**	**(3308)**
HCC/HCF40194			
	Fairchild	F40194	
	GE/RCA	**CD40194**	**(2634)**
	Motorola	MC14194	
	Signetics	HEF40194	
HCC/HCF4020			
	Fairchild	F4020	
	GE/RCA	**CD4020**	**(2634)**
	Motorola	MC14020	
	National	CD4020	
	Signetics	HEF4020	
	Solitron	CM4020	
	Sprague	SCL4020	
	Toshiba	**TC4020**	**(3308)**
HCC/HCF4021			
	Fairchild	F4021	
	GE/RCA	**CD4021**	**(2634)**
	Motorola	MC14021	
	National	CD4021	
	Signetics	HEF4021	
	Sprague	SCL4021	
	Toshiba	**TC4021**	**(3308)**
HCC/HCF4022			
	Fairchild	F4022	
	GE/RCA	**CD4022**	**(2635)**
	Motorola	MC14022	
	National	CD4022	
	Signetics	HEF4022	
	Solitron	CM4022	
	Sprague	SCL4022	
	Toshiba	**TC4022**	**(3308)**
HCC/HCF4023			
	Fairchild	F4023	
	GE/RCA	**CD4023**	**(2633)**
	Motorola	MC14023	
	National	CD4023	
		MM74C10	
	Signetics	HEF4023	
	Solitron	CM4023	
	Sprague	SCL4023	
	Toshiba	**TC4023**	**(3308)**
HCC/HCF4024			
	Fairchild	F4024	
	GE/RCA	**CD4024**	**(2634)**
	Motorola	MC14024	
	National	CD4024	
	Signetics	HEF4024	
	Solitron	CM4024	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HCC/HCF4024			(Cont'd)
	Sprague	SCL4024	
	Toshiba	**TC4024**	**(3308)**
HCC/HCF4025			
	Fairchild	F4025	
	GE/RCA	**CD4025**	**(2633)**
	Motorola	MC14025	
	National	CD4025	
	Signetics	HEF4025	
	Solitron	CM4025	
	Sprague	SCL4025	
	Toshiba	**TC4025**	**(3308)**
HCC/HCF4026			
	Solitron	CM4026	
	Sprague	SCL4026	
HCC/HCF4027			
	Fairchild	F4027	
	GE/RCA	**CD4027**	**(2634)**
	Motorola	MC14027	
	National	CD4027	
		MM74C76	
	OKI	MSM4027	
	Sanyo	LC4027	
	Signetics	HEF4027	
	Solitron	CM4027	
	Sprague	SCL4027	
HCC/HCF4028			
	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	CD4028	
		MM74C42	
	OKI	MSM4028	
	Sanyo	LC4028	
	Signetics	HEF4028	
	Solitron	CM4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
HCC/HCF4029			
	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
HCC/HCF4030			
	Fairchild	F4030	
	GE/RCA	**CD4030**	**(2633, 2636)**
	National	CD4030	
	Signetics	HEF4030	
	Solitron	CM4030	
	Sprague	SCL4030	
	Toshiba	**TC4030**	**(3308)**
HCC/HCF4031			
	Fairchild	F4031	
	GE/RCA	**CD4031**	**(2634)**
	National	CD4031	
	Signetics	HEF4731	
HCC/HCF4032			
	GE/RCA	**CD4032**	**(2636)**
	Motorola	MC14032	
	Solitron	CM4032	
	Toshiba	**TC4032**	**(3308)**
HCC/HCF4033			
	GE/RCA	**CD4033**	**(2635)**
	Solitron	CM4033	
	Sprague	SCL4033	
HCC/HCF4034			
	Fairchild	F4034	
	GE/RCA	**CD4034**	**(2634, 2636)**
	Motorola	MC14034	
	National	CD4034	
	Solitron	CM4034	
	Sprague	SCL4034	
	Toshiba	**TC4034**	**(3308)**
HCC/HCF4035			
	Fairchild	F4035	
	GE/RCA	**CD4035**	**(2634)**
	Motorola	MC14035	
	Signetics	HEF4035	
	Solitron	CM4035	
	Toshiba	TC4035	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HCC/HCF4038			
	GE/RCA	**CD4038**	**(2636)**
	Motorola	MC14038	
	Solitron	CM4038	
	Toshiba	**TC4038**	**(3308)**
HCC/HCF4040			
	Fairchild	F4040	
	GE/RCA	**CD4040**	**(2634)**
	Motorola	MC14040	
	National	CD4040	
	Signetics	HEF4040	
	Solitron	CM4040	
	Sprague	SCL4040	
	Toshiba	**TC4040**	**(3308)**
HCC/HCF4041			
	Fairchild	F4041	
	GE/RCA	**CD4041**	**(2633)**
	National	CD4041	
	Signetics	HEF4041	
	Solitron	CM4041	
	Sprague	SCL4041	
HCC/HCF4042			
	Fairchild	F4042	
	GE/RCA	**CD4042**	**(2634)**
	Motorola	MC14042	
	National	CD4042	
	Signetics	HEF4042	
	Solitron	CM4042	
	Sprague	SCL4042	
	Toshiba	**TC4042**	**(3308)**
HCC/HCF4043			
	GE/RCA	**CD4043**	**(2634)**
	Motorola	MC14043	
	National	CD4043	
	Signetics	HEF4043	
	Solitron	CM4043	
	Sprague	SCL4043	
	Toshiba	**TC4043**	**(3308)**
HCC/HCF4044			
	Fairchild	F4044	
	GE/RCA	**CD4044**	**(2634)**
	Motorola	MC14044	
	National	CD4044	
	Signetics	HEF4044	
	Solitron	CM4044	
	Toshiba	**TC4044**	**(3308)**
HCC/HCF4045			
	Fairchild	F4521	
	Motorola	MC14521	
	Signetics	HEF4521	
	Solitron	CM4045	
	Sprague	SCL4445	
	Toshiba	**TC4521**	**(3308)**
HCC/HCF4046			
	Fairchild	F4046	
	GE/RCA	**CD4046**	**(2635)**
	Motorola	MC14046	
	National	CD4046	
	Solitron	CM4046	
	Sprague	SCL4046	
HCC/HCF4047			
	Fairchild	F4047	
	GE/RCA	**CD4047**	**(2634)**
	National	CD4047	
	Signetics	HEF4047	
	Solitron	CM4047	
	Sprague	SCL4047	
	Toshiba	**TC4047**	**(3308)**
HCC/HCF4048			
	GE/RCA	**CD4048**	**(2633)**
	National	CD4048	
	Solitron	CM4048	
	Sprague	SCL4402	
HCC/HCF4049			
	Fairchild	F4049	
	GE/RCA	**CD4049**	**(2633)**
	Motorola	MC14049	
	National	CD4049	
	OKI	MSM4049	
	Sanyo	LC4049	
	Signetics	HEF4049	
	Solitron	CM4049	
	Sprague	SCL4049	
	Toshiba	**TC4049**	**(3308)**
HCC/HCF4050			
	Fairchild	F4050	
	GE/RCA	**CD4050**	**(2633)**
	Motorola	MC14050	
	National	CD4050	
	Signetics	HEF4050	
	Solitron	CM4050	
	Sprague	SCL4050	
	Toshiba	**TC4050**	**(3308)**
HCC/HCF4051			
	Fairchild	F4051	
	GE/RCA	**CD4051**	**(2635)**
	Motorola	MC14051	
	National	CD4051	
	Signetics	HEF4051	
	Solitron	CM4051	
	Sprague	SCL4051	
	Toshiba	**TC4051**	**(3308)**
HCC/HCF4052			
	Fairchild	F4052	
	GE/RCA	**CD4052**	**(2635)**
	Motorola	MC14052	
	Signetics	HEF4052	
HCC/HCF4053			
	Fairchild	F4053	
	GE/RCA	**CD4053**	**(2635)**
	Motorola	MC14053	
	National	CD4053	
	Signetics	HEF4053	
	Solitron	CM4053	
	Sprague	SCL4053	
	Toshiba	**TC4053B**	**(3308)**
HCC/HCF4054			
	GE/RCA	**CD4054**	**(2635)**
	Toshiba	**TC4054**	**(3308)**
HCC/HCF4055			
	GE/RCA	**CD4055**	**(2635)**
	Toshiba	**TC4055**	**(3308)**
HCC/HCF4060			
	GE/RCA	**CD4060**	**(2634)**
	Motorola	MC14060	
	National	CD4060	
	Signetics	HEF4060	
	Sprague	SCL4060	
HCC/HCF4063			
	GE/RCA	**CD4063**	**(2636)**
	Toshiba	**TC4063**	**(3308)**
HCC/HCF4066			
	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
HCC/HCF4067			
	Fairchild	F4067	
	Motorola	MC14067	
	Signetics	HEF4067	
HCC/HCF4068			
	Fairchild	F4068	
	GE/RCA	**CD4068**	**(2633)**
	Motorola	MC14068	
	Signetics	HEF4068	
	Solitron	CM4068	
	Sprague	SCL4068	
	Toshiba	**TC4068**	**(3308)**
HCC/HCF4069			
	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
HCC/HCF4070			
	Fairchild	F4070	
	GE/RCA	**CD4070**	**(2633, 2636)**
	Motorola	MC14070	
	National	CD4070	
		MM74C86	
	Signetics	HEF4070	
	Solitron	CM4070	
	Sprague	SCL4070	
HCC/HCF4071			
	Fairchild	F4071	
	GE/RCA	**CD4071**	**(2633)**
	Motorola	MC14071	
	National	CD4071	
		MM74C32	
	OKI	MSM4071	
	Sanyo	LC4071	
	Signetics	HEF4071	
	Solitron	CM4071	
	Sprague	SCL4071	
HCC/HCF4072			
	Fairchild	F4072	
	GE/RCA	**CD4072**	**(2633)**
	Motorola	MC14072	
	National	CD4072	
	Signetics	HEF4072	
	Sprague	SCL4072	
	Toshiba	TC4072	
HCC/HCF4073			
	Fairchild	F4073	
	GE/RCA	**CD4073**	**(2633)**
	Motorola	MC14073	
	National	CD4073	
	Signetics	HEF4073	
	Solitron	CM4073	
	Sprague	SCL4073	
	Toshiba	TC4073	
HCC/HCF4075			
	Fairchild	F4075	
	GE/RCA	**CD4075**	**(2633)**
	Motorola	MC14075	
	National	CD4075	
	Signetics	HEF4075	
	Solitron	CM4075	
	Sprague	SCL4075	
	Toshiba	TC4075	
HCC/HCF4076			
	Fairchild	F4076	
	GE/RCA	**CD4076**	**(2634)**
	Motorola	MC14076	
	National	CD4076	
		MM54C173	
		MM74C173	
	Signetics	HEF4076	
	Solitron	CM4076	
	Sprague	SCL4076	
	Toshiba	**TC4076**	**(3308)**
HCC/HCF4077			
	Fairchild	F4077	
	GE/RCA	**CD4077**	**(2633, 2636)**
	Motorola	MC14077	
	National	CD4077	
	Signetics	HEF4077	
	Solitron	CM4077	
	Sprague	SCL4077	
HCC/HCF4078			
	Fairchild	F4078	
	GE/RCA	**CD4078**	**(2633)**
	Motorola	MC14078	
	Signetics	HEF4078	
	Solitron	CM4078	
	Sprague	SCL4078	
	Toshiba	**TC4078**	**(3308)**
HCC/HCF4081			
	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	CD4081	
		MM74C08	
	OKI	MSM4081	
	Sanyo	LC4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
HCC/HCF4082			
	Fairchild	F4082	
	GE/RCA	**CD4082**	**(2633)**
	Motorola	MC14082	
	National	CD4082	
	Signetics	HEF4082	
	Sprague	SCL4082	
	Toshiba	TC4082	
HCC/HCF4086			
	GE/RCA	**CD4086B**	**(2633)**
	Motorola	MC14506	
	Signetics	HEF4086B	
HCC/HCF4089			
	GE/RCA	**CD4089**	**(2636)**
	National	CD4089	
HCC/HCF4097			
	Fairchild	F4097	
	Motorola	MC14097	
HCC/HCF4098			
	Fairchild	F4528	
	Motorola	MC14528	
	National	CD4528	
		MM74C221	
	Signetics	HEF4528	
	Toshiba	**TC4528**	**(3308)**
HCC/HCF4502			
	GE/RCA	**CD4502**	**(2633)**
	Motorola	MC14502	
	Signetics	HEF4502	
	Sprague	SCL4502	
HCC/HCF4508			
	GE/RCA	**CD4508**	**(2634)**
	Motorola	MC14508	
	National	DM74147	
	Signetics	**74147**	**(3003)**
		HEF4508	
		N82147	
	Sprague	SCL4508	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
HCC/HCF4510			
	Fairchild	F4510	
	GE/RCA	**CD4510**	**(2635)**
	Motorola	MC14510	
	National	CD4510	
	Signetics	HEF4510	
	Solitron	CM4510	
	Sprague	SCL4510	
	Toshiba	**TC4510**	**(3308)**
HCC/HCF4511			
	Fairchild	F4511	
	GE/RCA	**CD4511**	**(2635)**
	Motorola	MC14511	
	National	CD4511	
	NEC	μPD4511	
	Signetics	HEF4511	
	Solitron	CM4511	
	Sprague	SCL4511	
	Toshiba	**TC4511**	**(3308)**
HCC/HCF4512			
	Fairchild	F4512	
	GE/RCA	**CD4512**	**(2635)**
	Motorola	MC14512	
	National	CD4512	
	Sprague	SCL4512	
	Toshiba	**TC4512**	**(3308)**
HCC/HCF4514			
	Fairchild	F4514	
	GE/RCA	**CD4514**	**(2633)**
	Motorola	MC14514	
	National	CD4514	
	Signetics	HEF4514	
	Solitron	CM4514	
	Sprague	SCL4514	
	Toshiba	**TC4514**	**(3308)**
HCC/HCF4515			
	Fairchild	F4515	
	GE/RCA	**CD4515**	**(2633)**
	Motorola	MC14515	
	National	CD4515	
	Signetics	HEF4515	
	Solitron	CM4515	
	Sprague	SCL4515	
	Toshiba	**TC4515**	**(3308)**
HCC/HCF4516			
	Fairchild	F4516	
	GE/RCA	**CD4516**	**(2635)**
	Motorola	MC14516	
	National	CD4516	
	Signetics	HEF4516	
	Solitron	CM4516	
	Sprague	SCL4516	
	Toshiba	**TC4516**	**(3308)**
HCC/HCF4517			
	GE/RCA	**CD4517**	**(2634)**
	Motorola	MC14517	
	Signetics	HEF4517	
	Sprague	SCL4517	
HCC/HCF4518			
	Fairchild	F4518	
	GE/RCA	**CD4518**	**(2635)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HCC/HCF4518			(Cont'd)
	Motorola	MC14518	
	National	CD4518	
	Signetics	HEF4518	
	Solitron	CM4518	
	Sprague	SCL4518	
	Toshiba	**TC4518**	**(3308)**
HCC/HCF4520			
	Fairchild	F4520	
	GE/RCA	**CD4520**	**(2635)**
	Motorola	MC14520	
	National	CD4520	
	OKI	MSM4520	
	Sanyo	LC4520	
	Signetics	HEF4520	
	Solitron	CM4520	
	Sprague	SCL4520	
	Toshiba	**TC4520**	**(3308)**
HCC/HCF4527			
	Fairchild	F4527	
	GE/RCA	**CD4527**	**(2636)**
	Motorola	MC14527	
	National	CD4527	
	Signetics	HEF4527	
	Sprague	SCL4527	
	Toshiba	**TC4527**	**(3308)**
HCC/HCF4532			
	Fairchild	F4532	
	GE/RCA	CD4532	
	Motorola	MC14532	
	Signetics	HEF4532	
	Sprague	SCL4532	
	Toshiba	**TC4532**	**(3308)**
HCC/HCF4555			
	Fairchild	F4555	
	GE/RCA	**CD4555**	**(2633, 2635)**
	Motorola	MC14555	
	Signetics	HEF4555	
	Sprague	SCL4555	
	Toshiba	**TC4555**	**(3308)**
HCC/HCF4556			
	Fairchild	F4556	
	GE/RCA	**CD4556**	**(2633, 2635)**
	Motorola	MC14556	
	Signetics	HEF4556	
	Sprague	SCL4556	
	Toshiba	**TC4556**	**(3308)**
HCC/HCF4585			
	Fairchild	F40085	
	GE/RCA	**CD4585**	**(2636)**
	Motorola	MC14585	
	National	MM74C85	
	Signetics	HEF4585	
	Sprague	SCL4585	
	Toshiba	**TC4585**	**(3308)**
HCF40188	Motorola	MC14188	
HCF4503	Fairchild	F40097B	
	GE/RCA	**CD4503**	**(2633)**
	Motorola	MC14503	
	National	CD4503	
	Toshiba	TC4503	
L123	Fairchild	µA723	
		µA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	LM723	
	Signetics	µA723	
	SiliconG	SG723	
	TI	µA723	
		µA723M	
	Thomson	SFC2723	
		µA723	
L165	SiliconG	SG1173	
	Sprague	**ULN3751**	**(3203)**
L201	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	µA9665	
	Mitsubishi	M54524	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
L201			(Cont'd)
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
L202	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		µA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	µPA2002	
	Sanyo	LB1232	
	SGS	ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
L203	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		µA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
L204	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
L283D	TI	L293D	
L290B	SiliconG	L290B	
L291B	SiliconG	L291B	
L292	SiliconG	L292	
L293	**IPS**	**IP293**	**(2854)**
	Polycore	PL293	
	TI	L293	
		SN754410	
L295	**Unitrode**	**L295**	**(3326)**
L296	**Unitrode**	**L296**	**(3323)**
L298	TI	L298	
		TLP298	
	Unitrode	**L298**	**(3326)**
L601	SiliconG	SG2821	
	Sprague	**ULN2821**	**(3203)**
		ULS2821	
L602	SiliconG	SG2822	
	Sprague	**ULN2822**	**(3203)**
		ULS2822	
L603	SiliconG	SG2823	
	Sprague	**ULN2823**	**(3203)**
		ULS2823	
L604	SiliconG	SG2824	
	Sprague	**ULN2824**	**(3203)**
		ULS2824	
L6222	**GE/RCA**	**CA3219**	**(2650)**
	Hitachi	HAI3007	
	IPS	3658	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
L6222			(Cont'd)
	National	DS3658	
	TI	SN75437	
L702B	SGS	L702N	
	Thomson	L702B	
		L702SP	
L702N	SGS	L702B	
	Thomson	L702B	
		L702SP	
L7805	GoldStar	GL7805	
	Gould	µA7805	
	SiliconG	SG7805	
	Thomson	µ78S05	
	Toshiba	TA78005	
L7806	Fairchild	µA7806	
	Motorola	**MC7806**	**(2927)**
	National	LM7806	
	NEC	µPC7806	
	Samsung	MC7806	
	SiliconG	SG340-6	
		SG7806	
		SG7806A	
	TI	µA7806	
	Thomson	µA7806	
	Toshiba	TA78006	
L7808	Fairchild	µA7808	
	GoldStar	GL7808	
	Gould	µA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	NEC	µPC7808	
	Samsung	MC7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	µA7808	
	Thomson	µA7808	
	Toshiba	TA78008	
L7810	Fairchild	µA7810	
	National	LM7810	
	TI	µA7810	
	Toshiba	TA78010	
L7812	Fairchild	µA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	µPC7812	
	Samsung	MC7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	µA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
L7815	Fairchild	µA78L15	
	GoldStar	GL7815	
	Gould	µA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	µPC7815	
	Samsung	MC7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		µA7815	
	Thomson	µA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
L7818	Fairchild	µA7818	
	Motorola	**MC7818**	**(2928)**
	National	LM7818	
	Samsung	MC7818	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
L7818			(Cont'd)
	TI	µA7818	
	Toshiba	TA78018	
L7820	Fairchild	µA7820	
		µA7910	
	National	LM7820	
	SiliconG	SG7820	
		SG7820A	
	TI	µA7820	
		µA7910	
	Toshiba	TA78020	
L7824	Fairchild	µA7824	
	GoldStar	GL7824	
	Gould	µA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	µPC7824	
	Samsung	MC7824	
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
		µA7824	
	Thomson	µA7824	
	Toshiba	TA78024	
L78515	Thomson	µ78515	
L78M05	Fairchild	µA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	µPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	TI	µA78M05	
	Toshiba	TA78M05	
L78M05CV	Fairchild	µA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	µPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	TI	µA78M05	
	Toshiba	TA78M05	
L78M06	Fairchild	µA78M06	
	Motorola	**MC78M06**	**(2927)**
	National	LM78M06	
	Samsung	MC78M06	
	Sanyo	L78M06	
	SGS	L78M06CV	
	TI	µA78M06	
	Toshiba	TA78M06	
L78M06CV	Fairchild	µA78M06	
	Motorola	**MC78M06**	**(2927)**
	National	LM78M06	
	Samsung	MC78M06	
	Sanyo	L78M06	
	SGS	L78M06	
	TI	µA78M06	
	Toshiba	TA78M06	
L78M08	Fairchild	µA78M08	
	Motorola	MC78M08	
	National	LM78M08	
	NEC	µPC78M08	
	Samsung	MC78M08	
	Sanyo	L78M08	
	SGS	L78M08CV	
	TI	µA78M08	
	Toshiba	TA78M08	
L78M08CV	Fairchild	µA78M08	
	Motorola	MC78M08	
	National	LM78M08	
	NEC	µPC78M08	
	Samsung	MC78M08	
	Sanyo	L78M08	
	SGS	L78M08	
	TI	µA78M08	
	Toshiba	TA78M08	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
L78M09	Fairchild	μA78M09	
	National	LM78M09	
	TI	μA78M09	
	Toshiba	TA78M09	
L78M10	Fairchild	μA78M10	
	National	LM78M10	
		LM7910	
	TI	μA78M10	
	Toshiba	TA78M10	
L78M12	Fairchild	μA78M12	
	Motorola	**MC78M12**	**(2927, 2959)**
	National	LM341-12	
		LM342-12	
		LM78M12	
	NEC	μPC78M12	
	Samsung	MC78M12	
	Sanyo	L78M12	
	SGS	L78M12CV	
	TI	μA78M12	
	Toshiba	TA78M12	
L78M12CV	Fairchild	μA78M12	
	Motorola	**MC78M12**	**(2927, 2959)**
	National	LM341-12	
		LM342-12	
		LM78M12	
	NEC	μPC78M12	
	Samsung	MC78M12	
	Sanyo	L78M12	
	SGS	L78M12	
	TI	μA78M12	
	Toshiba	TA78M12	
L78M15	Fairchild	μA78M15	
	Motorola	**MC78M15**	**(2928, 2959)**
	National	LM341-15	
		LM342-15	
		LM78M15	
	NEC	μPC78M15	
	Samsung	MC78M15	
	Sanyo	L78M15	
	SGS	L78M15CV	
	TI	μA78M15	
	Toshiba	TA78M15	
L78M15CV	Fairchild	μA78M15	
	Motorola	**MC78M15**	**(2928, 2959)**
	National	LM341-15	
		LM342-15	
		LM78M15	
	NEC	μPC78M15	
	Samsung	MC78M15	
	Sanyo	L78M15	
	SGS	L78M15	
	TI	μA78M15	
	Toshiba	TA78M15	
L78M18	Fairchild	μA78M18	
	Motorola	MC78M18	
	Samsung	MC78M18	
	Sanyo	L78M18	
	TI	μA78M18	
	Toshiba	TA78M18	
L78M20	Fairchild	μA78M20	
	Motorola	**MC78M20**	**(2928)**
	National	LM78M20	
	TI	μA78M20	
	Toshiba	TA78M20	
L78M24	Fairchild	μA78M24	
	Motorola	**MC78M24**	**(2928)**
	Samsung	MC78M24	
	Sanyo	L78M24	
	SGS	L78M24CV	
	TI	μA78M24	
	Toshiba	TA78M24	
L78M24CV	Fairchild	μA78M24	
	Motorola	**MC78M24**	**(2928)**
	Samsung	MC78M24	
	Sanyo	L78M24	
	SGS	L78M24	
	TI	μA78M24	
	Toshiba	TA78M24	
L78S09	Thomson	μ78S09	
L78S12	Thomson	μ78S12	
L7905	Fairchild	MC7905	
		μA7905	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	Motorola	MC7905	
	Samsung	MC7905	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
L7905			(Cont'd)
	SiliconG	SG7905	
		SG7905A	
L7906	Fairchild	μA7906	
	GoldStar	GL7806	
	Gould	μA7806	
	Motorola	MC7906	
	National	LM7906	
	NEC	μPC7806	
	Samsung	MC7906	
	TI	μA7906	
	Toshiba	TA78006	
L7908	Fairchild	MC7908	
		μA7908	
		μA79M08	
	Motorola	MC7908	
	National	LM7908	
	Samsung	MC7908	
	SiliconG	SG7908	
		SG7908A	
	TI	μA7908	
		μA79M08	
	Toshiba	TA79008	
L7909	Fairchild	μA7909	
	GoldStar	**GL7909**	**(2701)**
	Gould	μA7909	
	National	LM7909	
	NEC	μPC7909	
	TI	μA7909	
	Toshiba	TA7900	
		TA79009	
L7910	Fujitsu	MB81C466	
	Hitachi	HM50465	
	Inmos	IMS2820	
	Intel	P51C259H	
L7912	Fairchild	μA7912	
		μA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	μA7824	
		μA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	μPC7912	
	Samsung	MC7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
L7915	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	μPC7915	
	Samsung	MC7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
L7918	Fairchild	μA7918	
	Motorola	MC7918	
	National	LM7918	
	Samsung	MC7918	
	SiliconG	SG7918	
		SG7918A	
	TI	μA7918	
	Toshiba	TA79018	
L7920	Fairchild	μA7920	
	National	LM7920	
	SiliconG	SG7920	
		SG7920A	
	SiliconSys	SSI957	
	TI	μA7920	
	Toshiba	TA79020	
L7924	Fairchild	74LS195A	
		μA7924	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
L7924			(Cont'd)
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
L7952	**IPS**	**IP120-5**	**(2854)**
	Motorola	MC7952	
	National	LM320-5	
	SiliconG	SG320-5	
L9222	**GE/RCA**	**CA3252**	**(2650, 2654)**
	IPS	3669	
	National	DS3669	
	TI	SN75440	
♦ LM123	Fairchild	SH123	
		UA138	
		μA123	
♦ LM123	**IPS**	**IP123**	**(2854)**
	LinearTech	LM123	
		LT123	
♦ LM123	**Motorola**	**LM123**	**(2927)**
		MC78T05	**(2926)**
♦ LM123	National	LM123	
	SiliconG	SG123	
		SG123A	
LM217	**IPS**	**IP217**	**(2854)**
	MCE	MCELM217	
	Motorola	**LM217**	**(2929)**
	National	LM217	
	SiliconG	SG217	
		SG217A	
	Thomson	LM217	
	Unitrode	**UC217**	**(3325)**
♦ LM223	Fairchild	SH223	
		μA223	
♦ LM223	**IPS**	**IP223**	**(2854)**
	Motorola	**LM223**	**(2927)**
	National	LM223	
	SiliconG	SG223	
	Thomson	LM223	
LM2901	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
LM2902	Fairchild	μA2902	
		μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	μPC324	
		μPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	TI	LM2902	
		LM324	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM2902			(Cont'd)
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
LM2903	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM2904	**GE/RCA**	**CA2904**	**(2645)**
	Motorola	**LM2904**	**(2922, 2958)**
	TI	LM2904	
	Thomson	LM2904	
	Toshiba	TA75358	
LM2930	National	LM2930	
LM2930A	National	LM2930A	
LM2931	National	LM2931	
LM2931A	National	LM2931A	
LM2935	National	LM2935	
LM301	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
LM301A	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
LM3045	Fairchild	UA3045	
	National	LM3045	
	Plessey	SL3086	
	Sanyo	LA3045	
	Sprague	ULS2045	
LM3046	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM3046			(Cont'd)
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
LM311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM317	Fairchild	μA317	
	IPS	**IP317**	**(2854)**
	LinearTech	LM317	
	MCE	MCELM317	
	Motorola	**LM317**	**(2929)**
	National	LM317	
	SiliconG	SG317	
	TI	LM317	
	Thomson	LM317	
		TDB0117	
	Unitrode	**UC317**	**(3325)**
LM324	Fairchild	μA324	
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17324	
	Motorola	**MC33174**	**(2924, 2959)**
	National	LM324	
	PMI	**OP421**	**(2970, 2972)**
	Samsung	LM324	
	SiliconG	SG324	
	Thomson	LM324	
	Toshiba	TA79502	
LM324A	National	LM324A	
	Samsung	LM324A	
	TI	LM324A	
LM339	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
LM358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	μPC1251	
		μPC358	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM358			(Cont'd)
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
LM393	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	μPC277	
		μPC393	
	TI	LM393	
	Toshiba	TA75393	
LM723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
	Signetics	μA723	
	SiliconG	SG723	
	TI	μA723	
		μA723M	
	Thomson	SFC2723	
		μA723	
LM741	AD	AD741	
	Fairchild	μA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	μPC151	
		μPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LS141	
	Signetics	μA741	
	SiliconG	SG741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
LM748	Fairchild	μA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
	National	LM748	
	SGS	LS148	
	SiliconG	SG201	
	TI	LM201	
		LM748	
		SN72748P	
		μA748	
	Thomson	LM201	
		LM748	
♦ LM7809	Fairchild	μA7809	
	GoldStar	GL7809	
	Gould	μA7809	
	Hitachi	HA17809	
	Motorola	MC7809	
	National	LM7809	
	NEC	μPC7809	
	TI	μA7809	
	Toshiba	TA78009	
LS101	AMD	LM101	
	AD	AD101	
	Fairchild	μA101	
	GE/Intersil	AD101	
	LinearTech	LM101	
	Motorola	LM101	
	Raytheon	LM101	
	SiliconG	SG101	
	Thomson	LM101	
LS141	AD	AD741	
	Fairchild	μA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LS141			(Cont'd)
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	μPC151	
		μPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
	Signetics	μA741	
	SiliconG	SG741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
LS148	Fairchild	μA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
	National	LM748	
	SGS	LM748	
	SiliconG	SG201	
	TI	LM201	
		LM748	
		SN72748P	
		μA748	
	Thomson	LM201	
		LM748	
LS204	National	LM204	
	SiliconG	SG204	
	Thomson	LM204	
LS285A	Samsung	LS285A	
LS4558	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
M093	GoldStar	GM62300	
	Mitel	MT8812	
♦ M108	AD	AD108	
	Fairchild	μA108	
	GE/Intersil	LM108	
	LinearTech	LM108	
	MicroPwr	MP108	
	Motorola	**LM108**	**(2919)**
	National	LM108	
	PMI	**PM108**	**(2970)**
	SiliconSys	SSI108	
M145026	Motorola	MC145026	
M145027	Motorola	MC145027	
♦ M2102A	Fairchild	2102H	
	National	MM2102A	
	Panasonic	MN2102	
M22100	**GE/RCA**	**CD22100**	**(2638)**
	Motorola	MC1452100	
	SiliconSys	SSI22100	
M2560	Gould	S2560	
M2569	Gould	S2569	
M27128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M27128			(Cont'd)
	SEEQ	**27128**	**(2991)**
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
M2716	**Harris**	**HM6616**	**(2768)**
	Hitachi	HN462716	
	National	MM2716	
	OKI	MSM2716	
	Thomson	ET2716	
M27256	AMD	AM27256	
		AM27C256	
	Intel	27256	
		27C256	**(2861)**
		M27256	
		M27C256	
	National	NMC27C256	
	SEEQ	**27C256**	**(2991)**
	TI	**SMJ27C256**	**(3220)**
	VLSI Tech	VT27C256	
	Waferscale	**WS27C256**	**(3376)**
M2732A	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		2732A	
		M2732	
	National	MM2732	
		NMC2732	
	NEC	μPD2732	
	OKI	MSM2732	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
M2764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
♦ M36000	GIM	RO3-9364	
	Hitachi	HN48364	
	Mitsubishi	M58334	
	National	MM52164	
	NEC	μPD2364	
	Rockwell	R2364A	
	Signetics	2664	
		26S64	
M3870	Fairchild	F3870	
M3872	Fairchild	F3872	
♦ M4027	Fairchild	M4027	
	Motorola	MCM4027	
	Stantel-STC	STC4027	
M4116	AMD	AM9016	
	Fairchild	F16K	
		F4116	
	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
M4116			(Cont'd)
	OKI	MSM3716	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
M5116	Fairchild	5116	
	National	TP5116	
M5156	CTI	MA556	
	Fairchild	5156	
	National	TP5156	
	Thomson	MK5156	
M5450	National	MM5450	
M5451	National	MM5451	
M5480	National	MM5480	
M5481	National	MM5481	
	SGS	SG2525A	
	SiliconG	SG2525A	
♦ M5912	CMD Micro	G8912B	
	Intel	2912	
		ID2912	
♦ M5912	National	TP3040	
	Plessey	MV8912	
	TI	TCM2912C	
	Thomson	ETC5040	
M74HC00	**GE/RCA**	**CD74HC00 (2631)**	
	Hitachi	HD74HC00	
	Motorola	MC74HC00	
	National	MM74HC00	
	Signetics	**74HC00 (3003)**	
	TI	SN74HC00	
	Toshiba	TC40H000	
M74HC02	**GE/RCA**	**CD74HC02 (2631)**	
	Hitachi	HD74HC02	
	Motorola	MC74HC02	
	National	MM74HC02	
	Signetics	**74HC02 (3003)**	
	TI	SN74HC02	
	Toshiba	TC40H002	
M74HC03	**GE/RCA**	**CD74HC03 (2631)**	
	Motorola	MC74HC03	
	National	MM74HC03	
	TI	SN74HC03	
	Toshiba	**TC74HC03 (3307)**	
M74HC04	**GE/RCA**	**CD74HC04 (2631)**	
	Hitachi	HD74HC04	
	Motorola	MC74HC04	
	National	MM74HC04	
	TI	SN74HC04	
	Toshiba	TC40H004	
M74HC08	**GE/RCA**	**CD74HC08 (2631)**	
	Hitachi	HD74HC08	
	Motorola	MC74HC08	
	National	MM74HC08	
	Signetics	**74HC08 (3003)**	
	TI	SN74HC08	
M74HC10	**GE/RCA**	**CD74HC10 (2631)**	
	Hitachi	HD74HC10	
	Motorola	MC74HC10	
	National	MM74HC10	
	Signetics	**74HC10 (3003)**	
	TI	SN74HC10	
	Toshiba	TC40H010	
M74HC107	**GE/RCA**	**CD74HC107 (2631)**	
	Hitachi	HD74HC107	
	Motorola	MC74HC107	
	National	MM74HC107	
	Signetics	**74HC107 (3003)**	
	TI	SN74HC107	
	Toshiba	TC40H107	
M74HC109	**GE/RCA**	**CD74HC109 (2631)**	
	Hitachi	HD74HC109	
	Motorola	MC74HC109	
	National	MM74HC109	
	Signetics	**74HC109 (3003)**	
	TI	SN74HC109	
	Toshiba	**TC74HC109 (3307)**	
M74HC11	**GE/RCA**	**CD74HC11 (2631)**	
	Hitachi	HD74HC11	
	Motorola	MC74HC11	
	National	MM74HC11	
	Signetics	**74HC11 (3003)**	
	TI	SN74HC11	
	Toshiba	TC40H011	
M74HC112	**GE/RCA**	**CD74HC112 (2631)**	
	Hitachi	HD74HC112	
	Motorola	MC74HC112	
	National	MM74HC112	
	Signetics	**74HC112 (3003)**	
	TI	SN74HC112	
M74HC113	Hitachi	HD74HC113	
	Motorola	MC74HC113	
	National	MM74HC113	
	TI	SN74HC113	
M74HC123	Hitachi	HD74HC123	
	Motorola	MC74HC123A	
	National	MM74HC123	
	Signetics	**74HC123 (3003)**	
	TI	SN74HC123	
M74HC125	**GE/RCA**	**CD74HC125 (2631)**	
	Hitachi	HD74HC125	
	Motorola	MC74HC125	
	National	MM74HC125	
	TI	SN74HC125	
	Toshiba	**TC74HC125 (3307)**	
M74HC126	**GE/RCA**	**CD74HC126 (2631)**	
	Hitachi	HD74HC126	
	Motorola	MC74HC126	
	National	MM74HC126	
	Toshiba	**TC74HC126 (3307)**	
M74HC131	Motorola	MC74HC131	
M74HC132	**GE/RCA**	**CD74HC132 (2631)**	
	Hitachi	HD74HC132	
	Motorola	MC74HC132	
	National	MM74HC132	
	Signetics	**74HC132 (3003)**	
	TI	SN74HC132	
M74HC133	Motorola	MC74HC133	
	National	MM74HC133	
	TI	SN74HC133	
M74HC137	Hitachi	HD74HC137	
	Motorola	MC74HC137	
	National	MM74HC137	
	Toshiba	**TC74HC137 (3307)**	
M74HC138	**GE/RCA**	**CD74HC138 (2632)**	
	Hitachi	HD74HC138	
	Motorola	MC74HC138	
	National	MM74HC138	
	Signetics	**74HC138 (3003)**	
	Sprague	SS74HC138	
	TI	SN74HC138	
M74HC139	**GE/RCA**	**CD74HC139 (2632)**	
	Hitachi	HD74HC139	
	National	MM74HC139	
	Signetics	**74HC139 (3003)**	
	Sprague	SS74HC139	
	TI	SN74HC139	
	Toshiba	TC40H139	
M74HC14	**GE/RCA**	**CD74HC14 (2631)**	
	Hitachi	HD74HC14	
	Motorola	MC74HC14	
	National	MM74HC14	
	Signetics	**74HC14 (3003)**	
	TI	SN74HC14	
M74HC147	**GE/RCA**	**CD74HC147 (2632)**	
	Hitachi	HD74HC147	
	Motorola	MC74HC147	
	National	MM74HC147	
	Signetics	**74HC147 (3003)**	
	TI	SN74HC147	
M74HC148	Hitachi	HD74HC148	
	TI	SN74HC148	
	Toshiba	**TC74HC148 (3307)**	
M74HC151	**GE/RCA**	**CD74HC151 (2632)**	
	Hitachi	HD74HC151	
	Motorola	MC74HC151	
	National	MM74HC151	
	Signetics	**74HC151 (3003)**	
	TI	SN74HC151	
	Universal	US74HC151	
M74HC153	**GE/RCA**	**CD74HC153 (2632)**	
	Hitachi	HD74HC153	
	Motorola	MC74HC153	
	National	MM74HC153	
	Signetics	**74HC153 (3003)**	
	TI	SN74HC153	
	Toshiba	TC40H153	
M74HC154	**GE/RCA**	**CD74HC154 (2632)**	
	Hitachi	HD74HC154	
	Motorola	MC74HC154	
	National	MM74HC154	
	Signetics	**74HC154 (3003)**	
	TI	SN74HC154	
M74HC157	**GE/RCA**	**CD74HC157 (2632)**	
	Hitachi	HD74HC157	
	Motorola	MC74HC157	
	National	MM74HC157	
	Signetics	**74HC157 (3003)**	
	TI	SN74HC157	
	Toshiba	TC40H157	
M74HC158	**GE/RCA**	**CD74HC158 (2632)**	
	Hitachi	HD74HC158	
	Motorola	MC74HC158	
	National	MM74HC158	
	Signetics	**74HC158 (3003)**	
	TI	SN74HC158	
	Toshiba	TC40H158	
M74HC160	**GE/RCA**	**CD74HC160 (2632)**	
	Motorola	MC74HC160	
	National	MM74HC160	
	Signetics	**74HC160 (3003)**	
	TI	SN74HC160	
M74HC161	**GE/RCA**	**CD74HC161 (2632)**	
	Hitachi	HD74HC161	
	Motorola	MC74HC161	
	National	MM74HC161	
	Signetics	**74HC161 (3003)**	
	TI	SN74HC161	
M74HC162	**GE/RCA**	**CD74HC162 (2632)**	
	Hitachi	HD74HC162	
	Motorola	MC74HC162	
	National	MM74HC162	
	Signetics	**74HC162 (3003)**	
	TI	SN74HC162	
M74HC163	**GE/RCA**	**CD74HC163 (2632)**	
	Hitachi	HD74HC163	
	Motorola	MC74HC163	
	National	MM74HC163	
	Signetics	**74HC163 (3003)**	
	TI	SN74HC163	
M74HC164	**GE/RCA**	**CD74HC164 (2631)**	
	Hitachi	HD74HC164	
	Motorola	MC74HC164	
	National	MM74HC164	
	Signetics	**74HC164 (3003)**	
	TI	SN74HC164	
M74HC165	**GE/RCA**	**CD74HC165 (2631)**	
	Hitachi	HD74HC165	
	Motorola	MC74HC165	
	National	MM74HC165	
	Signetics	**74HC165 (3003)**	
	TI	SN74HC165	
M74HC166	**GE/RCA**	**CD74HC166 (2631)**	
	Signetics	**74HC166 (3003)**	
	TI	SN74HC166	
M74HC173	**GE/RCA**	**CD74HC173 (2631)**	
	Hitachi	HD74HC173	
	Motorola	MC74HC173	
	National	MM74HC173	
	Signetics	**74HC173 (3003)**	
	TI	SN74HC173	
M74HC174	**GE/RCA**	**CD74HC174 (2631)**	
	Hitachi	HD74HC174	
	Motorola	MC74HC174	
	National	MM74HC174	
	Signetics	**74HC174 (3003)**	
	TI	SN74HC174	
	Toshiba	TC40H174	
M74HC175	**GE/RCA**	**CD74HC175 (2631)**	
	Hitachi	HD74HC175	
	Motorola	MC74HC175	
	National	MM74HC175	
	Signetics	**74HC175 (3003)**	
	TI	SN74HC175	
	Toshiba	TC40H175	
M74HC181	**GE/RCA**	**CD74HC181 (2632)**	
M74HC182	**GE/RCA**	**CD74HC182 (2632)**	
M74HC190	**GE/RCA**	**CD74HC190 (2632)**	
	Hitachi	HD74HC190	
	Motorola	MC74HC190	
	Signetics	**74HC190 (3003)**	
		PC74HC190	
		PCF74HC190	
	TI	SN74HC190	
	Toshiba	**TC74HC190 (3307)**	
M74HC191	**GE/RCA**	**CD74HC191 (2632)**	
	Hitachi	HD74HC191	
	Motorola	MC74HC191	
	Signetics	**74HC191 (3003)**	
	TI	SN74HC191	
M74HC192	**GE/RCA**	**CD74HC192 (2632)**	
	Hitachi	HD74HC192	
	Motorola	MC74HC192	
	National	MM74HC192	
	Signetics	**74HC192 (3003)**	
	TI	SN74HC192	
	Toshiba	TC40H192	
M74HC193	**GE/RCA**	**CD74HC193 (2632)**	
	Hitachi	HD74HC193	
	Motorola	MC74HC193	
	National	MM74HC193	
	Signetics	**74HC193 (3003)**	
	TI	SN74HC193	
	Toshiba	TC40H193	
M74HC194	**GE/RCA**	**CD74HC194 (2631)**	
	Hitachi	HD74HC194	
	Motorola	MC74HC194	
	National	MM74HC194	
	Signetics	**74HC194 (3003)**	
	TI	SN74HC194	
M74HC195	**GE/RCA**	**CD74HC195 (2631)**	
	Hitachi	HD74HC195	
	Motorola	MC74HC195	
	National	MM74HC195	
	Signetics	**74HC195 (3003)**	
	TI	SN74HC195	
M74HC20	**GE/RCA**	**CD74HC20 (2631)**	
	Hitachi	HD74HC20	
	Motorola	MC74HC20	
	National	MM74HC20	
	Signetics	**74HC20 (3003)**	
	TI	SN74HC20	
	Toshiba	TC40H020	
M74HC21	Hitachi	HD74HC21	
	Motorola	MC74HC21	
	TI	SN74HC21	
	Toshiba	**TC74HC21 (3307)**	
M74HC221	**GE/RCA**	**CD74HC221 (2632)**	
	Motorola	MC74HC221A	
	National	MM74HC221	
	Signetics	**74HC221 (3003)**	
M74HC237	Motorola	MC74HC237	
	TI	SN74HC237	
	Toshiba	**TC74HC237 (3307)**	
M74HC238	**GE/RCA**	**CD74HC238 (2632)**	
	Signetics	**74HC238 (3003)**	
	Sprague	SS74HC238	
	TI	SN74HC238	
M74HC240	**GE/RCA**	**CD74HC240 (2631)**	
	Hitachi	HD74HC240	
	Mitel	MD74HC240	
	Motorola	MC74HC240	
	National	MM74HC240	
	Signetics	**74HC240 (3003)**	
	Sprague	SS74HC240	
	Supertex	SI74HC240	
	TI	SN74HC240	
	Toshiba	TC40H240	
M74HC241	**GE/RCA**	**CD74HC241 (2631)**	
	Hitachi	HD74HC241	
	Mitel	MD74HC241	
	Motorola	MC74HC241	
	National	MM74HC241	
	Signetics	**74HC241 (3003)**	
	Sprague	SS74HC241	
	Supertex	SI74HC241	
	TI	SN74HC241	
M74HC242	**GE/RCA**	**CD74HC242 (2631)**	
	Hitachi	HD74HC242	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
M74HC242			(Cont'd)
	Motorola	MC74HC242	
	National	MM74HC242	
	Signetics	**74HC242**	**(3003)**
	TI	SN74HC242	
M74HC243	**GE/RCA**	**CD74HC243**	**(2631)**
	Hitachi	HD74HC243	
	Motorola	MC74HC243	
	National	MM74HC243	
	SGS	M74HC245	
	Signetics	**74HC243**	**(3003)**
	TI	SN74HC243	
M74HC244	**GE/RCA**	**CD74HC244**	**(2631)**
	Hitachi	HD74HC244	
	Mitel	MD74HC244	
	Motorola	MC74HC244	
	National	MM74HC244	
	Signetics	**74HC244**	**(3003)**
	Sprague	SS74HC244	
	Supertex	SI74HC244	
	TI	SN74HC244	
M74HC245	**GE/RCA**	**CD74HC243**	**(2631)**
	Hitachi	HD74HC243	
	Motorola	MC74HC243	
	National	MM74HC243	
	SGS	M74HC243	
	Signetics	**74HC243**	**(3003)**
	TI	SN74HC243	
M74HC251	**GE/RCA**	**CD74HC251**	**(2632)**
	Hitachi	HD74HC251	
	Motorola	MC74HC251	
	National	MM74HC251	
	Signetics	**74HC251**	**(3003)**
	TI	SN74HC251	
M74HC253	**GE/RCA**	**CD74HC253**	**(2632)**
	Hitachi	HD74HC253	
	Motorola	MC74HC253	
	National	MM74HC253	
	Signetics	**74HC253**	**(3003)**
	TI	SN74HC253	
M74HC257	**GE/RCA**	**CD74HC257**	**(2632)**
	Hitachi	HD74HC257	
	Motorola	MC74HC257	
	National	MM74HC257	
	Signetics	**74HC257**	**(3003)**
	TI	SN74HC257	
M74HC266	Hitachi	HD74HC266	
	Motorola	MC74HC266	
	National	MM74HC266	
	Signetics	74HC266	
	TI	SN74HC266	
M74HC27	**GE/RCA**	**CD74HC27**	**(2631)**
	Hitachi	HD74HC27	
	Motorola	MC74HC27	
	National	MM74HC27	
	Signetics	**74HC27**	**(3003)**
	TI	SN74HC27	
	Toshiba	TC40H027	
	Universal	US74HC27	
M74HC273	CTI	74HC273	
	GE/RCA	**CD74HC273**	**(2631)**
	Hitachi	HD74HC273	
	Motorola	MC74HC273	
	Signetics	**74HC273**	**(3003)**
	TI	SN74HC273	
M74HC280	**GE/RCA**	**CD74HC280**	**(2632)**
	Hitachi	HD74HC280	
	Motorola	MC74HC280	
	National	MM74HC280	
	Signetics	**74HC280**	**(3003)**
	TI	SN74HC280	
M74HC283	**GE/RCA**	**CD74HC283**	**(2632)**
	Motorola	MC74HC283	
M74HC298	Hitachi	HD74HC298	
	TI	SN74HC298	
M74HC299	**GE/RCA**	**CD74HC299**	**(2631)**
	Motorola	MC74HC299	
	National	MM74HC299	
	Signetics	**74HC299**	**(3003)**
M74HC30	**GE/RCA**	**CD74HC30**	**(2631)**
	Hitachi	HD74HC30	
	Motorola	MC74HC30	
	National	MM74HC30	
	Signetics	**74HC30**	**(3003)**
	TI	SN74HC30	
M74HC32	**GE/RCA**	**CD74HC32**	**(2631)**
	Hitachi	HD74HC32	
	Motorola	MC74HC32	
	National	MM74HC32	
	Signetics	**74HC32**	**(3003)**
	TI	SN74HC32	
	Toshiba	TC40H032	
M74HC354	**GE/RCA**	**CD74HC354**	**(2632)**
	Hitachi	HD74HC354	
	Motorola	MC74HC354	
	National	MM74HC354	
	Signetics	**74HC354**	**(3003)**
	TI	SN74HC354	
M74HC356	**GE/RCA**	**CD74HC356**	**(2632)**
	Hitachi	HD74HC356	
	Motorola	MC74HC356	
	National	MM74HC356	
	Signetics	**74HC356**	**(3003)**
	TI	SN74HC356	
M74HC365	**GE/RCA**	**CD74HC365**	**(2631)**
	Hitachi	HD74HC365	
	Motorola	MC74HC365	
	National	MM74HC365	
	TI	SN74HC365	
M74HC366	**GE/RCA**	**CD74HC366**	**(2631)**
	Hitachi	HD74HC366	
	Motorola	MC74HC366	
	National	MM74HC366	
	Signetics	**74HC366**	**(3003)**
	TI	SN74HC366	
M74HC367	**GE/RCA**	**CD74HC367**	**(2631)**
	Hitachi	HD74HC367	
	Motorola	MC74HC367	
	National	MM74HC367	
	Signetics	**74HC367**	**(3003)**
	TI	SN74HC367	
M74HC368	**GE/RCA**	**CD74HC368**	**(2631)**
	Hitachi	HD74HC368	
	Motorola	MC74HC368	
	National	MM74HC368	
	Signetics	**74HC368**	**(3003)**
	TI	SN74HC368	
M74HC373	**GE/RCA**	**CD74HC373**	**(2632)**
	Hitachi	HD74HC373	
	Mitel	MD74HC373	
	Motorola	MC74HC373	
	National	MM74HC373	
	Signetics	**74HC373**	**(3003)**
	Sprague	SS74HC373	
	Supertex	SI74HC373	
	TI	SN74HC373	
M74HC374	**GE/RCA**	**CD74HC374**	**(2631)**
	Hitachi	HD74HC374	
	Mitel	MD74HC374	
	Motorola	MC74HC374	
	National	MM74HC374	
	Signetics	**74HC374**	**(3003)**
	Sprague	SS74HC374	
	TI	SN74HC374	
M74HC375	Hitachi	HD74HC375	
	TI	SN74HC375	
	Toshiba	**TC74HC375**	**(3307)**
M74HC377	**GE/RCA**	**CD74HC377**	**(2631)**
	Hitachi	HD74HC377	
	Motorola	MC74HC377	
	Signetics	**74HC377**	**(3003)**
	TI	SN74HC377	
M74HC386	Motorola	MC74HC386	
	TI	SN74HC386	
	Toshiba	**TC74HC386**	**(3307)**
M74HC390	**GE/RCA**	**CD74HC390**	**(2632)**
	Hitachi	HD74HC390	
	Motorola	MC74HC390	
	National	MM74HC390	
	Signetics	**74HC390**	**(3003)**
	TI	SN74HC390	
M74HC393	**GE/RCA**	**CD74HC393**	**(2632)**
	Hitachi	HD74HC393	
	Motorola	MC74HC393	
	National	MM74HC393	
	Signetics	**74HC393**	**(3003)**
	TI	SN74HC393	
M74HC4002	**GE/RCA**	**CD74HC4002**	**(2631)**
	Motorola	MC74HC4002	
	National	MM74HC4002	
	Signetics	**74HC4002**	**(3003)**
	TI	SN74HC4002	
M74HC4010	Motorola	MC74HC4010	
M74HC4017	**GE/RCA**	**CD74HC4017**	**(2632)**
	Motorola	MC74HC4017	
	National	MM74HC4017	
	Signetics	**74HC4017**	**(3003)**
	TI	SN74HC4017	
M74HC4020	**GE/RCA**	**CD74HC4020**	**(2632)**
	Hitachi	HD74HC4020	
	Motorola	MC74HC4020	
	National	MM74HC4020	
	Signetics	**74HC4020**	**(3003)**
	TI	SN74HC4020	
M74HC4022	**Toshiba**	**TC74HC4022**	**(3307)**
M74HC4024	**GE/RCA**	**CD74HC4024**	**(2632)**
	Hitachi	HD74HC4024	
	Motorola	MC74HC4024	
	Signetics	**74HC4024**	**(3003)**
	TI	SN74HC4024	
M74HC4028	Motorola	MC74HC4028	
M74HC4040	**GE/RCA**	**CD74HC4040**	**(2632)**
	Hitachi	HD74HC4040	
	Motorola	MC74HC4040	
	National	MM74HC4040	
	Signetics	**74HC4040**	**(3003)**
	TI	SN74HC4040	
M74HC4049	**GE/RCA**	**CD74HC4049**	**(2631)**
	Motorola	MC74HC4049	
	National	MM74HC4049	
	Signetics	**74HC4049**	**(3003)**
	TI	SN74HC4049	
M74HC4050	**GE/RCA**	**CD74HC4050**	**(2631)**
	Motorola	MC74HC4050	
		MC84HC4050	
	Signetics	PC74HC4050	
	Toshiba	**TC74HC4050**	**(3307)**
M74HC4051	**GE/RCA**	**CD74HC4051**	**(2632)**
	Motorola	MC74HC4051	
	Signetics	**74HC4051**	**(3003)**
	TI	SN74HC4051	
M74HC4052	**GE/RCA**	**CD74HC4052**	**(2632)**
	Motorola	MC74HC4052	
	Signetics	**74HC4052**	**(3003)**
	TI	SN74HC4052	
M74HC4053	**GE/RCA**	**CD74HC4053**	**(2632)**
	Motorola	MC74HC4053	
	Signetics	**74HC4053**	**(3003)**
	TI	SN74HC4053	
M74HC4060	**GE/RCA**	**CD74HC4060**	**(2632)**
	Motorola	MC74HC4060	
	National	MM74HC4060	
	Signetics	**74HC4060**	**(3003)**
	TI	SN74HC4060	
M74HC4066	Motorola	MC74HC4066	
	Signetics	PC74HC4066	
	TI	SN74HC4075	
M74HC4072	Motorola	MC74HC4072	
M74HC4075	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	GE/RCA	**CD74HC4075**	**(2631)**
		CDM5167	
	GoldStar	GM7616	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MC74HC4075	
	Panasonic	MN74HC4075	
M74HC4075			(Cont'd)
	Sharp	**LH5167**	**(2993)**
	Signetics	PC74HC4075	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Toshiba	**TC74HC4075**	**(3307)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
M74HC4078	Motorola	MC74HC4078	
	National	MM74HC4078	
	TI	SN74HC4078A	
	Toshiba	**TC74HC4078**	**(3307)**
M74HC4094	**Cypress**	**CY7C186**	**(2562)**
	GE/RCA	**CD74HC4094**	**(2631)**
	IDT	**IDT7164**	**(2802)**
	Matra-Harris	HM62641	
	Mitsubishi	AM99C88	
	Motorola	MCM61L64	
	Performance	P4C164	
	Signetics	PC74HC4094	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5585	
	Vitelic	V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
M74HC4102	Motorola	MC74HC4102	
M74HC4103	Motorola	MC74HC4103	
M74HC42	**GE/RCA**	**CD74HC42**	**(2632)**
	Hitachi	HD74HC42	
	Motorola	MC74HC42	
	National	MM74HC42	
	Signetics	**74HC42**	**(3003)**
	TI	SN74HC42	
M74HC423	**GE/RCA**	**CD74HC423**	**(2632)**
	Motorola	MC74HC423A	
	Signetics	**74HC423**	**(3003)**
M74HC4511	**GE/RCA**	**CD74HC4511**	**(2632)**
M74HC4514	**GE/RCA**	**CD74HC4514**	**(2632)**
	Hitachi	HD74HC4514	
	Motorola	MC74HC4514	
	National	MM74HC4514	
	Signetics	**74HC4514**	**(3003)**
	TI	SN74HC4514	
M74HC4515	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
M74HC4518	**Cypress**	**CY7C171**	**(2562)**
	GE/RCA	**CD74HC4518**	**(2632)**
	IDT	**IDT71681**	**(2802)**
	Signetics	PC74HC4518	
M74HC4520	**GE/RCA**	**CD74HC4520**	**(2632)**
	Signetics	**74HC4520**	**(3003)**
M74HC4538	**GE/RCA**	**CD74HC4538**	**(2632)**
	Motorola	MC74HC4538	
	National	MM74HC4538	
	Signetics	**74HC4538**	**(3003)**
M74HC4543	**Cypress**	**CY7C172**	**(2562, 2564)**
	GE/RCA	**CD74HC4543**	**(2632)**
	IDT	**IDT71682**	**(2802)**
	Motorola	MC74HC4543	

(Continued)

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
M74HC4543			(Cont'd)
	National	MM74HC4543	
	Performance	P4C1682	
	Signetics	PC74HC4543	
	Toshiba	**TC74HC4543**	**(3307)**
M74HC533	**GE/RCA**	**CD74HC533**	**(2632)**
	Hitachi	HD74HC533	
	Motorola	MC74HC533	
	National	MM74HC533	
	Signetics	**74HC533**	**(3003)**
	Sprague	SS74HC533	
	TI	SN74HC533	
M74HC534	**GE/RCA**	**CD74HC534**	**(2631)**
	Hitachi	HD74HC534	
	Motorola	MC74HC534	
	National	MM74HC534	
	Signetics	**74HC534**	**(3003)**
	Sprague	SS74HC534	
	TI	SN74HC534	
M74HC540	**GE/RCA**	**CD74HC540**	**(2631)**
	Hitachi	HD74HC540	
	Motorola	MC74HC540	
	Signetics	**74HC540**	**(3003)**
	Sprague	SS74HC540	
	TI	SN74HC540	
	Toshiba	**TC74HC540**	**(3307)**
M74HC541	**GE/RCA**	**CD74HC541**	**(2631)**
	Hitachi	HD74HC541	
	Motorola	MC74HC541	
	Signetics	**74HC541**	**(3003)**
	Sprague	SS74HC541	
	TI	SN74HC541	
M74HC563	**GE/RCA**	**CD74HC563**	**(2632)**
	Hitachi	HD74HC563	
	Motorola	MC74HC563	
	National	MM74HC563	
	Signetics	**74HC563**	**(3003)**
	Sprague	SS74HC563	
	TI	SN74HC563	
M74HC564	**GE/RCA**	**CD74HC564**	**(2631)**
	Hitachi	HD74HC564	
	Motorola	MC74HC564	
	National	MM74HC564	
	Signetics	**74HC564**	**(3003)**
	Sprague	SS74HC564	
	TI	SN74HC564	
M74HC573	**GE/RCA**	**CD74HC573**	**(2632)**
	Hitachi	HD74HC573	
	Motorola	MC74HC573	
	National	MM74HC573	
	Signetics	**74HC573**	**(3003)**
	Sprague	SS74HC573	
	TI	SN74HC573	
	Toshiba	**TC74HC573**	**(3307)**
M74HC574	**GE/RCA**	**CD74HC574**	**(2631)**
	Hitachi	HD74HC574	
	Motorola	MC74HC574	
	National	MM74HC574	
	Signetics	**74HC574**	**(3003)**
	Sprague	SS74HC574	
	TI	SN74HC574	
M74HC590	Hitachi	HD74HC590	
	TI	SN74HC590	
M74HC595	**Cypress**	**CY7C164**	**(2562)**
	Hitachi	HD74HC595	
	Inmos	**IMS1620**	**(2787)**
	Motorola	MC74HC595	
		MCM6288	
		MCM62L88	
	Performance	P4C188	
	TI	SMJ64C64	
		SN74HC595	
	Toshiba	TC55416	
	Vitelic	V61C62	
	VLSI Tech	CT64KS4	
M74HC597	**GE/RCA**	**CD74HC597**	**(2631)**
	Hitachi	HD74HC597	
	Motorola	MC74HC597	
	National	MM74HC597	
	Signetics	PC74HC597	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M74HC597			(Cont'd)
	TI	SNN74HC597	
	Toshiba	**TC74HC597**	**(3307)**
M74HC643	**GE/RCA**	**CD74HC643**	**(2631)**
	Hitachi	HD74HC643	
	Motorola	MC74HC643	
	National	MM74HC643	
	Signetics	**74HC643**	**(3003)**
	Sprague	SS74HC643	
	TI	SN74HC643	
M74HC646	**GE/RCA**	**CD74HC646**	**(2631)**
	Hitachi	HD74HC646	
	Motorola	MC74HC646	
	National	MM74HC646	
	Signetics	**74HC646**	**(3003)**
	TI	SN74HC646	
M74HC670	**GE/RCA**	**CD74HC670**	**(2631)**
	Signetics	**74HC670**	**(3003)**
	TI	SN74HC670	
M74HC688	**GE/RCA**	**CD74HC688**	**(2632)**
	Motorola	MC74HC688	
	National	MM74HC688	
	Signetics	**74HC688**	**(3003)**
	TI	SN74HC688	
	Toshiba	**TC74HC688**	**(3307)**
M74HC73	**GE/RCA**	**CD74HC73**	**(2631)**
	Hitachi	HD74HC73	
	Motorola	MC74HC73	
	National	MM74HC73	
	Signetics	**74HC73**	**(3003)**
	TI	SN74HC73	
	Toshiba	**TC74HC73**	**(3307)**
M74HC74	**GE/RCA**	**CD74HC74**	**(2631)**
	Hitachi	HD74HC74	
	Motorola	MC74HC74	
	National	MM74HC74	
	Signetics	**74HC74**	**(3003)**
	TI	SN74HC74	
	Toshiba	TC40H074	
M74HC75	**GE/RCA**	**CD74HC75**	**(2632)**
	Hitachi	HD74HC75	
	Motorola	MC74HC75	
	National	MM74HC75	
	Signetics	**74HC75**	**(3003)**
	TI	SN74HC75	
	Toshiba	**TC74HC75**	**(3307)**
M74HC76	Hitachi	HD74HC76	
	Motorola	MC74HC76	
	National	MM74HC76	
	TI	SN74HC76	
	Toshiba	TC40H076	
M74HC85	**GE/RCA**	**CD74HC85**	**(2632)**
	Motorola	MC74HC85	
	National	MM74HC85	
	Signetics	**74HC85**	**(3003)**
	TI	SN74HC85	
M74HC86	**GE/RCA**	**CD74HC86**	**(2631)**
	Hitachi	HD74HC86	
	Motorola	MC74HC86	
	National	MM74HC86	
	Signetics	**74HC86**	**(3003)**
	TI	SN74HC86	
M74HCT04	**GE/RCA**	**CD74HCT04**	**(2631)**
	Motorola	MC74HCT04	
M74HCT137	CTI	74HCT137	
	GE/RCA	**CD74HCT137**	**(2632)**
	Plessey	MV74HCT137	
	Supertex	74HCT137	
	TI	SN74HCT137	
	Toshiba	TC74HCT137	
M74HCT138	CTI	74HCT138	
	GE/RCA	**CD74HCT138**	**(2632)**
	Hitachi	HD74HCT138	
	Mitel	MD74HCT138	
	National	MM74HCT138	
	Plessey	MV74HCT138	
	Signetics	**74HCT138**	**(3003)**
	Sprague	SS74HCT138	
	TI	SN74HCT138	
	Toshiba	TC74HCT138	
M74HCT240	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M74HCT240			(Cont'd)
	National	MM74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
M74HCT241	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
M74HCT244	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
M74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
M74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
M74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
M74HCT540	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M74HCT540			(Cont'd)
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
M74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
M74HCT563	CTI	74HCT563	
	GE/RCA	**CD74HCT563**	**(2632)**
	Hitachi	HD74HCT563	
	Micrel	MIC74HCT563	
	Plessey	MV74HCT563	
	Signetics	**74HCT563**	**(3003)**
	Sprague	SS74HCT563	
	TI	SN74HCT563	
	Toshiba	TC74HCT563	
M74HCT564	CTI	74HCT564	
	GE/RCA	**CD74HCT564**	**(2631)**
	Hitachi	HD74HCT564	
	Micrel	MIC74HCT564	
	Plessey	MV74HCT564	
		MV74HCT573	
	Signetics	**74HCT564**	**(3003)**
	Sprague	SS74HCT564	
	TI	SN74HCT564	
M74HCT573	CTI	74HCT573	
	GE/RCA	**CD74HCT573**	**(2632)**
	Hitachi	HD74HCT573	
	Micrel	MIC74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	Signetics	**74HCT573**	**(3003)**
	Sprague	SS74HCT573	
	Supertex	74HCT573	
	TI	SN74HCT573	
	Toshiba	TC74HCT573	
M74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
M74HCT620	Hitachi	HD74HCT620	
	Motorola	MC74HC597	
		MC74HCT620	
	TI	SN74HCT620	
M74HCT640	**GE/RCA**	**CD74HCT640**	**(2631)**
	Hitachi	HD74HCT640	
	Motorola	MC74HCT640	
	Signetics	**74HCT640**	**(3003)**
	Sprague	SS74HCT640	
	TI	SN74HCT640	
	Toshiba	TC74HCT640	
M74HCT643	**GE/RCA**	**CD74HCT643**	**(2631)**
	Hitachi	HD74HCT643	
	Motorola	MC74HCT643	
	Signetics	**74HCT643**	**(3003)**
	TI	SN74HCT643	
	Toshiba	TC74HCT643	
M74HCU04	Motorola	MC74HCU04	
	Signetics	74HCU04	
M9306	NCR	59306	
M9346	GIM	ER5911	
	Hyundai	**HY93C46**	**(2770)**
	National	COP495	
		NMC9346	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
M9346			(Cont'd)
	NCR	59346	
		NCR59308	
	Sierra	SC22011	
MC1458	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	μPC1458	
		μPC251	
	Samsung	MC1458	
		MC4558	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
MC1488	**Motorola**	**MC1488**	**(2952, 2958)**
MC1489	Exar	XR1489A	
	Fairchild	UA150	
		UA212A	
		μA1489A	
	Motorola	**MC1489A**	**(2952, 2958)**
	National	DS1489A	
	Signetics	MC1489A	
	SiliconG	SG1489A	
	TI	SN75189A	
MC1776	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
	Thomson	μA776	
MC3302	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
MC3303	Fairchild	μA3303	
	Motorola	**MC3303**	**(2924)**
	Signetics	MC3303	
	TI	MC3303	
MC3403	**Motorola**	**MC3403**	**(2923, 2959)**
	Signetics	MC3404	
	TI	MC3403	
NE555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
NE555			(Cont'd)
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
NE556	Mitsubishi	M5E556	
	Samsung	NE556	
	Signetics	NE556	
	TI	NE556	
	Thomson	NE556	
PBL3717	RIFA	PBL3717	
	Thomson	TA3717	
	Unitrode	**UC3717**	**(3326)**
SG1524	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	μA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	
	National	LM1524	
	SGS	UC1524A	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524**	**(3323)**
		UC1524A	**(3323)**
SG1524A	Cherry	CS1525A	
	Exar	**XR1525A**	**(2607)**
	IPS	**IP1525A**	**(2854)**
	LinearTech	LT1525A	
	Motorola	**SG1525A**	**(2931)**
	SiliconG	SG1525A	
	Siliconix	PWM125	
	Unitrode	**UC1525**	**(3323)**
		UC1525A	**(3323)**
SG1527	**Unitrode**	**UC1527A**	**(3323)**
SG1527A	Cherry	CS1527A	
	IPS	**IP1527A**	**(2854)**
	LinearTech	LT1527A	
	Motorola	**SG1527A**	**(2931)**
	SiliconG	SG1527A	
	Siliconix	PWM27	
	Unitrode	**UC1527A**	**(3323)**
SG2524	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	μA2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	UC2524A	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
SG2525A	National	MM5481	
	SGS	M5481	
	SiliconG	SG2525A	
SG3524	Cherry	CS3524	
	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
	TI	SG3524	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
SG3525A	Cherry	CS3525A	
	Exar	**XR3525A**	**(2607)**
	IPS	**IP3525A**	**(2854)**
	LinearTech	LT3525A	
	Motorola	**SG3525A**	**(2931)**
	RIFA	RL3525A	
	SiliconG	SG3525A	
	Siliconix	PWM25	
	TI	SG3525A	
	Unitrode	**UC3525A**	**(3323)**
SG3527A	Cherry	CS3527	
		CS3527A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG3527A			(Cont'd)
	Exar	**XR3527A**	**(2607)**
	IPS	**IP3527**	**(2854)**
	LinearTech	LT3527A	
	Motorola	**SG3527A**	**(2931)**
	SiliconG	SG3527A	
	TI	SG3527A	
T54LS00	Fairchild	54LS00	
	Motorola	SN54LS00	
	National	DM54LS00	
	Signetics	54LS00	
	TI	SN54LS00	
T54LS02	Fairchild	54LS02	
	Motorola	SN54LS02	
	National	DM54LS02	
	Signetics	54LS02	
	TI	SN54LS02	
T54LS03	Fairchild	54LS03	
	Motorola	SN54LS03	
	National	DM54LS03	
	TI	SN54LS03	
T54LS04	Fairchild	54LS04	
	Motorola	SN54LS04	
	National	DM54LS04	
	Signetics	54LS04	
	TI	SN54LS04	
T54LS05	Fairchild	54LS05	
	Motorola	SN54LS05	
	National	DM54LS05	
	TI	SN54LS05	
T54LS08	Fairchild	54LS08	
	Motorola	SN54LS08	
	National	DM54LS08	
	Signetics	54LS08	
	TI	SN54LS08	
T54LS09	Fairchild	54LS09	
	Motorola	SN54LS09	
	National	DM54LS09	
	TI	SN54LS09	
T54LS10	Fairchild	54LS10	
	Motorola	SN54LS10	
	National	DM54LS10	
	SGS	54LS10	
	Signetics	54LS10	
	TI	SN54LS10	
T54LS109	Fairchild	54LS109	
	Motorola	SN54LS109	
	National	DM54LS109	
	SGS	54LS109	
	Signetics	54LS109	
	TI	SN54LS109	
T54LS11	Fairchild	54LS11	
	Motorola	SN54LS11	
	National	DM54LS11	
	TI	SN54LS11	
T54LS112	Fairchild	54LS112	
T54LS113	Fairchild	54LS113	
T54LS114	Fairchild	54LS114	
T54LS125	Fairchild	54LS125A	
	Motorola	SN54LS125	
		SN54LS125A	
	National	DM54LS125	
	Signetics	54LS125A	
	TI	SN54LS125A	
T54LS126	Fairchild	54LS126	
	Motorola	SN54LS126	
	National	DM54LS126	
	SGS	54LS126	
	Signetics	54LS126	
	TI	SN54LS126	
T54LS13	Fairchild	54LS13	
	Motorola	SN54LS13	
	National	DM54LS13	
	TI	SN54LS13	
T54LS132	Motorola	SN54LS132	
	National	DM54LS132	
	Signetics	54LS132	
	TI	SN54LS132	
T54LS133	Fairchild	54LS133	
	Motorola	SN54LS133	
T54LS136	Fairchild	54LS136	
	Motorola	SN54LS136	
	National	DM54LS136	
	Signetics	54LS136	
	TI	SN54LS136	
T54LS138	Fairchild	54LS138	
	Motorola	SN54LS138	
	National	DM54LS138	
	Signetics	54LS138	
	TI	SN54LS138	
T54LS139	Fairchild	54LS139	
	Motorola	SN54LS139	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
T54LS139			(Cont'd)
	National	DM54LS139	
	Signetics	54LS139	
	TI	SN54LS139A	
T54LS14	Fairchild	54LS14	
	Motorola	SN54LS14	
	National	DM54LS14	
	Signetics	54LS14	
	TI	SN54LS14	
T54LS15	Fairchild	54LS15	
	Motorola	SN54LS15	
	National	DM54LS15	
	TI	SN54LS15	
T54LS151	Fairchild	54LS151	
	Motorola	SN54LS151	
	National	DM54LS151	
	Signetics	54LS151	
	TI	SN54LS151	
T54LS152	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	54LS152	
	Hitachi	HM6789	
	Inmos	**IMS1624**	**(2788)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR64E4	
	Motorola	MCM6290	
	NEC	μPD4363	
	Toshiba	TC55417	
	Vitelic	V61C62	
T54LS153	Fairchild	54LS153	
	Motorola	SN54LS153	
	National	DM54LS153	
	Signetics	54LS153	
	TI	SN54LS153	
T54LS155	Fairchild	54LS155	
	Motorola	SN54LS155	
	National	DM54LS155	
	TI	SN54LS155A	
T54LS156	Fairchild	54LS156	
	Motorola	SN54LS156	
	National	DM54LS156	
	TI	SN54LS156	
T54LS157	Fairchild	54LS157	
	Motorola	SN54LS157	
	National	DM54LS157	
	Signetics	54LS157	
	TI	SN54LS157	
T54LS158	Fairchild	54LS158	
	Motorola	SN54LS158	
	National	DM54LS158	
	Signetics	54LS158	
	TI	SN54LS158	
T54LS160	Fairchild	54LS160A	
	Motorola	SN54LS160A	
	Signetics	54LS160A	
	TI	SN54LS160A	
T54LS161	Fairchild	54LS161A	
	Motorola	SN54LS161A	
	National	DM54LS161A	
	Signetics	54LS161A	
	TI	SN54LS161A	
T54LS162	Fairchild	54LS162A	
	Motorola	SN54LS162A	
	National	DM54LS162A	
	Signetics	54LS162A	
	TI	SN54LS162A	
T54LS163	Fairchild	54LS163A	
	Motorola	SN54LS163A	
	National	DM54LS163	
		DM54LS163A	
	Signetics	54LS163A	
	TI	SN54LS163A	
T54LS164	Fairchild	54LS164	
	Motorola	SN54LS164	
	Signetics	54LS164	
	TI	SN54LS164	
T54LS168	Fairchild	54LS168	
	Motorola	SN54LS168	
	National	DM54LS168	
T54LS169	Fairchild	54LS169	
	Motorola	SN54LS169	
	National	DM54LS169	
	TI	SN54LS169B	
T54LS170	Fairchild	54LS170	
	National	DM54LS170	
	TI	SN54LS170	
T54LS174	Fairchild	54LS174	
	Motorola	SN54LS174	
	National	DM54LS174	
	Signetics	54LS174	
	TI	SN54LS174	
T54LS175	Fairchild	54LS175	
	Motorola	SN54LS175	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
T54LS175			(Cont'd)
	National	DM54LS175	
	Signetics	54LS175	
	TI	SN54LS175	
T54LS181	Fairchild	54LS181	
	Motorola	SN54LS181	
	Signetics	54LS181	
	TI	SN54LS181	
T54LS190	Motorola	SN54LS190	
	National	DM54LS190	
	Signetics	54LS190	
	TI	SN54LS190	
T54LS191	Motorola	SN54LS191	
	National	DM54LS191	
	Signetics	54LS191	
	TI	SN54LS191	
T54LS192	Fairchild	54LS192	
	Motorola	SN54LS192	
	National	DM54LS192	
	Signetics	54LS192	
	TI	SN54LS192	
T54LS193	Fairchild	54LS193	
	Motorola	SN54LS193	
	National	DM54LS193	
	Signetics	54LS193	
	TI	SN54LS193	
T54LS194	Fairchild	54LS194A	
	Motorola	SN54LS194A	
	TI	SN54LS194A	
T54LS195	Fairchild	54LS195A	
	Motorola	SN54LS195A	
	Signetics	54LS195A	
	TI	SN54LS195A	
T54LS196	Motorola	SN54LS196	
	National	DM54LS196	
	TI	SN54LS196	
T54LS197	Motorola	SN54LS197	
	National	DM54LS197	
	Signetics	54LS197	
	TI	SN54LS197	
T54LS20	Fairchild	54LS20	
	Motorola	SN54LS20	
	National	DM54LS20	
	Signetics	54LS20	
	TI	SN54LS20	
T54LS21	Fairchild	54LS21	
	Motorola	SN54LS21	
	National	DM54LS21	
	TI	SN54LS21	
T54LS22	Fairchild	54LS22	
	National	DM54LS22	
	TI	SN54LS22	
T54LS240	Fairchild	54LS240	
	MMI	SN54LS240	
	Motorola	SN54LS240	
	TI	SN54LS240	
T54LS241	Fairchild	54LS241	
	MMI	SN54LS241	
	Motorola	SN54LS241	
	TI	SN54LS241	
T54LS244	Fairchild	54LS244	
	MMI	SN54LS244	
	Motorola	SN54LS244	
	TI	SN54LS244	
T54LS251	Fairchild	54LS251	
	Motorola	SN54LS251	
	Signetics	54LS251	
	TI	SN54LS251	
T54LS253	Fairchild	54LS253	
	Motorola	SN54LS253	
	National	DM54LS253	
		DM7214	
	Signetics	54LS253	
	TI	SN54LS253	
T54LS256	Fairchild	54LS256	
	Motorola	SN54LS256	
T54LS257	Fairchild	54LS257A	
	National	DM54LS257	
T54LS259	Fairchild	54LS259	
	Motorola	SN54LS259	
	TI	SN54LS259B	
T54LS26	Fairchild	54LS26	
	Motorola	SN54LS26	
	National	DM54LS26	
	TI	SN54LS26	
T54LS260	Fairchild	54LS260	
	Motorola	SN54LS260A	
	Signetics	54LS260A	
T54LS266	Fairchild	54LS266	
	Motorola	SN54LS266	
			(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
T54LS266			(Cont'd)
	National	DM54LS266	
	Signetics	54LS266	
	TI	SN54LS266	
T54LS27	Fairchild	54LS27	
	Motorola	SN54LS27	
	National	DM54LS27	
	TI	SN54LS27	
T54LS273	Fairchild	54LS273	
	MMI	SN54LS273	
	Motorola	SN54LS273	
	Signetics	54LS273	
	TI	SN54LS273	
T54LS279	Fairchild	54LS279	
	Motorola	SN54LS279	
	National	DM54LS279	
	Signetics	54LS279	
	TI	SN54LS279A	
T54LS28	Fairchild	54LS28	
	Motorola	SN54LS28	
	Signetics	54LS194A	
		54LS28	
	TI	SN54LS28	
T54LS280	Motorola	SN54LS280	
	TI	SN54LS280	
T54LS283	Fairchild	54LS283	
	Motorola	SN54LS283	
	National	DM54LS283	
	Signetics	54LS283	
	TI	SN54LS283	
T54LS290	Motorola	SN54LS290	
	National	DM54LS290	
	Signetics	54LS290	
	TI	SN54LS290	
T54LS293	Motorola	SN54LS293	
	National	DM54LS293	
	Signetics	54LS293	
	TI	SN54LS293	
T54LS295	Fairchild	54LS295A	
	Motorola	SN54LS295A	
	TI	SN54LS295B	
T54LS298	Fairchild	54LS298	
	Motorola	SN54LS298	
	National	DM54LS298	
	SGS	54LS298	
	Signetics	54LS298	
	TI	SN54LS298	
T54LS30	Fairchild	54LS30	
	Motorola	SN54LS30	
	National	DM54LS30	
	Signetics	54LS30	
	TI	SN54LS30	
T54LS32	Fairchild	54LS32	
	Motorola	SN54LS32	
	National	DM54LS32	
	Signetics	54LS32	
	TI	SN54LS32	
T54LS33	Fairchild	54LS33	
	Motorola	SN54LS33	
	TI	SN54LS33	
T54LS352	Fairchild	54LS352	
	Motorola	SN54LS352	
	National	DM54LS352	
	TI	SN54LS352	
T54LS353	Fairchild	54LS353	
	Motorola	SN54LS353	
	National	DM54LS353	
	SGS	T54LS354	
	TI	SN54LS353	
T54LS354	Fairchild	54LS353	
	Motorola	SN54LS353	
	National	DM54LS353	
	SGS	T54LS353	
	TI	SN54LS353	
T54LS365	Fairchild	54LS365A	
	Motorola	SN54LS365A	
	Signetics	54LS365	
		54LS365A	
	TI	SN54LS365A	
T54LS366	Fairchild	54LS366A	
	Motorola	SN54LS366A	
	National	DM54LS366	
	Signetics	54LS366A	
	TI	SN54LS366A	
T54LS367	Fairchild	54LS367A	
	Motorola	SN54LS367A	
	National	DM54LS367	
	Signetics	54LS367	
		54LS367A	
	TI	SN54LS367A	
T54LS368	Fairchild	54LS368A	
	Motorola	SN54LS368A	
			(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
T54LS368			(Cont'd)
	National	DM54LS368	
	Signetics	54LS368	
		54LS368A	
	TI	SN54LS368A	
T54LS37	Fairchild	54LS37	
	Motorola	SN54LS37	
	National	DM54LS37	
	Signetics	54LS37	
	TI	SN54LS37	
T54LS373	MMI	SN54LS373	
	Motorola	SN54LS373	
	Signetics	54LS373	
	TI	SN54LS373	
T54LS374	Fairchild	54LS374	
	MMI	SN54LS374	
	Motorola	SN54LS374	
	National	DM54LS374	
	TI	SN54LS374	
T54LS377	Fairchild	54LS377	
	Motorola	SN54LS377	
	Signetics	54LS377	
	TI	SN54LS377	
T54LS378	Fairchild	54LS378	
T54LS379	AMD	SN54LS379	
	Fairchild	54LS379	
	Motorola	SN54LS379	
	TI	SN54LS379	
T54LS38	Fairchild	54LS38	
	Motorola	SN54LS38	
	National	DM54LS38	
	TI	SN54LS38	
T54LS390	Motorola	SN54LS390	
	TI	SN54LS390	
T54LS393	Motorola	SN54LS393	
	TI	SN54LS393	
T54LS395	Fairchild	54LS395	
	Motorola	SN54LS395	
	Signetics	54LS395	
	TI	SN54LS395	
T54LS40	Fairchild	54LS40	
	Motorola	SN54LS40	
	National	DM54LS40	
	TI	SN54LS40	
T54LS42	Fairchild	54LS42	
	Motorola	SN54LS42	
	National	DM54LS42	
	Signetics	54LS42	
	TI	SN54LS42	
T54LS490	Fairchild	54LS490	
	Motorola	SN54LS490	
	TI	SN54LS490	
T54LS51	Fairchild	54LS51	
	Motorola	SN54LS51	
	National	DM54LS51	
	Signetics	54LS51	
	TI	SN54LS51	
T54LS54	Fairchild	54LS54	
	Motorola	SN54LS54	
	National	DM54LS54	
	TI	SN54LS54	
T54LS55	Fairchild	54LS55	
	Motorola	SN54LS55	
	National	DM54LS55	
T54LS670	Fairchild	54LS670	
	Motorola	SN54LS670	
	National	DM54LS670	
	Signetics	54LS670	
	TI	SN54LS670	
T54LS74	Fairchild	54LS74	
	Motorola	SN54LS74A	
	National	DM54LS74	
		DM54LS74A	
	Signetics	54LS74	
	TI	SN54LS74A	
T54LS83	Fairchild	54LS83A	
	Motorola	SN54LS83A	
	National	DM54LS83A	
	Signetics	54LS83	
		54LS83A	
	TI	SN54LS83A	
T54LS86	Motorola	SN54LS86	
	National	DM54LS86	
	Signetics	54LS86	
	TI	SN54LS86A	
T54LS90	Motorola	SN54LS90	
	National	DM54LS90	
	Signetics	54LS90	
	TI	SN54LS90	
T54LS92	Motorola	SN54LS92	
	National	DM54LS92	
			(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
T54LS92			(Cont'd)
	Signetics	54LS92	
	TI	SN54LS92	
T54LS93	Motorola	SN54LS93	
	National	DM54LS93	
	Signetics	54LS93	
	TI	SN54LS93	
T54LS95	Fairchild	54LS95B	
	Motorola	SN54LS95B	
	National	DM54LS95B	
	Signetics	54LS95B	
	TI	SN54LS95B	
T74LS00	Fairchild	74LS00	
	Hitachi	HD74LS00	
	Motorola	SN74LS00	
	National	DM74LS00	
	Panasonic	DN74LS00	
	Signetics	**74LS00**	**(3003)**
	TI	SN74LS00	
T74LS02	Fairchild	74LS02	
	Hitachi	HD74LS02	
	Motorola	SN74LS02	
	National	DM74LS02	
	Panasonic	DN74LS02	
	Signetics	**74LS02**	**(3003)**
	TI	SN74LS02	
T74LS03	Fairchild	74LS03	
	Hitachi	HD74LS03	
	Motorola	SN74LS03	
	National	DM74LS03	
	Panasonic	DN74LS03	
	TI	SN74LS03	
T74LS04	Fairchild	74LS04	
	Hitachi	HD74LS04	
	Motorola	SN74LS04	
	National	DM74LS04	
	Panasonic	DN74LS04	
	Signetics	**74LS04**	**(3003)**
	TI	SN74LS04	
T74LS05	Fairchild	74LS05	
	Hitachi	HD74LS05	
	Motorola	SN74LS05	
	National	DM74LS05	
	Panasonic	DN74LS05	
	Signetics	**74LS05**	**(3003)**
	TI	SN74LS05	
T74LS08	Fairchild	74LS08	
	Hitachi	HD74LS08	
	Motorola	SN74LS08	
	National	DM74LS08	
	Panasonic	DN74LS08	
	Signetics	**74LS08**	**(3003)**
	TI	SN74LS08	
T74LS09	Fairchild	74LS09	
	Hitachi	HD74LS09	
	Motorola	SN74LS09	
	National	DM74LS09	
	Panasonic	DN74LS09	
	TI	SN74LS09	
T74LS10	Fairchild	74LS10	
	Hitachi	HD74LS10	
	Motorola	SN74LS10	
	National	DM74LS10	
	Panasonic	DN74LS10	
	Signetics	**74LS10**	**(3003)**
	TI	SN74LS10	
T74LS109	Fairchild	74LS109	
	Hitachi	HD74LS109	
	Motorola	SN74LS109	
	National	DM74LS109	
	Panasonic	DN74LS109	
	Signetics	**74LS109**	**(3003)**
	TI	SN74LS109A	
T74LS11	Fairchild	74LS11	
	Hitachi	HD74LS11	
	Motorola	SN74LS11	
	National	DM74LS11	
	Panasonic	DN74LS11	
	Signetics	**74LS11**	**(3003)**
	TI	SN74LS11	
T74LS112	Fairchild	74LS112	
	Hitachi	HD74LS112	
	Motorola	SN74LS112A	
	National	DM74LS112	
	Panasonic	DN74LS112	
	Signetics	**74LS112**	**(3003)**
	TI	SN74LS112A	
T74LS113	Hitachi	HD74LS113	
	Motorola	SN74LS113A	
	National	DM74LS113	
	Panasonic	DN74LS113	
			(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
T74LS113			(Cont'd)
	Signetics	**74LS113**	**(3003)**
	TI	SN74LS113A	
T74LS114	Hitachi	HD74LS114	
	Motorola	SN74LS114A	
	National	DM74LS114	
	Panasonic	DN74LS114	
	TI	SN74LS114A	
T74LS125	Fairchild	74LS125A	
	Motorola	SN74LS125A	
	National	DM74LS125	
	Panasonic	DN74LS125A	
	Signetics	**74LS125A**	**(3003)**
	TI	SN74LS125A	
T74LS126	Fairchild	74LS126	
	Motorola	SN74LS126A	
	National	DM74LS126	
	Signetics	**74LS126A**	**(3003)**
	TI	SN74LS126A	
T74LS13	Fairchild	74LS13	
	Hitachi	HD74LS13	
	Motorola	SN74LS13	
	National	DM74LS13	
	Panasonic	DN74LS13	
	Signetics	**74LS13**	**(3003)**
	TI	SN74LS13	
T74LS132	Fairchild	74LS132	
	Hitachi	HD74LS132	
	Motorola	SN74LS132	
	National	DM74LS132	
	Panasonic	DN74LS132	
	Signetics	**74LS132**	**(3003)**
	TI	SN74LS132	
T74LS136	Fairchild	74LS136	
	Hitachi	HD74LS136	
	Motorola	SN74LS136	
	National	DM74LS136	
	Panasonic	DN74LS136	
	Signetics	**74LS136**	**(3003)**
	TI	SN74LS136	
T74LS138	Fairchild	74LS138	
	Hitachi	HD74LS138	
	Motorola	SN74LS138	
	National	DM74LS138	
	Panasonic	DN74LS138	
	Signetics	**74LS138**	**(3003)**
	TI	SN74LS138	
T74LS139	Fairchild	74LS139	
	Hitachi	HD74LS139	
	Motorola	SN74LS139	
	National	DM74LS139	
	Panasonic	DN74LS139	
	Signetics	**74LS139**	**(3003)**
	TI	SN74LS139A	
T74LS15	Fairchild	74LS15	
	Motorola	SN74LS15	
	National	DM74LS15	
	Panasonic	DN74LS15	
	TI	SN74LS15	
T74LS151	Fairchild	74LS151	
	Hitachi	HD74LS151	
		HD74LS151A	
	Motorola	SN74LS151	
	National	DM74LS151	
	Panasonic	DN74LS151	
	Signetics	**74LS151**	**(3003)**
	TI	SN74LS151	
T74LS152	TI	SN74LS152	
T74LS153	Fairchild	74LS153	
	Hitachi	HD74LS153	
	Motorola	SN74LS153	
	National	DM74LS153	
	Panasonic	DN74LS153	
	Signetics	**74LS153**	**(3003)**
	TI	SN74LS153	
T74LS156	Fairchild	74LS156	
	Hitachi	HD74LS156	
	Motorola	SN74LS156	
	National	DM74LS156	
	Panasonic	DN74LS156	
	Signetics	**74LS156**	**(3003)**
	TI	SN74LS156	
T74LS157	Fairchild	74LS157	
	Hitachi	HD74LS157	
	Motorola	SN74LS157	
	National	DM74LS157	
	Panasonic	DN74LS157	
	Signetics	**74LS157**	**(3003)**
	TI	SN74LS157	
T74LS158	Fairchild	74LS158	
	Hitachi	HD74LS158	
	Motorola	SN74LS158	
	National	DM74LS158	
	Panasonic	DN74LS158	
	Signetics	**74LS158**	**(3003)**
	TI	SN74LS158	
T74LS160	Fairchild	74LS160	
	Hitachi	HD74LS160A	
	Motorola	SN74LS160A	
	National	DM74LS160	
	Panasonic	DN74LS160A	
	Signetics	**74LS160**	**(3003)**
		74LS160A	**(3003)**
	TI	SN74LS160A	
T74LS161	Fairchild	74LS161A	
	Hitachi	HD74LS161A	
	Motorola	SN74LS161A	
	National	DM74LS161	
	Panasonic	DN74LS161A	
	Signetics	**74LS161A**	**(3003)**
	TI	SN74LS161A	
T74LS162	Fairchild	74LS162	
	Hitachi	HD74LS162A	
	Motorola	SN74LS162A	
	National	DM74LS162	
	Panasonic	DN74LS162A	
	Signetics	**74LS162A**	**(3003)**
	TI	SN74LS162A	
T74LS163	Fairchild	74LS163	
	Hitachi	HD74LS163	
		HD74LS163A	
	Motorola	SN74LS163A	
	National	DM74LS163	
	Panasonic	DN74LS163A	
	Signetics	**74LS163A**	**(3003)**
	TI	SN74LS163A	
T74LS164	Fairchild	74LS164	
	Hitachi	HD74LS164	
	Motorola	SN74LS164A	
	National	DM74LS164	
	Panasonic	DN74LS164	
	Signetics	**74LS164**	**(3003)**
		74LS164A	**(3003)**
	TI	SN74LS164	
T74LS165	Fairchild	74LS165	
	Motorola	SN74LS165	
	TI	SN74LS165A	
T74LS169	Fairchild	74LS169	
	Hitachi	HD74LS169	
	Motorola	SN74LS169	
	National	DM74LS169	
	Signetics	**74LS169A**	**(3003)**
	TI	SN74LS169	
T74LS170	Fairchild	74LS170	
	Motorola	SN74LS170	
	National	DM74LS170	
	Panasonic	DN74LS170	
	Signetics	**74LS170**	**(3003)**
	TI	SN74LS170	
T74LS173	Fairchild	74LS173	
	Motorola	SN74LS173A	
	National	DM74LS173	
	Panasonic	DN74LS173	
	Signetics	**74LS173**	**(3003)**
	TI	SN74LS173A	
T74LS174	Fairchild	74LS174	
	Hitachi	HD74LS174	
	Motorola	SN74LS174	
	National	DM74LS174	
	Panasonic	DN74LS174	
	Signetics	**74LS174**	**(3003)**
	TI	SN74LS174	
T74LS175	Fairchild	74LS175	
	Hitachi	HD74LS175	
	Motorola	SN74LS175	
	Panasonic	DN74LS175	
	Signetics	**74LS175**	**(3003)**
	TI	SN74LS175	
T74LS181	Fairchild	74LS181	
	Hitachi	HD74LS181	
	Motorola	SN74LS181	
	Signetics	**74LS181**	**(3003)**
	TI	SN74LS181	
T74LS190	Fairchild	74LS190	
	Hitachi	HD74LS190	
	Motorola	SN74LS190	
	National	DM74LS190	
	Panasonic	DN74LS190	
	TI	SN74LS190	
T74LS191	Fairchild	74LS191	
	Hitachi	HD74LS191	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
T74LS191			(Cont'd)
	Motorola	SN74LS191	
	National	DM74LS191	
	Panasonic	DN74LS191	
	Signetics	**74LS191**	**(3003)**
	TI	SN74LS191	
T74LS192	Fairchild	74LS192	
	Hitachi	HD74LS192	
	Motorola	SN74LS192	
	National	DM74LS192	
	Panasonic	DN74LS192	
	Signetics	**74LS192**	**(3003)**
	TI	SN74LS192	
T74LS193	Fairchild	74LS193	
	Hitachi	HD74LS193	
	Motorola	SN74LS193	
	National	DM74LS193	
	Panasonic	DN74LS193	
	Signetics	**74LS193**	**(3003)**
	TI	SN74LS193	
T74LS194A	Fairchild	74LS194A	
	Hitachi	HD74LS194A	
	Motorola	SN74LS194A	
	National	DM74LS194	
	Panasonic	DN74LS194A	
	Signetics	**74LS194A**	**(3003)**
	TI	SN74LS194A	
T74LS195A	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
T74LS196	Fairchild	74LS196	
	Hitachi	HD74LS196	
	Motorola	SN74LS196	
	National	DM74LS196	
	Panasonic	DN74LS196	
	Signetics	N82S80	
	TI	SN74LS196	
T74LS197	Fairchild	74LS197	
	Hitachi	HD74LS197	
	Motorola	SN74LS197	
	National	DM74LS197	
	Panasonic	DN74LS197	
	Signetics	**74LS197**	**(3003)**
	TI	SN74LS197	
T74LS20	Fairchild	74LS20	
	Hitachi	HD74LS20	
	Motorola	SN74LS20	
	National	DM74LS20	
	Panasonic	DN74LS20	
	Signetics	**74LS20**	**(3003)**
	TI	SN74LS20	
T74LS21	Fairchild	74LS21	
	Hitachi	HD74LS21	
	Motorola	SN74LS21	
	National	DM74LS21	
	Panasonic	DN74LS21	
	Signetics	**74LS21**	**(3003)**
	TI	SN74LS21	
T74LS22	Hitachi	HD74LS22	
	Motorola	SN74LS22	
	National	DM74LS22	
	Panasonic	DN74LS22	
T74LS240	Fairchild	74LS240	
	Hitachi	HD74LS240	
	Motorola	SN74LS240	
	Panasonic	DN74LS240	
	Signetics	**74LS240**	**(3003)**
	TI	SN74LS240	
T74LS241	Fairchild	74LS241	
	Hitachi	HD74LS241	
	Motorola	SN74LS241	
	Panasonic	DN74LS241	
	Signetics	**74LS241**	**(3003)**
	TI	SN74LS241	
T74LS244	Fairchild	74LS244	
	Hitachi	HD74LS244	
	Motorola	SN74LS244	
	Panasonic	DN74LS244	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
T74LS244			(Cont'd)
	Signetics	**74LS244**	**(3003)**
	TI	SN74LS244	
T74LS248	Fairchild	74LS248	
	Hitachi	HD74LS248	
	Motorola	SN74LS248	
	National	DM74LS248	
T74LS249	Fairchild	74LS249	
	Hitachi	HD74LS249	
	Motorola	SN74LS249	
	National	DM74LS249	
T74LS251	Fairchild	74LS251	
	Hitachi	HD74LS251	
	Motorola	SN74LS251	
	National	DM74LS251	
	Panasonic	DN74LS251	
	Signetics	**74LS251**	**(3003)**
	TI	SN74LS251	
T74LS253	Fairchild	74LS253	
	Hitachi	HD74LS253	
	Motorola	SN74LS253	
	National	DM74LS253	
		DM8214	
	Panasonic	DN74LS253	
	Signetics	**74LS253**	**(3003)**
	TI	SN74LS253	
T74LS256	TI	SN74LS256	
T74LS257	Fairchild	74LS257A	
	Hitachi	HD74LS257	
	Motorola	SN74LS257A	
	National	DM74LS257	
	Signetics	**74LS257**	**(3003)**
		74LS257A	**(3003)**
	TI	SN74LS257B	
T74LS258	Fairchild	74LS258A	
	Hitachi	HD74LS258	
	Motorola	SN74LS258A	
	National	DM74LS258	
	Panasonic	DN74LS258A	
	Signetics	**74LS258**	**(3003)**
	TI	SN74LS258B	
T74LS259	Fairchild	74LS259	
	Motorola	SN74LS259	
	Signetics	**74LS259**	**(3003)**
	TI	SN74LS259B	
T74LS26	Fairchild	74LS26	
	Hitachi	HD74LS26	
	Motorola	SN74LS26	
	National	DM74LS26	
	Panasonic	DN74LS26	
	Signetics	**74LS26**	**(3003)**
	TI	SN74LS26	
T74LS260	Panasonic	DN74LS260	
	TI	SN74LS260	
T74LS266	Fairchild	74LS266	
	Motorola	SN74LS266	
	National	DM74LS266	
	Panasonic	DN74LS266	
	Raytheon	RC8242	
	Signetics	**74LS266**	**(3003)**
		N8242	**(3022)**
	TI	SN74LS266	
T74LS27	Fairchild	74LS27	
	Hitachi	HD74LS27	
	Motorola	SN74LS27	
	National	DM74LS27	
	Panasonic	DN74LS27	
	Signetics	**74LS27**	**(3003)**
	TI	SN74LS27	
T74LS273	Fairchild	74LS273	
	Motorola	SN74LS273	
	Signetics	**74LS273**	**(3003)**
	TI	SN74LS273	
T74LS279	Fairchild	74LS279	
	Hitachi	HD74LS279	
	Motorola	SN74LS279	
	National	DM74LS279	
	Panasonic	DN74LS279	
	Signetics	74LS279	
	TI	SN74LS279A	
T74LS28	Fairchild	74LS28	
	Motorola	SN74LS28	
	TI	SN74LS28	
T74LS280	Hitachi	HD74LS280	
	Motorola	SN74LS280	
	Panasonic	DN74LS280	
	TI	SN74LS280	
T74LS283	Fairchild	74LS283	
	Hitachi	HD74LS283	
		HD74LS283A	
	Motorola	SN74LS283	
	National	DM74LS283	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
T74LS283			(Cont'd)
	Panasonic	DN74LS283	
	Signetics	**74LS283**	**(3003)**
	TI	SN74LS283	
T74LS290	Fairchild	74LS290	
	Hitachi	HD74LS290	
	Motorola	SN74LS290	
	National	DM74LS290	
	Panasonic	DN74LS290	
	Signetics	**74LS290**	**(3003)**
	TI	SN74LS290	
T74LS292	TI	SN74LS292	
T74LS293	Fairchild	74LS293	
	Hitachi	HD74LS293	
	Motorola	SN74LS293	
	National	DM74LS293	
	Panasonic	DN74LS293	
	Signetics	**74LS293**	**(3003)**
	TI	SN74LS293	
T74LS295A	Fairchild	74LS295A	
	Motorola	SN74LS295A	
	Signetics	**74LS295A**	**(3003)**
		74LS295B	**(3003)**
	TI	SN74LS295B	
T74LS298	Fairchild	74LS298	
	Hitachi	HD74LS298	
	Motorola	SN74LS298	
	Signetics	**74LS298**	**(3003)**
	TI	SN74LS298	
T74LS299	AMD	SN74LS299	
	Fairchild	74LS299	
	Hitachi	HD74LS299	
	Motorola	SN74LS299	
	TI	SN74LS299	
T74LS30	Fairchild	74LS30	
	Hitachi	HD74LS30	
	Motorola	SN74LS30	
	National	DM74LS30	
	Panasonic	DN74LS30	
	Signetics	**74LS30**	**(3003)**
	TI	SN74LS30	
T74LS33	Fairchild	74LS33	
	Motorola	SN74LS33	
	Panasonic	DN74LS33	
	Signetics	**74LS33**	**(3003)**
	TI	SN74LS33	
T74LS352	Fairchild	74LS352	
	Motorola	SN74LS352	
	National	DM74LS352	
	TI	SN74LS352	
T74LS353	Fairchild	74LS353	
	Motorola	SN74LS353	
	National	DM74LS353	
	TI	SN74LS353	
T74LS365	Fairchild	74LS365A	
	Motorola	SN74LS365A	
	National	DM74LS365	
	Panasonic	DN74LS365A	
	SGS	T74LS365A	
	Signetics	**74LS365**	**(3003)**
		74LS365A	**(3003)**
	TI	SN74LS365A	
T74LS365A	Fairchild	74LS365A	
	Motorola	SN74LS365A	
	National	DM74LS365	
	Panasonic	DN74LS365A	
	SGS	T74LS365	
	Signetics	**74LS365**	**(3003)**
		74LS365A	**(3003)**
	TI	SN74LS365A	
T74LS366	Fairchild	74LS366A	
	Motorola	SN74LS366A	
	National	DM74LS366	
	Panasonic	DN74LS366A	
	SGS	T74LS366A	
	Signetics	**74LS366A**	**(3003)**
	TI	SN74LS366A	
T74LS366A	Fairchild	74LS366A	
	Motorola	SN74LS366A	
	National	DM74LS366	
	Panasonic	DN74LS366A	
	SGS	T74LS366	
	Signetics	**74LS366A**	**(3003)**
	TI	SN74LS366A	
T74LS367	Fairchild	74LS367A	
	Hitachi	HD74LS367	
		HD74LS367A	
	Motorola	SN74LS367A	
	National	DM74LS367	
	Panasonic	DN74LS367A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
T74LS367			(Cont'd)
	SGS	T74LS367A	
	Signetics	**74LS367**	**(3003)**
		74LS367A	**(3003)**
	TI	SN74LS367A	
T74LS367A	Fairchild	74LS367A	
	Hitachi	HD74LS367	
		HD74LS367A	
	Motorola	SN74LS367A	
	National	DM74LS367	
	Panasonic	DN74LS367A	
	SGS	T74LS367	
	Signetics	**74LS367**	**(3003)**
		74LS367A	**(3003)**
	TI	SN74LS367A	
T74LS368	Fairchild	74LS368A	
	Hitachi	HD74LS368	
	Motorola	SN74LS368A	
	National	DM74LS368	
	Panasonic	DN74LS368A	
	Signetics	**74LS368**	**(3003)**
		74LS368A	**(3003)**
	TI	SN74LS368A	
T74LS37	Fairchild	74LS37	
	Hitachi	HD74LS37	
	Motorola	SN74LS37	
	National	DM74LS37	
	Panasonic	DN74LS37	
	Signetics	74LS37	
	TI	SN74LS37	
T74LS373	Fairchild	74LS373	
	Motorola	SN74LS373	
	Panasonic	DN74LS373	
	Signetics	**74LS373**	**(3003)**
	TI	SN74LS373	
T74LS374	Fairchild	74LS374	
	Motorola	SN74LS374	
	National	DM74LS374	
	Signetics	**74LS374**	**(3003)**
	TI	SN74LS374	
T74LS377	Fairchild	74LS377	
	Motorola	SN74LS377	
	Signetics	**74LS377**	**(3003)**
	TI	SN74LS377	
T74LS378	AMD	SN74LS378	
	Fairchild	74LS378	
	Motorola	SN74LS378	
	Signetics	**74LS378**	**(3003)**
	TI	SN74LS378	
T74LS379	Fairchild	74LS379	
	Motorola	SN74LS379	
	TI	SN74LS379	
T74LS38	Fairchild	74LS38	
	Hitachi	HD74LS38	
	Motorola	SN74LS38	
	National	DM74LS38	
	Panasonic	DN74LS38	
	Signetics	**74LS38**	**(3003)**
	TI	SN74LS38	
T74LS390	Fairchild	74LS390	
	Motorola	SN74LS390	
	Panasonic	DN74LS390	
	TI	SN74LS390	
T74LS393	Fairchild	74LS393	
	Motorola	SN74LS393	
	Panasonic	DN74LS393	
	Signetics	**74LS393**	**(3003)**
	TI	SN74LS393	
T74LS395	Fairchild	74LS395	
	National	DM74LS395	
	Panasonic	DN74LS395A	
	Signetics	**74LS395**	**(3003)**
	TI	SN74LS395A	
T74LS399	AMD	SN74LS399	
	Motorola	SN74LS399	
	TI	SN74LS399	
T74LS40	Fairchild	74LS40	
	Hitachi	HD74LS40	
	Motorola	SN74LS40	
	National	DM74LS40	
	Panasonic	DN74LS40	
	Signetics	**74LS40**	**(3003)**
	TI	SN74LS40	
T74LS42	Fairchild	74LS42	
	Hitachi	HD74LS42	
	Motorola	SN74LS42	
	National	DM74LS42	
	Panasonic	DN74LS42	
	Signetics	**74LS42**	**(3003)**
	TI	SN74LS42	
T74LS47	Fairchild	74LS47	
	Hitachi	HD74LS47	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
T74LS47			(Cont'd)
	Motorola	SN74LS47	
	National	DM74LS47	
	TI	SN74LS47	
T74LS48	Fairchild	74LS48	
	Hitachi	HD74LS48	
	Motorola	SN74LS48	
	National	DM74LS48	
	Signetics	74LS48	
T74LS49	Hitachi	HD74LS49	
	Motorola	SN74LS49	
	National	DM74LS49	
	TI	SN74LS49	
T74LS490	Fairchild	74LS490	
	Motorola	SN74LS490	
	Panasonic	DN74LS490	
	Signetics	**74LS490**	**(3003)**
T74LS51	Fairchild	74LS51	
	Hitachi	HD74LS51	
	Motorola	SN74LS51	
	National	DM74LS51	
	Panasonic	DN74LS51	
	Signetics	**74LS51**	**(3003)**
	TI	SN74LS51	
T74LS54	Fairchild	74LS54	
	Hitachi	HD74LS54	
	Motorola	SN74LS54	
	National	DM74LS54	
	Panasonic	DN74LS54	
	Signetics	**74LS54**	**(3003)**
	TI	SN74LS54	
T74LS55	Fairchild	74LS55	
	Hitachi	HD74LS55	
	Motorola	SN74LS55	
	National	DM74LS55	
	Panasonic	DN74LS55	
	TI	SN74LS55	
T74LS670	Fairchild	74LS670	
	Motorola	SN74LS670	
	National	DM74LS670	
	Signetics	**74LS670**	**(3003)**
	TI	SN74LS670	
T74LS74	Fairchild	74LS74	
	Hitachi	HD74LS74	
		HD74LS74A	
	Motorola	SN74LS74A	
	National	DM74LS74	
	Panasonic	DN74LS74A	
	Signetics	74LS74	
	TI	SN74LS74A	
T74LS83	Fairchild	74LS83A	
	Hitachi	HD74LS183A	
		HD74LS83A	
	Motorola	SN74LS83A	
	National	DM74LS83A	
	Panasonic	DN74LS83A	
	Signetics	**74LS83**	**(3003)**
		74LS83A	**(3003)**
	TI	SN74LS83A	
T74LS86	Fairchild	74LS86	
	Hitachi	HD74LS86	
	Motorola	SN74LS86	
	National	DM74LS86	
	Panasonic	DN74LS86	
	Signetics	**74LS86**	**(3003)**
	TI	SN74LS86A	
T74LS90	Fairchild	74LS90	
	Motorola	SN74LS90	
	National	DM74LS90	
	Panasonic	DN74LS90	
	Signetics	**74LS90**	**(3003)**
	TI	SN74LS90	
T74LS92	Hitachi	HD74LS92	
	Motorola	SN74LS92	
	National	DM74LS92	
	Panasonic	DN74LS92	
	Signetics	**74LS92**	**(3003)**
	TI	SN74LS92	
T74LS93	Hitachi	HD74LS93	
	Motorola	SN74LS93	
	National	DM74LS93	
	Panasonic	DN74LS93	
	Signetics	**74LS93**	**(3003)**
	TI	SN74LS93	
T74LS95	Fairchild	74LS95B	
	Hitachi	HD74LS95B	
	Motorola	SN74LS95B	
	National	DM74LS95B	
	Panasonic	DN74LS95B	
	SGS	T74LS95B	
	Signetics	**74LS95B**	**(3003)**
	TI	SN74LS95B	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
T74LS95B	Fairchild	74LS95B	
	Hitachi	HD74LS95B	
	Motorola	SN74LS95B	
	National	DM74LS95B	
	Panasonic	DN74LS95B	
	SGS	T74LS95	
	Signetics	**74LS95B**	**(3003)**
	TI	SN74LS95B	
TBA231	Exar	XR4739	
	Fairchild	μA739	
		μA749	
	National	LM1303	
	Raytheon	RC4739	
	TI	SN76131	
		SN76149	
TBA331	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
TBA800	Fairchild	TBA800	
	Plessey	TBA800	
	Telefunken	TDA800	
TBA810	Fairchild	TBA810	
	Telefunken	TDA810	
TBA820	MCE	MCE820	
	TI	SN76001	
	Thomson	TBA820	
TBA830	Thomson	TBA830	
TDA1170	Fairchild	μA7327	
	GoldStar	**GL1170**	**(2699)**
	Sprague	ULN2270	
	Telefunken	TDA1170	
TDA1190Z	SGS	TDA3190	
	Sprague	ULN2290	
TDA1220	**GoldStar**	**GL5901**	**(2699)**
TDA2002	Hitachi	TDA2002	
	NEC	μPC2002	
TDA2005	NEC	μPC2005	
TDA2006	Thomson	TDA2006	
TDA2030	MicroLinear	ML510	
	Telefunken	TDA2030	
	Thomson	TDA2030	
TDA2140	Telefunken	TDA2140	
TDA2151	Telefunken	TDA2151	
TDA2161	Telefunken	TDA2161	
TDA3190	SGS	TDA1190Z	
	Sprague	ULN2290	
TDA440	National	TDA440	
	Plessey	TDA440	
TL072	AnalogSys	MA336	
	Fairchild	μA772	
	Motorola	**MC34002**	**(2922)**
	NEC	μPC4072	
		μPC4082	
	TI	TL072	
		TL082C	
	Toshiba	TA75072	
		TA75074	
TL074	NEC	μPC4074	
	Toshiba	TA75074	
TL082	Exar	XR082	
	GE/RCA	**CA082**	**(2645)**
	TI	HA17082	
		TL082	
	Thomson	LF353	
TL084	Exar	XR084	
	Fairchild	μAF774	
	GE/RCA	**CA084**	**(2645)**
	TI	TL084	
TL74LS133	Fairchild	74LS133	
	Motorola	SN74LS133	
TS4LS393	TI	SN54LS399	
UC1524A	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	μA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
UC1524A			(Cont'd)
	National	LM1524	
	SGS	SG1524	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524**	**(3323)**
		UC1524A	**(3323)**
UC1840	SiliconG	SG1840	
	Unitrode	**UC1840**	**(3323)**
UC1844-45	IPS	1844-45	
	Unitrode	**UC1844-45**	**(3323)**
UC2524A	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	μA2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	SG2524	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
UC2840	SiliconG	SG2840	
	Unitrode	**UC2840**	**(3323)**
UC3524A	Cherry	CS3524	
	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	SG3524	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
	TI	SG3524	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
UC3840	**Unitrode**	**UC3840**	**(3323)**
UC3842	SiliconG	SG3842	
	Unitrode	**UC3842**	**(3323)**
♦ UC3846	LinearTech	UC3846	
	RIFA	RL3846	
	SiliconG	SG3846	
	Unitrode	**UC3846**	**(3323)**
♦ UC3847	LinearTech	UC3847	
	SiliconG	SG3847	
	Unitrode	**UC3847**	**(3323)**
ULN2001	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
ULN2002	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
ULN2003	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ULN2003			(Cont'd)
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
ULN2004	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	L204	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
ULN2064	IPS	IP2064	
	Mitsubishi	M54532	
	Motorola	ULN2064	
	SiliconG	SG2064	
	TI	SN75064	
		ULN2064	
	Toshiba	TD62064	
ULN2065	IPS	IP2065	
	Motorola	ULN2065	
	SiliconG	SG2065	
	Sprague	**ULN2065**	**(3203)**
	TI	SN75065	
		ULN2065	
	Toshiba	TD62064	
ULN2066	IPS	IP2066	
	Motorola	ULN2066	
	SiliconG	SG2066	
	Sprague	ULN2066	
	TI	SN75066	
		ULN2066	
ULN2067	IPS	IP2067	
	Motorola	ULN2067	
	SiliconG	SG2067	
	Sprague	ULN2067	
	TI	SN75067	
		ULN2067	
ULN2068	IPS	IP2068	
	Motorola	**ULN2068**	**(2954)**
	SiliconG	SG2068	
	Sprague	**ULN2068**	**(3203)**
	TI	SN75068	
		ULN2068	
ULN2069	IPS	IP2069	
	Motorola	ULN2069	
	SiliconG	SG2069	
	Sprague	**ULN2069**	**(3203)**
	TI	SN75069	
		ULN2069	
ULN2070	SiliconG	SG2070	
	Sprague	**ULN2070**	**(3203)**
ULN2071	SiliconG	SG2071	
	Sprague	**ULN2071**	**(3203)**
ULN2074	IPS	IP2074	
	Motorola	**ULN2074**	**(2954)**
	SiliconG	SG2074	
	Sprague	**ULN2074**	**(3203)**
	TI	ULN2074	
	Toshiba	TD62074	
ULN2075	IPS	IP2075	
	Motorola	ULN2075	
	SiliconG	SG2075	
	Sprague	**ULN2075**	**(3203)**
	TI	ULN2075	
ULN2076	SiliconG	SG2076	
	Sprague	ULN2076	
ULN2077	SiliconG	SG2077	
ULN2801	**Motorola**	**ULN2801**	**(2954)**
	SiliconG	SG2801	
	Sprague	ULS2801	
	Toshiba	TD62081	
ULN2802	Hitachi	HM27128	
	Mitel	M5L27128	
	SiliconG	SG2802	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ULN2802			(Cont'd)
	Sprague	**ULN2802**	**(3203)**
		ULS2802	
	Toshiba	TD62082	
		TMN27128	
ULN2803	SiliconG	SG2803	
		SG2813	
	Sprague	**ULN2803**	**(3203)**
		ULS2803	
	Toshiba	TD62083	
ULN2804	**Motorola**	**ULN2804**	**(2954)**
	SiliconG	SG2804	
	Sprague	**ULN2804**	**(3203)**
		ULS2804	
	Toshiba	TD62084	
ULN2805	SiliconG	SG2805	
	Sprague	**ULN2805**	**(3203)**
ULQ2004	Fairchild	μA9668	
Z8	**Zilog**	**Z8**	**(3418)**
Z8001	AMD	Z8001	
Z8002	AMD	Z8002	
Z8010	Zilog	Z8010	
Z8030	AMD	Z8030	
	Zilog	**Z8030**	**(3418)**
Z8031	Zilog	Z8031	
Z8036	AMD	Z8036	
Z8038	AMD	Z8038	
	Zilog	**Z8038**	**(3418)**
Z8060	AMD	Z8060	
	Zilog	**Z8060**	**(3418)**
Z8090	Zilog	Z8090	
Z80ACPU	**GoldStar**	**Z8400**	**(2691)**
		Z8430	**(2691)**
	NEC	μPD780	
	SGS	Z80ACTC	
		Z8400	
		Z84C00	
	Sharp	LH0080	
	Thomson	MK3880	
	Toshiba	**TMPZ84C00**	**(3306)**
	Zilog	**Z8400**	**(3417)**
		Z84C00	**(3417)**
Z80ACTC	**GoldStar**	**Z8430**	**(2691)**
	SGS	Z80CTC	
		Z8430	
	Sharp	LH0082	
	Zilog	**Z80-CTC**	**(3418)**
		Z8430	**(3417)**
Z80ADART	**GoldStar**	**Z8470**	**(2691)**
	SGS	Z80DART	
		Z8470	
	Zilog	**Z80-DART**	**(3418)**
		Z8470	**(3417)**
Z80ASIO	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80SIO	
		Z8440	
		Z8441	
		Z8442	
	Sharp	LH0084	
		LH0085	
		LH0086	
	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
Z80CTC	**GoldStar**	**Z8430**	**(2691)**
	SGS	Z80ACTC	
		Z8430	
	Sharp	LH0082	
	Zilog	**Z80-CTC**	**(3418)**
		Z8430	**(3417)**
Z80DART	**GoldStar**	**Z8470**	**(2691)**
	SGS	Z80ADART	
		Z8470	
	Zilog	**Z80-DART**	**(3418)**
		Z8470	**(3417)**
Z80DMA	SGS	Z8410	
	Sharp	LH0083	
	Zilog	**Z80-DMA**	**(3418)**
		Z8410	**(3417)**
Z80PIO	**GoldStar**	**Z8420**	**(2691)**
	SGS	Z8420	
	Sharp	LH0081	
	Zilog	**Z80-PIO**	**(3418)**
		Z8420	**(3417)**
Z80SIO	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z8440	
		Z8441	
		Z8442	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
Z80SIO			(Cont'd)
	Sharp	LH0084	
		LH0085	
		LH0086	
	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
Z8400	**GoldStar**	**Z8400**	**(2691)**
		Z8430	**(2691)**
	NEC	μPD780	
	SGS	Z80ACPU	
		Z80ACTC	
		Z84C00	
	Sharp	LH0080	
	Thomson	MK3880	
	Toshiba	**TMPZ84C00**	**(3306)**
	Zilog	**Z8400**	**(3417)**
		Z84C00	**(3417)**
Z8410	SGS	Z80DMA	
	Sharp	LH0083	
	Zilog	**Z80-DMA**	**(3418)**
		Z8410	**(3417)**
Z8420	**GoldStar**	**Z8420**	**(2691)**
	SGS	Z80PIO	
	Sharp	LH0081	
	Zilog	**Z80-PIO**	**(3418)**
		Z8420	**(3417)**
Z8430	**GoldStar**	**Z8430**	**(2691)**
	SGS	Z80ACTC	
		Z80CTC	
	Sharp	LH0082	
	Zilog	**Z80-CTC**	**(3418)**
		Z8430	**(3417)**
Z8440	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8442	
	Sharp	LH0084	
		LH0085	
		LH0086	
	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
Z8441	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8442	
	Sharp	LH0084	
		LH0085	
		LH0086	
	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
Z8442	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8441	
	Sharp	LH0084	
		LH0085	
		LH0086	
	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
Z8470	**GoldStar**	**Z8470**	**(2691)**
	SGS	Z80ADART	
		Z80DART	
	Zilog	**Z80-DART**	**(3418)**
		Z8470	**(3417)**
Z84C00	**GoldStar**	**Z8400**	**(2691)**
		Z8430	**(2691)**
	NEC	μPD780	
	SGS	Z80ACPU	
		Z80ACTC	
		Z8400	
	Sharp	LH0080	
	Thomson	MK3880	
	Toshiba	**TMPZ84C00**	**(3306)**
	Zilog	**Z8400**	**(3417)**
		Z84C00	**(3417)**

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

SGS Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
Z84C10	**Toshiba**	**TMPZ84C10**	**(3306)**
	Zilog	**Z8410**	**(3417)**
		Z84C10	**(3417)**
Z84C20	**Toshiba**	**TMPZ84C20**	**(3306)**
	Zilog	**Z84C20**	**(3417)**
Z84C30	**Toshiba**	**TMPZ84C30**	**(3306)**
	Zilog	**Z84C30**	**(3417)**
Z84C40	**Toshiba**	**TMPZ84C40**	**(3306)**
	Zilog	**Z8440**	**(3417)**
		Z84C40	**(3417)**
Z84C41	**Toshiba**	**TMPZ84C41**	**(3306)**
	Zilog	**Z84C41**	**(3417)**
Z84C42	**Toshiba**	**TMPZ84C42**	**(3306)**
	Zilog	**Z84C42**	**(3417)**
Z8530	AMD	Z8530	
	Zilog	**Z8530**	**(3418)**
Z8531	Zilog	Z8531	
Z8536	AMD	Z8536	
♦ Z8538	**Zilog**	**Z8538**	**(3418)**
Z8601	Sharp	Z8601	
	Zilog	**Z8601**	**(3419)**
Z8611	Sharp	Z8611	
	Zilog	**Z8611**	**(3419)**
Z8612	Zilog	Z8612	
Z8671	**Zilog**	**Z8671**	**(3419)**
Z8681	Sharp	Z8681	
	Zilog	**Z8681**	**(3419)**
Z8682	Zilog	Z8682	

Sharp

Manufacturer Device	Replacement Source	Device	IC Master Page
LH0080	**GoldStar**	**Z8400**	**(2691)**
		Z8430	**(2691)**
	NEC	μPD780	
	SGS	Z80ACPU	
		Z80ACTC	
		Z8400	
		Z84C00	
	Thomson	MK3880	
	Toshiba	**TMPZ84C00**	**(3306)**
	Zilog	**Z8400**	**(3417)**
		Z84C00	**(3417)**
LH0081	**GoldStar**	**Z8420**	**(2691)**
	SGS	Z80PIO	
		Z8420	
	Zilog	**Z80-PIO**	**(3418)**
		Z8420	**(3417)**
LH0082	**GoldStar**	**Z8430**	**(2691)**
	SGS	Z80ACTC	
		Z80CTC	
		Z8430	
	Zilog	**Z80-CTC**	**(3418)**
		Z8430	**(3417)**
LH0083	SGS	Z80DMA	
		Z8410	
	Zilog	**Z80-DMA**	**(3418)**
		Z8410	**(3417)**
LH0084	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8441	
		Z8442	
	Sharp	LH0085	
		LH0086	
	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
LH0085	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8441	
		Z8442	
	Sharp	LH0084	
		LH0086	
	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
LH0086	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8441	
		Z8442	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LH0086			(Cont'd)
	Sharp	LH0084	
		LH0085	
	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
LH2114	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
LH2332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
LH2364A	Gould	S2364	
	Hitachi	HN48364	
	NCR	NCR2364	
	OKI	MSM3864	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**
	Signetics	2364	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
LH5101	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sprague	BCM5101	
		SCM5101	
	Toshiba	TC5501	
LH5115	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LH5115			(Cont'd)
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5116**	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
LH5116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LH5116	Mitsubishi		(Cont'd)
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
LH5164	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Sharp (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LH5164	Toshiba		(Cont'd)
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
LH5167	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
LH52256	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	
LH5749	Atmel	27HC641	
		AT27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C263	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GE/RCA	**CD22203**	**(2636)**
	GIM	27HC641	
	ICT	27CX642	
	Sharp	**LH5762**	**(2994)**
	SiliconSys	SSI203	
	Waferscale	**WS57C49**	**(3376)**
LH5762	Atmel	27HC641	
		AT27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C263	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GE/RCA	**CD22203**	**(2636)**
	GIM	27HC641	
	ICT	27CX642	
	Sharp	**LH5749**	**(2994)**
	SiliconSys	SSI203	
	Waferscale	**WS57C49**	**(3376)**
LH5763	Atmel	27HC64	
		AT27HC64	
	GIM	27HC64	
	GoldStar	**GL3620**	**(2699)**
		GM27HC64	**(2692)**
	ICT	27CX641	
	Sanyo	LA7620	
	Waferscale	**WS57C64**	**(3376)**
LH64256	Toshiba	TC514258	
	Vitelic	V51C105	
LR3465	NCM	NCM2009Z	
LR4089	Gould	S25089	
	ITT	SBA5089	
	National	TP5089	
	Samsung	MK5089	
	Stantel-STC	STC5089	
	TI	TCM5089	
	Thomson	MK5089	
	UMC	UM5089	
SM4A	Samsung	KS52000	
Z8601	SGS	Z8601	
	Zilog	**Z8601**	**(3419)**
Z8611	SGS	Z8611	
	Zilog	**Z8611**	**(3419)**
Z8681	SGS	Z8681	
	Zilog	**Z8681**	**(3419)**

Siemens

Manufacturer Device	Replacement Source	Device	IC Master Page
80186	AMD	80186	
	Fujitsu	80186	
	Intel	80186	
	IMI	IMI6080	
80188	AMD	80188	
	Fujitsu	80188	
	Intel	80188	
GXB10415	AMD	AM10415	
	Fujitsu	MBM100470A	
		MBM10415	
	Hitachi	HM2110	
		HM2112	
	Motorola	**MCM10146**	**(2918)**
	National	DM10415	
HYB4116	AMD	AM9016	
	Fairchild	F16K	
		F4116	
	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
HYB4164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	TI	SM4164	
		TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
S042	National	DM5445	
	Signetics	**NE602**	**(3101)**
		SA602	
	TI	SN5445	
S062P	**AD**	**AD7576**	**(2414)**
	Maxim	AD7576	
	Plessey	SP4632	
		SP4653	
	SEEQ	**8023**	**(2991)**
	Siemens	SDA2211	
		SDA4212	
	Telefunken	μ684	
		μ686BS	
S576A	**LSIComp**	**LS7231**	**(2867)**
S576B	**LSIComp**	**LS7232**	**(2867)**
	PMI	**OP07**	**(2970)**
S576C	**LSIComp**	**LS7233**	**(2867)**
S576D	**LSIComp**	**LS7234**	**(2867)**
SA88332	Commodore	MPS2332	
	Fairchild	F3532	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SA88332			(Cont'd)
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
SAB1795	SMC	FDC1795	
		FDC9795	
	Western	FD1795	
SAB1797	SMC	FDC1797	
		FDC9797	
	Western	FD1797	
SAB8031	AD	AD636	
	Fujitsu	MBL8031	
	Intel	AMD8031	
	Maxim	AD636	
	Signetics	SCN8031	
SAB8031A-16	AMD	P8031AH-15	
SAB8032	Intel	P8032	
	Signetics	**SCN8032**	**(3074)**
SAB8051	AMD	P8051	
	Fujitsu	MBL8051	
	Intel	P8051	
	Signetics	SCN8051	
SAB80515	AMD	AM80515	
SAB8052	Intel	P8052	
	Signetics	**SCN8052**	**(3074)**
SAB80C31	AMD	P80C31	
	Fujitsu	MBL80C31	
	Harris	P80C31	
	Intel	80C31	
		P80C31	
	OKI	M80C31	
	Signetics	SC80C31	
SAB80C51	Fujitsu	MBL80C51	
	Intel	80C51	
		P80C51	
	Matra-Harris	P80C51	
	OKI	M80C51	
	Signetics	SC80C51	
SAB8332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
SDA0808	National	ADC0808	
	TI	ADC0808	
	Thomson	MK0808	
SDA2211	**AD**	**AD7576**	**(2414)**
	Maxim	AD7576	
	Plessey	SP4632	
		SP4653	
	SEEQ	**8023**	**(2991)**
	Siemens	S062P	
		SDA4212	
	Telefunken	μ684	
		μ686BS	

Manufacturer Device	Replacement Source	Device	IC Master Page
SDA3203	AD	AD7575	
	Maxim	AD7575	
	Toshiba	TD6316	
♦ SDA4040	Plessey	SP4040	
♦ SDA4041	Plessey	SP4551	
SDA4212	**AD**	**AD7576**	**(2414)**
	Maxim	AD7576	
	Plessey	SP4632	
		SP4653	
	SEEQ	**8023**	**(2991)**
	Siemens	S062P	
		SDA2211	
	Telefunken	μ684	
		μ686BS	
SO41P	AD	AD7628	
	Maxim	AD7628	
	Motorola	MC12020	
	Signetics	**NE604**	**(3103)**
		SA604	
	Sprague	ULN3820	
TBA120	National	TBA120	
	Telefunken	TBA120	
TBA1440G	Thomson	TBA1440G	
♦ TBA440	Plessey	TBA440	
♦ TBB146	Motorola	MC145146	
TCA4500	Motorola	TCA4500	
	National	LM4500	
TDA1048	Thomson	TDA1048	
♦ TDA2522	National	TDA2522	
	Plessey	TDA2522	
♦ TDA2530	Hitachi	HN462532	
	National	MM2532	
		NMC2532	
		TDA2530	
		TDA2532	
♦ TDA2530	Plessey	TDA2530	
♦ TDA2560	National	TDA2560	
	Plessey	TDA2560	
μAA170	TI	μAA170	
♦ μAA171	TI	μAA171	

Sierra Semiconductor

Manufacturer Device	Replacement Source	Device	IC Master Page
SC11000	EG&G-Reticon		
		R5632	
		RM5632A	**(2590)**
	Exar	**XR2126**	**(2605)**
		XR2127	**(2605)**
	Gould	S35212	
		S35212A	
	Hitachi	HA17815	
	Mitel	MT35212A	
	National	μA7815	
	Sierra	SC11005	
SC11001	**Exar**	**XR2128**	**(2605)**
SC11002	National	MM74HC942	
SC11003	National	MM74HC943	
SC11005	EG&G-Reticon		
		R5632	
		RM5632A	**(2590)**
	Exar	**XR2126**	**(2605)**
		XR2127	**(2605)**
	Gould	S35212	
		S35212A	
	Hitachi	HA17815	
	Mitel	MT35212A	
	National	μA7815	
	Sierra	SC11000	
♦ SC11202	SiliconSys	SSI202	
♦ SC11203	SiliconSys	SSI203	
♦ SC11204	SiliconSys	SSI204	
SC11270	**CMD Micro**	**G8870**	**(2547)**
	Mitel	MT8870	
	Plessey	MV8870	
	Sierra	SC11271	
SC11271	**CMD Micro**	**G8870**	**(2547)**
	Mitel	MT8870	
	Plessey	MV8870	
	Sierra	SC11270	
♦ SC11280	Mitel	MT8880	
SC11289	SiliconSys	SSI20C89	
SC11290	SiliconSys	SSI20C90	
SC11301	Fairchild	μA3054	
	National	TP3054	
	Sprague	ULN3054	
	Thomson	ETC5054	
SC11302	Fairchild	μA3057	
	Matra-Harris	HC3057	
	National	TP3057	
	Thomson	ETC5057	
SC11305	National	TP3051	
	Thomson	ETC5051	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Sierra Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SC11306	National	TP3056	
	Thomson	ETC5056	
SC11311	National	TP3064	
	Thomson	ETC5064	
SC11312	National	TP3067	
SC22001	National	COP494	
		NMC9306	
	Xicor	**X2444**	**(3388, 3400)**
SC22011	GIM	ER5911	
	Hyundai	**HY93C46**	**(2770)**
	National	COP495	
		NMC9346	
	NCR	59346	
		NCR59308	
	SGS	M9346	
SC22056	National	NMC93C56	
SC22057	National	NMC93C66	
SC22101	National	NMC98C10	
SC22104	National	NMC98C40	
SC22300	National	NMC95C14	
SC22304	National	NMC95C12	
SC44820	National	COP820	
SC44821	National	COP821	
SC44822	National	COP822	
SC44840	National	COP841	
SC44844	National	COP844	
	Sierra	SC46844	
SC44848	National	COP848	
	Sierra	SC46848	
SC44884	National	COP884	
SC44888	National	COP888	
	Sierra	SC46888	
SC46844	National	COP844	
	Sierra	SC44844	
SC46848	National	COP848	
	Sierra	SC44848	
SC46888	National	COP888	
	Sierra	SC44888	
SC48620	National	COP8620	
SC48621	National	COP8621	
SC48622	National	COP8622	
SC48720	National	COP8720	
SC48721	National	COP8721	
SC48722	National	COP8722	

Signetics

Manufacturer Device	Replacement Source	Device	IC Master Page
10010	Fairchild	F100101	
100102	Fairchild	F100102	
100107	Fairchild	F100107	
100112	Fairchild	F100112	
	Hitachi	HD100112	
	Sprague	SPL16LC6	
100113	Fairchild	F100113	
100117	Fairchild	F100117	
100118	Fairchild	F100118	
100122	Fairchild	F100122	
100123	Fairchild	F100123	
	Hitachi	HD100123	
100124	Fairchild	F100124	
100125	Fairchild	F100125	
	Hitachi	HD100125	
100126	Fairchild	F100126	
100131	Fairchild	F100131	
	Hitachi	HD100131	
100136	Fairchild	F100136	
	Hitachi	HD100136	
100141	Fairchild	F100141	
	Hitachi	HD100141	
100145	Fairchild	F100145	
	Hitachi	HD100145	
100149	Motorola	MCM100416	
100150	Fairchild	F100150	
	Hitachi	HD100150	
100151	Fairchild	F100151	
	Hitachi	HD100151	
100164	Fairchild	F100164	
	Hitachi	HD100164	
100165	Cypress	CUPLDC20G10	
	Fairchild	F100165	
	Hitachi	HD100165	
		HM6288	
	MMI	PAL20L8	
		PAL20L8B	
	National	PAL20L8	
	Sprague	SPL20LC8	
	TI	PAL20L8	
		TIBPAL20L8-20	**(3217, 4320)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
100165			(Cont'd)
	Toshiba	TC55416	
100170	Cypress	CUPLDC20G10	
	Fairchild	F100170	
	Hitachi	HD100170	
	MMI	PAL20R6	
		PAL20R6B	
	Sprague	SPL20RC6	
	TI	PAL20R6	
		TIBPAL20R6-20	**(3217, 4320)**
100171	Fairchild	F100171	
	Hitachi	HD100171	
100175	Fairchild	F100175	
	GE/RCA	**CD22223**	**(2637)**
	SiliconSys	SSI223	
100180	**Cypress**	**CY7C510**	**(2569)**
	Fairchild	F100180	
	Hitachi	HD100179	
		HD100180	
	LSI Logic	**L64010**	**(2868)**
	Waferscale	WS59610	
100181	**Cypress**	**CY7C164**	**(2562)**
	Fairchild	F100181	
	Hitachi	HD100181	
	IDT	**IDT7188**	**(2802)**
	TI	SMJ64C64	
	Vitelic	V61C62	
	VLSI Tech	CT64KS4	
♦ 100415	AMD	AM100415	
	Fairchild	F100415	
	Hitachi	HM100415	
♦ 100422	Fairchild	F100422	
	Fujitsu	MB8118	
		MBM100422	
		MBM100422A	
♦ 100422	Hitachi	HM100422	
	National	DM100422	
		NMC5295	
♦ 100422	NEC	μPB100422	
♦ 100470	AMD	AM100470	
	Fujitsu	MBM100470A	
	NEC	μPB100470	
♦ 100474	AMD	AM100474	
	Fairchild	F100474	
	Fujitsu	MBM100474	
		MBM100474A	
♦ 100474	Hitachi	100474	
		HM100474	
♦ 100474	NEC	μPB100474	
10100	Motorola	MC10100	
10101	Hitachi	HD10101	
	Motorola	MC10101	
10102	Hitachi	HD10102	
	Motorola	MC10102	
10103	Motorola	MC10103	
10104	Hitachi	HD10104	
	Motorola	MC10104	
10105	Hitachi	HD10105	
	Motorola	MC10105	
10106	Hitachi	HD10106	
	Motorola	MC10106	
10107	Hitachi	HD10107	
	Motorola	MC10107	
10109	Hitachi	HD10109	
	Motorola	MC10109	
10110	Hitachi	HD10110	
	Motorola	MC10110	
10111	Hitachi	HD10111	
	Motorola	MC10111	
10114	Motorola	MC10114	
10115	Motorola	MC10115	
10116	Hitachi	HD10116	
	Motorola	MC10116	
	National	DM10116	
10117	Hitachi	HD10117	
	Motorola	MC10117	
10118	Hitachi	HD10118	
	Motorola	MC10118	
10119	Hitachi	HD10119	
	Motorola	MC10119	
10121	Hitachi	HD10121	
	Motorola	MC10121	
10123	Motorola	MC10123	
10124	Hitachi	HD10124	
	Motorola	MC10124	
10125	Hitachi	HD10125	
	Motorola	MC10125	
♦ 10128	Motorola	MC10128	
10129	Motorola	MC10129	
10130	Hitachi	HD10130	
	Motorola	MC10130	

Manufacturer Device	Replacement Source	Device	IC Master Page
10131	Hitachi	HD10131	
	Motorola	MC10131	
10132	Hitachi	HD10132	
	Motorola	MC10132	
10133	Hitachi	HD10133	
	Motorola	MC10133	
10134	Hitachi	HD10134	
	Motorola	MC10134	
10135	Motorola	MC10135	
10136	Hitachi	HD10136	
	Motorola	MC10136	
10137	Motorola	MC10137	
♦ 10138	Motorola	MC10138	
♦ 10139	**Motorola**	**MCM10139**	**(2918)**
♦ 10140	TI	SN10140	
10141	Motorola	MC10141	
♦ 10144	Fairchild	F10144	
	Motorola	**MCM10144**	**(2918)**
	TI	SN10144	
10145	**Motorola**	**MCM10145**	**(2918)**
♦ 10148	Hitachi	HD10148	
	Motorola	**MCM10148**	**(2918)**
	TI	SN10148	
10149	**Motorola**	**MCM10149**	**(2918)**
10158	Motorola	MC10158	
10159	Motorola	MC10159	
10160	Hitachi	HD10160	
	Motorola	MC10160	
10161	Hitachi	HD10161	
	Motorola	MC10161	
10162	Hitachi	HD10162	
	Motorola	MC10162	
10164	Hitachi	HD10164	
	Motorola	MC10164	
	TI	SN10164	
10165	Hitachi	HD10165	
	Motorola	MC10165	
♦ 10170	Motorola	MC10170	
10171	Motorola	MC10171	
10172	Motorola	MC10172	
10173	Motorola	MC10173	
10174	Hitachi	HD10174	
	Motorola	MC10174	
	TI	SN10174	
10175	Hitachi	HD10175	
	Motorola	MC10175	
♦ 10178	Fairchild	F10178	
	Motorola	MC10178	
10179	Hitachi	HD10179	
	Motorola	MC10179	
10180	Hitachi	HD10180	
	Motorola	MC10180	
10181	Hitachi	HD10181	
	Motorola	MC10181	
♦ 10186	Motorola	MC10186	
10188	Motorola	MC10188	
10189	Motorola	MC10189	
♦ 10190	Motorola	MC10190	
♦ 10191	Motorola	MC10191	
10192	Motorola	MC10192	
♦ 10195	Motorola	MC10195	
10210	Motorola	MC10210	
10211	Motorola	MC10211	
♦ 10212	Motorola	MC10212	
10216	Fairchild	F10216	
	Motorola	MC10216	
10231	Motorola	MC10231	
♦ 10415	AMD	AM10415	
	Fujitsu	MBM100470A	
		MBM10415	
♦ 10415	Hitachi	HM2110	
		HM2112	
♦ 10415	**Motorola**	**MCM10146**	**(2918)**
	National	DM10415	
	Siemens	GXB10415	
♦ 10422	Fujitsu	MBM10422A	
	National	DM10422	
	NEC	μPB10422	
♦ 10470	AMD	AM10470	
	Fujitsu	MBM10470A	
	Hitachi	HM10470	
	Motorola	MCM10470	
	National	DM10470	
	NEC	μPB10470	
♦ 10474	AMD	AM10474	
	Fairchild	F10474	
	Fujitsu	MBM10474A	
	Hitachi	HM10474	
	Motorola	MCM10474	
	National	DM10474	
	NEC	μPB10474	

Manufacturer Device	Replacement Source	Device	IC Master Page
23128	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
23256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
23256A	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
2332	Amperex	AM9233	
	Commodore	MPS2333	
	Fairchild	F3533	
	GIM	RO3-9333	
	Gould	S2333	
	Supertex	23C32	
2364	Gould	S2364	
	Hitachi	HN48364	
	NCR	NCR2364	
	OKI	MSM3864	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**
	Sharp	LH2364A	
	TI	TMS2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
2632A	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
	SiliconG	SG3532	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Signetics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
2632A			(Cont'd)
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
2664	GIM	R03-9364	
	Hitachi	HN48364	
	Mitsubishi	M58334	
	National	MM52164	
	NEC	μPD2364	
	Rockwell	R2364A	
	Signetics	26S64	
2690	AMD	AM9016	
	Fairchild	F16K	
		F4116	
	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
26S64	GIM	R03-9364	
	Hitachi	HN48364	
	Mitsubishi	M58334	
	National	MM52164	
	NEC	μPD2364	
	Rockwell	R2364A	
	Signetics	2664	
27C256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
27C64	OKI		(Cont'd)
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
2960	AMD	AM2960	
	IDT	**IDT39C60**	**(2801)**
5114	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
5400	Fairchild	5400	
	National	DM5400	
	TI	SN5400	
54109	National	DM54109	
	TI	SN54109	
54116	TI	SN54116	
54121	Fairchild	54121	
	National	DM54121	
	TI	SN54121	
54123	Fairchild	54123	
	National	DM54123	
	TI	SN54123	
54126	National	DM54126	
		DM7094	
	TI	SN54126	
54132	National	DM54132	
	TI	SN54132	
5414	Fairchild	5414	
	National	DM5414	
	TI	SN5414	
54141	National	DM54141	
54147	National	DM54147	
	TI	SN54147	
54148	National	DM54148	
		DM9318	
	TI	SN54148	
54151	Fairchild	54151A	
	National	DM54151	
	TI	SN54151A	
54153	Fairchild	54153	
	National	DM54153	
	TI	SN54153	
54157	Fairchild	54157	
	National	DM54157	
	TI	SN54157	
54160	National	DM54160	
	Raytheon	RM9310	
	TI	SN54160	
54161	Fairchild	54161	
	National	DM54161	
	TI	SN54161	
54163	National	DM54163	
	TI	SN54163	
54164	Fairchild	54164	
	National	DM54164	
		DM7570	
	TI	SN54164	
54165	Fairchild	54165	
	National	DM54165	
		DM7590	
	TI	SN54165	

Manufacturer Device	Replacement Source	Device	IC Master Page
54166	National	DM54166	
	TI	SN54166	
54174	Fairchild	54174	
	National	DM54174	
	TI	SN54174	
54175	Fairchild	54175	
	National	DM54175	
	TI	SN54175	
54176	National	DM54176	
	Raytheon	RM8280	
	Signetics	S8280	
	TI	SN54176	
54180	National	DM54180	
	TI	SN54180	
54181	National	DM54181	
	Raytheon	RM9341	
	TI	SN54181	
54190	National	DM54190	
	TI	SN54190	
54191	Fairchild	54191	
	National	DM54191	
	TI	SN54191	
54194	National	DM54194	
54196	National	DM54196	
	TI	SN54196	
5420	Fairchild	5420	
	National	DM5420	
	TI	SN5420	
54221	TI	SN54221	
5426	National	DM5426	
	TI	SN5426	
54279	Fairchild	54279	
	TI	SN54279	
5432	Fairchild	5432	
	National	DM5432	
	TI	SN5432	
5433	TI	SN5433	
5442	Fairchild	5442A	
	National	DM5442	
	TI	SN5442A	
5473	Fairchild	5473	
	National	DM5473	
	TI	SN5473	
5474	Fairchild	5474	
	National	DM5474	
	TI	SN5474	
5475	Fairchild	5475	
	National	DM5475	
	TI	SN5475	
5476	Fairchild	5476	
	National	DM5476	
	TI	SN5476	
5483A	Fairchild	5483A	
	TI	SN5483A	
5485	Fairchild	5485	
	National	DM5485	
	TI	SN5485	
5486	Fairchild	5486	
	National	DM5486	
	TI	SN5486	
5491	Fairchild	5491	
	Motorola	MC5491	
	National	SN5491	
	TI	SN5491	
5495	Fairchild	5495	
	National	DM5495	
	TI	SN5495	
5496	National	DM5496	
	TI	SN5496	
54AC11000	TI	54AC11000	
54AC11002	TI	54AC11002	
54AC11004	TI	54AC11004	
54AC11008	TI	54AC11008	
54AC11010	TI	54AC11010	
54AC11011	TI	54AC11011	
54AC11020	TI	54AC11020	
54AC11027	TI	54AC11027	
54AC11030	TI	54AC11030	
54AC11032	TI	54AC11032	
54AC11034	TI	54AC11034	
54AC11074	TI	54AC11074	
54AC11109	TI	54AC11109	
54AC11112	TI	54AC11112	
54AC11151	TI	54AC11151	
54AC11153	TI	54AC11153	
54AC11157	TI	54AC11157	
54AC11158	TI	54AC11158	
54AC11161	TI	54AC11161	
54AC11163	TI	54AC11163	
54AC11169	TI	54AC11169	
54AC11174	TI	54AC11174	
54AC11175	TI	54AC11175	

Manufacturer Device	Replacement Source	Device	IC Master Page
54AC11191	TI	54AC11191	
54AC11194	TI	54AC11194	
54AC11240	TI	54AC11240	
54AC11241	TI	54AC11241	
54AC11244	TI	54AC11244	
54AC11245	TI	54AC11245	
54AC11251	TI	54AC11251	
54AC11253	TI	54AC11253	
54AC11257	TI	54AC11257	
54AC11258	TI	54AC11258	
54AC11280	TI	54AC11280	
54AC11352	TI	54AC11352	
54AC11353	TI	54AC11353	
54AC11373	TI	54AC11373	
54AC11374	TI	54AC11374	
54AC11533	TI	54AC11533	
54AC11534	TI	54AC11534	
54ACT11000	TI	54ACT11000	
54ACT11030	TI	54ACT11030	
54ACT11032	TI	54ACT11032	
54ACT11074	TI	54ACT11074	
54ACT11109	TI	54ACT11109	
54ACT11138	TI	54ACT11138	
54ACT11240	TI	54ACT11240	
54ACT11244	TI	54ACT11244	
54ACT11245	TI	54ACT11245	
54ACT11299	TI	54ACT11299	
54ACT11373	TI	54ACT11373	
54ACT11374	TI	54ACT11374	
54F00	Fairchild	54F00	
	Motorola	MC54F00	
	TI	SN54F00	
54F02	Fairchild	54F02	
	Motorola	MC54F02	
	TI	SN54F02	
54F04	Fairchild	54F04	
	Motorola	MC54F04	
	Signetics	S4F04	
	TI	SN54F04	
54F08	Fairchild	54F08	
	Motorola	MC54F08	
	TI	SN54F08	
54F10	Fairchild	54F10	
	Motorola	MC54F10	
	TI	SN54F10	
54F109	Fairchild	54F109	
	Motorola	MC54F109	
	TI	SN54F109	
54F11	Fairchild	54F11	
54F138	Fairchild	54F138	
	Motorola	MC54F138	
	TI	SN54F138	
54F139	Fairchild	54F139	
	Motorola	MC54F139	
54F157	Fairchild	54F157	
	Motorola	MC54F157	
	TI	SN54F157	
54F158	Fairchild	54F158	
	Motorola	MC54F158	
	TI	SN54F158	
54F20	Fairchild	54F20	
	Motorola	MC54F20	
	TI	SN54F20	
54F240	Fairchild	54F240	
	Motorola	MC54F240	
	Signetics	SN54F240	
54F241	Fairchild	54F241	
	Motorola	MC54F241	
	TI	SN54F241	
54F242	Fairchild	54F242	
	Motorola	MC54F242	
	TI	SN54F242	
54F243	Fairchild	54F243	
	Motorola	MC54F243	
	TI	SN54F243	
54F244	Fairchild	54F244	
	Motorola	MC54F244	
	TI	SN54F244	
54F245	Fairchild	54F245	
	Motorola	MC54F245	
	TI	SN54F245	
54F257	Fairchild	54F257	
	Motorola	MC54F257	
	TI	SN54F257	
54F258	Fairchild	54F258	
	Motorola	MC54F258	
	TI	SN54F258	
54F280	Fairchild	54F280	
	Motorola	MC54F280	
	TI	SN54F280	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
54F32	Fairchild	54F32	
	Motorola	MC54F32	
	TI	SN54F32	
54F333	Motorola	MC54F333	
54F373	Fairchild	54F373	
	Motorola	54F373	
		MC54F373	
	TI	SN547F373	
54F374	Fairchild	54F374	
	Motorola	MC54F374	
	TI	SN54F374	
54F521	Fairchild	54F521	
	Motorola	MC54F521	
	TI	SN54F521	
54F534	Fairchild	54F534	
	Motorola	MC54F534	
	TI	SN54F534	
54F620	Fairchild	54F620	
	Motorola	MC54F620	
	TI	SN54F620	
54HC00	**GE/RCA**	**CD54HC00**	**(2631)**
	Motorola	MC54HC00	
	National	MM54HC00	
	Sprague	SS54HC00	
	TI	SN54HC00	
54HC02	**GE/RCA**	**CD54HC02**	**(2631)**
	Motorola	MC54HC02	
	National	MM54HC02	
	TI	SN54HC02	
54HC04	**GE/RCA**	**CD54HC04**	**(2631)**
	Motorola	MC54HC04	
	National	MM54HC04	
	TI	SN54HC04	
54HC08	**GE/RCA**	**CD54HC08**	**(2631)**
	Motorola	MC54HC08	
	National	MM54HC08	
	TI	SN54HC08	
54HC10	**GE/RCA**	**CD54HC10**	**(2631)**
	Motorola	MC54HC10	
	National	MM54HC10	
	TI	SN54HC10	
54HC107	**GE/RCA**	**CD54HC107**	**(2631)**
	Motorola	MC54HC107	
	National	MM54HC107	
	TI	SN54HC107	
54HC109	**GE/RCA**	**CD54HC109**	**(2631)**
	Motorola	MC54HC109	
	National	MM54HC109	
	TI	SN54HC109	
54HC11	**GE/RCA**	**CD54HC11**	**(2631)**
	Motorola	MC54HC11	
	National	MM54HC11	
	TI	SN54HC11	
54HC112	**GE/RCA**	**CD54HC112**	**(2631)**
	Motorola	MC54HC112	
	National	MM54HC112	
	TI	SN54HC112	
54HC123	**GE/RCA**	**CD54HC123**	**(2632)**
	Motorola	MC54HC123	
	National	MM54HC123	
54HC132	Fairchild	54HC132	
	GE/RCA	**CD54HC132**	**(2631)**
	Motorola	MC54HC132	
	National	MM54HC132	
	TI	SN54HC132	
54HC133	Motorola	MC54HC133	
	National	MM54HC133	
	TI	SN54HC133	
54HC138	**GE/RCA**	**CD54HC138**	**(2632)**
	Motorola	MC54HC138	
	National	MM54HC138	
	Sprague	SS54HC138	
	TI	SN54HC138	
54HC139	**GE/RCA**	**CD54HC139**	**(2632)**
	Motorola	MC54HC139	
	National	MM54HC139	
	Sprague	SS54HC139	
	TI	SN54HC139	
54HC14	**GE/RCA**	**CD54HC14**	**(2631)**
	Motorola	MC54HC14	
	National	MM54HC14	
	TI	SN54HC14	
54HC147	**GE/RCA**	**CD54HC147**	**(2632)**
	Motorola	MC54HC147	
	National	MM54HC147	
54HC151	**GE/RCA**	**CD54HC151**	**(2632)**
	Motorola	MC54HC151	
	National	MM54HC151	
	TI	SN54HC151	
54HC153	**GE/RCA**	**CD54HC153**	**(2632)**
	Motorola	MC54HC153	
	National	MM54HC153	
	TI	SN54HC153	
54HC154	**GE/RCA**	**CD54HC154**	**(2632)**
	Motorola	MC54HC154	
	National	MM54HC154	
54HC157	**GE/RCA**	**CD54HC157**	**(2632)**
	Motorola	MC54HC157	
	TI	SN54HC157	
54HC158	**GE/RCA**	**CD54HC158**	**(2632)**
	Motorola	MC54HC158	
	National	MM54HC158	
	TI	SN54HC158	
54HC160	**GE/RCA**	**CD54HC160**	**(2632)**
	Motorola	MC54HC160	
	National	MM54HC160	
	TI	SN54HC160	
54HC161	**GE/RCA**	**CD54HC161**	**(2632)**
	Motorola	MC54HC161	
	National	MM54HC161	
	TI	SN54HC161	
54HC162	**GE/RCA**	**CD54HC162**	**(2632)**
	Motorola	MC54HC162	
	National	MM54HC162	
	TI	SN54HC162	
54HC163	**GE/RCA**	**CD54HC163**	**(2632)**
	Motorola	MC54HC163	
	National	MM54HC163	
54HC164	**GE/RCA**	**CD54HC164**	**(2631)**
	Motorola	MC54HC164	
	National	MM54HC164	
	TI	SN54HC164	
54HC165	**GE/RCA**	**CD54HC165**	**(2631)**
	Motorola	MC54HC165	
	National	MM54HC165	
	TI	SN54HC165	
54HC166	**GE/RCA**	**CD54HC166**	**(2631)**
	Motorola	MC54HC166	
	TI	SN54HC166	
54HC173	**GE/RCA**	**CD54HC173**	**(2631)**
	Motorola	MC54HC173	
	National	MM54HC173	
	TI	SN54HC173	
54HC174	**GE/RCA**	**CD54HC174**	**(2631)**
	Motorola	MC54HC174	
	National	MM54HC174	
	TI	SN54HC174	
54HC175	**GE/RCA**	**CD54HC175**	**(2631)**
	Motorola	MC54HC175	
	National	MM54HC175	
	TI	SN54HC175	
54HC191	**GE/RCA**	**CD54HC191**	**(2632)**
	TI	SN54HC191	
54HC192	**GE/RCA**	**CD54HC192**	**(2632)**
	Motorola	MC54HC192	
	National	MM54HC192	
	TI	SN54HC192	
54HC193	**GE/RCA**	**CD54HC193**	**(2632)**
	Motorola	MC54HC193	
	National	MM54HC193	
	TI	SN54HC193	
54HC194	**GE/RCA**	**CD54HC194**	**(2631)**
	Motorola	MC54HC194	
	National	MM54HC194	
	TI	SN54HC194	
54HC195	**GE/RCA**	**CD54HC195**	**(2631)**
	Motorola	MC54HC195	
	National	MM54HC195	
	TI	SN54HC195	
54HC20	**GE/RCA**	**CD54HC20**	**(2631)**
	Motorola	MC54HC20	
	National	MM54HC20	
	TI	SN54HC20	
54HC221	**GE/RCA**	**CD54HC221**	**(2632)**
	Motorola	MC54HC221	
	National	MM54HC221	
54HC238	**GE/RCA**	**CD54HC238**	**(2632)**
	Sprague	SS54HC238	
	TI	SN54HC238	
54HC240	**GE/RCA**	**CD54HC240**	**(2631)**
	Motorola	MC54HC240	
	National	MM54HC240	
	Sprague	SS54HC240	
	Supertex	SI54HC240	
	TI	SN54HC240	
54HC241	**GE/RCA**	**CD54HC241**	**(2631)**
	Motorola	MC54HC241	
	National	MM54HC241	
	Sprague	SS54HC241	
	Supertex	SI54HC241	
	TI	SN54HC241	
54HC242	**GE/RCA**	**CD54HC242**	**(2631)**
	Motorola	MC54HC242	
	National	MM54HC242	
	TI	SN54HC242	
54HC243	Fairchild	54HC243	
	GE/RCA	**CD54HC243**	**(2631)**
	Motorola	MC54HC243	
	National	MM54HC243	
	TI	SN54HC243	
54HC244	**GE/RCA**	**CD54HC244**	**(2631)**
	Motorola	MC54HC244	
	National	MM54HC244	
	Sprague	SS54HC244	
	Supertex	SI54HC244	
	TI	SN54HC244	
54HC245	**GE/RCA**	**CD54HC245**	**(2631)**
	Motorola	MC54HC245	
	National	MM54HC245	
	Sprague	SS54HC245	
	TI	SN54HC245	
54HC251	**GE/RCA**	**CD54HC251**	**(2632)**
	Motorola	MC54HC251	
	National	MM54HC251	
	TI	SN54HC251	
54HC253	**GE/RCA**	**CD54HC253**	**(2632)**
	Motorola	MC54HC253	
	National	MM54HC253	
	TI	SN54HC253	
54HC257	**GE/RCA**	**CD54HC257**	**(2632)**
	Motorola	MC54HC257	
	National	MM54HC257	
	TI	SN54HC257	
54HC259	**GE/RCA**	**CD54HC259**	**(2632)**
	Motorola	MC54HC259	
	National	MM54HC259	
	TI	SN54HC259	
54HC266	Motorola	MC54HC266	
	National	MM54HC266	
	TI	SN54HC266	
54HC27	**GE/RCA**	**CD54HC27**	**(2631)**
	Motorola	MC54HC27	
	National	MM54HC27	
	TI	SN54HC27	
54HC273	CTI	54HC273	
	GE/RCA	**CD54HC273**	**(2631)**
	Motorola	MC54HC273	
	TI	SN54HC273	
54HC280	**GE/RCA**	**CD54HC280**	**(2632)**
	Motorola	MC54HC280	
	National	MM54HC280	
	TI	SN54HC280	
54HC297	**GE/RCA**	**CD54HC297**	**(2632)**
54HC299	**GE/RCA**	**CD54HC299**	**(2631)**
	Motorola	MC54HC299	
	National	MM54HC299	
54HC30	**GE/RCA**	**CD54HC30**	**(2631)**
	Motorola	MC54HC30	
	National	MM54HC30	
	TI	SN54HC30	
54HC32	**GE/RCA**	**CD54HC32**	**(2631)**
	Motorola	MC54HC32	
	National	MM54HC32	
	TI	SN54HC32	
54HC354	**GE/RCA**	**CD54HC354**	**(2632)**
	Motorola	MC54HC354	
	National	MM54HC354	
54HC356	**GE/RCA**	**CD54HC356**	**(2632)**
	Motorola	MC54HC356	
	National	MM54HC356	
54HC365	**GE/RCA**	**CD54HC365**	**(2631)**
	Motorola	MC54HC365	
	National	MM54HC365	
	TI	SN54HC365	
54HC366	**GE/RCA**	**CD54HC366**	**(2631)**
	Motorola	MC54HC366	
	National	MM54HC366	
	TI	SN54HC366	
54HC367	**GE/RCA**	**CD54HC367**	**(2631)**
	Motorola	MC54HC367	
	National	MM54HC367	
	TI	SN54HC367	
54HC368	**GE/RCA**	**CD54HC368**	**(2631)**
	Motorola	MC54HC368	
	National	MM54HC368	
	TI	SN54HC368	
54HC373	**GE/RCA**	**CD54HC373**	**(2632)**
	Motorola	MC54HC373	
	National	MM54HC373	
	Sprague	SS54HC373	
	Supertex	SI54HC373	
	TI	SN54HC373	
54HC374	**GE/RCA**	**CD54HC374**	**(2631)**
	Motorola	MC54HC374	
	National	MM54HC374	
	Sprague	SS54HC374	
	Supertex	SI54HC374	
	TI	SN54HC374	
54HC377	**GE/RCA**	**CD54HC377**	**(2631)**
	Motorola	MC54HC377	
	TI	SN54HC377	
54HC390	**GE/RCA**	**CD54HC390**	**(2632)**
	Motorola	MC54HC390	
	National	MM54HC390	
	TI	SN54HC390	
54HC393	**GE/RCA**	**CD54HC393**	**(2632)**
	Motorola	MC54HC393	
	National	MM54GC393	
	TI	SN54HC393	
54HC4002	**GE/RCA**	**CD54HC4002**	**(2631)**
	Motorola	MC54HC4002	
	National	MM54HC4002	
	TI	SN54HC4002	
54HC40104	**GE/RCA**	**CD54HC40104**	**(2631)**
54HC40105	**GE/RCA**	**CD54HC40105**	**(2631)**
54HC4017	**GE/RCA**	**CD54HC4017**	**(2632)**
	Motorola	MC54HC4017	
	National	MM54HC4017	
54HC4020	**GE/RCA**	**CD54HC4020**	**(2632)**
	National	MM54HC4020	
54HC4024	**GE/RCA**	**CD54HC4024**	**(2632)**
	Motorola	MC54HC4024	
54HC4040	**GE/RCA**	**CD54HC4040**	**(2632)**
	Motorola	MC54HC4040	
	National	MM54HC4040	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Signetics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
54HC4049	**GE/RCA**	**CD54HC4049**	**(2631)**
	Motorola	MC54HC4049	
	National	MM54HC4049	
54HC4050	**GE/RCA**	**CD54HC4050**	**(2631)**
	Motorola	MC54HC4050	
	National	MM54HC4050	
54HC4051	**GE/RCA**	**CD54HC4051**	**(2632)**
	Motorola	MC54HC4051	
54HC4052	**GE/RCA**	**CD54HC4052**	**(2632)**
	Motorola	MC54HC4052	
54HC4053	**GE/RCA**	**CD54HC4053**	**(2632)**
	Motorola	MC54HC4053	
54HC4060	**GE/RCA**	**CD54HC4060**	**(2632)**
	Motorola	MC54HC4060	
	National	MM54HC4060	
54HC42	**GE/RCA**	**CD54HC42**	**(2632)**
	Motorola	MC54HC42	
	National	MM54HC42	
	TI	SN54HC42	
54HC4514	**GE/RCA**	**CD54HC4514**	**(2632)**
	Motorola	MC54HC4514	
	National	MM54HC4514	
54HC4520	**GE/RCA**	**CD54HC4520**	**(2632)**
54HC4538	**GE/RCA**	**CD54HC4538**	**(2632)**
	Motorola	MC54HC4538	
	National	MM54HC4538	
54HC533	**GE/RCA**	**CD54HC533**	**(2632)**
	Motorola	MC54HC533	
	National	MM54HC533	
	Sprague	SS54HC533	
	TI	SN54HC533	
54HC534	**GE/RCA**	**CD54HC534**	**(2631)**
	Motorola	MC54HC534	
	National	MM54HC534	
	Sprague	SS54HC534	
	TI	SN54HC534	
54HC540	**GE/RCA**	**CD54HC540**	**(2631)**
	Motorola	MC54HC540	
	Sprague	SS54HC540	
	TI	SN54HC540	
54HC541	**GE/RCA**	**CD54HC541**	**(2631)**
	Sprague	SS54HC541	
	TI	SN54HC541	
54HC563	**GE/RCA**	**CD54HC563**	**(2632)**
	National	MM54HC563	
	Sprague	SS54HC563	
	TI	SN54HC563	
54HC564	**GE/RCA**	**CD54HC564**	**(2631)**
	Motorola	MC54HC564	
	National	MM54HC564	
	Sprague	SS54HC564	
	TI	SN54HC564	
54HC573	**GE/RCA**	**CD54HC573**	**(2632)**
	Motorola	MC54HC573	
	National	MM54HC573	
	Sprague	SS54HC573	
	TI	SN54HC573	
54HC574	**GE/RCA**	**CD54HC574**	**(2631)**
	Motorola	MC54HC574	
	National	MM54HC574	
	Sprague	SS54HC574	
	TI	SN54HC574	
54HC640	**GE/RCA**	**CD54HC640**	**(2631)**
	Motorola	MC54HC640	
	National	MM54HC640	
	Sprague	SS54HC640	
	TI	SN54HC640	
54HC643	**GE/RCA**	**CD54HC643**	**(2631)**
	Motorola	MC54HC643	
	National	MM54HC643	
	TI	SN54HC643	
54HC645	National	MM54HC645	
	Sprague	SS54HC645	
	TI	SN54HC645	
54HC646	**GE/RCA**	**CD54HC646**	**(2631)**
	Motorola	MC54HC646	
	National	MM54HC646	
54HC648	**GE/RCA**	**CD54HC648**	**(2631)**
	Motorola	MC54HC648	
	National	MM54HC648	
54HC670	**GE/RCA**	**CD54HC670**	**(2631)**
54HC688	Fairchild	54HC688	
	GE/RCA	**CD54HC688**	**(2632)**
	Motorola	MC54HC688	
	National	MM54HC688	
	TI	SN54HC688	
54HC73	**GE/RCA**	**CD54HC73**	**(2631)**
	Motorola	MC54HC73	
	National	MM54HC73	
54HC74	**GE/RCA**	**CD54HC74**	**(2631)**
	Motorola	MC54HC74	
	National	MM54HC74	
	TI	SN54HC74	
54HC75	**GE/RCA**	**CD54HC75**	**(2632)**
	Motorola	MC54HC75	
	National	MM54HC75	
	TI	SN54HC75	
54HC76	Motorola	MC54HC76	
	National	MM54HC76	
54HC85	**GE/RCA**	**CD54HC85**	**(2632)**
	Motorola	MC54HC85	
	National	MM54HC85	
54HC86	**GE/RCA**	**CD54HC86**	**(2631)**
	Motorola	MC54HC86	
	National	MM54HC86	
	TI	SN54HC86	
54HCT00	**GE/RCA**	**CD54HCT00**	**(2631)**
	Motorola	MC54HCT00	
54HCT02	**GE/RCA**	**CD54HCT02**	**(2631)**
54HCT04	Fairchild	54HCT04	
	GE/RCA	**CD54HCT04**	**(2631)**
	Motorola	MC54HCT04	
	National	MM54HCT04	
	TI	SN54HCT04	
54HCT08	**GE/RCA**	**CD54HCT08**	**(2631)**
54HCT10	**GE/RCA**	**CD54HCT10**	**(2631)**
54HCT107	**GE/RCA**	**CD54HCT107**	**(2631)**
54HCT109	**GE/RCA**	**CD54HCT109**	**(2631)**
54HCT11	**GE/RCA**	**CD54HCT11**	**(2631)**
54HCT112	**GE/RCA**	**CD54HCT112**	**(2631)**
54HCT123	**GE/RCA**	**CD54HCT123**	**(2632)**
54HCT132	**GE/RCA**	**CD54HCT132**	**(2631)**
54HCT138	CTI	54HCT138	
	GE/RCA	**CD54HCT138**	**(2632)**
	Mitel	MD54HCT138	
	Motorola	MC54HCT138	
	National	MM54HCT138	
	Sprague	SS54HCT138	
	Supertex	54HCT138	
	TI	SN54HCT138	
54HCT139	CTI	54HCT139	
	GE/RCA	**CD54HCT139**	**(2632)**
	Mitel	MD54HCT139	
	National	MM54HCT139	
	Sprague	SS54HCT139	
	Supertex	54HCT139	
54HCT14	**GE/RCA**	**CD54HCT14**	**(2631)**
54HCT147	**GE/RCA**	**CD54HCT147**	**(2632)**
54HCT151	**GE/RCA**	**CD54HCT151**	**(2632)**
54HCT153	**GE/RCA**	**CD54HCT153**	**(2632)**
54HCT154	**GE/RCA**	**CD54HCT154**	**(2632)**
54HCT157	**GE/RCA**	**CD54HCT157**	**(2632)**
	Motorola	MC54HCT157	
54HCT158	**GE/RCA**	**CD54HCT158**	**(2632)**
	Motorola	MC54HCT158	
54HCT160	**GE/RCA**	**CD54HCT160**	**(2632)**
54HCT161	**GE/RCA**	**CD54HCT161**	**(2632)**
54HCT162	**GE/RCA**	**CD54HCT162**	**(2632)**
54HCT163	**GE/RCA**	**CD54HCT163**	**(2632)**
54HCT164	**GE/RCA**	**CD54HCT164**	**(2631)**
54HCT165	**GE/RCA**	**CD54HCT165**	**(2631)**
54HCT166	**GE/RCA**	**CD54HCT166**	**(2631)**
54HCT173	**GE/RCA**	**CD54HCT173**	**(2631)**
54HCT174	**GE/RCA**	**CD54HCT174**	**(2631)**
54HCT175	**GE/RCA**	**CD54HCT175**	**(2631)**
54HCT191	**GE/RCA**	**CD54HCT191**	**(2632)**
54HCT192	**GE/RCA**	**CD54HCT192**	**(2632)**
54HCT193	**GE/RCA**	**CD54HCT193**	**(2632)**
54HCT194	**GE/RCA**	**CD54HCT194**	**(2631)**
54HCT195	**GE/RCA**	**CD54HCT195**	**(2631)**
54HCT20	**GE/RCA**	**CD54HCT20**	**(2631)**
54HCT221	**GE/RCA**	**CD54HCT221**	**(2632)**
54HCT238	CTI	54HCT238	
	GE/RCA	**CD54HCT238**	**(2632)**
	Sprague	SS54HCT238	
	TI	SN54HCT238	
54HCT240	CTI	54HCT240	
	GE/RCA	**CD54HCT240**	**(2631)**
	Hitachi	HD54HCT240	
	Micrel	MC54HCT240	
		MIC54HCT240	
	Mitel	MD54HCT240	
	Motorola	MC54HCT240	
	National	MM54HCT240	
	Supertex	SI54HCT240	
	TI	SN54HCT240	
54HCT241	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**
	Vitelic	V51C256	
		V51C257	
54HCT242	**GE/RCA**	**CD54HCT242**	**(2631)**
54HCT243	**GE/RCA**	**CD54HCT243**	**(2631)**
54HCT244	CTI	54HCT244	
	GE/RCA	**CD54HCT244**	**(2631)**
	Micrel	MIC54HCT244	
	Mitel	MD54HCT244	
	Motorola	MC54HCT244	
	National	MM54HCT244	
	Sprague	SS54HCT244	
	Supertex	SI54HCT244	
	TI	SN54HCT244	
54HCT245	CTI	54HCT245	
	GE/RCA	**CD54HCT245**	**(2631)**
	Mitel	MD54HCT245	
	Motorola	MC54HCT245	
	National	MM54HCT245	
	Sprague	SS54HCT245	
	Supertex	54HCT245	
	TI	SN54HCT245	
54HCT251	**GE/RCA**	**CD54HCT251**	**(2632)**
54HCT253	**GE/RCA**	**CD54HCT253**	**(2632)**
54HCT257	**GE/RCA**	**CD54HCT257**	**(2632)**
	Motorola	MC54HCT257	
54HCT259	**GE/RCA**	**CD54HCT259**	**(2632)**
54HCT27	**GE/RCA**	**CD54HCT27**	**(2631)**
54HCT273	**GE/RCA**	**CD54HCT273**	**(2631)**
54HCT280	**GE/RCA**	**CD54HCT280**	**(2632)**
54HCT297	**GE/RCA**	**CD54HCT297**	**(2632)**
54HCT299	**GE/RCA**	**CD54HCT299**	**(2631)**
54HCT30	**GE/RCA**	**CD54HCT30**	**(2631)**
54HCT32	**GE/RCA**	**CD54HCT32**	**(2631)**
54HCT354	**GE/RCA**	**CD54HCT354**	**(2632)**
54HCT356	**GE/RCA**	**CD54HCT356**	**(2632)**
54HCT365	**GE/RCA**	**CD54HCT365**	**(2631)**
54HCT366	**GE/RCA**	**CD54HCT366**	**(2631)**
54HCT367	**GE/RCA**	**CD54HCT367**	**(2631)**
54HCT368	**GE/RCA**	**CD54HCT368**	**(2631)**
54HCT373	CTI	54HCT373	
	GE/RCA	**CD54HCT373**	**(2632)**
	Micrel	MIC54HCT373	
	Mitel	MD54HCT373	
	Motorola	MC54HCT373	
	National	MM54HCT373	
	Sprague	SS54HCT373	
	Supertex	SI54HCT373	
	TI	SN54HCT373	
54HCT377	**GE/RCA**	**CD54HCT377**	**(2631)**
54HCT390	**GE/RCA**	**CD54HCT390**	**(2632)**
54HCT393	**GE/RCA**	**CD54HCT393**	**(2632)**
54HCT4002	**GE/RCA**	**CD54HCT4002**	**(2631)**
54HCT40104	**GE/RCA**	**CD54HCT40104**	**(2631)**
54HCT40105	**GE/RCA**	**CD54HCT40105**	**(2631)**
54HCT4017	**GE/RCA**	**CD54HCT4017**	**(2632)**
54HCT4020	**GE/RCA**	**CD54HCT4020**	**(2632)**
54HCT4024	**GE/RCA**	**CD54HCT4024**	**(2632)**
54HCT4040	**GE/RCA**	**CD54HCT4040**	**(2632)**
54HCT4049	GE/RCA	CD54HCT4049	
54HCT4050	GE/RCA	CD54HCT4050	
54HCT4051	**GE/RCA**	**CD54HCT4051**	**(2632)**
54HCT4052	**GE/RCA**	**CD54HCT4052**	**(2632)**
54HCT4053	**GE/RCA**	**CD54HCT4053**	**(2632)**
54HCT4060	**GE/RCA**	**CD54HCT4060**	**(2632)**
54HCT42	**GE/RCA**	**CD54HCT42**	**(2632)**
54HCT4511	**GE/RCA**	**CD54HCT4511**	**(2632)**
54HCT4514	**GE/RCA**	**CD54HCT4514**	**(2632)**
54HCT4520	**GE/RCA**	**CD54HCT4520**	**(2632)**
54HCT4538	**GE/RCA**	**CD54HCT4538**	**(2632)**
54HCT533	CTI	54HCT533	
	GE/RCA	**CD54HCT533**	**(2632)**
	Motorola	MC54HCT533	
	Sprague	SS54HCT533	
54HCT534	CTI	54HCT534	
	GE/RCA	**CD54HCT534**	**(2631)**
	Motorola	MC54HCT534	
	Sprague	SS54HCT534	
54HCT540	CTI	54HCT540	
	GE/RCA	**CD54HCT540**	**(2631)**
	Mitel	MD54HCT540	
	Motorola	MC54HCT540	
	National	MM54HCT540	
	Sprague	SS54HCT540	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
54HCT540			(Cont'd)
	Supertex	54HCT540	
	TI	SN54HCT540	
54HCT541	CTI	54HCT541	
	GE/RCA	**CD54HCT541**	**(2631)**
	Mitel	MD54HCT541	
	Motorola	MC54HCT541	
	National	MM54HCT541	
	Sprague	SS54HCT541	
	Supertex	54HCT541	
	TI	SN54HCT541	
54HCT563	CTI	54HCT563	
	GE/RCA	**CD54HCT563**	**(2632)**
	Sprague	SS54HCT563	
54HCT564	CTI	54HCT564	
	GE/RCA	**CD54HCT564**	**(2631)**
	Sprague	SS54HCT564	
54HCT573	CTI	54HCT573	
	GE/RCA	**CD54HCT573**	**(2632)**
	Mitel	MD54HCT573	
	Sprague	SS54HCT573	
54HCT574	CTI	54HCT574	
	GE/RCA	**CD54HCT574**	**(2631)**
	Mitel	MD54HCT574	
	Sprague	SS54HCT574	
54HCT640	**GE/RCA**	**CD54HCT640**	**(2631)**
	Motorola	MC54HCT640	
	Sprague	SS54HCT640	
54HCT643	**GE/RCA**	**CD54HCT643**	**(2631)**
	Motorola	MC54HCT643	
54HCT645	Sprague	SS54HCT645	
54HCT646	**GE/RCA**	**CD54HCT646**	**(2631)**
54HCT648	**GE/RCA**	**CD54HCT648**	**(2631)**
54HCT670	**GE/RCA**	**CD54HCT670**	**(2631)**
54HCT688	**GE/RCA**	**CD54HCT688**	**(2632)**
54HCT73	**GE/RCA**	**CD54HCT73 (2631)**	
54HCT74	**GE/RCA**	**CD54HCT74 (2631)**	
54HCT75	**GE/RCA**	**CD54HCT75 (2632)**	
54HCT85	**GE/RCA**	**CD54HCT85 (2632)**	
54HCT86	**GE/RCA**	**CD54HCT86 (2631)**	
54HCU04	**GE/RCA**	**CD54HCU04**	**(2631)**
	Motorola	MC54HCU04	
54LS00	Fairchild	54LS00	
	Motorola	SN54LS00	
	National	DM54LS00	
	SGS	T54LS00	
	TI	SN54LS00	
54LS02	Fairchild	54LS02	
	Motorola	SN54LS02	
	National	DM54LS02	
	SGS	T54LS02	
	TI	SN54LS02	
54LS04	Fairchild	54LS04	
	Motorola	SN54LS04	
	National	DM54LS04	
	SGS	T54LS04	
	TI	SN54LS04	
54LS08	Fairchild	54LS08	
	Motorola	SN54LS08	
	National	DM54LS08	
	SGS	T54LS08	
	TI	SN54LS08	
54LS10	Fairchild	54LS10	
	Motorola	SN54LS10	
	National	DM54LS10	
	SGS	54LS10	
		T54LS10	
	TI	SN54LS10	
54LS107	Motorola	SN54LS107	
	National	DM54LS107	
	TI	SN54LS107	
54LS109	Fairchild	54LS109	
	Motorola	SN54LS109	
	National	DM54LS109	
	SGS	54LS109	
		T54LS109	
	TI	SN54LS109	

Manufacturer Device	Replacement Source	Device	IC Master Page
54LS125A	Fairchild	54LS125A	
	Motorola	SN54LS125	
		SN54LS125A	
	National	DM54LS125	
	SGS	T54LS125	
	TI	SN54LS125A	
54LS126	Fairchild	54LS126	
	Motorola	SN54LS126	
	National	DM54LS126	
	SGS	54LS126	
		T54LS126	
	TI	SN54LS126	
54LS132	Motorola	SN54LS132	
	National	DM54LS132	
	SGS	T54LS132	
	TI	SN54LS132	
54LS136	Fairchild	54LS136	
	Motorola	SN54LS136	
	National	DM54LS136	
	SGS	T54LS136	
	TI	SN54LS136	
54LS138	Fairchild	54LS138	
	Motorola	SN54LS138	
	National	DM54LS138	
	SGS	T54LS138	
	TI	SN54LS138	
54LS139	Fairchild	54LS139	
	Motorola	SN54LS139	
	National	DM54LS139	
	SGS	T54LS139	
	TI	SN54LS139A	
54LS14	Fairchild	54LS14	
	Motorola	SN54LS14	
	National	DM54LS14	
	SGS	T54LS14	
	TI	SN54LS14	
54LS151	Fairchild	54LS151	
	Motorola	SN54LS151	
	National	DM54LS151	
	SGS	T54LS151	
	TI	SN54LS151	
54LS153	Fairchild	54LS153	
	Motorola	SN54LS153	
	National	DM54LS153	
	SGS	T54LS153	
	TI	SN54LS153	
54LS154	National	DM54LS154	
54LS157	Fairchild	54LS157	
	Motorola	SN54LS157	
	National	DM54LS157	
	SGS	T54LS157	
	TI	SN54LS157	
54LS158	Fairchild	54LS158	
	Motorola	SN54LS158	
	National	DM54LS158	
	SGS	T54LS158	
	TI	SN54LS158	
54LS160A	Fairchild	54LS160A	
	Motorola	SN54LS160A	
	SGS	T54LS160	
	TI	SN54LS160A	
54LS161A	Fairchild	54LS161A	
	Motorola	SN54LS161A	
	National	DM54LS161A	
	SGS	T54LS161	
	TI	SN54LS161A	
54LS162A	Fairchild	54LS162A	
	Motorola	SN54LS162A	
	National	DM54LS162A	
	SGS	T54LS162	
	TI	SN54LS162A	
54LS163A	Fairchild	54LS163A	
	Motorola	SN54LS163A	
	National	DM54LS163	
		DM54LS163A	
	SGS	T54LS163	
	TI	SN54LS163A	
54LS164	Fairchild	54LS164	
	Motorola	SN54LS164	
	SGS	T54LS164	
	TI	SN54LS164	
54LS173	Fairchild	54LS173	
	Motorola	SN54LS173A	
	National	DM54LS173	
	TI	SN54LS173A	
54LS174	Fairchild	54LS174	
	Motorola	SN54LS174	
	National	DM54LS174	
	SGS	T54LS174	
	TI	SN54LS174	
54LS175	Fairchild	54LS175	
	Motorola	SN54LS175	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
54LS175			(Cont'd)
	National	DM54LS175	
	SGS	T54LS175	
	TI	SN54LS175	
54LS181	Fairchild	54LS181	
	Motorola	SN54LS181	
	SGS	T54LS181	
	TI	SN54LS181	
54LS190	Motorola	SN54LS190	
	National	DM54LS190	
	SGS	T54LS190	
	TI	SN54LS190	
54LS191	Motorola	SN54LS191	
	National	DM54LS191	
	SGS	T54LS191	
	TI	SN54LS191	
54LS192	Fairchild	54LS192	
	Motorola	SN54LS192	
	National	DM54LS192	
	SGS	T54LS192	
	TI	SN54LS192	
54LS193	Fairchild	54LS193	
	Motorola	SN54LS193	
	National	DM54LS193	
	SGS	T54LS193	
	TI	SN54LS193	
54LS194A	Fairchild	54LS28	
	Motorola	SN54LS28	
	SGS	T54LS28	
	Signetics	54LS28	
	TI	SN54LS28	
54LS195A	Fairchild	54LS195A	
	Motorola	SN54LS195A	
	SGS	T54LS195	
	TI	SN54LS195A	
54LS197	Motorola	SN54LS197	
	National	DM54LS197	
	SGS	T54LS197	
	TI	SN54LS197	
54LS20	Fairchild	54LS20	
	Motorola	SN54LS20	
	National	DM54LS20	
	SGS	T54LS20	
	TI	SN54LS20	
54LS221	Motorola	SN54LS221	
	National	DM54LS221	
	TI	SN54LS221	
54LS245	Fairchild	54LS245	
	MMI	SN54LS245	
	Motorola	SN54LS245	
	National	DM54LS245	
	TI	SN54LS245	
54LS248	Fairchild	54LS248	
	Motorola	SN54LS248	
	National	DM54LS248	
	TI	SN54LS248	
54LS251	Fairchild	54LS251	
	Motorola	SN54LS251	
	SGS	T54LS251	
	TI	SN54LS251	
54LS253	Fairchild	54LS253	
	Motorola	SN54LS253	
	National	DM54LS253	
		DM7214	
	SGS	T54LS253	
	TI	SN54LS253	
54LS260A	Fairchild	54LS260	
	Motorola	SN54LS260A	
	SGS	T54LS260	
54LS266	Fairchild	54LS266	
	Motorola	SN54LS266	
	National	DM54LS266	
	SGS	T54LS266	
	TI	SN54LS266	
54LS273	Fairchild	54LS273	
	MMI	SN54LS273	
	Motorola	SN54LS273	
	SGS	T54LS273	
	TI	SN54LS273	
54LS279	Fairchild	54LS279	
	Motorola	SN54LS279	
	National	DM54LS279	
	SGS	T54LS279	
	TI	SN54LS279A	
54LS28	Fairchild	54LS28	
	Motorola	SN54LS28	
	SGS	T54LS28	
	Signetics	54LS194A	
	TI	SN54LS28	
54LS283	Fairchild	54LS283	
	Motorola	SN54LS283	
	National	DM54LS283	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
54LS283			(Cont'd)
	SGS	T54LS283	
	TI	SN54LS283	
54LS290	Motorola	SN54LS290	
	National	DM54LS290	
	SGS	T54LS290	
	TI	SN54LS290	
54LS293	Motorola	SN54LS293	
	National	DM54LS293	
	SGS	T54LS293	
	TI	SN54LS293	
54LS298	Fairchild	54LS298	
	Motorola	SN54LS298	
	National	DM54LS298	
	SGS	54LS298	
		T54LS298	
	TI	SN54LS298	
54LS30	Fairchild	54LS30	
	Motorola	SN54LS30	
	National	DM54LS30	
	SGS	T54LS30	
	TI	SN54LS30	
54LS32	Fairchild	54LS32	
	Motorola	SN54LS32	
	National	DM54LS32	
	SGS	T54LS32	
	TI	SN54LS32	
54LS365	Fairchild	54LS365A	
	Motorola	SN54LS365A	
	SGS	T54LS365	
	Signetics	54LS365A	
	TI	SN54LS365A	
54LS365A	Fairchild	54LS365A	
	Motorola	SN54LS365A	
	SGS	T54LS365	
	Signetics	54LS365	
	TI	SN54LS365A	
54LS366A	Fairchild	54LS366A	
	Motorola	SN54LS366A	
	National	DM54LS366	
	SGS	T54LS366	
	TI	SN54LS366A	
54LS367	Fairchild	54LS367A	
	Motorola	SN54LS367A	
	National	DM54LS367	
	SGS	T54LS367	
	Signetics	54LS367A	
	TI	SN54LS367A	
54LS367A	Fairchild	54LS367A	
	Motorola	SN54LS367A	
	National	DM54LS367	
	SGS	T54LS367	
	Signetics	54LS367	
	TI	SN54LS367A	
54LS368	Fairchild	54LS368A	
	Motorola	SN54LS368A	
	National	DM54LS368	
	SGS	T54LS368	
	Signetics	54LS368A	
	TI	SN54LS368A	
54LS368A	Fairchild	54LS368A	
	Motorola	SN54LS368A	
	National	DM54LS368	
	SGS	T54LS368	
	Signetics	54LS368	
	TI	SN54LS368A	
54LS37	Fairchild	54LS37	
	Motorola	SN54LS37	
	National	DM54LS37	
	SGS	T54LS37	
	TI	SN54LS37	
54LS373	MMI	SN54LS373	
	Motorola	SN54LS373	
	SGS	T54LS373	
	TI	SN54LS373	
54LS375	Fairchild	54LS375	
	Motorola	SN54LS375	
	TI	SN54LS375	
54LS377	Fairchild	54LS377	
	Motorola	SN54LS377	
	SGS	T54LS377	
	TI	SN54LS377	
54LS378	AMD	SN54LS378	
	Motorola	SN54LS378	
	TI	SN54LS378	
54LS395	Fairchild	54LS395	
	Motorola	SN54LS395	
	SGS	T54LS395	
	TI	SN54LS395	
54LS42	Fairchild	54LS42	
	Motorola	SN54LS42	
	National	DM54LS42	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
54LS42			(Cont'd)
	SGS	T54LS42	
	TI	SN54LS42	
54LS51	Fairchild	54LS51	
	Motorola	SN54LS51	
	National	DM54LS51	
	SGS	T54LS51	
	TI	SN54LS51	
54LS541	Fairchild	54LS541	
	Motorola	SN54LS541	
	TI	SN54LS541	
54LS670	Fairchild	54LS670	
	Motorola	SN54LS670	
	National	DM54LS670	
	SGS	T54LS670	
	TI	SN54LS670	
54LS73	Motorola	SN54LS73A	
	National	DM54LS73	
		DM54LS73A	
	TI	SN54LS73A	
54LS74	Fairchild	54LS74	
	Motorola	SN54LS74A	
	National	DM54LS74	
		DM54LS74A	
	SGS	T54LS74	
	TI	SN54LS74A	
54LS75	Motorola	SN54LS75	
	National	DM54LS75	
	TI	SN54LS75	
54LS76	Motorola	SN54LS76A	
	National	DM54LS76	
	TI	SN54LS76A	
54LS83	Fairchild	54LS83A	
	Motorola	SN54LS83A	
	National	DM54LS83A	
	SGS	T54LS83	
	Signetics	54LS83A	
	TI	SN54LS83A	
54LS83A	Fairchild	54LS83A	
	Motorola	SN54LS83A	
	National	DM54LS83A	
	SGS	T54LS83	
	Signetics	54LS83	
	TI	SN54LS83A	
54LS85	Fairchild	54LS85	
	Motorola	SN54LS85	
	National	DM54LS85	
	TI	SN54LS85	
54LS86	Motorola	SN54LS86	
	National	DM54LS86	
	SGS	T54LS86	
	TI	SN54LS86A	
54LS90	Motorola	SN54LS90	
	National	DM54LS90	
	SGS	T54LS90	
	TI	SN54LS90	
54LS92	Motorola	SN54LS92	
	National	DM54LS92	
	SGS	T54LS92	
	TI	SN54LS92	
54LS93	Motorola	SN54LS93	
	National	DM54LS93	
	SGS	T54LS93	
	TI	SN54LS93	
54LS95B	Fairchild	54LS95B	
	Motorola	SN54LS95B	
	National	DM54LS95B	
	SGS	T54LS95	
	TI	SN54LS95B	
54LS96	TI	SN54LS96	
54S00	TI	SN54S00	
54S02	TI	SN54S02	
54S03	National	DM54S03	
	TI	SN54S03	
54S04	TI	SN54S04	
54S08	TI	SN54S08	
54S10	Fairchild	54S10	
	National	DM54S10	
	TI	SN54S10	
54S11	TI	SN54S11	
54S133	Fairchild	54S133	
	National	DM54S133	
	TI	SN54S133	
54S134	Fairchild	54S194	
	National	DM54S194	
	TI	SN54S194	
54S135	Fairchild	54S135	
	National	DM54S135	
	TI	SN54S135	
54S138	Fairchild	54S138	
	National	DM54S138	
	TI	SN54S138	
54S139	Fairchild	54S139	
	National	DM54S139	
	TI	SN54S139	
54S140	National	DM54S140	
	TI	SN54S140	
54S151	Fairchild	54S151	
	National	DM54S151	
	TI	SN54S151	
54S153	Fairchild	54S153	
	National	DM54S153	
	TI	SN54S153	
54S157	Fairchild	54S157	
	National	DM54S157	
	TI	SN54S157	
54S158	Fairchild	54S158	
	National	DM54S158	
	TI	SN54S158	
54S168	TI	SN54S168	
54S169	TI	SN54S169	
54S175	Fairchild	54S175	
	National	DM54S175	
	TI	SN54S175	
54S181	TI	SN54S181	
54S189	AMD	SN54S189	
	National	DM54S189	
54S195	National	DM54S195	
	TI	SN54S195	
54S20	Fairchild	54S20	
	National	DM54S20	
	TI	SN54S20	
54S244	MMI	SN54S244	
	TI	SN54S244	
54S251	National	DM54S251	
	TI	SN54S251	
54S257	National	DM54S257	
	TI	SN54S257	
54S258	Fairchild	54S258	
	National	DM54S258	
	TI	SN54S258	
54S280	Fairchild	54S280	
	National	DM54S280	
	TI	SN54S280	
54S37	TI	SN54S37	
54S38	TI	SN54S38	
54S40	Fairchild	54S40	
	National	DM54S40	
	TI	SN54S40	
54S51	Fairchild	54S51	
	National	DM54S51	
	TI	SN54S51	
54S64	Fairchild	54S64	
	National	DM54S64	
	TI	SN54S64	
54S65	Fairchild	54S65	
	National	DM54S65	
	TI	SN54S65	
54S74	Fairchild	54S74	
	TI	SN54S74	
54S85	TI	SN54S85	
54S86	TI	SN54S86	
55450	SiliconG	SG55450B	
	TI	SN55450	
55451	Fairchild	55451	
	National	DS55451	
	SiliconG	SG55451	
		SG55451B	
	TI	SN55451	
55452	Fairchild	μA55452	
	National	DS55452	
	SiliconG	SG55452	
	TI	SN55452	
		SNJ55452	
55453	Fairchild	55453	
	National	DS55453	
		LM55453	
	SiliconG	SG55453	
	TI	SN55453	
		SNJ55453	
55454	National	DS55454	
	SiliconG	SG55454	
		SG55454B	
	TI	SN55454	
68682	Motorola	MC68682	
7400	Fairchild	7400	
	National	DM7400	
	TI	SN7400	
	Toshiba	TC7400	
7402	Fairchild	7402	
	National	DM7402	
	TI	SN7402	
7403	Fairchild	7403	
	National	DM7403	
	TI	SN7403	
7404	Fairchild	7404	
	National	DM7404	
	TI	SN7404	
	Toshiba	TC7404	
7405	Fairchild	7405	
	National	DM7405	
	TI	SN7405	
7406	Fairchild	7406	
	National	DM7406	
	TI	SN7406	
7407	Fairchild	7407	
	Hitachi	HD7407	
	National	DM7407	
	TI	SN7407	
7408	Fairchild	7408	
	National	DM7408	
	TI	SN7408	
7410	Fairchild	7410	
	National	DM7410	
	TI	SN7410	
	Toshiba	TC7410	
74107	National	DM74107	
	TI	SN74107	
74109	National	DM74109	
	TI	SN74109	
7411	Fairchild	7411	
	Hitachi	HD7411	
	National	DM7411	
74121	Fairchild	74121	
	National	DM74121	
	TI	SN74121	
74123	Fairchild	74123	
	National	DM74123	
	TI	SN74123	
74125	Fairchild	74125	
	National	DM74125	
		DM8093	
	TI	SN74125	
74126	National	DM74126	
		DM8094	
	TI	SN74126	
74128	TI	SN74128	
7413	National	DM7413	
	TI	SN7413	
74132	Fairchild	74132	
	National	DM74132	
	TI	SN74132	
7414	Fairchild	7414	
	National	DM7414	
	TI	SN7414	
74141	Fairchild	93141	
	Hitachi	HD7441	
	National	DM74141	
		DM7441	
	Signetics	7441	
74145	Fairchild	74145	
	National	DM74145	
	TI	SN74145	
74147	**GE/RCA**	**CD4508**	**(2634)**
	Motorola	MC14508	
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	HEF4508	
		N82147	
	Sprague	SCL4508	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
74148	National	DM74148	
		DM8318	
	Signetics	N82148	
	TI	SN74148	
74150	Fairchild	74150	
	National	DM74150	
	TI	SN74150	
74153	Fairchild	74153	
	National	DM74153	
	TI	SN74153	
74155	Fairchild	74155	
	National	DM74155	
	TI	SN74155	
74156	National	DM74156	
	TI	SN74156	
74157	National	DM74157	
	TI	SN74157	
7416	Fairchild	7416	
	National	DM7416	
	TI	SN7416	
74160	National	DM74160	
	TI	SN74160	
74161	Fairchild	74161	
	National	DM74161	
	TI	SN74161	
74163	Fairchild	74163	
	National	DM74163	
	TI	SN74163	
74165	Fairchild	74165	
	National	DM74165	
		DM8590	
	TI	SN74165	
74166	Fairchild	74166	
	National	DM74166	
	TI	SN74166	
7417	Fairchild	7417	
	National	DM7417	
	TI	SN7417	
74170	Fairchild	74170	
	Hitachi	HD74170	
	National	DM74170	
	TI	SN74170	
74172	TI	SN74172	
74174	Fairchild	74174	
	National	DM74174	
	TI	SN74174	
74176	Fairchild	96176	
	National	DM74176	
		DM8280	
	Raytheon	RC8280	
	TI	SN74176	
74177	National	DM74177	
		DM8281	
	Raytheon	RC8281	
	TI	SN74177	
74180	Fairchild	74180	
	National	DM74180	
	TI	SN74180	
74181	Hitachi	HD74181	
	National	DM74181	
	Raytheon	RC9341	
74190	National	DM74190	
	TI	SN74190	
74191	National	DM74191	
	TI	SN74191	
74192	National	DM74192	
		DM8560	
	Raytheon	RC9360	
	TI	SN74192	
74194	National	DM74194	
	TI	SN74194	
74195	National	DM74195	
	TI	SN74195	
74196	National	DM74196	
		DM8290	
	Raytheon	RC8290	
	TI	SN74196	
74197	Fairchild	74197	
	National	DM74197	
		DM8291	
	Raytheon	RC8291	
	TI	SN74197	
74198	National	DM74198	
	TI	SN74198	
74199	National	DM74199	
	TI	SN74199	
7420	Fairchild	7420	
		9004	
	National	DM7420	
		DM9004C	
	TI	SN7420	
	Toshiba	TC7420	
74221	TI	SN74221	
7426	Fairchild	μA75451	
	National	DM7426	
		DM8810	
	TI	SN7426	
7427	Fairchild	7427	
	National	DM7427	
	TI	SN7427	
74279	Fairchild	74279	
	TI	SN74279	
7428	TI	SN7428	
74298	TI	SN74298	
7430	Fairchild	7430	
	National	DM7430	
	TI	SN7430	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Signetics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
7432	Fairchild	7432	
	National	DM7432	
	TI	SN7432	
7433	TI	SN7433	
74365A	TI	SN74365A	
		SN74366A	
74367A	TI	SN74367A	
74368A	TI	SN74368A	
7437	Fairchild	7437	
	National	DM7437	
	TI	SN7437	
7438	Fairchild	7438	
	National	DM7438	
	TI	SN7438	
7439	Fairchild	7439	
7440	Fairchild	7440	
	National	DM7440	
	TI	SN7440	
7441	Fairchild	93141	
	Hitachi	HD7441	
	National	DM74141	
		DM7441	
	Signetics	74141	
7442	Fairchild	7442	
	National	DM7442	
		DM8842	
	TI	SN7442A	
7445	Fairchild	7445	
	TI	SN7445	
7450	Fairchild	7450	
	National	DM7450	
	TI	SN7450	
7451	Fairchild	7451	
	Hitachi	HD7451	
	National	DM7451	
	TI	SN7451	
7473	Fairchild	7473	
	National	DM7473	
	TI	SN7473	
7474	Fairchild	7474	
	National	DM7474	
	TI	SN7474	
7475	Fairchild	7475	
	National	DM7475	
	TI	SN7475	
7476	Fairchild	7476	
	National	DM7476	
	TI	SN7476	
7485	Fairchild	7485	
	National	DM7485	
	TI	SN7485	
7486	Fairchild	7486	
	National	DM7486	
	TI	SN7486	
7494	Hitachi	HD7494	
7496	National	DM7496	
	TI	SN7496	
74AC11000	TI	**74AC11000 (3252)**	
74AC11002	TI	**74AC11002 (3252)**	
74AC11004	TI	**74AC11004 (3252)**	
74AC11008	TI	**74AC11008 (3252)**	
74AC11010	TI	**74AC11010 (3252)**	
74AC11011	TI	**74AC11011 (3252)**	
74AC11013	TI	74AC11012	
74AC11014	TI	**74AC11014 (3252)**	
74AC11020	TI	**74AC11020 (3252)**	
74AC11021	TI	**74AC11021 (3252)**	
74AC11027	TI	**74AC11027 (3252)**	
74AC11030	TI	**74AC11030 (3252)**	
74AC11032	TI	**74AC11032 (3252)**	
74AC11034	TI	**74AC11034 (3252)**	
74AC11074	Signetics	74AC11112	
	TI	**74AC11074 (3252)**	
		74AC11112 (3252)	
74AC11109	Signetics	74AC11132	
	TI	**74AC11109 (3252)**	
		74AC11132 (3252)	
74AC11112	Signetics	74AC11074	
	TI	**74AC11074 (3252)**	
		74AC11112 (3252)	
74AC11132	Signetics	74AC11109	
	TI	**74AC11109 (3252)**	
		74AC11132 (3252)	
74AC11138	TI	**74AC11138 (3252)**	
74AC11139	TI	**74AC11139 (3252)**	
74AC11151	TI	**74AC11151 (3252)**	
74AC11153	TI	**74AC11153 (3252)**	
74AC11157	TI	**74AC11157 (3252)**	
74AC11158	TI	**74AC11158 (3252)**	
74AC11160	TI	**74AC11160 (3252)**	
74AC11161	TI	**74AC11161 (3252)**	
74AC11162	TI	**74AC11162 (3252)**	
74AC11163	TI	**74AC11163 (3252)**	
74AC11168	TI	**74AC11168 (3252)**	
74AC11169	TI	**74AC11169 (3252)**	
74AC11174	TI	**74AC11174 (3252)**	
74AC11175	TI	**74AC11175 (3252)**	
74AC11181	TI	74AC11181	
74AC11190	TI	**74AC11190 (3252)**	
74AC11191	TI	**74AC11191 (3252)**	
74AC11192	TI	**74AC11192 (3252)**	
74AC11193	TI	**74AC11193 (3252)**	
74AC11194	TI	**74AC11194 (3252)**	
74AC11238	TI	**74AC11238 (3252)**	
74AC11239	TI	**74AC11239 (3252)**	
74AC11240	TI	**74AC11240 (3252)**	
74AC11241	TI	**74AC11241 (3252)**	
74AC11244	TI	**74AC11244 (3252)**	
74AC11245	TI	**74AC11245 (3252)**	
74AC11251	TI	**74AC11251 (3252)**	
74AC11253	TI	**74AC11253 (3252)**	
74AC11257	TI	**74AC11257 (3252)**	
74AC11258	TI	**74AC11258 (3252)**	
74AC11269	TI	**74AC11269 (3252)**	
74AC11280	TI	**74AC11280 (3252)**	
74AC11286	TI	**74AC11286 (3252)**	
74AC11299	TI	**74AC11299 (3252)**	
74AC11323	TI	**74AC11323 (3252)**	
74AC11352	TI	**74AC11352 (3252)**	
74AC11353	TI	**74AC11353 (3252)**	
74AC11373	TI	**74AC11373 (3252)**	
74AC11374	TI	**74AC11374 (3252)**	
74AC11378	TI	**74AC11378 (3252)**	
74AC11379	TI	**74AC11379 (3252)**	
74AC11520	TI	**74AC11520 (3252)**	
74AC11521	TI	**74AC11521 (3252)**	
74AC11533	TI	**74AC11533 (3252)**	
74AC11534	TI	**74AC11534 (3252)**	
74AC11568	TI	**74AC11568 (3252)**	
74AC11569	TI	**74AC11569 (3252)**	
74AC11579	TI	**74AC11579 (3252)**	
74AC11620	TI	**74AC11620 (3252)**	
74AC11623	TI	**74AC11623 (3252)**	
74AC11640	TI	**74AC11640 (3252)**	
74AC11643	TI	**74AC11643 (3252)**	
74AC11646	TI	**74AC11646 (3252)**	
74AC11648	TI	**74AC11648 (3252)**	
74AC11651	TI	**74AC11651 (3252)**	
74AC11652	TI	**74AC11652 (3252)**	
74AC11657	TI	**74AC11657 (3252)**	
74AC11818	TI	**74AC11818 (3252)**	
74AC11819	TI	**74AC11819 (3252)**	
74AC11821	TI	**74AC11821 (3252)**	
74AC11822	TI	**74AC11822 (3252)**	
74AC11823	TI	**74AC11823 (3252)**	
74AC11824	TI	**74AC11824 (3252)**	
74AC11825	TI	**74AC11825 (3252)**	
74AC11826	TI	**74AC11826 (3252)**	
74AC11827	TI	**74AC11827 (3252)**	
74AC11828	TI	**74AC11828 (3252)**	
74AC11833	TI	**74AC11833 (3252)**	
74AC11834	TI	**74AC11834 (3252)**	
74AC11841	TI	**74AC11841 (3252)**	
74AC11842	TI	**74AC11842 (3252)**	
74AC11843	TI	**74AC11843 (3252)**	
74AC11844	TI	**74AC11844 (3252)**	
74AC11845	TI	**74AC11845 (3252)**	
74AC11846	TI	**74AC11846 (3252)**	
74AC11853	TI	**74AC11853 (3252)**	
74AC11854	TI	**74AC11854 (3252)**	
74AC11861	TI	**74AC11861 (3252)**	
74AC11862	TI	**74AC11862 (3252)**	
74AC11863	TI	**74AC11863 (3252)**	
74AC11864	TI	**74AC11864 (3252)**	
74AC11873	TI	**74AC11873 (3252)**	
74AC11874	TI	**74AC11874 (3252)**	
74AC11881	TI	**74AC11881 (3252)**	
74AC11882	TI	**74AC11882 (3252)**	
74ACT11000	TI	**74ACT11000 (3252)**	
74ACT11002	TI	**74ACT11002 (3252)**	
74ACT11004	TI	**74ACT11004 (3252)**	
74ACT11008	TI	**74ACT11008 (3252)**	
74ACT11010	TI	**74ACT11010 (3252)**	
74ACT11011	TI	**74ACT11011 (3252)**	
74ACT11013	TI	74ACT11013	
74ACT11014	TI	74ACT11014	
74ACT11020	TI	**74ACT11020 (3252)**	
74ACT11021	TI	**74ACT11021 (3252)**	
74ACT11027	TI	**74ACT11027 (3252)**	
74ACT11030	TI	**74ACT11030 (3252)**	
74ACT11032	TI	**74ACT11032 (3252)**	
74ACT11034	TI	**74ACT11034 (3252)**	
74ACT11074	TI	**74ACT11074 (3252)**	
74ACT11109	TI	**74ACT11109 (3252)**	
74ACT11112	TI	**74ACT11112 (3252)**	
74ACT11132	TI	**74ACT11132 (3252)**	
74ACT11138	TI	**74ACT11138 (3252)**	
74ACT11139	TI	**74ACT11139 (3252)**	
74ACT11151	TI	**74ACT11151 (3252)**	
74ACT11153	TI	**74ACT11153 (3252)**	
74ACT11157	TI	**74ACT11157 (3252)**	
74ACT11158	TI	74ACT11158	
74ACT11160	TI	**74ACT11160 (3252)**	
74ACT11161	TI	**74ACT11161 (3252)**	
74ACT11162	TI	**74ACT11162 (3252)**	
74ACT11163	TI	**74ACT11163 (3252)**	
74ACT11168	TI	**74ACT11168 (3252)**	
74ACT11169	TI	**74ACT11169 (3252)**	
74ACT11174	TI	**74ACT11174 (3252)**	
74ACT11175	TI	**74ACT11175 (3252)**	
74ACT11181	TI	74ACT11181	
74ACT11190	TI	**74ACT11190 (3252)**	
74ACT11191	TI	**74ACT11191 (3252)**	
74ACT11192	TI	**74ACT11192 (3252)**	
74ACT11193	TI	**74ACT11193 (3252)**	
74ACT11194	TI	**74ACT11194 (3252)**	
74ACT11238	TI	**74ACT11238 (3252)**	
74ACT11240	TI	**74ACT11240 (3252)**	
74ACT11241	TI	**74ACT11241 (3252)**	
74ACT11244	TI	**74ACT11244 (3252)**	
74ACT11245	TI	**74ACT11245 (3252)**	
74ACT11251	TI	**74ACT11251 (3252)**	
74ACT11253	TI	**74ACT11253 (3252)**	
74ACT11257	TI	**74ACT11257 (3252)**	
74ACT11258	TI	**74ACT11258 (3252)**	
74ACT11269	TI	**74ACT11269 (3252)**	
74ACT11280	TI	**74ACT11280 (3252)**	
74ACT11286	TI	**74ACT11286 (3252)**	
74ACT11299	TI	**74ACT11299 (3253)**	
74ACT11323	TI	**74ACT11323 (3253)**	
74ACT11352	TI	74ACT11352	
74ACT11353	TI	**74ACT11353 (3253)**	
74ACT11373	TI	**74ACT11373 (3253)**	
74ACT11374	TI	**74ACT11374 (3253)**	
74ACT11378	TI	**74ACT11378 (3253)**	
74ACT11379	TI	**74ACT11379 (3253)**	
74ACT11520	TI	**74ACT11520 (3253)**	
74ACT11521	TI	**74ACT11521 (3253)**	
74ACT11533	TI	**74ACT11533 (3253)**	
74ACT11534	TI	**74ACT11534 (3253)**	
74ACT11568	TI	**74ACT11568 (3253)**	
74ACT11569	TI	**74ACT11569 (3253)**	
74ACT11579	TI	**74ACT11579 (3253)**	
74ACT11620	TI	**74ACT11620 (3253)**	
74ACT11623	TI	**74ACT11623 (3253)**	
74ACT11640	TI	**74ACT11640 (3253)**	
74ACT11643	TI	**74ACT11643 (3253)**	
74ACT11646	TI	**74ACT11646 (3253)**	
74ACT11648	TI	**74ACT11648 (3253)**	
74ACT11651	TI	**74ACT11651 (3253)**	
74ACT11652	TI	**74ACT11652 (3253)**	
74ACT11657	TI	**74ACT11657 (3253)**	
74ACT11818	TI	**74ACT11818 (3253)**	
74ACT11819	TI	**74ACT11819 (3253)**	
74ACT11821	TI	**74ACT11821 (3253)**	
74ACT11822	TI	**74ACT11822 (3253)**	
74ACT11823	TI	**74ACT11823 (3253)**	
74ACT11824	TI	**74ACT11824 (3253)**	
74ACT11825	TI	**74ACT11825 (3253)**	
74ACT11826	TI	**74ACT11826 (3253)**	
74ACT11827	TI	**74ACT11827 (3253)**	
74ACT11828	TI	**74ACT11828 (3253)**	
74ACT11833	TI	**74ACT11833 (3253)**	
74ACT11834	TI	**74ACT11834 (3253)**	
74ACT11841	TI	**74ACT11841 (3253)**	
74ACT11842	TI	**74ACT11842 (3253)**	
74ACT11843	TI	**74ACT11843 (3253)**	
74ACT11844	TI	**74ACT11844 (3253)**	
74ACT11845	TI	**74ACT11845 (3253)**	
74ACT11846	TI	**74ACT11846 (3253)**	
74ACT11853	TI	**74ACT11853 (3253)**	
74ACT11854	TI	**74ACT11854 (3253)**	
74ACT11861	TI	**74ACT11861 (3253)**	
74ACT11862	TI	**74ACT11862 (3253)**	
74ACT11863	TI	**74ACT11863 (3253)**	
74ACT11864	TI	**74ACT11864 (3253)**	
74ACT11873	TI	**74ACT11873 (3253)**	
74ACT11874	TI	**74ACT11874 (3253)**	
74ACT11881	TI	**74ACT11881 (3253)**	
74ACT11882	TI	**74ACT11882 (3253)**	
74ALS00	Motorola	SN74ALS00	
	National	DM74ALS00	
	TI	SN74ALS00	
		SN74ALS00A	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
74ALS02	Motorola	SN74ALS02	
	National	DM74ALS02	
	TI	SN74ALS02	
74ALS04	Motorola	SN74ALS04	
	National	DM74ALS04	
	TI	SN74ALS04	
		SN74ALS04B	
74ALS08	Motorola	SN74ALS08	
	National	DM74ALS08	
	TI	SN74ALS08	
74ALS10	National	DM74ALS10	
	TI	SN74ALS10	
		SN74ALS10A	
74ALS11	National	DM74ALS11	
	TI	SN74ALS11	
		SN74ALS11A	
74ALS138	National	DM74ALS138	
	TI	SN74ALS138	
74ALS139	TI	SN74ALS139	
74ALS151	Mitsubishi	M74ALS151	
	National	DM74ALS151	
	TI	SN74ALS151	
74ALS153	Mitsubishi	M74ALS153	
	National	DM74ALS153	
	TI	SN74ALS153	
74ALS157	Mitsubishi	M74ALS157	
	TI	SN74ALS157	
74ALS158	Mitsubishi	M74ALS158	
	National	DM54ALS353	
		DM54AS1000	
		DM74ALS158	
	TI	SN54ALS353	
		SN74ALS158	
74ALS161	Motorola	SN74ALS161	
	National	DM74ALS161	
	TI	SN74ALS161B	
74ALS163	Motorola	SN74ALS163	
	National	DM74ALS163	
	TI	SN74ALS163A	
		SN74ALS163B	
74ALS174	Mitsubishi	M74ALS174	
	National	DM74ALS174	
	TI	SN74ALS174	
74ALS175	Mitsubishi	M74ALS175	
	National	DM74ALS175	
	TI	SN74ALS175	
74ALS191	Mitsubishi	M74ALS191	
	National	DM74ALS191	
	TI	SN74ALS191	
74ALS193	Mitsubishi	M74ALS193	
	Motorola	SN74ALS193	
	National	DM74ALS193	
	TI	SN74ALS193	
74ALS20	National	DM74ALS20	
	TI	SN74ALS20A	
74ALS240	Mitsubishi	M74ALS240	
	Motorola	SN74ALS240	
	National	DM74ALS240	
	TI	SN74ALS240A	
74ALS240A-1	Mitsubishi	M74ALS240A-1	
	TI	SN74ALS240A-1	
74ALS241	Mitsubishi	M74ALS241	
	Motorola	SN74ALS241	
	National	DM74ALS241	
	TI	SN74ALS241A	
74ALS241A-1	Mitsubishi	M74ALS241A-1	
	TI	SN74ALS241A-1	
74ALS244	Mitsubishi	M74ALS244	
	Motorola	SN74ALS244	
	National	DM74ALS244	
	TI	SN74ALS244A	
74ALS244A-1	Mitsubishi	M74ALS244A-1	
	TI	SN74ALS244A-1	
74ALS245	Mitsubishi	M74ALS245	
	Motorola	SN74ALS245	
	National	DM74ALS245	
	TI	SN74ALS245A	
74ALS245A-1	Mitsubishi	M74ALS245A-1	
	TI	SN74ALS245A-1	
74ALS251	Mitsubishi	M74ALS251	
	National	DM74ALS251	
	TI	SN74ALS251	
74ALS253	Mitsubishi	M74ALS253	
	National	DM74ALS253	
	TI	SN74ALS253	
74ALS257	Mitsubishi	M74ALS257	
	National	DM74ALS257	
	TI	SN74ALS257	
74ALS258	Mitsubishi	M74ALS258	
	National	DM74ALS258	
	TI	SN74ALS258	
74ALS27	National	DM74ALS27	
	TI	SN74ALS27	
74ALS273	Mitsubishi	M74ALS273	
	Motorola	SN74ALS273	
	National	DM74ALS273	
	TI	SN74ALS273	
74ALS30	National	DM74ALS30	
	TI	SN74ALS30	
74ALS32	Motorola	SN74ALS32	
	National	DM74ALS32	
	TI	SN74ALS32	
74ALS373	Mitsubishi	M74ALS373	
	Motorola	SN74ALS373	
	National	DM74ALS373	
	TI	SN74ALS373	
74ALS374	Mitsubishi	M74ALS374	
	Motorola	SN74ALS374	
	National	DM74ALS374	
	TI	SN74ALS374	
74ALS377	Mitsubishi	M74ALS377	
74ALS38	National	DM74ALS38	
	TI	SN74ALS38A	
74ALS563	National	DM74ALS563	
	TI	SN74ALS563	
74ALS620	Mitsubishi	M74ALS620	
	Motorola	SN74ALS620	
	National	DM74ALS620	
	TI	SN74ALS620A	
74ALS620A-1	Mitsubishi	M74ALS620A-1	
	TI	SN74ALS620A-1	
74ALS623	Mitsubishi	M74ALS623	
	Motorola	SN74ALS623	
	National	DM74ALS623	
	TI	SN74ALS623A	
74ALS623A-1	Mitsubishi	M74ALS623A-1	
	TI	SN74ALS623A-1	
74ALS64	National	DM74ALS564	
	TI	SN74ALS564	
74ALS73	Motorola	SN74ALS573	
	National	DM74ALS573	
	TI	SN74ALS573	
74F00	Fairchild	74F00	
	Motorola	MC74F00	
	TI	SN74F00	
74F02	Fairchild	74F02	
	Motorola	MC74F02	
	TI	SN74F02	
74F04	Fairchild	74F04	
	Motorola	MC74F04	
	TI	SN74F04	
74F08	Fairchild	74F08	
	Motorola	MC74F08	
74F10	Fairchild	74F10	
	Motorola	MC74F10	
74F109	Fairchild	74F109	
	Motorola	MC74F109	
	TI	SN74F109	
74F11	Fairchild	74F11	
	Motorola	MC74F11	
	TI	SN74F11	
74F112	Fairchild	74F112	
	Motorola	MC74F112	
	TI	SN74F112	
74F125	Fairchild	74F125	
74F126	Fairchild	74F126	
74F13	Fairchild	74F13	
74F132	Fairchild	74F132	
74F138	Fairchild	74F138	
	Motorola	MC74F138	
	TI	SN74F138	
74F139	Motorola	MC74F139	
74F14	Fairchild	74F14	
74F148	Fairchild	74F148	
	Motorola	MC74F148	
74F151	Fairchild	74F151	
	Motorola	MC74F151	
	TI	SN74F151	
74F153	Fairchild	74F153	
	Motorola	MC74F153	
	TI	SN74F153	
74F157	Fairchild	74F157	
	Motorola	MC74F157	
	TI	SN74F157	
74F158	Fairchild	74F158	
	Motorola	MC74F158	
	TI	SN74F158	
74F160	Fairchild	74F160	
	Motorola	MC74F160	
	TI	SN74F160	
74F161	Fairchild	74F161	
	Motorola	MC74F161	
	TI	SN74F161	
74F162	Fairchild	74F162	
	Motorola	MC74F162	
	TI	SN74F162	
74F163	Fairchild	74F163	
	Motorola	MC74F163	
	TI	SN74F163	
74F164	Fairchild	74F164	
	Motorola	MC74F164	
74F168	Fairchild	74F168	
	Motorola	MC74F168	
	TI	SN74F168	
74F169	Fairchild	74F169	
	Motorola	MC74F169	
	TI	SN74F169	
74F174	Fairchild	74F174	
	Motorola	MC74F174	
	TI	SN74F174	
74F175	Fairchild	74F175	
	Motorola	MC74F175	
	TI	SN74F175	
74F181	Fairchild	74F181	
	Motorola	MC74F181	
74F182	Fairchild	74F182	
	Motorola	MC74F182	
74F190	Fairchild	74F190	
	Motorola	MC74F190	
74F191	Fairchild	74F191	
	Motorola	MC74F191	
74F192	Fairchild	74F192	
	Motorola	MC74F192	
74F193	Fairchild	74F193	
	Motorola	MC74F193	
74F194	Fairchild	74F194	
	Motorola	MC74F194	
74F195	Fairchild	74F195	
	Motorola	MC74F195	
74F198	Cypress	CY74F189	
	Fairchild	74F189	
	Motorola	MC74F189	
74F20	Fairchild	74F20	
	Motorola	MC74F20	
	TI	SN74F20	
74F240	Fairchild	74F240	
	Motorola	MC74F240	
	TI	**SN74BCT240**	**(3249)**
		SN74F240	
74F241	Fairchild	74F241	
	Motorola	MC74F241	
	TI	**SN74BCT241**	**(3249)**
		SN74F241	
74F242	Motorola	MC74F242	
	TI	SN74F242	
74F243	Fairchild	74F243	
	Motorola	MC74F243	
	TI	SN74F243	
74F244	Fairchild	74F244	
	Motorola	MC74F244	
	TI	**SN74BCT244**	**(3249)**
		SN74F244	
74F245	Fairchild	74F245	
	Motorola	MC74F245	
	TI	**SN74BCT245**	**(3249)**
		SN74F245	
74F251	Fairchild	74F251	
74F253	Fairchild	74F253	
	Motorola	MC74F253	
	TI	SN74F253	
74F256	Fairchild	74F256	
		74F368	
	Signetics	**74F368**	**(3023)**
74F257	Fairchild	74F257	
	Motorola	MC74F257	
	TI	SN74F257	
74F258	Fairchild	74F258	
	Motorola	MC74F258	
	TI	SN74F258	
74F259	Fairchild	74F259	
		74F37	
	Motorola	MC74F259	
	Signetics	**74F37**	**(3023)**
74F269	Fairchild	74F269	
		74F377	
	Signetics	**74F377**	**(3023)**
	TI	SN74F377	
74F27	Fairchild	74F27	
		74F395	
	Signetics	**74F395**	**(3024)**
	TI	SN74F27	
74F273	Fairchild	74F273	
		74F398	
	Motorola	MC74F398	
	Signetics	**74F398**	**(3024)**
	TI	SN74F273	
74F280	Fairchild	74F280	
	Motorola	MC74F280	
	TI	SN74F280	
74F282	Fairchild	74F828	
74F283	Fairchild	74F283	
	Motorola	MC74F283	
	TI	SN74F283	
74F298	Fairchild	74F298	
		74F323	
	Motorola	MC74F323	
	Signetics	**74F323**	**(3023)**
	TI	SN74F323	
74F299	Fairchild	74F299	
		74F350	
	Motorola	MC74F350	
	Signetics	**74F350**	**(3023)**
	TI	SN74F299	
		SN74F350	
74F30	Fairchild	74F30	
		74F352	
	Motorola	MC74F352	
	Signetics	**74F352**	**(3023)**
	TI	SN74F30	
		SN74F352	
74F30244	Fairchild	74F30244	
		74F353	
	Motorola	MC74F353	
	Signetics	**74F353**	**(3023)**
	TI	SN74F353	
74F3037	Fairchild	74F3037	
		74F378	
	Motorola	MC74F378	
	Signetics	**74F378**	**(3023)**
	TI	SN74F378	
74F3040	Fairchild	74F3040	
		74F379	
	Motorola	MC74F379	
	Signetics	**74F379**	**(3023)**
	TI	SN74F379	
74F32	Fairchild	74F32	
	Motorola	MC74F32	
74F322	Fairchild	74F322	
		74F381	
	Motorola	MC74F381	
	Signetics	**74F381**	**(3024)**
	TI	SN74F381	
74F323	Fairchild	74F298	
		74F323	
	Motorola	MC74F323	
	Signetics	**74F298**	**(3023)**
	TI	SN74F323	
74F350	Fairchild	74F299	
		74F350	
	Motorola	MC74F350	
	Signetics	**74F299**	**(3023)**
	TI	SN74F299	
		SN74F350	
74F352	Fairchild	74F30	
		74F352	
	Motorola	MC74F352	
	Signetics	**74F30**	**(3023)**
	TI	SN74F30	
		SN74F352	
74F353	Fairchild	74F30244	
		74F353	
	Motorola	MC74F353	
	Signetics	**74F30244**	**(3023)**
	TI	SN74F353	
74F365	Fairchild	74F365	
		74F382	
	Motorola	MC74F382	
	Signetics	**74F382**	**(3024)**
	TI	SN74F382	
74F366	Fairchild	74F366	
		74F620	
	Motorola	MC74F620	
	Signetics	**74F620**	**(3024)**
	TI	**SN74BCT620**	**(3249)**
		SN74F620	
74F367	Fairchild	74F367	
		74F623	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
74F367			(Cont'd)
	Motorola	MC74F623	
	Signetics	**74F623**	**(3024)**
	TI	**SN74BCT623**	**(3249)**
		SN74F623	
74F368	Fairchild	74F256	
		74F368	
	Signetics	**74F256**	**(3023)**
74F37	Fairchild	74F259	
		74F37	
	Motorola	MC74F259	
	Signetics	**74F259**	**(3023)**
74F373	Fairchild	74F373	
	Motorola	MC74F373	
	TI	**SN74BCT373**	**(3249)**
		SN74F373	
74F374	Fairchild	74F374	
	Motorola	MC74F374	
	TI	**SN74BCT374**	**(3249)**
		SN74F374	
74F377	Fairchild	74F269	
		74F377	
	Signetics	**74F269**	**(3023, 3038)**
	TI	SN74F377	
74F378	Fairchild	74F3037	
		74F378	
	Motorola	MC74F378	
	Signetics	**74F3037**	**(3023, 3043)**
	TI	SN74F378	
74F379	Fairchild	74F3040	
		74F379	
	Motorola	MC74F379	
	Signetics	**74F3040**	**(3023)**
	TI	SN74F379	
74F38	Fairchild	74F38	
74F381	Fairchild	74F322	
		74F381	
	Motorola	MC74F381	
	Signetics	**74F322**	**(3023)**
	TI	SN74F381	
74F382	Fairchild	74F365	
		74F382	
	Motorola	MC74F382	
	Signetics	**74F365**	**(3023)**
	TI	SN74F382	
74F385	Fairchild	74F385	
74F395	Fairchild	74F27	
		74F395	
	Signetics	74F27	
	TI	SN74F27	
74F398	Fairchild	74F273	
		74F398	
	Motorola	MC74F398	
	Signetics	**74F273**	**(3023)**
	TI	SN74F273	
74F399	Fairchild	74F399	
	Motorola	MC74F399	
74F40	Fairchild	74F40	
74F407	Fairchild	74F407	
74F410	Fairchild	74F410	
74F412	Fairchild	74F412	
74F432	Fairchild	74F432	
74F455	Fairchild	74F455	
74F456	Fairchild	74F456	
74F521	Fairchild	74F521	
	Motorola	MC74F521	
	TI	SN74F521	
74F524	Fairchild	74F524	
74F533	Fairchild	74F533	
	Motorola	MC74F533	
	TI	**SN74BCT533**	**(3249)**
		SN74F533	
74F534	Fairchild	74F534	
	Motorola	MC74F534	
	TI	**SN74BCT534**	**(3249)**
		SN74F534	
74F537	Fairchild	74F537	
	TI	SN74F537	
74F538	Fairchild	74F538	
	TI	SN74F538	
74F539	Fairchild	74F539	
	TI	SN74F539	
74F540	Fairchild	74F540	
74F541	Fairchild	74F541	
74F543	Fairchild	74F543	
	TI	**SN74BCT543**	**(3249)**
		SN74F543	
74F544	Fairchild	74F544	
	TI	**SN74BCT544**	**(3249)**
		SN74F544	
74F545	Fairchild	74F545	
74F547	Fairchild	74F547	
74F548	Fairchild	74F548	
74F550	Fairchild	74F550	
74F551	Fairchild	74F551	
74F552	Fairchild	74F552	
74F563	Fairchild	74F563	
	TI	SN74F563	
74F564	Fairchild	74F564	
74F568	Fairchild	74F568	
	TI	SN74F568	
74F569	Fairchild	74F569	
	TI	SN74F569	
74F573	Fairchild	74F573	
	TI	SN74F573	
74F574	Fairchild	74F574	
74F579	Fairchild	74F579	
74F582	Fairchild	74F582	
74F583	Fairchild	74F583	
74F588	Fairchild	74F588	
74F595	Fairchild	74F595	
74F597	Fairchild	74F597	
74F598	Fairchild	74F598	
74F604	Fairchild	74F604	
74F605	Fairchild	74F605	
74F620	Fairchild	74F366	
		74F620	
	Motorola	MC74F620	
	Signetics	**74F366**	**(3023)**
	TI	**SN74BCT620**	**(3249)**
		SN74F620	
74F621	Fairchild	74F621	
	TI	SN74F621	
74F622	Fairchild	74F622	
	TI	SN74F622	
74F623	Fairchild	74F367	
		74F623	
	Motorola	MC74F623	
	Signetics	**74F367**	**(3023)**
	TI	**SN74BCT623**	**(3249)**
		SN74F623	
74F630	Fairchild	74F630	
74F631	Fairchild	74F631	
74F64	Fairchild	74F64	
	TI	SN74F64	
74F640	Fairchild	74F640	
74F646	Fairchild	74F646	
74F648	Fairchild	74F648	
74F651	**TI**	**SN74BCT646**	**(3249)**
74F652	**TI**	**SN74BCT651**	**(3249)**
74F655	Fairchild	74F655	
74F656	Fairchild	74F656	
74F657	Fairchild	74F657	
74F673	Fairchild	74F673	
74F674	Fairchild	74F674	
74F675	Fairchild	74F675	
74F676	Fairchild	74F676	
74F74	Fairchild	74F74	
	Motorola	MC74F74	
	TI	SN74F74	
74F779	Fairchild	74F779	
74F821	Fairchild	74F821	
74F823	Fairchild	74F823	
	TI	OP27	
74F825	Fairchild	74F825	
74F827	Fairchild	74F827	
74F841	Fairchild	74F841	
	TI	OP37	
74F843	Fairchild	74F843	
74F845	Fairchild	74F845	
74F85	Fairchild	74F85	
74F86	Fairchild	74F86	
74HC00	**GE/RCA**	**CD74HC00**	**(2631)**
	Hitachi	HD74HC00	
	Motorola	MC74HC00	
	National	MM74HC00	
	SGS	M74HC00	
	TI	SN74HC00	
	Toshiba	TC40H000	
74HC02	**GE/RCA**	**CD74HC02**	**(2631)**
	Hitachi	HD74HC02	
	Motorola	MC74HC02	
	National	MM74HC02	
	SGS	M74HC02	
	TI	SN74HC02	
	Toshiba	TC40H002	
74HC08	**GE/RCA**	**CD74HC08**	**(2631)**
	Hitachi	HD74HC08	
	Motorola	MC74HC08	
	National	MM74HC08	
	SGS	M74HC08	
	TI	SN74HC08	
74HC10	**GE/RCA**	**CD74HC10**	**(2631)**
	Hitachi	HD74HC10	
	Motorola	MC74HC10	
	National	MM74HC10	
	SGS	M74HC10	
	TI	SN74HC10	
	Toshiba	TC40H010	
74HC107	**GE/RCA**	**CD74HC107**	**(2631)**
	Hitachi	HD74HC107	
	Motorola	MC74HC107	
	National	MM74HC107	
	SGS	M74HC107	
	TI	SN74HC107	
	Toshiba	TC40H107	
74HC109	**GE/RCA**	**CD74HC109**	**(2631)**
	Hitachi	HD74HC109	
	Motorola	MC74HC109	
	National	MM74HC109	
	SGS	M74HC109	
	TI	SN74HC109	
	Toshiba	**TC74HC109**	**(3307)**
74HC11	**GE/RCA**	**CD74HC11**	**(2631)**
	Hitachi	HD74HC11	
	Motorola	MC74HC11	
	National	MM74HC11	
	SGS	M74HC11	
	TI	SN74HC11	
	Toshiba	TC40H011	
74HC112	**GE/RCA**	**CD74HC112**	**(2631)**
	Hitachi	HD74HC112	
	Motorola	MC74HC112	
	National	MM74HC112	
	SGS	M74HC112	
	TI	SN74HC112	
74HC123	Hitachi	HD74HC123	
	Motorola	MC74HC123A	
	National	MM74HC123	
	SGS	M74HC123	
	TI	SN74HC123	
74HC132	**GE/RCA**	**CD74HC132**	**(2631)**
	Hitachi	HD74HC132	
	Motorola	MC74HC132	
	National	MM74HC132	
	SGS	M74HC132	
	TI	SN74HC132	
♦ 74HC133	Motorola	MC74HC133	
	National	MM74HC133	
	SGS	M74HC133	
	TI	SN74HC133	
74HC138	**GE/RCA**	**CD74HC138**	**(2632)**
	Hitachi	HD74HC138	
	Motorola	MC74HC138	
	National	MM74HC138	
	SGS	M74HC138	
	Sprague	SS74HC138	
	TI	SN74HC138	
74HC139	**GE/RCA**	**CD74HC139**	**(2632)**
	Hitachi	HD74HC139	
	National	MM74HC139	
	SGS	M74HC139	
	Sprague	SS74HC139	
	TI	SN74HC139	
	Toshiba	TC40H139	
74HC14	**GE/RCA**	**CD74HC14**	**(2631)**
	Hitachi	HD74HC14	
	Motorola	MC74HC14	
	National	MM74HC14	
	SGS	M74HC14	
	TI	SN74HC14	
74HC147	**GE/RCA**	**CD74HC147**	**(2632)**
	Hitachi	HD74HC147	
	Motorola	MC74HC147	
74HC147			(Cont'd)
	National	MM74HC147	
	SGS	M74HC147	
	TI	SN74HC147	
74HC151	**GE/RCA**	**CD74HC151**	**(2632)**
	Hitachi	HD74HC151	
	Motorola	MC74HC151	
	National	MM74HC151	
	SGS	M74HC151	
	TI	SN74HC151	
	Universal	US74HC151	
74HC153	**GE/RCA**	**CD74HC153**	**(2632)**
	Hitachi	HD74HC153	
	Motorola	MC74HC153	
	National	MM74HC153	
	SGS	M74HC153	
	TI	SN74HC153	
	Toshiba	TC40H153	
74HC154	**GE/RCA**	**CD74HC154**	**(2632)**
	Hitachi	HD74HC154	
	Motorola	MC74HC154	
	National	MM74HC154	
	SGS	M74HC154	
	TI	SN74HC154	
74HC157	**GE/RCA**	**CD74HC157**	**(2632)**
	Hitachi	HD74HC157	
	Motorola	MC74HC157	
	National	MM74HC157	
	SGS	M74HC157	
	TI	SN74HC157	
	Toshiba	TC40H157	
74HC158	**GE/RCA**	**CD74HC158**	**(2632)**
	Hitachi	HD74HC158	
	Motorola	MC74HC158	
	National	MM74HC158	
	SGS	M74HC158	
	TI	SN74HC158	
	Toshiba	TC40H158	
74HC160	**GE/RCA**	**CD74HC160**	**(2632)**
	Motorola	MC74HC160	
	National	MM74HC160	
	SGS	M74HC160	
	TI	SN74HC160	
74HC161	**GE/RCA**	**CD74HC161**	**(2632)**
	Hitachi	HD74HC161	
	Motorola	MC74HC161	
	National	MM74HC161	
	SGS	M74HC161	
	TI	SN74HC161	
74HC162	**GE/RCA**	**CD74HC162**	**(2632)**
	Hitachi	HD74HC162	
	Motorola	MC74HC162	
	National	MM74HC162	
	SGS	M74HC162	
	TI	SN74HC162	
74HC163	**GE/RCA**	**CD74HC163**	**(2632)**
	Hitachi	HD74HC163	
	Motorola	MC74HC163	
	National	MM74HC163	
	SGS	M74HC163	
	TI	SN74HC163	
74HC164	**GE/RCA**	**CD74HC164**	**(2631)**
	Hitachi	HD74HC164	
	Motorola	MC74HC164	
	National	MM74HC164	
	SGS	M74HC164	
	TI	SN74HC164	
74HC165	**GE/RCA**	**CD74HC165**	**(2631)**
	Hitachi	HD74HC165	
	Motorola	MC74HC165	
	National	MM74HC165	
	SGS	M74HC165	
	TI	SN74HC165	
74HC166	**GE/RCA**	**CD74HC166**	**(2631)**
	SGS	M74HC166	
	TI	SN74HC166	
74HC173	**GE/RCA**	**CD74HC173**	**(2631)**
	Hitachi	HD74HC173	
	Motorola	MC74HC173	
	National	MM74HC173	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
74HC173			(Cont'd)
	SGS	M74HC173	
	TI	SN74HC173	
74HC174	**GE/RCA**	**CD74HC174**	**(2631)**
	Hitachi	HD74HC174	
	Motorola	MC74HC174	
	National	MM74HC174	
	SGS	M74HC174	
	TI	SN74HC174	
	Toshiba	TC40H174	
74HC175	**GE/RCA**	**CD74HC175**	**(2631)**
	Hitachi	HD74HC175	
	Motorola	MC74HC175	
	National	MM74HC175	
	SGS	M74HC175	
	TI	SN74HC175	
	Toshiba	TC40H175	
74HC190	**GE/RCA**	**CD74HC190**	**(2632)**
	Hitachi	HD74HC190	
	Motorola	MC74HC190	
	SGS	M74HC190	
	Signetics	PC74HC190	
		PCF74HC190	
	TI	SN74HC190	
	Toshiba	**TC74HC190**	**(3307)**
74HC191	**GE/RCA**	**CD74HC191**	**(2632)**
	Hitachi	HD74HC191	
	Motorola	MC74HC191	
	SGS	M74HC191	
	TI	SN74HC191	
74HC192	**GE/RCA**	**CD74HC192**	**(2632)**
	Hitachi	HD74HC192	
	Motorola	MC74HC192	
	National	MM74HC192	
	SGS	M74HC192	
	TI	SN74HC192	
	Toshiba	TC40H192	
74HC193	**GE/RCA**	**CD74HC193**	**(2632)**
	Hitachi	HD74HC193	
	Motorola	MC74HC193	
	National	MM74HC193	
	SGS	M74HC193	
	TI	SN74HC193	
	Toshiba	TC40H193	
74HC194	**GE/RCA**	**CD74HC194**	**(2631)**
	Hitachi	HD74HC194	
	Motorola	MC74HC194	
	National	MM74HC194	
	SGS	M74HC194	
	TI	SN74HC194	
74HC195	**GE/RCA**	**CD74HC195**	**(2631)**
	Hitachi	HD74HC195	
	Motorola	MC74HC195	
	National	MM74HC195	
	SGS	M74HC195	
	TI	SN74HC195	
74HC20	**GE/RCA**	**CD74HC20**	**(2631)**
	Hitachi	HD74HC20	
	Motorola	MC74HC20	
	National	MM74HC20	
	SGS	M74HC20	
	TI	SN74HC20	
	Toshiba	TC40H020	
74HC221	**GE/RCA**	**CD74HC221**	**(2632)**
	Motorola	MC74HC221A	
	National	MM74HC221	
	SGS	M74HC221	
74HC238	**GE/RCA**	**CD74HC238**	**(2632)**
	SGS	M74HC238	
	Sprague	SS74HC238	
	TI	SN74HC238	
74HC240	**GE/RCA**	**CD74HC240**	**(2631)**
	Hitachi	HD74HC240	
	Mitel	MD74HC240	
	Motorola	MC74HC240	
	National	MM74HC240	
	SGS	M74HC240	
	Sprague	SS74HC240	
	Supertex	SI74HC240	
			(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74HC240			(Cont'd)
	TI	SN74HC240	
	Toshiba	TC40H240	
74HC241	**GE/RCA**	**CD74HC241**	**(2631)**
	Hitachi	HD74HC241	
	Mitel	MD74HC241	
	Motorola	MC74HC241	
	National	MM74HC241	
	SGS	M74HC241	
	Sprague	SS74HC241	
	Supertex	SI74HC241	
	TI	SN74HC241	
74HC242	**GE/RCA**	**CD74HC242**	**(2631)**
	Hitachi	HD74HC242	
	Motorola	MC74HC242	
	National	MM74HC242	
	SGS	M74HC242	
	TI	SN74HC242	
74HC243	**GE/RCA**	**CD74HC243**	**(2631)**
	Hitachi	HD74HC243	
	Motorola	MC74HC243	
	National	MM74HC243	
	SGS	M74HC243	
		M74HC245	
	TI	SN74HC243	
74HC244	**GE/RCA**	**CD74HC244**	**(2631)**
	Hitachi	HD74HC244	
	Mitel	MD74HC244	
	Motorola	MC74HC244	
	National	MM74HC244	
	SGS	M74HC244	
	Sprague	SS74HC244	
	Supertex	SI74HC244	
	TI	SN74HC244	
74HC245	**GE/RCA**	**CD74HC245**	**(2631)**
	Hitachi	HD74HC245	
	Motorola	MC74HC245	
	National	MM74HC245	
	Sprague	SS74HC245	
	TI	SN74HC245	
74HC251	**GE/RCA**	**CD74HC251**	**(2632)**
	Hitachi	HD74HC251	
	Motorola	MC74HC251	
	National	MM74HC251	
	SGS	M74HC251	
	TI	SN74HC251	
74HC253	**GE/RCA**	**CD74HC253**	**(2632)**
	Hitachi	HD74HC253	
	Motorola	MC74HC253	
	National	MM74HC253	
	SGS	M74HC253	
	TI	SN74HC253	
74HC257	**GE/RCA**	**CD74HC257**	**(2632)**
	Hitachi	HD74HC257	
	Motorola	MC74HC257	
	National	MM74HC257	
	SGS	M74HC257	
	TI	SN74HC257	
74HC259	**GE/RCA**	**CD74HC259**	**(2632)**
	Hitachi	HD74HC259	
	Motorola	MC74HC259	
	National	MM74HC259	
	TI	SN74HC259	
74HC266	Hitachi	HD74HC266	
	Motorola	MC74HC266	
	National	MM74HC266	
	SGS	M74HC266	
	TI	SN74HC266	
74HC27	**GE/RCA**	**CD74HC27**	**(2631)**
	Hitachi	HD74HC27	
	Motorola	MC74HC27	
	National	MM74HC27	
	SGS	M74HC27	
	TI	SN74HC27	
	Toshiba	TC40H027	
	Universal	US74HC27	
74HC273	CTI	74HC273	
	GE/RCA	**CD74HC273**	**(2631)**
	Hitachi	HD74HC273	
	Motorola	MC74HC273	
	SGS	M74HC273	
	TI	SN74HC273	

Manufacturer Device	Replacement Source	Device	IC Master Page
74HC280	**GE/RCA**	**CD74HC280**	**(2632)**
	Hitachi	HD74HC280	
	Motorola	MC74HC280	
	National	MM74HC280	
	SGS	M74HC280	
	TI	SN74HC280	
74HC297	**GE/RCA**	**CD74HC297**	**(2632)**
74HC299	**GE/RCA**	**CD74HC299**	**(2631)**
	Motorola	MC74HC299	
	National	MM74HC299	
	SGS	M74HC299	
74HC30	**GE/RCA**	**CD74HC30**	**(2631)**
	Hitachi	HD74HC30	
	Motorola	MC74HC30	
	National	MM74HC30	
	SGS	M74HC30	
	TI	SN74HC30	
74HC32	**GE/RCA**	**CD74HC32**	**(2631)**
	Hitachi	HD74HC32	
	Motorola	MC74HC32	
	National	MM74HC32	
	SGS	M74HC32	
	TI	SN74HC32	
	Toshiba	TC40H032	
74HC354	**GE/RCA**	**CD74HC354**	**(2632)**
	Hitachi	HD74HC354	
	Motorola	MC74HC354	
	National	MM74HC354	
	SGS	M74HC354	
	TI	SN74HC354	
74HC356	**GE/RCA**	**CD74HC356**	**(2632)**
	Hitachi	HD74HC356	
	Motorola	MC74HC356	
	National	MM74HC356	
	SGS	M74HC356	
	TI	SN74HC356	
74HC366	**GE/RCA**	**CD74HC366**	**(2631)**
	Hitachi	HD74HC366	
	Motorola	MC74HC366	
	National	MM74HC366	
	SGS	M74HC366	
	TI	SN74HC366	
74HC367	**GE/RCA**	**CD74HC367**	**(2631)**
	Hitachi	HD74HC367	
	Motorola	MC74HC367	
	National	MM74HC367	
	SGS	M74HC367	
	TI	SN74HC367	
74HC368	**GE/RCA**	**CD74HC368**	**(2631)**
	Hitachi	HD74HC368	
	Motorola	MC74HC368	
	National	MM74HC368	
	SGS	M74HC368	
	TI	SN74HC368	
74HC373	**GE/RCA**	**CD74HC373**	**(2632)**
	Hitachi	HD74HC373	
	Mitel	MD74HC373	
	Motorola	MC74HC373	
	National	MM74HC373	
	SGS	M74HC373	
	Sprague	SS74HC373	
	Supertex	SI74HC373	
	TI	SN74HC373	
74HC374	**GE/RCA**	**CD74HC374**	**(2631)**
	Hitachi	HD74HC374	
	Mitel	MD74HC374	
	Motorola	MC74HC374	
	National	MM74HC374	
	SGS	M74HC374	
	Sprague	SS74HC374	
	TI	SN74HC374	
74HC377	**GE/RCA**	**CD74HC377**	**(2631)**
	Hitachi	HD74HC377	
	Motorola	MC74HC377	
	SGS	M74HC377	
	TI	SN74HC377	
74HC390	**GE/RCA**	**CD74HC390**	**(2632)**
	Hitachi	HD74HC390	
	Motorola	MC74HC390	
	National	MM74HC390	
			(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74HC390			(Cont'd)
	SGS	M74HC390	
	TI	SN74HC390	
74HC393	**GE/RCA**	**CD74HC393**	**(2632)**
	Hitachi	HD74HC393	
	Motorola	MC74HC393	
	National	MM74HC393	
	SGS	M74HC393	
	TI	SN74HC393	
74HC4002	**GE/RCA**	**CD74HC4002**	**(2631)**
	Motorola	MC74HC4002	
	National	MM74HC4002	
	SGS	M74HC4002	
	TI	SN74HC4002	
74HC40104	**GE/RCA**	**CD74HC40104**	**(2631)**
74HC40105	**GE/RCA**	**CD74HC40105**	**(2631)**
74HC4017	**GE/RCA**	**CD74HC4017**	**(2632)**
	Motorola	MC74HC4017	
	National	MM74HC4017	
	SGS	M74HC4017	
	TI	SN74HC4017	
74HC4020	**GE/RCA**	**CD74HC4020**	**(2632)**
	Hitachi	HD74HC4020	
	Motorola	MC74HC4020	
	National	MM74HC4020	
	SGS	M74HC4020	
	TI	SN74HC4020	
74HC4024	**GE/RCA**	**CD74HC4024**	**(2632)**
	Hitachi	HD74HC4024	
	Motorola	MC74HC4024	
	SGS	M74HC4024	
	TI	SN74HC4024	
74HC4040	**GE/RCA**	**CD74HC4040**	**(2632)**
	Hitachi	HD74HC4040	
	Motorola	MC74HC4040	
	National	MM74HC4040	
	SGS	M74HC4040	
	TI	SN74HC4040	
74HC4046	**GE/RCA**	**CD74HC4046**	**(2632)**
	Motorola	MC74HC4046	
74HC4049	**GE/RCA**	**CD74HC4049**	**(2631)**
	Motorola	MC74HC4049	
	National	MM74HC4049	
	SGS	M74HC4049	
	TI	SN74HC4049	
74HC4051	**GE/RCA**	**CD74HC4051**	**(2632)**
	Motorola	MC74HC4051	
	SGS	M74HC4051	
	TI	SN74HC4051	
74HC4052	**GE/RCA**	**CD74HC4052**	**(2632)**
	Motorola	MC74HC4052	
	SGS	M74HC4052	
	TI	SN74HC4052	
74HC4053	**GE/RCA**	**CD74HC4053**	**(2632)**
	Motorola	MC74HC4053	
	SGS	M74HC4053	
	TI	SN74HC4053	
74HC4060	**GE/RCA**	**CD74HC4060**	**(2632)**
	Motorola	MC74HC4060	
	National	MM74HC4060	
	SGS	M74HC4060	
	TI	SN74HC4060	
74HC4067	**GE/RCA**	**CD74HC4067**	**(2632)**
	Panasonic	MN74HC4067	
74HC4075	**GE/RCA**	**CD74HC4075**	**(2631)**
	Motorola	MC74HC4075	
	National	MM74HC4075	
	TI	SN74HC4075	
	Toshiba	**TC74HC4075**	**(3307)**
74HC42	**GE/RCA**	**CD74HC42**	**(2632)**
	Hitachi	HD74HC42	
	Motorola	MC74HC42	
	National	MM74HC42	
	SGS	M74HC42	
	TI	SN74HC42	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
74HC423	**GE/RCA**	**CD74HC423**	**(2632)**
	Motorola	MC74HC423A	
	SGS	M74HC423	
74HC4514	**GE/RCA**	**CD74HC4514**	**(2632)**
	Hitachi	HD74HC4514	
	Motorola	MC74HC4514	
	National	MM74HC4514	
	SGS	M74HC4514	
	TI	SN74HC4514	
74HC4520	**GE/RCA**	**CD74HC4520**	**(2632)**
	SGS	M74HC4520	
74HC4538	**GE/RCA**	**CD74HC4538**	**(2632)**
	Motorola	MC74HC4538	
	National	MM74HC4538	
	SGS	M74HC4538	
74HC533	**GE/RCA**	**CD74HC533**	**(2632)**
	Hitachi	HD74HC533	
	Motorola	MC74HC533	
	National	MM74HC533	
	SGS	M74HC533	
	Sprague	SS74HC533	
	TI	SN74HC533	
74HC534	**GE/RCA**	**CD74HC534**	**(2631)**
	Hitachi	HD74HC534	
	Motorola	MC74HC534	
	National	MM74HC534	
	SGS	M74HC534	
	Sprague	SS74HC534	
	TI	SN74HC534	
74HC540	**GE/RCA**	**CD74HC540**	**(2631)**
	Hitachi	HD74HC540	
	Motorola	MC74HC540	
	SGS	M74HC540	
	Sprague	SS74HC540	
	TI	SN74HC540	
	Toshiba	**TC74HC540**	**(3307)**
74HC541	**GE/RCA**	**CD74HC541**	**(2631)**
	Hitachi	HD74HC541	
	Motorola	MC74HC541	
	SGS	M74HC541	
	Sprague	SS74HC541	
	TI	SN74HC541	
74HC563	**GE/RCA**	**CD74HC563**	**(2632)**
	Hitachi	HD74HC563	
	Motorola	MC74HC563	
	National	MM74HC563	
	SGS	M74HC563	
	Sprague	SS74HC563	
	TI	SN74HC563	
74HC564	**GE/RCA**	**CD74HC564**	**(2631)**
	Hitachi	HD74HC564	
	Motorola	MC74HC564	
	National	MM74HC564	
	SGS	M74HC564	
	Sprague	SS74HC564	
	TI	SN74HC564	
74HC573	**GE/RCA**	**CD74HC573**	**(2632)**
	Hitachi	HD74HC573	
	Motorola	MC74HC573	
	National	MM74HC573	
	SGS	M74HC573	
	Sprague	SS74HC573	
	TI	SN74HC573	
	Toshiba	**TC74HC573**	**(3307)**
74HC574	**GE/RCA**	**CD74HC574**	**(2631)**
	Hitachi	HD74HC574	
	Motorola	MC74HC574	
	National	MM74HC574	
	SGS	M74HC574	
	Sprague	SS74HC574	
	TI	SN74HC574	
74HC640	**GE/RCA**	**CD74HC640**	**(2631)**
	Hitachi	HD74HC640	
	Motorola	MC74HC640	
	National	MM74HC640	
	Sprague	SS74HC640	
	TI	SN74HC640	
74HC643	**GE/RCA**	**CD74HC643**	**(2631)**
	Hitachi	HD74HC643	
	Motorola	MC74HC643	
	National	MM74HC643	
	SGS	M74HC643	
	Sprague	SS74HC643	
	TI	SN74HC643	
♦ 74HC645	National	MM74HC645	
	Sprague	SS74HC645	
	TI	SN74HC645	
74HC646	**GE/RCA**	**CD74HC646**	**(2631)**
	Hitachi	HD74HC646	
	Motorola	MC74HC646	
	National	MM74HC646	
	SGS	M74HC646	
	TI	SN74HC646	
74HC648	**GE/RCA**	**CD74HC648**	**(2631)**
	Hitachi	HD74HC648	
	Motorola	MC74HC648	
	National	MM74HC648	
	TI	SN74HC648	
74HC670	**GE/RCA**	**CD74HC670**	**(2631)**
	SGS	M74HC670	
	TI	SN74HC670	
74HC688	**GE/RCA**	**CD74HC688**	**(2632)**
	Motorola	MC74HC688	
	National	MM74HC688	
	SGS	M74HC688	
	TI	SN74HC688	
	Toshiba	**TC74HC688**	**(3307)**
74HC73	**GE/RCA**	**CD74HC73**	**(2631)**
	Hitachi	HD74HC73	
	Motorola	MC74HC73	
	National	MM74HC73	
	SGS	M74HC73	
	TI	SN74HC73	
	Toshiba	**TC74HC73**	**(3307)**
74HC74	**GE/RCA**	**CD74HC74**	**(2631)**
	Hitachi	HD74HC74	
	Motorola	MC74HC74	
	National	MM74HC74	
	SGS	M74HC74	
	TI	SN74HC74	
	Toshiba	TC40H074	
74HC75	**GE/RCA**	**CD74HC75**	**(2632)**
	Hitachi	HD74HC75	
	Motorola	MC74HC75	
	National	MM74HC75	
	SGS	M74HC75	
	TI	SN74HC75	
	Toshiba	**TC74HC75**	**(3307)**
♦ 74HC76	Hitachi	HD74HC76	
	Motorola	MC74HC76	
	National	MM74HC76	
	SGS	M74HC76	
	TI	SN74HC76	
	Toshiba	TC40H076	
74HC85	**GE/RCA**	**CD74HC85**	**(2632)**
	Motorola	MC74HC85	
	National	MM74HC85	
	SGS	M74HC85	
	TI	SN74HC85	
74HC86	**GE/RCA**	**CD74HC86**	**(2631)**
	Hitachi	HD74HC86	
	Motorola	MC74HC86	
	National	MM74HC86	
	SGS	M74HC86	
	TI	SN74HC86	
74HCT00	**GE/RCA**	**CD74HCT00**	**(2631)**
74HCT02	**GE/RCA**	**CD74HCT02**	**(2631)**
74HCT08	**GE/RCA**	**CD74HCT08**	**(2631)**
74HCT10	**GE/RCA**	**CD74HCT10**	**(2631)**
74HCT107	**GE/RCA**	**CD74HCT107**	**(2631)**
	Universal	US74HCT107	
74HCT109	**GE/RCA**	**CD74HCT109**	**(2631)**
74HCT11	**GE/RCA**	**CD74HCT11**	**(2631)**
74HCT112	**GE/RCA**	**CD74HCT112**	**(2631)**
74HCT123	**GE/RCA**	**CD74HCT123**	**(2632)**
74HCT132	**GE/RCA**	**CD74HCT132**	**(2631)**
74HCT138	**GE/RCA**	**CD74HCT138**	**(2632)**
74HCT139	**GE/RCA**	**CD74HCT139**	**(2632)**
	IDT	IDT74HCT139	
	Mitel	MD74HCT139	
	National	MM74HCT139	
	Plessey	MV74HCT139	
	Sprague	SS74HCT139	
	Supertex	74HCT139	
74HCT14	**GE/RCA**	**CD74HCT14**	**(2631)**
74HCT147	**GE/RCA**	**CD74HCT147**	**(2632)**
74HCT151	**GE/RCA**	**CD74HCT151**	**(2632)**
74HCT153	**GE/RCA**	**CD74HCT153**	**(2632)**
74HCT154	**GE/RCA**	**CD74HCT154**	**(2632)**
74HCT157	**GE/RCA**	**CD74HCT157**	**(2632)**
74HCT158	**GE/RCA**	**CD74HCT158**	**(2632)**
74HCT160	**GE/RCA**	**CD74HCT160**	**(2632)**
	National	MM74HCT160	
74HCT161	**GE/RCA**	**CD74HCT161**	**(2632)**
74HCT162	**GE/RCA**	**CD74HCT162**	**(2632)**
74HCT163	**GE/RCA**	**CD74HCT163**	**(2632)**
74HCT164	**GE/RCA**	**CD74HCT164**	**(2631)**
74HCT165	**GE/RCA**	**CD74HCT165**	**(2631)**
74HCT166	**GE/RCA**	**CD74HCT166**	**(2631)**
74HCT173	**GE/RCA**	**CD74HCT173**	**(2631)**
74HCT174	**GE/RCA**	**CD74HCT174**	**(2631)**
74HCT175	**GE/RCA**	**CD74HCT175**	**(2631)**
74HCT190	**GE/RCA**	**CD74HCT190**	**(2632)**
74HCT191	**GE/RCA**	**CD74HCT191**	**(2632)**
74HCT192	**GE/RCA**	**CD74HCT192**	**(2632)**
74HCT193	**GE/RCA**	**CD74HCT193**	**(2632)**
74HCT194	**GE/RCA**	**CD74HCT194**	**(2631)**
74HCT195	**GE/RCA**	**CD74HCT195**	**(2631)**
74HCT20	**GE/RCA**	**CD74HCT20**	**(2631)**
74HCT221	**GE/RCA**	**CD74HCT221**	**(2632)**
74HCT238	CTI	74HCT238	
	GE/RCA	**CD74HCT238**	**(2632)**
	Plessey	MV74HCT238	
	Sprague	SS74HCT238	
	TI	SN74HCT238	
74HCT240	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
74HCT241	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
74HCT242	**GE/RCA**	**CD74HCT242**	**(2631)**
	Hitachi	HD74HCT242	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74HCT242			(Cont'd)
	Micrel	MIC74HCT242	
	TI	SN74HCT242	
74HCT243	**GE/RCA**	**CD74HCT243**	**(2631)**
	Hitachi	HD74HCT243	
	Micrel	MIC74HCT243	
	TI	SN74HCT243	
74HCT244	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
74HCT251	**GE/RCA**	**CD74HCT251**	**(2632)**
74HCT253	**GE/RCA**	**CD74HCT253**	**(2632)**
74HCT257	**GE/RCA**	**CD74HCT257**	**(2632)**
74HCT259	**GE/RCA**	**CD74HCT259**	**(2632)**
74HCT27	**GE/RCA**	**CD74HCT27**	**(2631)**
74HCT273	CTI	74HCT139	
	GE/RCA	**CD74HCT139**	**(2632)**
		CD74HCT273	**(2631)**
	Sprague	SS74HCT139	
74HCT280	**GE/RCA**	**CD74HCT280**	**(2632)**
74HCT297	**GE/RCA**	**CD74HCT297**	**(2632)**
74HCT299	**GE/RCA**	**CD74HCT299**	**(2631)**
74HCT30	**GE/RCA**	**CD74HCT30**	**(2631)**
74HCT32	**GE/RCA**	**CD74HCT32**	**(2631)**
74HCT354	**GE/RCA**	**CD74HCT354**	**(2632)**
74HCT356	**GE/RCA**	**CD74HCT356**	**(2632)**
74HCT365	**GE/RCA**	**CD74HCT365**	**(2631)**
74HCT366	**GE/RCA**	**CD74HCT366**	**(2631)**
74HCT367	**GE/RCA**	**CD74HCT367**	**(2631)**
74HCT368	**GE/RCA**	**CD74HCT368**	**(2631)**
74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
74HCT374			(Cont'd)
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
74HCT377	**GE/RCA**	**CD74HCT377**	**(2631)**
74HCT390	**GE/RCA**	**CD74HCT390**	**(2632)**
74HCT4002	**GE/RCA**	**CD74HCT4002**	**(2631)**
74HCT40104	**GE/RCA**	**CD74HCT40104**	**(2631)**
74HCT40105	**GE/RCA**	**CD74HCT40105**	**(2631)**
74HCT4017	**GE/RCA**	**CD74HCT4017**	**(2632)**
74HCT4020	**GE/RCA**	**CD74HCT4020**	**(2632)**
74HCT4024	**GE/RCA**	**CD74HCT4024**	**(2632)**
74HCT4040	**GE/RCA**	**CD74HCT4040**	**(2632)**
74HCT4049	GE/RCA	CD74HCT4049	
74HCT4050	GE/RCA	CD74HCT4050	
74HCT4051	**GE/RCA**	**CD74HCT4051**	**(2632)**
74HCT4052	**GE/RCA**	**CD74HCT4052**	**(2632)**
74HCT4053	**GE/RCA**	**CD74HCT4053**	**(2632)**
74HCT4060	**GE/RCA**	**CD74HCT4060**	**(2632)**
74HCT42	**GE/RCA**	**CD74HCT42 (2632)**	
74HCT423	**GE/RCA**	**CD74HCT423**	**(2632)**
74HCT4511	**GE/RCA**	**CD74HCT4511**	**(2632)**
74HCT4514	**GE/RCA**	**CD74HCT4514**	**(2632)**
74HCT4538	**GE/RCA**	**CD74HCT4538**	**(2632)**
74HCT4543	**GE/RCA**	**CD74HCT4543**	**(2632)**
74HCT533	CTI	74HCT533	
	GE/RCA	**CD74HCT533**	**(2632)**
	Hitachi	HD74HCT533	
	Micrel	MIC74HCT533	
	Motorola	MC74HCT533	
	Plessey	MV74HCT533	
	Sprague	SS74HCT533	
	TI	SN74HCT533	
74HCT534	CTI	74HCT534	
	GE/RCA	**CD74HCT534**	**(2631)**
	Hitachi	HD74HCT534	
	Micrel	MIC74HCT534	
	Motorola	MC74HCT534	
	Plessey	MV74HCT534	
	Sprague	SS74HCT534	
	TI	SN74HCT534	
74HCT540	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74HCT541			(Cont'd)
	SGS	M74HCT541	
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
74HCT563	CTI	74HCT563	
	GE/RCA	**CD74HCT563**	**(2632)**
	Hitachi	HD74HCT563	
	Micrel	MIC74HCT563	
	Plessey	MV74HCT563	
	SGS	M74HCT563	
	Sprague	SS74HCT563	
	TI	SN74HCT563	
	Toshiba	TC74HCT563	
74HCT564	CTI	74HCT564	
	GE/RCA	**CD74HCT564**	**(2631)**
	Hitachi	HD74HCT564	
	Micrel	MIC74HCT564	
	Plessey	MV74HCT564	
		MV74HCT573	
	SGS	M74HCT564	
	Sprague	SS74HCT564	
	TI	SN74HCT564	
74HCT573	CTI	74HCT573	
	GE/RCA	**CD74HCT573**	**(2632)**
	Hitachi	HD74HCT573	
	Micrel	MIC74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Sprague	SS74HCT573	
	Supertex	74HCT573	
	TI	SN74HCT573	
	Toshiba	TC74HCT573	
74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
74HCT640	**GE/RCA**	**CD74HCT640**	**(2631)**
	Hitachi	HD74HCT640	
	Motorola	MC74HCT640	
	SGS	M74HCT640	
	Sprague	SS74HCT640	
	TI	SN74HCT640	
	Toshiba	TC74HCT640	
74HCT643	**GE/RCA**	**CD74HCT643**	**(2631)**
	Hitachi	HD74HCT643	
	Motorola	MC74HCT643	
	SGS	M74HCT643	
	TI	SN74HCT643	
	Toshiba	TC74HCT643	
♦ 74HCT645	Signetics	75HCT645	
	Sprague	SS74HCT645	
	TI	SN74HCT645	
74HCT646	**GE/RCA**	**CD74HCT646**	**(2631)**
	Hitachi	HD74HCT646	
	TI	SN74HCT646	
	Toshiba	TC74HCT646	
74HCT648	**GE/RCA**	**CD74HCT648**	**(2631)**
	Hitachi	HD74HCT648	
	TI	SN74HCT648	
	Toshiba	TC74HCT648	
74HCT670	**GE/RCA**	**CD74HCT670**	**(2631)**
74HCT688	**GE/RCA**	**CD74HCT688**	**(2632)**
74HCT73	**GE/RCA**	**CD74HCT73 (2631)**	
74HCT74	**GE/RCA**	**CD74HCT74 (2631)**	
74HCT75	**GE/RCA**	**CD74HCT75 (2632)**	
74HCT76	TI	SN74HC76	
74HCT85	**GE/RCA**	**CD74HCT85 (2632)**	
74HCT86	**GE/RCA**	**CD74HCT86 (2631)**	
74HCU04	Motorola	MC74HCU04	
	SGS	M74HCU04	
74LS00	Fairchild	74LS00	
	Hitachi	HD74LS00	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS00			(Cont'd)
	Motorola	SN74LS00	
	National	DM74LS00	
	Panasonic	DN74LS00	
	SGS	T74LS00	
	TI	SN74LS00	
74LS01	Fairchild	74LS01	
	Hitachi	HD74LS01	
	Motorola	SN74LS01	
	National	DM74LS01	
	Panasonic	DN74LS01	
	TI	SN74LS01	
74LS02	Fairchild	74LS02	
	Hitachi	HD74LS02	
	Motorola	SN74LS02	
	National	DM74LS02	
	Panasonic	DN74LS02	
	SGS	T74LS02	
	TI	SN74LS02	
74LS04	Fairchild	74LS04	
	Hitachi	HD74LS04	
	Motorola	SN74LS04	
	National	DM74LS04	
	Panasonic	DN74LS04	
	SGS	T74LS04	
	TI	SN74LS04	
74LS05	Fairchild	74LS05	
	Hitachi	HD74LS05	
	Motorola	SN74LS05	
	National	DM74LS05	
	Panasonic	DN74LS05	
	SGS	T74LS05	
	TI	SN74LS05	
74LS08	Fairchild	74LS08	
	Hitachi	HD74LS08	
	Motorola	SN74LS08	
	National	DM74LS08	
	Panasonic	DN74LS08	
	SGS	T74LS08	
	TI	SN74LS08	
74LS10	Fairchild	74LS10	
	Hitachi	HD74LS10	
	Motorola	SN74LS10	
	National	DM74LS10	
	Panasonic	DN74LS10	
	SGS	T74LS10	
	TI	SN74LS10	
74LS109	Fairchild	74LS109	
	Hitachi	HD74LS109	
	Motorola	SN74LS109	
	National	DM74LS109	
	Panasonic	DN74LS109	
	SGS	T74LS109	
	TI	SN74LS109A	
74LS11	Fairchild	74LS11	
	Hitachi	HD74LS11	
	Motorola	SN74LS11	
	National	DM74LS11	
	Panasonic	DN74LS11	
	SGS	T74LS11	
	TI	SN74LS11	
74LS112	Fairchild	74LS112	
	Hitachi	HD74LS112	
	Motorola	SN74LS112A	
	National	DM74LS112	
	Panasonic	DN74LS112	
	SGS	T74LS112	
	TI	SN74LS112A	
74LS113	Hitachi	HD74LS113	
	Motorola	SN74LS113A	
	National	DM74LS113	
	Panasonic	DN74LS113	
	SGS	T74LS113	
	TI	SN74LS113A	
74LS12	Hitachi	HD74LS12	
	Motorola	SN74LS12	
	National	DM74LS12	
	Panasonic	DN74LS12	
	TI	SN74LS12	
74LS125A	Fairchild	74LS125A	
	Motorola	SN74LS125A	
	National	DM74LS125	
	Panasonic	DN74LS125A	
	SGS	T74LS125	
	TI	SN74LS125A	
74LS126A	Fairchild	74LS126	
	Motorola	SN74LS126A	
	National	DM74LS126	
	SGS	T74LS126	
	TI	SN74LS126A	
74LS13	Fairchild	74LS13	
	Hitachi	HD74LS13	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS13			(Cont'd)
	Motorola	SN74LS13	
	National	DM74LS13	
	Panasonic	DN74LS13	
	SGS	T74LS13	
	TI	SN74LS13	
74LS132	Fairchild	74LS132	
	Hitachi	HD74LS132	
	Motorola	SN74LS132	
	National	DM74LS132	
	Panasonic	DN74LS132	
	SGS	T74LS132	
	TI	SN74LS132	
74LS136	Fairchild	74LS136	
	Hitachi	HD74LS136	
	Motorola	SN74LS136	
	National	DM74LS136	
	Panasonic	DN74LS136	
	SGS	T74LS136	
	TI	SN74LS136	
74LS138	Fairchild	74LS138	
	Hitachi	HD74LS138	
	Motorola	SN74LS138	
	National	DM74LS138	
	Panasonic	DN74LS138	
	SGS	T74LS138	
	TI	SN74LS138	
74LS139	Fairchild	74LS139	
	Hitachi	HD74LS139	
	Motorola	SN74LS139	
	National	DM74LS139	
	Panasonic	DN74LS139	
	SGS	T74LS139	
	TI	SN74LS139A	
74LS14	Fairchild	74LS14	
	Hitachi	HD74LS14	
	Motorola	SN74LS14	
	National	DM74LS14	
	Panasonic	DN74LS14	
	TI	SN74LS14	
74LS151	Fairchild	74LS151	
	Hitachi	HD74LS151	
		HD74LS151A	
	Motorola	SN74LS151	
	National	DM74LS151	
	Panasonic	DN74LS151	
	SGS	T74LS151	
	TI	SN74LS151	
74LS152	Hitachi	HD74LS152	
74LS153	Fairchild	74LS153	
	Hitachi	HD74LS153	
	Motorola	SN74LS153	
	National	DM74LS153	
	Panasonic	DN74LS153	
	SGS	T74LS153	
	TI	SN74LS153	
74LS154	National	DM74LS154	
74LS155	Fairchild	74LS155	
	Hitachi	HD74LS155	
	Motorola	SN74LS155	
	National	DM74LS155	
	Panasonic	DN74LS155	
	TI	SN74LS155A	
74LS156	Fairchild	74LS156	
	Hitachi	HD74LS156	
	Motorola	SN74LS156	
	National	DM74LS156	
	Panasonic	DN74LS156	
	SGS	T74LS156	
	TI	SN74LS156	
74LS157	Fairchild	74LS157	
	Hitachi	HD74LS157	
	Motorola	SN74LS157	
	National	DM74LS157	
	Panasonic	DN74LS157	
	SGS	T74LS157	
	TI	SN74LS157	
74LS158	Fairchild	74LS158	
	Hitachi	HD74LS158	
	Motorola	SN74LS158	
	National	DM74LS158	
	Panasonic	DN74LS158	
	SGS	T74LS158	
	TI	SN74LS158	
74LS160	Fairchild	74LS160	
	Hitachi	HD74LS160A	
	Motorola	SN74LS160A	
	National	DM74LS160	
	Panasonic	DN74LS160A	
	SGS	T74LS160	
	Signetics	**74LS160A (3003)**	
	TI	SN74LS160A	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Signetics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS160A	Fairchild	74LS160	
	Hitachi	HD74LS160A	
	Motorola	SN74LS160A	
	National	DM74LS160	
	Panasonic	DN74LS160A	
	SGS	T74LS160	
	Signetics	**74LS160**	**(3003)**
	TI	SN74LS160A	
74LS161A	Fairchild	74LS161A	
	Hitachi	HD74LS161A	
	Motorola	SN74LS161A	
	National	DM74LS161	
	Panasonic	DN74LS161A	
	SGS	T74LS161	
	TI	SN74LS161A	
74LS162A	Fairchild	74LS162	
	Hitachi	HD74LS162A	
	Motorola	SN74LS162A	
	National	DM74LS162	
	Panasonic	DN74LS162A	
	SGS	T74LS162	
	TI	SN74LS162A	
74LS163A	Fairchild	74LS163	
	Hitachi	HD74LS163	
		HD74LS163A	
	Motorola	SN74LS163A	
	National	DM74LS163	
	Panasonic	DN74LS163A	
	SGS	T74LS163	
	TI	SN74LS163A	
74LS164	Fairchild	74LS164	
	Hitachi	HD74LS164	
	Motorola	SN74LS164A	
	National	DM74LS164	
	Panasonic	DN74LS164	
	SGS	T74LS164	
	Signetics	**74LS164A**	**(3003)**
	TI	SN74LS164	
74LS164A	Fairchild	74LS164	
	Hitachi	HD74LS164	
	Motorola	SN74LS164A	
	National	DM74LS164	
	Panasonic	DN74LS164	
	SGS	T74LS164	
	Signetics	**74LS164**	**(3003)**
	TI	SN74LS164	
74LS169A	Fairchild	74LS169	
	Hitachi	HD74LS169	
	Motorola	SN74LS169	
	National	DM74LS169	
	SGS	T74LS169	
	TI	SN74LS169	
74LS170	Fairchild	74LS170	
	Motorola	SN74LS170	
	National	DM74LS170	
	Panasonic	DN74LS170	
	SGS	T74LS170	
	TI	SN74LS170	
74LS173	Fairchild	74LS173	
	Motorola	SN74LS173A	
	National	DM74LS173	
	Panasonic	DN74LS173	
	SGS	T74LS173	
	TI	SN74LS173A	
74LS174	Fairchild	74LS174	
	Hitachi	HD74LS174	
	Motorola	SN74LS174	
	National	DM74LS174	
	Panasonic	DN74LS174	
	SGS	T74LS174	
	TI	SN74LS174	
74LS175	Fairchild	74LS175	
	Hitachi	HD74LS175	
	Motorola	SN74LS175	
	Panasonic	DN74LS175	
	SGS	T74LS175	
	TI	SN74LS175	
74LS181	Fairchild	74LS181	
	Hitachi	HD74LS181	
	Motorola	SN74LS181	
	SGS	T74LS181	
	TI	SN74LS181	
74LS191	Fairchild	74LS191	
	Hitachi	HD74LS191	
	Motorola	SN74LS191	
	National	DM74LS191	
	Panasonic	DN74LS191	
	SGS	T74LS191	
	TI	SN74LS191	
74LS192	Fairchild	74LS192	
	Hitachi	HD74LS192	
	Motorola	SN74LS192	
	National	DM74LS192	
	Panasonic	DN74LS192	
	SGS	T74LS192	
	TI	SN74LS192	
74LS193	Fairchild	74LS193	
	Hitachi	HD74LS193	
	Motorola	SN74LS193	
	National	DM74LS193	
	Panasonic	DN74LS193	
	SGS	T74LS193	
	TI	SN74LS193	
74LS194A	Fairchild	74LS194A	
	Hitachi	HD74LS194A	
	Motorola	SN74LS194A	
	National	DM74LS194	
	Panasonic	DN74LS194A	
	SGS	T74LS194A	
	TI	SN74LS194A	
74LS195A	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	TI	SN74LS195A	
		μA7924	
	Toshiba	TA79024	
74LS197	Fairchild	74LS197	
	Hitachi	HD74LS197	
	Motorola	SN74LS197	
	National	DM74LS197	
	Panasonic	DN74LS197	
	SGS	T74LS197	
	TI	SN74LS197	
74LS20	Fairchild	74LS20	
	Hitachi	HD74LS20	
	Motorola	SN74LS20	
	National	DM74LS20	
	Panasonic	DN74LS20	
	SGS	T74LS20	
	TI	SN74LS20	
74LS21	Fairchild	74LS21	
	Hitachi	HD74LS21	
	Motorola	SN74LS21	
	National	DM74LS21	
	Panasonic	DN74LS21	
	SGS	T74LS21	
	TI	SN74LS21	
74LS240	Fairchild	74LS240	
	Hitachi	HD74LS240	
	Motorola	SN74LS240	
	Panasonic	DN74LS240	
	SGS	T74LS240	
	TI	SN74LS240	
74LS241	Fairchild	74LS241	
	Hitachi	HD74LS241	
	Motorola	SN74LS241	
	Panasonic	DN74LS241	
	SGS	T74LS241	
	TI	SN74LS241	
74LS242	Fairchild	74LS242A	
	Motorola	SN74LS242	
	TI	SN74LS242	
74LS243	Fairchild	74LS243A	
	Motorola	SN74LS243	
	TI	SN74LS243	
74LS244	Fairchild	74LS244	
	Hitachi	HD74LS244	
	Motorola	SN74LS244	
	Panasonic	DN74LS244	
	SGS	T74LS244	
	TI	SN74LS244	
74LS251	Fairchild	74LS251	
	Hitachi	HD74LS251	
	Motorola	SN74LS251	
	National	DM74LS251	
	Panasonic	DN74LS251	
	SGS	T74LS251	
	TI	SN74LS251	
74LS253	Fairchild	74LS253	
	Hitachi	HD74LS253	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS253			(Cont'd)
	Motorola	SN74LS253	
	National	DM74LS253	
		DM8214	
	Panasonic	DN74LS253	
	SGS	T74LS253	
	TI	SN74LS253	
74LS256	Fairchild	74LS256	
	Motorola	SN74LS256	
74LS257	Fairchild	74LS257A	
	Hitachi	HD74LS257	
	Motorola	SN74LS257A	
	National	DM74LS257	
	SGS	T74LS257	
	Signetics	**74LS257A**	**(3003)**
	TI	SN74LS257B	
74LS257A	Fairchild	74LS257A	
	Hitachi	HD74LS257	
	Motorola	SN74LS257A	
	National	DM74LS257	
	SGS	T74LS257	
	Signetics	**74LS257**	**(3003)**
	TI	SN74LS257B	
74LS258	Fairchild	74LS258A	
	Hitachi	HD74LS258	
	Motorola	SN74LS258A	
	National	DM74LS258	
	Panasonic	DN74LS258A	
	SGS	T74LS258	
	TI	SN74LS258B	
74LS259	Fairchild	74LS259	
	Motorola	SN74LS259	
	SGS	T74LS259	
	TI	SN74LS259B	
74LS26	Fairchild	74LS26	
	Hitachi	HD74LS26	
	Motorola	SN74LS26	
	National	DM74LS26	
	Panasonic	DN74LS26	
	SGS	T74LS26	
	TI	SN74LS26	
74LS260	Fairchild	74LS260	
	Motorola	SN74LS260	
74LS266	Fairchild	74LS266	
	Motorola	SN74LS266	
	National	DM74LS266	
	Panasonic	DN74LS266	
	Raytheon	RC8242	
	SGS	T74LS266	
	Signetics	**N8242**	**(3022)**
	TI	SN74LS266	
74LS27	Fairchild	74LS27	
	Hitachi	HD74LS27	
	Motorola	SN74LS27	
	National	DM74LS27	
	Panasonic	DN74LS27	
	SGS	T74LS27	
	TI	SN74LS27	
74LS273	Fairchild	74LS273	
	Motorola	SN74LS273	
	SGS	T74LS273	
	TI	SN74LS273	
74LS279	Fairchild	74LS279	
	Hitachi	HD74LS279	
	Motorola	SN74LS279	
	National	DM74LS279	
	Panasonic	DN74LS279	
	SGS	T74LS279	
	TI	SN74LS279A	
74LS283	Fairchild	74LS283	
	Hitachi	HD74LS283	
		HD74LS283A	
	Motorola	SN74LS283	
	National	DM74LS283	
	Panasonic	DN74LS283	
	SGS	T74LS283	
	TI	SN74LS283	
74LS290	Fairchild	74LS290	
	Hitachi	HD74LS290	
	Motorola	SN74LS290	
	National	DM74LS290	
	Panasonic	DN74LS290	
	SGS	T74LS290	
	TI	SN74LS290	
74LS293	Fairchild	74LS293	
	Hitachi	HD74LS293	
	Motorola	SN74LS293	
	National	DM74LS293	
	Panasonic	DN74LS293	
	SGS	T74LS293	
	TI	SN74LS293	

Manufacturer Device	Replacement Source	Device	IC Master Page
74LS295A	Fairchild	74LS295A	
	Motorola	SN74LS295A	
	SGS	T74LS295A	
	Signetics	**74LS295B**	**(3003)**
	TI	SN74LS295B	
74LS295B	Fairchild	74LS295A	
	Motorola	SN74LS295A	
	SGS	T74LS295A	
	Signetics	**74LS295A**	**(3003)**
	TI	SN74LS295B	
74LS298	Fairchild	74LS298	
	Hitachi	HD74LS298	
	Motorola	SN74LS298	
	SGS	T74LS298	
	TI	SN74LS298	
74LS30	Fairchild	74LS30	
	Hitachi	HD74LS30	
	Motorola	SN74LS30	
	National	DM74LS30	
	Panasonic	DN74LS30	
	SGS	T74LS30	
	TI	SN74LS30	
74LS33	Fairchild	74LS33	
	Motorola	SN74LS33	
	Panasonic	DN74LS33	
	SGS	T74LS33	
	TI	SN74LS33	
74LS365	Fairchild	74LS365A	
	Motorola	SN74LS365A	
	National	DM74LS365	
	Panasonic	DN74LS365A	
	SGS	T74LS365	
		T74LS365A	
	Signetics	**74LS365A**	**(3003)**
	TI	SN74LS365A	
74LS365A	Fairchild	74LS365A	
	Motorola	SN74LS365A	
	National	DM74LS365	
	Panasonic	DN74LS365A	
	SGS	T74LS365	
		T74LS365A	
	Signetics	**74LS365**	**(3003)**
	TI	SN74LS365A	
74LS366A	Fairchild	74LS366A	
	Motorola	SN74LS366A	
	National	DM74LS366	
	Panasonic	DN74LS366A	
	SGS	T74LS366	
		T74LS366A	
	TI	SN74LS366A	
74LS367	Fairchild	74LS367A	
	Hitachi	HD74LS367	
		HD74LS367A	
	Motorola	SN74LS367A	
	National	DM74LS367	
	Panasonic	DN74LS367A	
	SGS	T74LS367	
		T74LS367A	
	Signetics	**74LS367A**	**(3003)**
	TI	SN74LS367A	
74LS367A	Fairchild	74LS367A	
	Hitachi	HD74LS367	
		HD74LS367A	
	Motorola	SN74LS367A	
	National	DM74LS367	
	Panasonic	DN74LS367A	
	SGS	T74LS367	
		T74LS367A	
	Signetics	**74LS367**	**(3003)**
	TI	SN74LS367A	
74LS368	Fairchild	74LS368A	
	Hitachi	HD74LS368	
	Motorola	SN74LS368A	
	National	DM74LS368	
	Panasonic	DN74LS368A	
	SGS	T74LS368	
	Signetics	**74LS368A**	**(3003)**
	TI	SN74LS368A	
74LS368A	Fairchild	74LS368A	
	Hitachi	HD74LS368	
	Motorola	SN74LS368A	
	National	DM74LS368	
	Panasonic	DN74LS368A	
	SGS	T74LS368	
	Signetics	**74LS368**	**(3003)**
	TI	SN74LS368A	
74LS37	Fairchild	74LS37	
	Hitachi	HD74LS37	
	Motorola	SN74LS37	
	National	DM74LS37	
	Panasonic	DN74LS37	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
74LS37			(Cont'd)
	SGS	T74LS37	
	TI	SN74LS37	
74LS373	Fairchild	74LS373	
	Motorola	SN74LS373	
	Panasonic	DN74LS373	
	SGS	T74LS373	
	TI	SN74LS373	
74LS374	Fairchild	74LS374	
	Motorola	SN74LS374	
	National	DM74LS374	
	SGS	T74LS374	
	TI	SN74LS374	
74LS375	Fairchild	74LS375	
	Motorola	SN74LS375	
	TI	SN74LS375	
74LS377	Fairchild	74LS377	
	Motorola	SN74LS377	
	SGS	T74LS377	
	TI	SN74LS377	
74LS378	AMD	SN74LS378	
	Fairchild	74LS378	
	Motorola	SN74LS378	
	SGS	T74LS378	
	TI	SN74LS378	
74LS38	Fairchild	74LS38	
	Hitachi	HD74LS38	
	Motorola	SN74LS38	
	National	DM74LS38	
	Panasonic	DN74LS38	
	SGS	T74LS38	
	TI	SN74LS38	
74LS393	Fairchild	74LS393	
	Motorola	SN74LS393	
	Panasonic	DN74LS393	
	SGS	T74LS393	
	TI	SN74LS393	
74LS395	Fairchild	74LS395	
	National	DM74LS395	
	Panasonic	DN74LS395A	
	SGS	T74LS395	
	TI	SN74LS395A	
74LS40	Fairchild	74LS40	
	Hitachi	HD74LS40	
	Motorola	SN74LS40	
	National	DM74LS40	
	Panasonic	DN74LS40	
	SGS	T74LS40	
	TI	SN74LS40	
74LS42	Fairchild	74LS42	
	Hitachi	HD74LS42	
	Motorola	SN74LS42	
	National	DM74LS42	
	Panasonic	DN74LS42	
	SGS	T74LS42	
	TI	SN74LS42	
74LS48	Fairchild	74LS48	
	Hitachi	HD74LS48	
	Motorola	SN74LS48	
	National	DM74LS48	
	SGS	T74LS48	
74LS490	Fairchild	74LS490	
	Motorola	SN74LS490	
	Panasonic	DN74LS490	
	SGS	T74LS490	
74LS51	Fairchild	74LS51	
	Hitachi	HD74LS51	
	Motorola	SN74LS51	
	National	DM74LS51	
	Panasonic	DN74LS51	
	SGS	T74LS51	
	TI	SN74LS51	
74LS54	Fairchild	74LS54	
	Hitachi	HD74LS54	
	Motorola	SN74LS54	
	National	DM74LS54	
	Panasonic	DN74LS54	
	SGS	T74LS54	
	TI	SN74LS54	
74LS540	Fairchild	74LS540	
	Motorola	SN74LS540	
	TI	SN74LS540	
74LS541	Motorola	SN74LS541	
	TI	SN74LS541	
74LS568	Motorola	SN74LS568	
74LS569	Motorola	SN74LS569	
74LS640	Motorola	SN74LS640	
	Signetics	**N8T125**	**(3022)**
	TI	SN74LS640	
74LS641	Motorola	SN74LS641	
	TI	SN74LS641	
74LS642	Motorola	SN74LS642	
	TI	SN74LS642	
74LS645	Motorola	SN74LS645	
	TI	SN74LS645	
74LS670	Fairchild	74LS670	
	Motorola	SN74LS670	
	National	DM74LS670	
	SGS	T74LS670	
	TI	SN74LS670	
74LS73	Hitachi	HD74LS73	
	Motorola	SN74LS73A	
	National	DM74LS73	
	Panasonic	DN74LS73	
	TI	SN74LS73A	
74LS74	Fairchild	74LS74	
	Hitachi	HD74LS74	
		HD74LS74A	
	Motorola	SN74LS74A	
	National	DM74LS74	
	Panasonic	DN74LS74A	
	SGS	T74LS74	
	TI	SN74LS74A	
74LS75	Hitachi	HD74LS75	
	Motorola	SN74LS75	
	National	DM74LS75	
	Panasonic	DN74LS75	
	TI	SN74LS75	
74LS76	Hitachi	HD74LS76	
	Motorola	SN74LS76A	
	National	DM74LS76	
	Panasonic	DN74LS76	
	TI	SN74LS76A	
74LS83	Fairchild	74LS83A	
	Hitachi	HD74LS183A	
		HD74LS83A	
	Motorola	SN74LS83A	
	National	DM74LS83A	
	Panasonic	DN74LS83A	
	SGS	T74LS83	
	Signetics	**74LS83A**	**(3003)**
	TI	SN74LS83A	
74LS83A	Fairchild	74LS83A	
	Hitachi	HD74LS183A	
		HD74LS83A	
	Motorola	SN74LS83A	
	National	DM74LS83A	
	Panasonic	DN74LS83A	
	SGS	T74LS83	
	Signetics	**74LS83**	**(3003)**
	TI	SN74LS83A	
74LS85	Fairchild	74LS85	
	Hitachi	HD74LS85	
	Motorola	SN74LS85	
	National	DM74LS85	
	Panasonic	DN74LS85	
	TI	SN74LS85	
74LS86	Fairchild	74LS86	
	Hitachi	HD74LS86	
	Motorola	SN74LS86	
	National	DM74LS86	
	Panasonic	DN74LS86	
	SGS	T74LS86	
	TI	SN74LS86A	
74LS90	Fairchild	74LS90	
	Motorola	SN74LS90	
	National	DM74LS90	
	Panasonic	DN74LS90	
	SGS	T74LS90	
	TI	SN74LS90	
74LS92	Hitachi	HD74LS92	
	Motorola	SN74LS92	
	National	DM74LS92	
	Panasonic	DN74LS92	
	SGS	T74LS92	
	TI	SN74LS92	
74LS93	Hitachi	HD74LS93	
	Motorola	SN74LS93	
	National	DM74LS93	
	Panasonic	DN74LS93	
	SGS	T74LS93	
	TI	SN74LS93	
74LS95B	Fairchild	74LS95B	
	Hitachi	HD74LS95B	
	Motorola	SN74LS95B	
	National	DM74LS95B	
	Panasonic	DN74LS95B	
	SGS	T74LS95	
		T74LS95B	
	TI	SN74LS95B	
74LS96	TI	SN74LS96	
74S00	Fairchild	74S00	
	National	DM74S00	
	TI	SN74S00	
74S02	Fairchild	74S02	
	National	DM74S02	
	TI	SN74S02	
		SN74S32	
74S03	Fairchild	74S03	
	National	DM74S03	
	TI	SN74S03	
74S04	Fairchild	74S04	
	National	DM74S04	
	TI	SN74S04	
74S05	Fairchild	74S05	
	National	DM74S05	
	TI	SN74S05	
74S08	Fairchild	74S08	
	TI	SN74S08	
74S10	Fairchild	74S10	
	National	DM74S10	
	TI	SN74S10	
74S11	Fairchild	74S11	
	National	DM74S11	
	TI	SN74S11	
74S112	Fairchild	74S112	
	Motorola	SN74S112	
	National	DM74S112	
	TI	SN74S112	
74S113	National	DM74S113	
	TI	SN74S113	
74S133	Fairchild	74S133	
	National	DM74S133	
	TI	SN74S133	
74S134	National	DM74S134	
	TI	SN74S134	
74S135	National	DM74S135	
	TI	SN74S135	
74S138	AMD	SN74S138	
	Fairchild	74S138	
	National	DM74S138	
	TI	SN74S138	
74S140	National	DM74S140	
	TI	SN74S140	
74S169	TI	SN74S169	
74S182	Fairchild	74S182	
	MMI	SN74S182	
	National	DM74S182	
	TI	SN74S182	
♦ 74S189	AMD	AM27LS03	
		AM27S03	
		SN74S189	
♦ 74S189	Cypress	27LS03M	
		CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**
♦ 74S189	National	DM74S189	
		DM7599	
		DM8599	
74S196	TI	SN74S196	
74S197	TI	SN74S197	
74S20	Fairchild	74S20	
	National	DM74S20	
	TI	SN74S20	
74S251	AMD	SN74S251	
	National	DM74S251	
	TI	SN74S251	
74S280	National	DM74S280	
	TI	SN74S280	
74S289	Fairchild	7489	
	National	DM7489	
		DM74S289	
		DM8589	
		MM74S289	
	Signetics	N82S25	
74S32	Fairchild	74S32	
74S37	TI	SN74S37	
74S373	TI	SN74S373	
74S374	TI	SN74S374	
74S40	Fairchild	74S40	
	National	DM74S40	
	TI	SN74S40	
74S51	Fairchild	74S51	
	National	DM74S51	
	TI	SN74S51	
74S74	Fairchild	74S74	
	Hitachi	HD74S74	
	National	DM74S74	
	TI	SN74S74	
74S85	TI	SN74S85	
74S86	Fairchild	74S86	
	National	DM74S86	
	TI	SN74S86	
7524	Motorola	MC7524	
	National	DS75S24	
75HCT645	Sprague	SS74HCT645	
	TI	SN74HCT645	
82HS195	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
82S123	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	N82S123	
		N82US123	
		S825123	
	TI	JBP38S030	
82S191	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
9401	Fairchild	F9401	
	Motorola	MC8503	
9403	Fairchild	F9403	
ADC0803	Datel	ADC830	
	GE/Intersil	**ADC0803**	**(2667)**
	National	ADC0803	
	TI	ADC0803	
ADC0805	National	ADC0805	
	TI	ADC0805	
		ADC0824A	
ADC0820	Maxim	ADC0820	
	MicroPwr	MP0820	
	National	ADC0820	
AM6012	AMD	AM6012	
	Exar	XR3464	
	Ferranti	ZN6012	
	National	NS8464	
	PMI	**DAC312**	**(2974)**
♦ CA3081	**GE/RCA**	**CA3081**	**(2648, 2653)**
	Sprague	ULN2081	
CA3089	GE/RCA	CA3089	
HEF400	**GE/RCA**	**CD4000**	**(2633)**
	Motorola	MC14000	
	National	CD4000	
	SGS	HCC/HCF4000	
	Solitron	CM4000	
	Sprague	SCL4000	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Signetics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HEF4001	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
	Motorola	MC14001	
	National	CD4001	
		MM74C02	
	OKI	MSM4001	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
HEF4002	Fairchild	F4002	
	GE/RCA	**CD4002**	**(2633)**
	Motorola	MC14002	
	National	CD4002	
	SGS	HCC/HCF4002	
	Solitron	CM4002	
	Sprague	SCL4002	
	Toshiba	**TC4002**	**(3308)**
HEF4006	Fairchild	F4006	
	GE/RCA	**CD4006**	**(2634)**
	National	CD4006	
	SGS	HCC/HCF4006	
	Solitron	CM4006	
	Sprague	SCL4006	
	Toshiba	**TC4006**	**(3308)**
HEF4007	Fairchild	F4007	
	GE/RCA	**CD4007**	**(2633)**
	Motorola	MC14007	
	National	CD4007	
	SGS	HCC/HCF4007	
	Solitron	CM4007	
	Sprague	SCL4007	
	Toshiba	**TC4007**	**(3308)**
HEF4008	Fairchild	F4008	
	GE/RCA	**CD4008**	**(2636)**
	Motorola	MC14008	
	National	CD4008	
		MM74C83	
	SGS	HCC/HCF4008	
	Solitron	CM4008	
	Sprague	SCL4008	
	Toshiba	**TC4008**	**(3308)**
♦ HEF40098	Fairchild	F40098	
	National	MM80C98	
HEF40106	Fairchild	F400014	
		F40014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14106	
		MC14584	
	National	CD40106	
		CD4584	
		MM54C14	
		MM74C14	
	SGS	HCC/HCF40106	
	Sprague	SCL4584	
HEF4011	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	Motorola	MC14011	
	National	CD4011	
		MM74C00	
	OKI	MSM4011	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
HEF4012	Fairchild	F4012	
	GE/RCA	**CD4012**	**(2633)**
	Motorola	MC14012	
	National	CD4012	
	SGS	HCC/HCF4012	
	Solitron	CM4012	
	Sprague	SCL4012	
	Toshiba	**TC4012**	**(3308)**
HEF4013	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	CD4013	
		MM74C74	
	OKI	MSM4013	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
HEF4014	Fairchild	F4014	
	GE/RCA	**CD4014**	**(2634)**
	Motorola	MC14014	
	National	CD4014	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HEF4014			(Cont'd)
	SGS	HCC/HCF4014	
	Solitron	CM4014	
	Sprague	SCL4014	
	Toshiba	**TC4014**	**(3308)**
HEF4015	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	CD4015	
		MM74C164	
	OKI	MSM4015	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
HEF4016	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
HEF4017	Fairchild	F4017	
	GE/RCA	**CD4017**	**(2635)**
	Motorola	MC14017	
	National	CD4017	
	SGS	HCC/HCF4017	
	Solitron	CM4017	
	Sprague	SCL4017	
	Toshiba	**TC4017**	**(3308)**
HEF40175	Fairchild	F40175	
	Motorola	MC14175	
	National	CD40175	
		MM54C175	
		MM74C175	
	Toshiba	**TC40175**	**(3308)**
HEF4018	Fairchild	F4018	
	GE/RCA	**CD4018**	**(2635)**
	Motorola	MC14018	
	National	CD4018	
	SGS	HCC/HCF4018	
	Solitron	CM4018	
	Sprague	SCL4018	
	Toshiba	**TC4018**	**(3308)**
HEF4019	Fairchild	F4019	
	GE/RCA	**CD4019**	**(2633, 2635)**
	National	CD4019	
	OKI	MSM4019	
	Sanyo	LC4019	
	SGS	HCC/HCF4019	
	Solitron	CM4019	
	Sprague	SCL4019	
	Toshiba	**TC4019**	**(3308)**
HEF40192	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
HEF40193	Fairchild	F40193	
	GE/RCA	**CD40193**	**(2635)**
	National	CD40193	
		MM54C193	
		MM74C193	
	SGS	HCC/HCF40193	
	Sprague	SCL4193	
	Toshiba	**TC40193**	**(3308)**
HEF40194	Fairchild	F40194	
	GE/RCA	**CD40194**	**(2634)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HEF40194			(Cont'd)
	Motorola	MC14194	
	SGS	HCC/HCF40194	
HEF4020	Fairchild	F4020	
	GE/RCA	**CD4020**	**(2634)**
	Motorola	MC14020	
	National	CD4020	
	SGS	HCC/HCF4020	
	Solitron	CM4020	
	Sprague	SCL4020	
	Toshiba	**TC4020**	**(3308)**
HEF4021	Fairchild	F4021	
	GE/RCA	**CD4021**	**(2634)**
	Motorola	MC14021	
	National	CD4021	
	SGS	HCC/HCF4021	
	Sprague	SCL4021	
	Toshiba	**TC4021**	**(3308)**
HEF4022	Fairchild	F4022	
	GE/RCA	**CD4022**	**(2635)**
	Motorola	MC14022	
	National	CD4022	
	SGS	HCC/HCF4022	
	Solitron	CM4022	
	Sprague	SCL4022	
	Toshiba	**TC4022**	**(3308)**
HEF4023	Fairchild	F4023	
	GE/RCA	**CD4023**	**(2633)**
	Motorola	MC14023	
	National	CD4023	
		MM74C10	
	SGS	HCC/HCF4023	
	Solitron	CM4023	
	Sprague	SCL4023	
	Toshiba	**TC4023**	**(3308)**
HEF4024	Fairchild	F4024	
	GE/RCA	**CD4024**	**(2634)**
	Motorola	MC14024	
	National	CD4024	
	SGS	HCC/HCF4024	
	Solitron	CM4024	
	Sprague	SCL4024	
	Toshiba	**TC4024**	**(3308)**
HEF4025	Fairchild	F4025	
	GE/RCA	**CD4025**	**(2633)**
	Motorola	MC14025	
	National	CD4025	
	SGS	HCC/HCF4025	
	Solitron	CM4025	
	Sprague	SCL4025	
	Toshiba	**TC4025**	**(3308)**
HEF4027	Fairchild	F4027	
	GE/RCA	**CD4027**	**(2634)**
	Motorola	MC14027	
	National	CD4027	
		MM74C76	
	OKI	MSM4027	
	Sanyo	LC4027	
	SGS	HCC/HCF4027	
	Solitron	CM4027	
	Sprague	SCL4027	
HEF4028	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	CD4028	
		MM74C42	
	OKI	MSM4028	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Solitron	CM4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
HEF4030	Fairchild	F4030	
	GE/RCA	**CD4030**	**(2633, 2636)**
	National	CD4030	
	SGS	HCC/HCF4030	
	Solitron	CM4030	
	Sprague	SCL4030	
	Toshiba	**TC4030**	**(3308)**
HEF4035	Fairchild	F4035	
	GE/RCA	**CD4035**	**(2634)**
	Motorola	MC14035	
	SGS	HCC/HCF4035	
	Solitron	CM4035	
	Toshiba	TC4035	
HEF4040	Fairchild	F4040	
	GE/RCA	**CD4040**	**(2634)**
	Motorola	MC14040	
	National	CD4040	
	SGS	HCC/HCF4040	
	Solitron	CM4040	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HEF4040			(Cont'd)
	Sprague	SCL4040	
	Toshiba	**TC4040**	**(3308)**
HEF4041	Fairchild	F4041	
	GE/RCA	**CD4041**	**(2633)**
	National	CD4041	
	SGS	HCC/HCF4041	
	Solitron	CM4041	
	Sprague	SCL4041	
HEF4042	Fairchild	F4042	
	GE/RCA	**CD4042**	**(2634)**
	Motorola	MC14042	
	National	CD4042	
	SGS	HCC/HCF4042	
	Solitron	CM4042	
	Sprague	SCL4042	
	Toshiba	**TC4042**	**(3308)**
HEF4043	**GE/RCA**	**CD4043**	**(2634)**
	Motorola	MC14043	
	National	CD4043	
	SGS	HCC/HCF4043	
	Solitron	CM4043	
	Sprague	SCL4043	
	Toshiba	**TC4043**	**(3308)**
HEF4044	Fairchild	F4044	
	GE/RCA	**CD4044**	**(2634)**
	Motorola	MC14044	
	National	CD4044	
	SGS	HCC/HCF4044	
	Solitron	CM4044	
	Toshiba	**TC4044**	**(3308)**
HEF4047	Fairchild	F4047	
	GE/RCA	**CD4047**	**(2634)**
	National	CD4047	
	SGS	HCC/HCF4047	
	Solitron	CM4047	
	Sprague	SCL4047	
	Toshiba	**TC4047**	**(3308)**
HEF4049	Fairchild	F4049	
	GE/RCA	**CD4049**	**(2633)**
	Motorola	MC14049	
	National	CD4049	
	OKI	MSM4049	
	Sanyo	LC4049	
	SGS	HCC/HCF4049	
	Solitron	CM4049	
	Sprague	SCL4049	
	Toshiba	**TC4049**	**(3308)**
HEF4050	Fairchild	F4050	
	GE/RCA	**CD4050**	**(2633)**
	Motorola	MC14050	
	National	CD4050	
	SGS	HCC/HCF4050	
	Solitron	CM4050	
	Sprague	SCL4050	
	Toshiba	**TC4050**	**(3308)**
HEF4051	Fairchild	F4051	
	GE/RCA	**CD4051**	**(2635)**
	Motorola	MC14051	
	National	CD4051	
	SGS	HCC/HCF4051	
	Solitron	CM4051	
	Sprague	SCL4051	
	Toshiba	**TC4051**	**(3308)**
HEF4052	Fairchild	F4052	
	GE/RCA	**CD4052**	**(2635)**
	Motorola	MC14052	
	SGS	HCC/HCF4052	
HEF4053	Fairchild	F4053	
	GE/RCA	**CD4053**	**(2635)**
	Motorola	MC14053	
	National	CD4053	
	SGS	HCC/HCF4053	
	Solitron	CM4053	
	Sprague	SCL4053	
	Toshiba	**TC4053B**	**(3308)**
HEF4059	Motorola	MC14569	
HEF4060	**GE/RCA**	**CD4060**	**(2634)**
	Motorola	MC14060	
	National	CD4060	
	SGS	HCC/HCF4060	
	Sprague	SCL4060	
HEF4066	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
HEF4066			(Cont'd)
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
HEF4067	Fairchild	F4067	
	Motorola	MC14067	
	SGS	HCC/HCF4067	
HEF4068	Fairchild	F4068	
	GE/RCA	**CD4068**	**(2633)**
	Motorola	MC14068	
	SGS	HCC/HCF4068	
	Solitron	CM4068	
	Sprague	SCL4068	
	Toshiba	**TC4068**	**(3308)**
HEF4069	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
HEF4070	Fairchild	F4070	
	GE/RCA	**CD4070**	**(2633, 2636)**
	Motorola	MC14070	
	National	CD4070	
		MM74C86	
	SGS	HCC/HCF4070	
	Solitron	CM4070	
	Sprague	SCL4070	
HEF4071	Fairchild	F4071	
	GE/RCA	**CD4071**	**(2633)**
	Motorola	MC14071	
	National	CD4071	
		MM74C32	
	OKI	MSM4071	
	Sanyo	LC4071	
	SGS	HCC/HCF4071	
	Solitron	CM4071	
	Sprague	SCL4071	
HEF4072	Fairchild	F4072	
	GE/RCA	**CD4072**	**(2633)**
	Motorola	MC14072	
	National	CD4072	
	SGS	HCC/HCF4072	
	Sprague	SCL4072	
	Toshiba	TC4072	
HEF4073	Fairchild	F4073	
	GE/RCA	**CD4073**	**(2633)**
	Motorola	MC14073	
	National	CD4073	
	SGS	HCC/HCF4073	
	Solitron	CM4073	
	Sprague	SCL4073	
	Toshiba	TC4073	
HEF4075	Fairchild	F4075	
	GE/RCA	**CD4075**	**(2633)**
	Motorola	MC14075	
	National	CD4075	
	SGS	HCC/HCF4075	
	Solitron	CM4075	
	Sprague	SCL4075	
	Toshiba	TC4075	
HEF4076	Fairchild	F4076	
	GE/RCA	**CD4076**	**(2634)**
	Motorola	MC14076	
	National	CD4076	
		MM54C173	
		MM74C173	
	SGS	HCC/HCF4076	
	Solitron	CM4076	
	Sprague	SCL4076	
	Toshiba	**TC4076**	**(3308)**
HEF4077	Fairchild	F4077	
	GE/RCA	**CD4077**	**(2633, 2636)**
	Motorola	MC14077	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
HEF4077			(Cont'd)
	National	CD4077	
	SGS	HCC/HCF4077	
	Solitron	CM4077	
	Sprague	SCL4077	
HEF4078	Fairchild	F4078	
	GE/RCA	**CD4078**	**(2633)**
	Motorola	MC14078	
	SGS	HCC/HCF4078	
	Solitron	CM4078	
	Sprague	SCL4078	
	Toshiba	**TC4078**	**(3308)**
HEF4081	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	CD4081	
		MM74C08	
	OKI	MSM4081	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
HEF4082	Fairchild	F4082	
	GE/RCA	**CD4082**	**(2633)**
	Motorola	MC14082	
	National	CD4082	
	SGS	HCC/HCF4082	
	Sprague	SCL4082	
	Toshiba	TC4082	
HEF4086B	**GE/RCA**	**CD4086B**	**(2633)**
	Motorola	MC14506	
	SGS	HCC/HCF4086	
HEF4502	**GE/RCA**	**CD4502**	**(2633)**
	Motorola	MC14502	
	SGS	HCC/HCF4502	
	Sprague	SCL4502	
HEF4505	Motorola	MC14505	
HEF4508	**GE/RCA**	**CD4508**	**(2634)**
	Motorola	MC14508	
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**
		N82147	
	Sprague	SCL4508	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
HEF4510	Fairchild	F4510	
	GE/RCA	**CD4510**	**(2635)**
	Motorola	MC14510	
	National	CD4510	
	SGS	HCC/HCF4510	
	Solitron	CM4510	
	Sprague	SCL4510	
	Toshiba	**TC4510**	**(3308)**
HEF4511	Fairchild	F4511	
	GE/RCA	**CD4511**	**(2635)**
	Motorola	MC14511	
	National	CD4511	
	NEC	μPD4511	
	SGS	HCC/HCF4511	
	Solitron	CM4511	
	Sprague	SCL4511	
	Toshiba	**TC4511**	**(3308)**
HEF4514	Fairchild	F4514	
	GE/RCA	**CD4514**	**(2633)**
	Motorola	MC14514	
	National	CD4514	
	SGS	HCC/HCF4514	
	Solitron	CM4514	
	Sprague	SCL4514	
	Toshiba	**TC4514**	**(3308)**
HEF4515	Fairchild	F4515	
	GE/RCA	**CD4515**	**(2633)**
	Motorola	MC14515	
	National	CD4515	
	SGS	HCC/HCF4515	
	Solitron	CM4515	
	Sprague	SCL4515	
	Toshiba	**TC4515**	**(3308)**
HEF4516	Fairchild	F4516	
	GE/RCA	**CD4516**	**(2635)**
	Motorola	MC14516	
	National	CD4516	
	SGS	HCC/HCF4516	
	Solitron	CM4516	
	Sprague	SCL4516	
	Toshiba	**TC4516**	**(3308)**
HEF4517	**GE/RCA**	**CD4517**	**(2634)**
	Motorola	MC14517	
	SGS	HCC/HCF4517	
	Sprague	SCL4517	

Manufacturer Device	Replacement Source	Device	IC Master Page
HEF4518	Fairchild	F4518	
	GE/RCA	**CD4518**	**(2635)**
	Motorola	MC14518	
	National	CD4518	
	SGS	HCC/HCF4518	
	Solitron	CM4518	
	Sprague	SCL4518	
	Toshiba	**TC4518**	**(3308)**
HEF4519	Hitachi	HD4519	
	Motorola	MC14519	
	National	CD4519	
HEF4520	Fairchild	F4520	
	GE/RCA	**CD4520**	**(2635)**
	Motorola	MC14520	
	National	CD4520	
	OKI	MSM4520	
	Sanyo	LC4520	
	SGS	HCC/HCF4520	
	Solitron	CM4520	
	Sprague	SCL4520	
	Toshiba	**TC4520**	**(3308)**
HEF4521	Fairchild	F4521	
	Motorola	MC14521	
	SGS	HCC/HCF4045	
	Solitron	CM4045	
	Sprague	SCL4445	
	Toshiba	**TC4521**	**(3308)**
HEF4526	Fairchild	F4526	
	Motorola	MC14526	
	National	CD4526	
	Sprague	SCL4526	
	Toshiba	**TC4526**	**(3308)**
HEF4527	Fairchild	F4527	
	GE/RCA	**CD4527**	**(2636)**
	Motorola	MC14527	
	National	CD4527	
	SGS	HCC/HCF4527	
	Sprague	SCL4527	
	Toshiba	**TC4527**	**(3308)**
HEF4528	Fairchild	F4528	
	Motorola	MC14528	
	National	CD4528	
		MM74C221	
	SGS	HCC/HCF4098	
	Toshiba	**TC4528**	**(3308)**
HEF4531	Fairchild	F4531	
	Motorola	MC14531	
	SGS	HCC/HCF40101	
	Sprague	SCL4531	
	Toshiba	**TC4531**	**(3308)**
HEF4532	Fairchild	F4532	
	GE/RCA	CD4532	
	Motorola	MC14532	
	SGS	HCC/HCF4532	
	Sprague	SCL4532	
	Toshiba	**TC4532**	**(3308)**
HEF4534	Motorola	MC14534	
HEF4538	Motorola	MC14538	
	National	CD4538	
	OKI	MSM4538	
HEF4539	Fairchild	F4539	
	Motorola	MC14539	
HEF4543	Fairchild	F4543	
	GE/RCA	**CD4543**	**(2635)**
	Motorola	MC14543	
		MC14543B	
	National	CD4543	
	Toshiba	**TC4543**	**(3308)**
HEF4555	Fairchild	F4555	
	GE/RCA	**CD4555**	**(2633, 2635)**
	Motorola	MC14555	
	SGS	HCC/HCF4555	
	Sprague	SCL4555	
	Toshiba	**TC4555**	**(3308)**
HEF4556	Fairchild	F4556	
	GE/RCA	**CD4556**	**(2633, 2635)**
	Motorola	MC14556	
	SGS	HCC/HCF4556	
	Sprague	SCL4556	
	Toshiba	**TC4556**	**(3308)**
HEF4557	Fairchild	F4557	
	Motorola	MC14557	
HEF4585	Fairchild	F40085	
	GE/RCA	**CD4585**	**(2636)**
	Motorola	MC14585	
	National	MM74C85	
	SGS	HCC/HCF4585	
	Sprague	SCL4585	
	Toshiba	**TC4585**	**(3308)**

Manufacturer Device	Replacement Source	Device	IC Master Page
HEF4591	**GE/RCA**	**CD4541**	**(2634)**
	Motorola	MC14541	
HEF4720	Fairchild	F4720	
HEF4724	Fairchild	F4727	
HEF4731	Fairchild	F4031	
	GE/RCA	**CD4031**	**(2634)**
	National	CD4031	
	SGS	HCC/HCF4031	
INS2652	National	INS2652	
ISP8A/600	National	INS8060	
		ISP8A/600	
LF198	AMD	LF198	
	LinearTech	LF198	
	National	LF198	
♦ LF356	LinearTech	LF356	
	Motorola	**LF356**	**(2920)**
	National	LF356	
	PMI	PM356	
	Thomson	LF356	
LF398	LinearTech	LF398	
	National	LF398	
		LM298	
	PMI	**SMP10**	**(2975)**
	Signetics	NE5537	
LM111	AD	AD111	
	Fairchild	μA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
LM119	LinearTech	LM119	
		LT119	
	National	LM119	
	PMI	**PM119**	**(2975)**
♦ LM124A	Fairchild	μA124	
	GE/RCA	**CA124**	**(2645)**
	LinearTech	LT1014	
	National	LM124A	
	SiliconG	SG124	
	TI	LM124	
LM139	Fairchild	μA139	
	GE/RCA	**CA139**	**(2647)**
	Motorola	**LM139**	**(2925)**
	National	LM139	
	PMI	**CMP04**	**(2975)**
		PM139	**(2975)**
	Raytheon	LM139	
	TI	LM139	
LM158	**GE/RCA**	**CA158A**	**(2645)**
	LinearTech	LT1013	
	Motorola	**LM158**	**(2922)**
	National	LM158A	
	Raytheon	RM4139	
	TI	LM158	
LM1870	National	LM1870	
LM193	**Motorola**	**LM193**	**(2925)**
	National	LM193A	
	TI	LM193	
LM211	AD	AD211	
	Motorola	**LM211**	**(2925, 2958)**
	National	LM211	
	PMI	PM211	
	SiliconG	SG211	
	TI	LM211	
	Thomson	LM211	
LM219	National	LM219	
	Thomson	LM219	
LM239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
		μA239	
	GE/RCA	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
	Raytheon	LM239	
	TI	LM239	
	Thomson	LM239	
LM258	**GE/RCA**	**CA258A**	**(2645)**
	Motorola	**LM258**	**(2922, 2958)**
	National	LM258A	
	PMI	**OP221**	**(2970, 2972)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Signetics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM258			(Cont'd)
	TI	LM258	
	Thomson	LM258	
LM2901	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
LM2903	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM293	**Motorola**	**LM293**	**(2925, 2958)**
	National	LM293	
	TI	LM293	
LM311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM319	NEC	μPC319	
	Thomson	LM319	
LM358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	NE532	
	TI	LM348	
		LM358	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM358			(Cont'd)
	Thomson	LM358	
	Toshiba	TA75358	
LM393	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	μPC393	
	Sanyo	LA6393	
	TI	LM393	
	Toshiba	TA75393	
MC1408	AMD	AM1408	
		DAC08	
	AD	AD1408	
		ADDAC-08	
	Datel	**DAC08B**	**(2576)**
		DACI8BC	
		DACIC8B	**(2576)**
		DACIC8BC	**(2576)**
	Fairchild	DAC08	
		MA0802M	
		μA0801	
		μA0802	
	Hitachi	HA17008	
		HA17408	
	Motorola	**DAC08**	**(2938, 2958)**
		MC1408	**(2938)**
	National	DAC0801	
		DAC0802	
		DAC0806	
		DAC0807	
		DAC0808	
	NEC	μPC624	
	PMI	**DAC08**	**(2973)**
		DAC1408	
	Raytheon	DAC08	
MC14558	Motorola	SE4558	
MC1488	Exar	XR1488	
	Fairchild	MC1488	
		μA212A	
		μA750	
	GoldStar	**GD75188**	**(2694)**
	Hitachi	HD75188	
	National	DS1488	
	Signetics	MC1489	
	SiliconG	SG75188	
		SG75788	
	TI	MC1488	
		MC1489	
		SN75188	
		SN75189	
MC1489	Exar	XR1488	
	Fairchild	MC1488	
		μA212A	
		μA750	
	GoldStar	**GD75188**	**(2694)**
	Hitachi	HD75188	
	National	DS1488	
	Signetics	MC1488	
	SiliconG	SG75188	
		SG75788	
	TI	MC1488	
		MC1489	
		SN75188	
		SN75189	
MC1489A	Exar	XR1489A	
	Fairchild	UA150	
		UA212A	
		μA1489A	
	Motorola	**MC1489A**	**(2952, 2958)**
	National	DS1489A	
	SGS	MC1489	
	SiliconG	SG1489A	
	TI	SN75189A	
MC1496	**Motorola**	**MC1496**	**(2939, 2958)**
	National	LM1496	
	Plessey	SL1496	
	SiliconG	SG1496	
MC1508	AD	AD1508	
	Datel	**DACIC8BM**	**(2576)**
	Motorola	**MC1508**	**(2938)**
	National	MC1508	
	PMI	DAC1508	
	Signetics	SE5008	
		SE5009	
MC1558	**Motorola**	**MC1558**	**(2922)**
♦ MC1596	Fairchild	μA796	
	Motorola	**MC1596**	**(2939)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ MC1596			(Cont'd)
	National	LM1596	
	SiliconG	SG1596	
MC3302	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
MC3303	Fairchild	μA3303	
	Motorola	**MC3303**	**(2924)**
	SGS	MC3303	
	TI	MC3303	
MC3361	**Motorola**	**MC3361**	**(2939, 2959)**
	Samsung	MC3361	
	Sprague	ULN3862	
MC3404	**Motorola**	**MC3403**	**(2923, 2959)**
	SGS	MC3403	
	TI	MC3403	
MC3503	Raytheon	RM4137	
	TI	MC3503	
MC3510	Signetics	NE5410	
N5111	GE/RCA	CA2111A	
	National	LM2111	
		LM2113	
	Sprague	ULN2111	
	TI	SN76642	
		SN76643	
♦ N8202	Raytheon	RC8202	
N82147	**GE/RCA**	**CD4508**	**(2634)**
	Motorola	MC14508	
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**
		HEF4508	
	Sprague	SCL4508	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
N82148	National	DM74148	
		DM8318	
	Signetics	**74148**	**(3003)**
	TI	SN74148	
♦ N8230	Fairchild	9312	
	National	DM8312	
	Raytheon	RC8230	
		RC9312	
♦ N8233	Raytheon	RC8233	
N8234	Raytheon	RC8234	
N8242	Fairchild	74LS266	
	Motorola	SN74LS266	
	National	DM74LS266	
	Panasonic	DN74LS266	
	Raytheon	RC8242	
	SGS	T74LS266	
	Signetics	**74LS266**	**(3003)**
	TI	SN74LS266	
N8243	Raytheon	RC8243	
♦ N8250	National	8250A	
	Raytheon	RC8250	
N825147A	AMD	AM27S29	
	Fujitsu	MB7124	
	MMI	635481	
		63S481	
	National	DM74S472	
	Raytheon	**29623**	**(2985)**
	Signetics	N82S147	
♦ N8252	Fairchild	9031	
		9301	
♦ N8252	National	DM8301	
		DM9301	
♦ N8252	Raytheon	RC8252	
	Signetics	S8252	
N8262	Raytheon	RC8262	
N8266	Raytheon	RC8266	
N8271	Raytheon	RC8271	
N8273	Raytheon	RC8273	

Manufacturer Device	Replacement Source	Device	IC Master Page
N8274	Raytheon	RC8274	
♦ N8277	Fairchild	9328	
♦ N8280	Fairchild	96176	
	National	DM74176	
		DM8280	
♦ N8280	Raytheon	RC8280	
	Signetics	74176	
	TI	SN74176	
♦ N8281	National	DM74177	
		DM8281	
♦ N8281	Raytheon	RC8281	
	Signetics	74177	
	TI	SN74177	
N82H5641	MMI	63S6481	
N82HS187	AMD	AM27S45	
		AM27S47	
	Cypress	**CY7C245**	**(2565)**
	MMI	63RA1681	
	Signetics	S82HS187	
N82HS189	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		S82HS189	
N82HS195	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
N82HS195A	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
N82HS641	**Cypress**	**CY7C264**	**(2565)**
	SGS	HCC/HCF40110	
N82LS135	Fujitsu	MB7118	
	TI	28L22	
♦ N82S09	Fairchild	93419	
	Signetics	S82S09	
N82S100	Signetics	S82S100	
N82S115	AMD	AM27S15	
N82S123	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82US123	
		S825123	
	TI	JBP38S030	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Signetics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
N82S126	AMD	AM27S20	
	MMI	5300-1	
		53S140	
		63S140	
	National	DM54S387	
	Signetics	S82S126	
	TI	34SA10-25	
N82S129A	AMD	27S21	
		AM27S21	
	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
	National	DM74S287	
	Signetics	S82S5129	
N82S130	AMD	AM27S12	
	Fujitsu	MB7115	
	MMI	63S240	
	National	74S570	
		DM74S570	
	Signetics	S82S130	
N82S131	AMD	AM27S13	
	Fujitsu	MB7116	
	MMI	63S241	
	National	74S571A	
		DM74S571	
N82S135	MMI	63S281	
		63S281A	
N82S137	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
	National	74S573	
		DM74S573	
	NEC	μPB426	
♦ N82S140	AMD	AM27S30	
	National	DM74S475	
		DM77S475	
		DM87S475	
N82S141	AMD	AM27S31	
	MMI	63S485	
	National	74S474	
		DM74S474	
♦ N82S146	AMD	AM27S28	
	National	DM74S473	
N82S147	AMD	AM27S29	
	Fujitsu	MB7124	
	MMI	635481	
		63S481	
	National	DM74S472	
	Raytheon	**29623**	**(2985)**
	Signetics	N825147A	
♦ N82S180	AMD	AM27S180	
	Fujitsu	MB7131	
	National	DM87S180	
		DM87S229	
N82S181	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	S82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
♦ N82S184	AMD	AM27S184	
	National	DM87S184	
N82S185	AMD	27S185	
		AM2725S291	
		AM27S185	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
N82S185			(Cont'd)
	TI	24S81-55	
		28S165-35	
N82S191	AMD	AM27S191	
		AM27S291	
		AM27S291A	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
	Motorola	MCM76	
	National	87S291	
		DM878291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
N82S191A	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
♦ N82S191B	AMD	AM27S191	
		AM27S291	
		AM27S291A	
♦ N82S191B	**Cypress**	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
♦ N82S191B	Motorola	MCM76	
	National	87S291	
		DM878291	
♦ N82S191B	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
N82S212	Fairchild	93479	
N82S23	AMD	AM27S18	
	Fujitsu	MB7111	
	National	DM74S188	
	TI	28SA030-25	
N82S25	Fairchild	7489	
	National	DM7489	
		DM74S289	
		DM8589	
		MM74S289	
	Signetics	74S289	
♦ N82S321	AMD	27S43	
		AM27S43	
♦ N82S321	Fujitsu	MB7142	
	MMI	53S3281	
		63S3281	
♦ N82S321	National	77S321	
		87S321	
		DM87S321	
♦ N82S321	**Raytheon**	**29671**	**(2985)**
	Waferscale	**WS57C43**	**(3376)**
N82S80	Fairchild	74LS196	
	Hitachi	HD74LS196	
	Motorola	SN74LS196	
	National	DM74LS196	
	Panasonic	DN74LS196	
	SGS	T74LS196	
	TI	SN74LS196	
N82US123	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
N82US123	MMI		(Cont'd)
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		S825123	
	TI	JBP38S030	
N8T09	Raytheon	RC8T09	
N8T10	Fairchild	74173	
	National	DM74173	
		DM8551	
	Raytheon	RC8T10	
	TI	SN74173	
N8T125	Motorola	SN74LS640	
	Signetics	**74LS640**	**(3003)**
	TI	SN74LS640	
N8T13	National	DS75121	
		N8T13	
	TI	SN75121	
N8T20	Raytheon	RC8T20	
N8T22	Fairchild	9601	
	National	DM8601	
		DM9601	
	Raytheon	RF8601	
		RF9601	
	Signetics	S8T22	
	TI	SN74122	
N8T23	National	DS75122	
		DS75123	
	TI	SN75123	
N8T24	National	DS75124	
	TI	SN75124	
N8T25	National	DS3625	
N8T26	Hitachi	HD268T26	
	Motorola	**MC6880A**	**(2951)**
		MC8T26	**(2951)**
N8T26A	Fairchild	μA8T26A	
	Motorola	**MC8T26A**	**(2951)**
	National	DS8T26A	
N8T28	**Motorola**	**MC8T28**	**(2951)**
N8T34	National	DS8834	
N8T37	**Motorola**	**MC3437**	**(2952)**
	National	DS8837	
N8T380	National	DS8836	
N8T74	Fairchild	9374	
N8T95	**Motorola**	**MC6885**	**(2951)**
		MC8T95	**(2951)**
	National	DM8095	
	TI	SN74365	
NE4558	TI	MC4558C	
NE5018	AMD	AM6081	
	Datel	**DACUP8B**	**(2576)**
	Signetics	NE5019	
		NE5118	
		NE5119	
NE5019	AMD	AM6081	
	Datel	**DACUP8B**	**(2576)**
	Signetics	**NE5018**	**(3117)**
		NE5118	
		NE5119	
NE5020	Datel	DACUP10	
NE5118	AMD	AM6081	
	Datel	**DACUP8B**	**(2576)**
	Signetics	**NE5018**	**(3117)**
		NE5019	
		NE5119	
NE5119	AMD	AM6081	
	Datel	**DACUP8B**	**(2576)**
	Signetics	**NE5018**	**(3117)**
		NE5019	
		NE5118	
NE5170	Unitrode	μC5170	
NE529	National	LM361	
NE532	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
NE532			(Cont'd)
	TI	LM348	
		LM358	
	Thomson	LM358	
	Toshiba	TA75358	
NE5410	Signetics	MC3510	
NE542	National	LM381	
♦ NE5501	SiliconG	SG2021	
	Sprague	**ULN2021**	**(3203)**
		ULS2021	
♦ NE5501	TI	SN75466	
NE5517	Exar	XR13600	
	National	LM13600	
NE5532	Exar	XR5532	
	Signetics	**NE5532A**	**(3090)**
		SE5532	
		SE5532A	
	TI	NE5532	
		NE5532A	
NE5532A	Exar	XR5532	
	Signetics	**NE5532**	**(3090)**
		SE5532	
		SE5532A	
	TI	NE5532	
		NE5532A	
NE5533	Exar	XR5533	
	Signetics	NE5533A	
	TI	NE5533	
NE5533A	Exar	XR5533	
	Signetics	NE5533	
	TI	NE5533	
NE5534	AnalogSys	MA332	
	Datel	**AM453-2C**	**(2577)**
	Exar	XR5534	
	Raytheon	RC5534	
	Signetics	**NE5534A**	**(3091)**
	SSM	SSM2134	
	TI	NE5534	
		NE5534A	
NE5537	LinearTech	LF398	
	National	LF398	
		LM298	
	PMI	**SMP10**	**(2975)**
	Signetics	LF398	
NE5539	**Harris**	**HA2539**	**(2737, 2747, 2753)**
		HA5190	**(2707, 2737, 2747)**
	TeledyneP	1342	
NE555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
♦ NE555N	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
♦ NE555N	**Motorola**	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Signetics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ NE555N	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
NE556	Mitsubishi	M5E556	
	Samsung	NE556	
	SGS	NE556	
	TI	NE556	
	Thomson	NE556	
NE5560	Cherry	CS5560N	
	IPS	**IP5560C**	**(2854)**
NE5561	Cherry	CS5561	
		CS5561N	
	IPS	**IP5561C**	**(2854)**
NE5568	Sprague	ULN8168	
NE558	Exar	XR558	
	Signetics	SE558	
♦ NE5602	Exar	XR2002C	
		XR2202	
♦ NE5602	Fairchild	MC1412	
		μA9666	
♦ NE5602	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
♦ NE5602	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
♦ NE5602	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
♦ NE5602	TI	ULN2002	
		ULN2002A	
♦ NE5602	Toshiba	TD62002	
♦ NE5603	Exar	XR2003C	
		XR2203	
♦ NE5603	Fairchild	MC1413	
		μA9667	
♦ NE5603	Mitsubishi	M52523	
		M54523	
♦ NE5603	**Motorola**	**MC1413**	**(2954, 2958)**
		ULN2003	
♦ NE5603	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
♦ NE5603	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
♦ NE5603	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
♦ NE5604	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
♦ NE5604	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
♦ NE5604	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
♦ NE5604	**Sprague**	**ULN2004**	**(3203)**
		ULS2004	
♦ NE5604	TI	ULN2004	
		ULN2004A	
♦ NE5604	Toshiba	TD62004	
		TD62104	
NE565	National	LM565	
	Signetics	SE565	
NE566	National	LM566	
	Signetics	SE566	
NE567	Exar	XR2567	
		XR567	
	MCE	MCE567	
	National	LM567	
	Samsung	LM567	
	Signetics	SE567	
NE571	NEC	UPC571	
NE592	TI	NE592	
NE594	Dionics	DI513B	
		DI514	
		DI514B	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
NE594			(Cont'd)
	Exar	XR6118	
	Motorola	MC3490	
	National	DM8887	
		DS8887	
	OKI	MSL912	
	Sanyo	LB1290	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
	Toshiba	TD62781	
NE602	National	DM5445	
	Siemens	S042	
	Signetics	SA602	
	TI	SN5445	
NE604	AD	AD7628	
	Maxim	AD7628	
	Motorola	MC12020	
	Siemens	SO41P	
	Signetics	SA604	
	Sprague	ULN3820	
PC74HC190	**GE/RCA**	**CD74HC190**	**(2632)**
	Hitachi	HD74HC190	
	Motorola	MC74HC190	
	SGS	M74HC190	
	Signetics	**74HC190**	**(3003)**
		PCF74HC190	
	TI	SN74HC190	
	Toshiba	**TC74HC190**	**(3307)**
PC74HC4050	**GE/RCA**	**CD74HC4050**	**(2631)**
	Motorola	MC74HC4050	
		MC84HC4050	
	SGS	M74HC4050	
	Toshiba	**TC74HC4050**	**(3307)**
PC74HC4066	Motorola	MC74HC4066	
	SGS	M74HC4066	
	TI	SN74HC4075	
PC74HC4075	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	GE/RCA	**CD74HC4075**	**(2631)**
		CDM5167	
	GoldStar	GM7616	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MC74HC4075	
	Panasonic	MN74HC4075	
	SGS	M74HC4075	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Toshiba	**TC74HC4075**	**(3307)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
PC74HC4094	**Cypress**	**CY7C186**	**(2562)**
	GE/RCA	**CD74HC4094**	**(2631)**
	IDT	**IDT7164**	**(2802)**
	Matra-Harris	HM62641	
	Mitsubishi	AM99C88	
	Motorola	MCM61L64	
	Performance	P4C164	
	SGS	M74HC4094	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5585	
	Vitelic	V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
PC74HC4515	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
PC74HC4515			(Cont'd)
	S-MOS	SRM2261	
	SGS	M74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
PC74HC4518	**Cypress**	**CY7C171**	**(2562)**
	GE/RCA	**CD74HC4518**	**(2632)**
	IDT	**IDT71681**	**(2802)**
	SGS	M74HC4518	
PC74HC4543	**Cypress**	**CY7C172**	**(2562, 2564)**
	GE/RCA	**CD74HC4543**	**(2632)**
	IDT	**IDT71682**	**(2802)**
	Motorola	MC74HC4543	
	National	MM74HC4543	
	Performance	P4C1682	
	SGS	M74HC4543	
	Toshiba	**TC74HC4543**	**(3307)**
PC74HC597	**GE/RCA**	**CD74HC597**	**(2631)**
	Hitachi	HD74HC597	
	Motorola	MC74HC597	
	National	MM74HC597	
	SGS	M74HC597	
	TI	SNN74HC597	
	Toshiba	**TC74HC597**	**(3307)**
PC74HC7266	**GE/RCA**	**CD74HC7266**	**(2631)**
	Motorola	MC74HC7266	
	National	MM74HC7266	
	TI	SN74HC7266	
	Toshiba	**TC74HC7266**	**(3307)**
PCF74HC190	**GE/RCA**	**CD74HC190**	**(2632)**
	Hitachi	HD74HC190	
	Motorola	MC74HC190	
	SGS	M74HC190	
	Signetics	**74HC190**	**(3003)**
		PC74HC190	
	TI	SN74HC190	
	Toshiba	**TC74HC190**	**(3307)**
PCF74HCT393	**GE/RCA**	**CD74HCT393**	**(2632)**
PLC153	MMI	PAL10L8	
	National	DMPAL10L8	
		PAL10L8	
	Signetics	PLHS153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PLHS153	MMI	PAL10L8	
	National	DMPAL10L8	
		PAL10L8	
	Signetics	PLC153	
		PLHS18P8	**(3155, 3173)**
		PLS153	**(3155, 3169)**
PLHS18P8	MMI	PAL10L8	
	National	DMPAL10L8	
		PAL10L8	
	Signetics	PLC153	
		PLHS153	
		PLS153	**(3155, 3169)**
PLS153	MMI	PAL10L8	
	National	DMPAL10L8	
		PAL10L8	
	Signetics	PLC153	
		PLHS153	
		PLHS18P8	**(3155, 3173)**
PLS155	**Signetics**	**PLHS18P8**	**(3155, 3173)**
		PLS157	**(3155, 3159)**
		PLS159	**(3155, 3160)**
PLS157	**Signetics**	**PLHS18P8**	**(3155, 3173)**
		PLS155	**(3155, 3158)**
		PLS159	**(3155, 3160)**

Manufacturer Device	Replacement Source	Device	IC Master Page
PLS159	**Signetics**	**PLHS18P8**	**(3155, 3173)**
		PLS155	**(3155, 3158)**
		PLS157	**(3155, 3159)**
PLS173	MMI	PAL12L16	
		PAL16L6	
	National	PAL16L6	
S4F04	Fairchild	54F04	
	Motorola	MC54F04	
	Signetics	54F04	
	TI	SN54F04	
S7281	National	DM54177	
		DM7281	
	Raytheon	RM8281	
	TI	SN54177	
S8202	Raytheon	RM8202	
S8224	National	DM5488	
S8231	Raytheon	RM8231	
S8250	Raytheon	RM8250	
S825123	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
	TI	JBP38S030	
S8252	Fairchild	9031	
		9301	
	National	DM8301	
		DM9301	
	Raytheon	RC8252	
S8262	Raytheon	RM8262	
S8266	Raytheon	RM8266	
S8270	Raytheon	RM8270	
	TI	SN54178	
S8271	Raytheon	RM8271	
	TI	SN54179	
S8280	National	DM54176	
	Raytheon	RM8280	
	Signetics	54176	
	TI	SN54176	
S82HS187	AMD	AM27S45	
		AM27S47	
	Cypress	**CY7C245**	**(2565)**
	MMI	63RA1681	
	Signetics	**N82HS187**	**(3178)**
S82HS189	AMD	AM27S35	
		AM27S37	
	Cypress	**CY7C235**	**(2565)**
	Fujitsu	MB723	
		MB7232	
	MMI	53RS881	
		63RA881	
		63RS881	
	Motorola	MCM27S35	
	National	87SR/81	
		87SR181	
		DM87SR181	
	Signetics	**N82HS187**	**(3178)**
		N82HS189	**(3179)**
S82S09	Fairchild	93419	
S82S100	Signetics	N82S100	
S82S126	AMD	AM27S20	
	MMI	5300-1	
		53S140	
		63S140	
	National	DM54S387	
	Signetics	N82S126	
	TI	34SA10-25	
S82S129	MMI	53S141	
	National	DM54S287	
S82S130	MMI	53S240	
	National	DM54S570	
S82S131	MMI	53S241	
	National	DM54S571	
S82S137	MMI	53S441	
	Motorola	MCM7643M	
	National	DM54S573	
		DM54S573A	
♦ S82S140	National	DM54S475	
		DM77S295	
		DM87S295	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Signetics (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
S82S141	National	DM54S474	
♦ S82S146	Fujitsu	MB7123	
	National	DM54S473	
S82S147	Fujitsu	MBM7124	
S82S16	National	DM54S200	
♦ S82S17	National	S82S117	
		S82S17	
♦ S82S180	National	DM77S180	
S82S181	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	93Z451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
	TI	28586-60	
		28S86-60	
		JBP28L86A	
S82S185	National	DM77S185	
	Raytheon	**29651AM**	**(2985)**
♦ S82S190	AMD	AM27S190	
	Fujitsu	MB7137	
	Hitachi	HN25168	
	National	DM77S190	
		DM87S190	
♦ S82S212	Fairchild	93479	
	Signetics	N82S212	
S82S23	AMD	AM27S18	
		AM27LS18	
	National	74S188	
		DM54S188	
		DM7577	
	Signetics	N82S23	
	TI	28SA030-25	
		38SA030	
		38SA030-25	
S82S25	AMD	SN5489-1	
	National	DM5489	
		DM54S289	
		MM54S289	
♦ S82S41	Motorola	SN54LS386	
	National	DM54LS386	
	Raytheon	RM8241	
	TI	SN54LS386	
S82S5129	AMD	27S21	
		AM27S21	
	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
	National	DM74S287	
	Signetics	N82S129A	
S8T09	Raytheon	RM8T09	
S8T13	National	DS55121	
	TI	SN55121	
S8T22	Fairchild	9601	
	National	DM8601	
		DM9601	
	Raytheon	RF8601	
		RF9601	
	Signetics	N8T22	
	TI	SN74122	
S8T95	National	DM7095	
	TI	SN54365A	
S8T97	National	DM7097	
	TI	SN54367A	
S8T98	National	DM7098	
	TI	SN54368A	
SA1458	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	μPC1458	
		μPC251	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SA1458			(Cont'd)
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	TI	LF412	
		TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
SA594	Sprague	UDQ6118	
SA602	National	DM5445	
	Siemens	S042	
	Signetics	**NE602**	**(3101)**
	TI	SN5445	
SA604	AD	AD7628	
	Maxim	AD7628	
	Motorola	MC12020	
	Siemens	S041P	
	Signetics	**NE604**	**(3103)**
	Sprague	ULN3820	
SC80C31	AMD	P80C31	
	Fujitsu	MBL80C31	
	Harris	P80C31	
	Intel	80C31	
		P80C31	
	OKI	M80C31	
	Siemens	SAB80C31	
SC80C51	Fujitsu	MBL80C51	
	Intel	80C51	
		P80C51	
	Matra-Harris	P80C51	
	OKI	M80C51	
	Siemens	SAB80C51	
SCC80C39	Intel	80C39	
	Mitsubishi	M5M80C39	
	Toshiba	**TMP80C39**	**(3306)**
SCC80C49	Intel	80C49	
	NEC	μPD80C49	
	Toshiba	**TMP80C49**	**(3306)**
SCN2651	National	INS2651	
	SMC	COM2651	
SCN2652	Motorola	MC2652	
SCN2653	Motorola	MC2653	
SCN2661	Motorola	MC2661	
		MC68661	**(2898)**
	SMC	AY2661	
		COM2661	
SCN2681	**Exar**	**XR88C681**	**(2612)**
	Motorola	**MC2681**	**(2898)**
SCN2682	Motorola	MC2682	
SCN68000	Hitachi	HD68000	
	Motorola	**MC68000**	**(2896)**
	Rockwell	**R68000**	**(2987, 2989)**
	Thomson	**TS68000**	**(3281)**
♦ SCN68230	**Motorola**	**MC68230**	**(2898)**
SCN68681	**Motorola**	**MC68681**	**(2898)**
SCN8031	AD	AD636	
	Fujitsu	MBL8031	
	Intel	AMD8031	
	Maxim	AD636	
	Siemens	SAB8031	
SCN8032	Intel	P8032	
	Siemens	SAB8032	
SCN8035	Intel	8035	
	National	INS8035	
	NEC	μPD8035	
	Toshiba	**TMP8035**	**(3306)**
SCN8048	Intel	8048	
	National	INS8048	
	NEC	μPD8048	
	Toshiba	**TMP8048**	**(3306)**
SCN8049	Intel	8049	
	National	INS8049	
	NEC	μPD8049	
	Toshiba	**TMP8049**	**(3306)**
SCN8051	AMD	P8051	
	Fujitsu	MBL8051	
	Intel	P8051	
	Siemens	SAB8051	
SCN8052	Intel	P8052	
	Siemens	SAB8052	
SE4558	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SE4558			(Cont'd)
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
SE5008	AD	AD1508	
	Datel	**DACIC8BM**	**(2576)**
	Motorola	**MC1508**	**(2938)**
	National	MC1508	
	PMI	DAC1508	
	Signetics	MC1508	
		SE5009	
SE5009	AD	AD1508	
	Datel	**DACIC8BM**	**(2576)**
	Motorola	**MC1508**	**(2938)**
	National	MC1508	
	PMI	DAC1508	
	Signetics	MC1508	
		SE5008	
SE5019	AMD	AM6080	
	Signetics	SE5118	
		SE5119	
SE5118	AMD	AM6080	
	Signetics	SE5019	
		SE5119	
SE5119	AMD	AM6080	
	Signetics	SE5019	
		SE5118	
SE5410	Datel	DACIC10BM	
♦ SE550	National	LM550	
SE5532	Exar	XR5532	
	Signetics	**NE5532**	**(3090)**
		NE5532A	**(3090)**
		SE5532A	
	TI	NE5532	
		NE5532A	
SE5532A	Exar	XR5532	
	Signetics	**NE5532**	**(3090)**
		NE5532A	**(3090)**
		SE5532	
	TI	NE5532	
		NE5532A	
SE5534	**Datel**	**AM453-2M**	**(2577)**
	Harris	**HA5101**	**(2737, 2747, 2759)**
	Raytheon	**RM5534**	**(2979)**
	Signetics	SE5534A	
SE5534A	**Datel**	**AM453-2M**	**(2577)**
	Harris	**HA5101**	**(2737, 2747, 2759)**
	Raytheon	**RM5534**	**(2979)**
	Signetics	SE5534	
♦ SE554A	TI	SE5534	
		SE5534A	
SE555	Exar	XR555M	
	GE/Intersil	SE555	
	Motorola	MC1555	
	Raytheon	RM555	
	TI	SE555	
		SE555M	
SE556	**Elantec**	**EHA2600**	**(2594)**
	Harris	**HA2600**	**(2706, 2737, 2747)**
	Hitachi	HA17741	
	Motorola	**MC1556**	**(2921)**
		ML1556	
	TeledyneP	1326	
	TI	MC1556	
		SE556M	
SE5561	Cherry	CS5561S	
	IPS	**IP5561**	**(2854)**
♦ SE5563	Sprague	ULS8163	
SE558	Exar	XR558	
	Signetics	NE558	
SE565	National	LM565	
	Signetics	NE565	
SE566	National	LM566	
	Signetics	NE566	
SE567	Exar	XR2567	
		XR567	
	MCE	MCE567	
	National	LM567	
	Samsung	LM567	
	Signetics	NE567	

Manufacturer Device	Replacement Source	Device	IC Master Page
SE592	GE/Intersil	SE592	
	Motorola	SE592	
	TI	SE592	
♦ SG1526A	**IPS**	**IP1526A**	**(2854, 2856)**
♦ SG2526A	**IPS**	**IP2526A**	**(2856)**
SG3524	Cherry	CS3524	
	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	SG3524	
		UC3524A	
	SiliconG	SG3524	
		SG3524B	
	TI	SG3524	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
♦ SG3526	**IPS**	**IP3526A**	**(2854, 2856)**
SN54F240	Fairchild	54F240	
	Motorola	MC54F240	
	Signetics	54F240	
SN74LS645-1	TI	SN74LS645-1	
SP380	National	DS8640	
♦ TBA120	National	TBA120	
	Siemens	TBA120	
	Telefunken	TBA120	
♦ TBA540	Plessey	TBA540	
	Telefunken	TBA540	
TBA750	Plessey	TBA750	
♦ TCA440	Siemens	TCA440	
TDA2540	Plessey	TDA2540	
	Thomson	TBA2540	
TDA2541	Plessey	TDA2541	
	Thomson	TDA2541	
♦ TDA2560	National	TDA2560	
	Plessey	TDA2560	
TDA2593	National	TDA2593	
	Plessey	TDA2593	
	Telefunken	TDA2593	
	Thomson	TDA2593	
TDA3561	**GoldStar**	**GL3361**	**(2699)**
ULN2003	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
ULN2004	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
μA723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Signetics			**(Cont'd)**
µA723			(Cont'd)
	Samsung	LM723	
	SGS	L123	
		LM723	
	SiliconG	SG723	
	TI	µA723	
		µA723M	
	Thomson	SFC2723	
		µA723	
µA733	Fairchild	µA733	
	GE/Intersil	µA733	
	Hitachi	HA17733	
	Motorola	**MC1733**	**(2920)**
		NE592	**(2960)**
	National	LM733	
	SiliconG	SG1401	
	TI	µA733	
		µA733M	
♦ µA740	GE/Intersil	LM740	
µA741	AD	AD741	
	Fairchild	µA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	µPC151	
		µPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	SiliconG	SG741	
	TI	µA741	
		µA741M	
	Thomson	µA741	
	Toshiba	TA7504	
µA747	Fairchild	µA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	µPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	TeledyneS	747	
	TI	µA747	
		µA747M	
µA758	Fairchild	µA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
	Sprague	ULN3809	
		ULN3812	
	TI	SN76111	
		SN76116	
Silicon General			
1526	Cherry	CS1527	
	LinearTech	LT1527	
		SG1527	
	SiliconG	SG1527	
	TI	TL1527	
	Unitrode	**UC1527**	**(3323)**
JAN101A	National	DM54AS74	
		JAN101A	
	TI	SN54AS74	
JAN55325	National	DM54ALS1000	
		DM54AS160	
	TI	JANB55325	
L290B	SGS	L290B	
L291B	SGS	L291B	
L292	SGS	L292	
SG101	AMD	LM101	
	AD	AD101	
	Fairchild	µA101	
	GE/Intersil	AD101	
	LinearTech	LM101	
	Motorola	LM101	
	Raytheon	LM101	
	SGS	LS101	
	Thomson	LM101	
SG104	National	LM104	
	Thomson	LM104	
SG105	Fairchild	µA105	
	GE/Intersil	LM105	
	National	LM105	
	Thomson	LM105	
SG107	AD	AD741S	
	Burr-Brown	3500	
	LinearTech	LM107	
	National	LH741A	
		LM107	
	PMI	PM741	
	Raytheon	RC741	
	Thomson	LM107	
SG109	Fairchild	µA109	
	IPS	**IP140-5**	**(2854)**
	Motorola	**LM109**	**(2926)**
	National	LM109	
	Thomson	LM109	
		SFC2109	
♦ SG110	National	LM110	
SG111	AD	AD111	
	Fairchild	µA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	TI	TL111	
	Thomson	LM111	
SG117	Fairchild	µA117	
	IPS	**IP117**	**(2854)**
	LinearTech	LM117	
	MCE	MCELM117	
	Motorola	**LM117**	**(2929)**
	National	LM117	
	TI	TL117	
	Thomson	LM117	
	Unitrode	**UC117**	**(3325)**
SG1173	SGS	L165	
	Sprague	**ULN3751**	**(3203)**
SG117A	LinearTech	LT117A	
	Motorola	**LM117A**	**(2929)**
	National	LM117A	
SG120-05	Unitrode	UC120-05	
SG120-08	National	LM120-08	
SG120-12	**IPS**	**IP120-12**	**(2854)**
	National	LM120-12	
	Unitrode	UC120-12	
SG120-15	**IPS**	**IP120-15**	**(2854)**
	National	LM120-15	
	Unitrode	UC120-15	
SG120-18	National	LM120-18	
SG120-5	Fairchild	µA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	µA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	µPC7905	
	SiliconG	SG320-05	
		SG7905	
		SH12005	
	TI	µA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
	National	LM120-5	
SG123	Fairchild	SH123	
		UA138	
		µA123	
	IPS	**IP123**	**(2854)**
	LinearTech	LM123	
		LT123	
	Motorola	**LM123**	**(2927)**
		MC78T05	**(2926)**
	National	LM123	
	SiliconG	SG123A	
SG123A	Fairchild	SH123	
		UA138	
		µA123	
	IPS	**IP123**	**(2854)**
	LinearTech	LM123	
		LT123	
	Motorola	**LM123**	**(2927)**
		MC78T05	**(2926)**
	National	LM123	
	SiliconG	SG123	
SG124	Fairchild	µA124	
	GE/RCA	**CA124**	**(2645)**
	LinearTech	LT1014	
	National	LM124A	
	TI	LM124	
SG124A	Ferranti	ZN518	
	Motorola	**LM124**	**(2924)**
	SiliconSys	SSI6276	
SG1253	AD	AD558	
	Ferranti	ZN558	
	GE/Intersil	**ICL8023**	**(2673)**
	SiliconSys	SSI6270	
SG137A	**IPS**	**IP137**	**(2854)**
	LinearTech	LM137	
		LT137	
	MCE	MCELM137	
	Motorola	**LM137**	**(2929)**
	National	LM137	
	SiliconG	SG137	
	Thomson	LM137	
	Unitrode	**UC137**	**(3325)**
SG138	Ferranti	ZN454	
	LinearTech	LT138	
	SiliconSys	SSI6280	
SG138A	Ferranti	ZN455	
	SiliconSys	SSI6282	
♦ SG139	Fairchild	µA139	
	GE/RCA	**CA139**	**(2647)**
	Motorola	**LM139**	**(2925)**
	National	LM139	
	PMI	**CMP04**	**(2975)**
		PM139	**(2975)**
♦ SG139	Raytheon	LM139	
	Signetics	LM139	
	TI	LM139	
♦ SG139A	**GE/RCA**	**CA139A**	**(2647)**
	Motorola	**LM139A**	**(2925)**
	National	LM139A	
	PMI	**CMP04**	**(2975)**
		PM139A	**(2975)**
♦ SG139A	TI	LM139A	
SG140-05	National	LM140-05	
	Unitrode	UC140-05	
SG140-06	National	LM140-06	
SG140-08	National	LM140-08	
SG140-12	**IPS**	**IP140-12**	**(2854)**
	Motorola	**LM140-12**	**(2926, 2928)**
	National	LM140-12	
	Unitrode	UC140-12	
SG140-15	**IPS**	**IP140-15**	**(2854)**
	Motorola	**LM140-15**	**(2926, 2928)**
	National	LM140-15	
	Unitrode	UC140-15	
SG140-18	National	LM140-18	
SG140-20	National	LM140-20	
SG140-24	**GoldStar**	**GL7905**	**(2701)**
	Gould	µA7905	
	National	LM140-24	
	Toshiba	TA79005	
SG14005	Fairchild	µA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	µPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14012	
		SG7805AT	
		SG7812AT	
	TI	µA78M05	
	Toshiba	TA78M05	
SG1401	Fairchild	µA733	
	GE/Intersil	µA733	
	Hitachi	HA17733	
	Motorola	**MC1733**	**(2920)**
		NE592	**(2960)**
	National	LM733	
	Signetics	µA733	
	TI	µA733	
		µA733M	
SG14012	Fairchild	µA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
SG14012			(Cont'd)
	NEC	µPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG7805AT	
		SG7812AT	
	TI	µA78M05	
	Toshiba	TA78M05	
SG143	Datel	AM464-2M	
	Harris	**HA2640**	**(2706, 2738, 2748)**
	Motorola	**MC1536**	**(2921)**
	National	LM143	
		LM1536	
	SiliconG	SG1536	
SG1436	**Datel**	**AM464-2**	**(2577)**
	Harris	HA2645	
	Motorola	**MC1436**	**(2920, 2958)**
	National	LM1436	
		LM343	
	SiliconG	SG343	
	TeledyneP	1332	
♦ SG1456	Burr-Brown	3506	
	Datel	**AM460-2**	**(2577)**
	Elantec	**EHA2605**	**(2594)**
	Harris	HA2605	
	Motorola	**MC1456**	**(2920)**
	TI	MC1456	
♦ SG1458	Exar	XR4558	
	Fairchild	µA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
♦ SG1458	**Motorola**	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	µPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
♦ SG1458	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
♦ SG1458	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
SG1468	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		µA212A	
		µA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1489	
		SG2501A	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
SG1489	Fairchild	µA1489	
		µA212A	
		µA750	
	Motorola	**MC1489**	**(2952, 2958)**
	Signetics	MC1489	
	SiliconG	SG508	
	Sprague	UHD508	
	TI	MC1489	
		SN55189	
		SN75189	
SG1489A	Exar	XR1489A	
	Fairchild	UA150	
		UA212A	
		µA1489A	
	Motorola	**MC1489A**	**(2952, 2958)**
	National	DS1489A	
	SGS	MC1489	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Silicon General (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG1489A			(Cont'd)
	Signetics	MC1489A	
	TI	SN75189A	
SG1495	Motorola	MC1495	
SG1496	**Motorola**	**MC1496**	**(2939, 2958)**
	National	LM1496	
	Plessey	SL1496	
	Signetics	MC1496	
SG150	**IPS**	**IP150**	**(2854)**
	LinearTech	LM150	
		LT150	
	Motorola	**LM150**	**(2929)**
	National	LM150	
	Unitrode	**UC150**	**(3325)**
SG1501A	Exar	XR1568	
	Motorola	**MC1568**	**(2931)**
	SiliconG	SG1568	
SG1503	AD	AD580	
	Hitachi	HA17012	
	Maxim	AD580	
SG1524	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	μA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	
	National	LM1524	
	SGS	SG1524	
		UC1524A	
	SiliconG	SG1524B	
	Unitrode	**UC1524**	**(3323)**
		UC1524A	**(3323)**
SG1525	Cherry	CS1525	
	LinearTech	LT1525	
		SG1525	
	TI	TL1525	
SG1525A	Cherry	CS1525A	
	Exar	**XR1525A**	**(2607)**
	IPS	**IP1525A**	**(2854)**
	LinearTech	LT1525A	
	Motorola	**SG1525A**	**(2931)**
	SGS	SG1524A	
	Siliconix	PWM125	
	Unitrode	**UC1525**	**(3323)**
		UC1525A	**(3323)**
SG1526	Cherry	CH1526	
	IPS	**IP1526**	**(2854, 2856)**
	LinearTech	LT1526	
	Motorola	**SG1526**	**(2931)**
		SG3526	**(2931)**
	SiliconG	SG3525	
		SG3526	
	Unitrode	**UC1526**	**(3323)**
SG1527	Cherry	CS1527	
	LinearTech	LT1527	
		SG1527	
	SiliconG	1526	
	TI	TL1527	
	Unitrode	**UC1527**	**(3323)**
SG1527A	Cherry	CS1527A	
	IPS	**IP1527A**	**(2854)**
	LinearTech	LT1527A	
	Motorola	**SG1527A**	**(2931)**
	SGS	SG1527A	
	Siliconix	PWM27	
	Unitrode	**UC1527A**	**(3323)**
SG1532	SiliconG	SG1544	
		SG2532	
	Unitrode	UC1532	
		UC1544	**(3324)**
SG1536	Datel	AM464-2M	
	Harris	**HA2640**	**(2706, 2738, 2748)**
	Motorola	**MC1536**	**(2921)**
	National	LM143	
		LM1536	
	SiliconG	SG143	
SG1543	Exar	XR1543	
	IPS	IP1543	
	Unitrode	**UC1543**	**(3324)**
SG1544	IPS	IP1544	
♦ SG1556	**Elantec**	**EHA2600**	**(2594)**
	Harris	**HA2600**	**(2706, 2737, 2747)**
	Hitachi	HA17741	
	Motorola	**MC1556**	**(2921)**
		ML1556	
♦ SG1556	Signetics	SE556	
	TeledyneP	1326	
	TI	MC1556	
		SE556M	
SG1568	Exar	XR1568	
	Motorola	**MC1568**	**(2931)**
	SiliconG	SG1501A	
SG1595	Motorola	MC1595	
SG1596	Fairchild	μA796	
	Motorola	**MC1596**	**(2939)**
	National	LM1596	
SG1840	SGS	UC1840	
	Unitrode	**UC1840**	**(3323)**
SG1842	Cherry	CS1842	
	IPS	**IP1842**	**(2854, 2856)**
	LinearTech	LT1842	
	Unitrode	**UC1842**	**(3323)**
SG1843	Cherry	CS1843	
	IPS	**IP1843**	**(2854)**
	LinearTech	LT1843	
	Unitrode	**UC1843**	**(3323)**
SG1846	LinearTech	UC1846	
	National	DM54ALS468	
		DM54AS1034	
	TI	SN54AS1034A	
	Unitrode	**UC1846**	**(3323)**
SG1847	LinearTech	UC1847	
	National	DM54ALS521	
		DM54AS04	
	TI	SN54ALS688	
		SN54AS04	
	Unitrode	**UC1847**	**(3323)**
SG2001	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
SG2002	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
SG2003	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
SG2004	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
SG2004			(Cont'd)
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
SG201	Fairchild	μA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
	National	LM748	
	SGS	LM748	
		LS148	
	TI	LM201	
		LM748	
		SN72748P	
		μA748	
	Thomson	LM201	
		LM748	
SG2011	Exar	XR2011C	
	Sprague	**ULN2011**	**(3203)**
		ULS2011	
SG2012	**Sprague**	**ULN2012**	**(3203)**
		ULS2012	
SG2013	Exar	XR2013C	
	SiliconG	SG3853	
	Sprague	**ULN2013**	**(3203)**
		ULS2013	
SG2014	Exar	XR2014C	
	SiliconG	SG3854	
	Sprague	**ULN2014**	**(3203)**
		ULS2014	
SG2021	**Sprague**	**ULN2021**	**(3203)**
		ULS2021	
	TI	SN75466	
SG2022	SiliconG	SG2002	
	Sprague	**ULN2022**	**(3203)**
		ULS2022	
	TI	SN75467	
SG2023	Exar	XR2003	
	Sprague	**ULN2023**	**(3203)**
		ULQ2003	
		ULS2023	
	TI	SN75468	
SG2024	**Sprague**	**ULN2024**	**(3203)**
		ULS2024	
	TI	SN75469	
SG204	National	LM204	
	SGS	LS204	
	Thomson	LM204	
SG205	Ferranti	ZN515	
	National	LM205	
	SiliconSys	SSI6284	
SG2064	Mitsubishi	M54532	
	Sprague	**ULN2064**	**(3203)**
SG2065	IPS	IP2065	
	Motorola	ULN2065	
	SGS	ULN2065	
	Sprague	**ULN2065**	**(3203)**
	TI	SN75065	
		ULN2065	
	Toshiba	TD62064	
SG2066	IPS	IP2066	
	Motorola	ULN2066	
	SGS	ULN2066	
	Sprague	ULN2066	
	TI	SN75066	
		ULN2066	
SG2067	IPS	IP2067	
	Motorola	ULN2067	
	SGS	ULN2067	
	Sprague	ULN2067	
	TI	SN75067	
		ULN2067	
SG2068	IPS	IP2068	
	Motorola	**ULN2068**	**(2954)**
	SGS	ULN2068	
	Sprague	**ULN2068**	**(3203)**
	TI	SN75068	
		ULN2068	
SG2069	IPS	IP2069	
	Motorola	ULN2069	
	SGS	ULN2069	
	Sprague	**ULN2069**	**(3203)**
	TI	SN75069	
		ULN2069	
SG207	Ferranti	ZNREF050	
	National	LM207	
	SiliconSys	SSI6505	
	TI	LM207	
SG2070	SGS	ULN2070	
	Sprague	**ULN2070**	**(3203)**
SG2071	SGS	ULN2071	
	Sprague	**ULN2071**	**(3203)**
SG2074	IPS	IP2074	
	Motorola	**ULN2074**	**(2954)**
	SGS	ULN2074	
	Sprague	**ULN2074**	**(3203)**
	TI	ULN2074	
	Toshiba	TD62074	
SG2075	IPS	IP2075	
	Motorola	ULN2075	
	SGS	ULN2075	
	Sprague	**ULN2075**	**(3203)**
	TI	ULN2075	
SG2076	SGS	ULN2076	
	Sprague	ULN2076	
SG2077	SGS	ULN2077	
SG209	Fairchild	μA209	
	Ferranti	ZN437	
	Motorola	**LM208**	**(2919, 2958)**
	National	LM209	
	SiliconSys	SSI6410	
SG211	AD	AD211	
	Motorola	**LM211**	**(2925, 2958)**
	National	LM211	
	PMI	PM211	
	Signetics	LM211	
	TI	LM211	
	Thomson	LM211	
SG217	**IPS**	**IP217**	**(2854)**
	MCE	MCELM217	
	Motorola	**LM217**	**(2929)**
	National	LM217	
	SGS	LM217	
	SiliconG	SG217A	
	Thomson	LM217	
	Unitrode	**UC217**	**(3325)**
SG217A	**IPS**	**IP217**	**(2854)**
	MCE	MCELM217	
	Motorola	**LM217**	**(2929)**
	National	LM217	
	SGS	LM217	
	SiliconG	SG217	
	Thomson	LM217	
	Unitrode	**UC217**	**(3325)**
SG220-05	National	LM120-05	
		LM220-05	
		LM220-05	
	SiliconG	SG120-05	
SG220-12	**IPS**	**IP220-12**	**(2854)**
	National	LM220-12	
SG220-15	**IPS**	**IP220-15**	**(2854)**
	National	LM220-15	
SG220-18	National	LM220-18	
SG220-20	National	LM220-20	
SG220-5	National	LM220-5	
SG223	Fairchild	SH223	
		μA223	
	IPS	**IP223**	**(2854)**
	Motorola	**LM223**	**(2927)**
	National	LM223	
	Thomson	LM223	
SG224	Fairchild	μA224	
	Ferranti	ZN448	
	Motorola	**LM224**	**(2923, 2958)**
	SiliconSys	SSI6051	
	TI	LM224	
SG224A	Ferranti	ZN501	
	SiliconSys	SSI6070M	
SG237	**IPS**	**IP237**	**(2854)**
	MCE	MCELM237	
	Motorola	**LM237**	**(2929)**
	National	LM237	
	SiliconG	SG237A	
	Unitrode	**UC237**	**(3325)**
SG237A	**IPS**	**IP237**	**(2854)**
	MCE	MCELM237	
	Motorola	**LM237**	**(2929)**
	National	LM237	
	SiliconG	SG237	
	Unitrode	**UC237**	**(3325)**
SG238	Fairchild	μA238	
	IPS	**IP238**	**(2854)**
	National	LM238	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Silicon General (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SG239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
		μA239	
♦ SG239	**GE/RCA**	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
♦ SG239	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
	Thomson	LM239	
♦ SG239A	**GE/RCA**	**CA239A**	**(2647)**
	Motorola	**LM239A**	**(2925, 2958)**
	National	LM239A	
	PMI	**CMP04**	**(2975)**
SG240-05	Ferranti	ZN502	
	National	LM240-05	
		LM240-5	
	SiliconSys	SSI6070C	
SG240-06	National	LM240-06	
SG240-08	National	LM240-08	
SG240-12	National	LM240-12	
SG240-15	National	LM240-15	
SG240-18	National	LM240-18	
SG240-20	**IDT**	**IDT7243**	**(2806)**
	National	LM240-20	
	VLSI Tech	VL2044	
SG240-24	National	LM240-24	
	TeledyneP	TSC7541	
SG250	**IPS**	**IP250**	**(2854)**
	Motorola	**LM250**	**(2929)**
	National	LM250	
	Unitrode	**UC250**	**(3325)**
SG2501A	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		μA212A	
		μA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
SG2524	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	μA2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
SG2524B	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	μA2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
SG2525	Cherry	CS2525	
	TI	TL2525	
	Unitrode	**UC2525**	**(3323)**
SG2525A	Cherry	CS2525A	
	Exar	**XR2525A**	**(2607)**
	IPS	IP2525A	
	LinearTech	LT2525A	
	Motorola	**SG2525A**	**(2931)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG2525A			(Cont'd)
	Siliconix	PWM25B	
	TI	SG2525A	
	Unitrode	**UC2525A**	**(3323)**
SG2526	Cherry	CS2526	
	IPS	**IP2526**	**(2856)**
	LinearTech	LT2526	
	Motorola	**SG2526**	**(2931)**
	SiliconG	SG2527	
	Unitrode	**UC2526**	**(3323)**
SG2527	Cherry	CS2527	
	TI	TL2527	
	Unitrode	**UC2527**	**(3323)**
SG2527A	Cherry	CS2527A	
	Exar	**XR2527A**	**(2607)**
	IPS	IP2527A	
	LinearTech	LT2527A	
	Motorola	**SG2527A**	**(2931)**
	TI	SG2527A	
	Unitrode	**UC2527A**	**(3323)**
SG2540	Unitrode	UC2540	
SG2543	Exar	XR2543	
	IPS	IP2543	
	Unitrode	**UC2543**	**(3324)**
SG2544	IPS	IP2544	
	Unitrode	**UC2544**	**(3324)**
SG2801	**Motorola**	**ULN2801**	**(2954)**
	SGS	ULN2801	
	Sprague	ULS2801	
	Toshiba	TD62081	
SG2802	Hitachi	HM27128	
	Mitel	M5L27128	
	SGS	ULN2802	
	Sprague	**ULN2802**	**(3203)**
		ULS2802	
	Toshiba	TD62082	
		TMN27128	
SG2803	SGS	ULN2803	
	SiliconG	SG2813	
	Sprague	**ULN2803**	**(3203)**
		ULS2803	
	Toshiba	TD62083	
SG2804	**Motorola**	**ULN2804**	**(2954)**
	SGS	ULN2804	
	Sprague	**ULN2804**	**(3203)**
		ULS2804	
	Toshiba	TD62084	
SG2805	SGS	ULN2805	
	Sprague	**ULN2805**	**(3203)**
SG2811	Ferranti	ZN504	
	SiliconSys	SSI6072C	
	Sprague	**ULN2811**	**(3203)**
		ULS2811	
SG2812	Ferranti	ZN512	
	SiliconSys	SSI6074	
	Sprague	**ULN2812**	**(3203)**
		ULS2812	
SG2813	Ferranti	ZN439	
	SiliconSys	SSI6080	
	Sprague	**ULN2813**	**(3203)**
SG2814	Ferranti	ZN509	
	SiliconSys	SSI6082	
	Sprague	**ULN2814**	**(3203)**
SG2815	Ferranti	ZN426	
	SiliconSys	SSI6220	
	Sprague	**ULN2815**	**(3203)**
SG2821	SGS	L601	
	Sprague	**ULN2821**	**(3203)**
		ULS2821	
SG2822	SGS	L602	
	Sprague	**ULN2822**	**(3203)**
		ULS2822	
SG2823	SGS	L603	
	Sprague	**ULN2823**	**(3203)**
		ULS2823	
SG2824	SGS	L604	
	Sprague	**ULN2824**	**(3203)**
		ULS2824	
SG2825	Ferranti	ZN429	
	SiliconSys	SSI6240	
	Sprague	**ULN2825**	**(3203)**
SG2840	SGS	UC2840	
	Unitrode	**UC2840**	**(3323)**
♦ SG2841	Motorola	UDN2841	
	Sprague	UDN2841	
SG2842	Cherry	CS2842A	
		CS3842A	
	Unitrode	**UC2842**	**(3323)**
SG2843	**IPS**	**IP2843**	**(2856)**
	Unitrode	**UC2843**	**(3323)**
SG2846	National	DM54ALS519	
		DM54AS1036	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG2846			(Cont'd)
	TI	SN54AS1036A	
	Unitrode	**UC2846**	**(3323)**
SG2847	National	DM54ALS522	
		DM54AS32	
	TI	SN54ALS522	
		SN54AS32	
	Unitrode	**UC2847**	**(3323)**
SG2950	National	DM54ALS1003	
		DM54AS168	
	Sprague	ULN2950	
SG301	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	TI	LM301	
		LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
SG304	National	LM304	
	Thomson	LM304	
SG3046	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3146	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
SG3049	National	DM54ALS1002	
		DM54AS162	
SG305	Fairchild	μA305	
	Ferranti	ZNREF025	
	National	LM305	
	SiliconSys	SSI6505	
♦ SG3059	**GE/RCA**	**CA3059**	**(2649)**
	Motorola	**CA3059**	**(2932)**
SG305A	National	LM305A	
SG307	Ferranti	ZNREF100	
	LinearTech	LM307	
	National	LM307	
	SiliconSys	SSI6507	
	TI	LM307	
♦ SG3079	**GE/RCA**	**CA3079**	**(2649)**
	Motorola	**CA3079**	**(2932)**
♦ SG308	AD	AD308	
	Burr-Brown	3500	
		3501	
♦ SG308	Fairchild	μA308	
	GE/Intersil	AD308	
		LM308	
♦ SG308	**Motorola**	**LM308**	**(2919, 2958)**
	National	LM308	
	Raytheon	LM308	
♦ SG3081	**GE/RCA**	**CA3081**	**(2648, 2653)**
	Sprague	ULN2081	
♦ SG3082	**GE/RCA**	**CA3082**	**(2648, 2653)**
	Sprague	ULN2082	
SG3083	**GE/RCA**	**CA3083**	**(2648)**
	SiliconG	SG3183	
	Sprague	ULN2083	
SG3086	**GE/RCA**	**CA3086**	**(2648)**
	National	LM3086	
	Plessey	SL3086	
	Sanyo	LA3086	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG3086			(Cont'd)
	SiliconG	SG3886	
	Sprague	ULN2086	
	Thomson	SFC2086	
SG309	Fairchild	μA309	
	Ferranti	ZN447	
	Motorola	**LM309**	**(2926)**
	National	LM309	
	SiliconSys	SSI6050	
SG311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
SG3146	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3821	
	Sprague	ULN2046	
	Thomson	SFC2046	
SG317	Fairchild	μA317	
	IPS	**IP317**	**(2854)**
	LinearTech	LM317	
	MCE	MCELM317	
	Motorola	**LM317**	**(2929)**
	National	LM317	
	SGS	LM317	
	TI	LM317	
	Thomson	LM317	
		TDB0117	
	Unitrode	**UC317**	**(3325)**
SG3183	**GE/RCA**	**CA3083**	**(2648)**
	SiliconG	SG3083	
	Sprague	ULN2083	
SG320-05	Fairchild	μA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	μPC7905	
	SiliconG	SG120-5	
		SG7905	
		SH12005	
	TI	μA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
SG320-08	National	LM320-08	
SG320-12	National	LM320-12	
	Unitrode	UC320-12	
SG320-15	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Silicon General (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG320-15			(Cont'd)
	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
SG320-18	National	LM320-18	
SG320-20	National	LM320-20	
SG320-5	**IPS**	**IP120-5**	**(2854)**
	Motorola	MC7952	
	National	LM320-5	
	SGS	L7952	
	National	LM320-5	
SG320P-12	Fairchild	μA7912	
		μA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	μA7824	
		μA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	μPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG7912	
		SG7912A	
	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
SG323	Fairchild	SH0323	
		SH323	
		μA323	
		μA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	Thomson	LM323	
SG323A	National	LM323A	
SG324	Fairchild	μA324	
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17324	
	Motorola	**MC33174**	**(2924, 2959)**
	National	LM324	
	PMI	**OP421**	**(2970, 2972)**
	Samsung	LM324	
	SGS	LM324	
	Thomson	LM324	
	Toshiba	TA79502	
SG324A	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	TI	LM2901	
		LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
♦ SG3302	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
♦ SG3302	**Motorola**	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
♦ SG3302	National	LM2901	
		LM3302	
♦ SG3302	**PMI**	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
♦ SG3302	SGS	LM2901	
		MC3302	
♦ SG3302	Signetics	LM2901	
		MC3302	
♦ SG3302	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
♦ SG3302	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
SG337	**IPS**	**IP337**	**(2854)**
	LinearTech	LM337	
		LT337	
	MCE	MCELM337	
	Motorola	**LM337**	**(2929)**
	National	LM337	
	SiliconG	SG337A	
	TI	LM337	
	Thomson	LM337	
	Unitrode	**UC337**	**(3325)**
SG337A	**IPS**	**IP337**	**(2854)**
	LinearTech	LM337	
		LT337	
	MCE	MCELM337	
	Motorola	**LM337**	**(2929)**
	National	LM337	
	SiliconG	SG337	
	TI	LM337	
	Thomson	LM337	
	Unitrode	**UC337**	**(3325)**
SG337HV	National	LM337HV	
SG338	Fairchild	μA338	
	IPS	**IP338**	**(2854)**
	LinearTech	LM338	
		LT338	
	Micropac	MLM338	
	National	LM338	
♦ SG339	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
♦ SG339	**GoldStar**	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
♦ SG339	**PMI**	**CMP04**	**(2975)**
		PM339A	**(2975)**
♦ SG339	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
SG340-04	National	LM340-05	
SG340-05	Ferranti	ZN503	
	Motorola	**LM340-05**	**(2926, 2928)**
	National	LM340-5	
	SiliconSys	SSI6072M	
	Unitrode	UC340-05	
SG340-08	Fairchild	μA75453	
	National	LM340-08	
	SiliconG	SG75453	
SG340-12	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG7812	
		SG7812A	
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
SG340-15	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
SG340-18	National	LM340-18	
	NEC	μPC7818	
	SiliconG	SG7818	
		SG7818A	
	TI	LM340-18	
	Thomson	μA7818	
SG340-20	National	LM340-20	
SG340-24	**Motorola**	**LM340-24**	**(2926, 2928)**
	National	LM340-24	
SG340-6	Fairchild	μA7806	
	Motorola	**MC7806**	**(2927)**
	National	LM7806	
	NEC	μPC7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG7806	
		SG7806A	
	TI	μA7806	
	Thomson	μA7806	
	Toshiba	TA78006	
SG340-8	Fairchild	μA7808	
	GoldStar	GL7808	
	Gould	μA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	NEC	μPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG7808	
		SG7808A	
	TI	μA7808	
	Thomson	μA7808	
	Toshiba	TA78008	
SG3423	**Motorola**	**MC3423**	**(2959)**
	TI	MC3423	
SG343	**Datel**	**AM464-2**	**(2577)**
	Harris	HA2645	
	Motorola	**MC1436**	**(2920, 2958)**
	National	LM1436	
		LM343	
	SiliconG	SG1436	
	TeledyneP	1332	
SG350	Fairchild	μA350	
		μA78HGA	
	IPS	**IP350**	**(2854)**
	LinearTech	LM350	
		LT350	
	Motorola	**LM350**	**(2929)**
	National	LM350	
	TI	LM350	
	Unitrode	**UC350**	**(3325)**
SG3501A	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		μA212A	
		μA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
SG3501A	SiliconG		(Cont'd)
		SG2501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
SG3503	AD	AD1403	
	LinearTech	LT1009	
	Motorola	**MC1403**	**(2958)**
	TI	LT1009	
SG3523	Motorola	MC3523	
	TI	MC3523	
SG3523A	Ferranti	ZN436	
	Motorola	MC3523	
	SiliconSys	SSI6260	
SG3524	Fairchild	μA3524	
	LinearTech	SG3524	
	Signetics	SG3524	
	SiliconG	SG3524B	
		SG3525A	
	TI	SG3525	
	Unitrode	**UC3524**	**(3323)**
		UC3524A	**(3323)**
SG3524B	Cherry	CS3524	
	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	SG3524	
		UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
	TI	SG3524	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
SG3525	LinearTech	LT3525	
		SG3525	
	Unitrode	**UC3525**	**(3323)**
SG3525A	Cherry	CS3525A	
	Exar	**XR3525A**	**(2607)**
	IPS	**IP3525A**	**(2854)**
	LinearTech	LT3525A	
	Motorola	**SG3525A**	**(2931)**
	RIFA	RL3525A	
	SGS	SG3525A	
	Siliconix	PWM25	
	TI	SG3525A	
	Unitrode	**UC3525A**	**(3323)**
SG3526	**IPS**	**IP3526**	**(2854, 2856)**
	LinearTech	LT3526	
	Unitrode	**UC3526**	**(3323)**
		UC3626	
SG3527	LinearTech	LT3527	
		SG3527	
	SiliconG	SG3527A	
	TI	SG3527	
	Unitrode	**UC3527A**	**(3323)**
SG3527A	Cherry	CS3527	
		CS3527A	
	Exar	**XR3527A**	**(2607)**
	IPS	**IP3527**	**(2854)**
	LinearTech	LT3527A	
	Motorola	**SG3527A**	**(2931)**
	SGS	SG3527A	
	TI	SG3527A	
SG3532	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Silicon General (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG3543	Exar	XR3543	
	IPS	IP3543	
	Unitrode	**UC3543**	**(3324)**
SG3544	IPS	IP3544	
	Unitrode	**UC3544**	**(3324)**
SG3635	**Sprague**	**UDN2935**	**(3203)**
SG3821	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
	Sprague	ULN2046	
	Thomson	SFC2046	
♦ SG3822	Fairchild	μA3054	
	GE/RCA	**CA3054**	**(2647, 2649)**
	Motorola	**CA3054**	**(2948)**
	National	LM3054	
	Sprague	ULN2054	
	Thomson	SFC2054	
SG3842	SGS	UC3842	
	Unitrode	**UC3842**	**(3323)**
SG3843	**IPS**	**IP3843**	**(2854, 2856)**
	Unitrode	UC3843	
SG3846	LinearTech	UC3846	
	RIFA	RL3846	
	Unitrode	**UC3846**	**(3323)**
SG3847	LinearTech	UC3847	
	Unitrode	**UC3847**	**(3323)**
SG3851	Sprague	SCM6113	
		ULN2011	**(3203)**
SG3852	Exar	XR2012C	
SG3853	Exar	XR2013C	
	SiliconG	SG2013	
	Sprague	**ULN2013**	**(3203)**
		ULS2013	
SG3854	**Sprague**	**ULN2014**	**(3203)**
		ULS2041	
SG3886	**GE/RCA**	**CA3086**	**(2648)**
	National	LM3086	
	Plessey	SL3086	
	Sanyo	LA3086	
	SiliconG	SG3086	
	Sprague	ULN2086	
	Thomson	SFC2086	
♦ SG4136	Exar	XR4136M	
	Raytheon	RM4136	
	TI	RM4136	
♦ SG4194	Exar	XR4194	
	MCE	MCE4194	
	Raytheon	RC4194	
		RM4194	
♦ SG4250	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
♦ SG4250	**Harris**	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
♦ SG4250	**PMI**	**OP20**	**(2970)**
		OP22	**(2970)**
♦ SG4250	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
♦ SG4250	Thomson	μA776	
SG4501	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		μA212A	
		μA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG4501			(Cont'd)
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG2501A	
		SG3501A	
		SG75189	
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
SG508	Fairchild	μA1489	
		μA212A	
		μA750	
	Motorola	**MC1489**	**(2952, 2958)**
	Signetics	MC1489	
	SiliconG	SG1489	
	Sprague	UHD508	
	TI	MC1489	
		SN55189	
		SN75189	
♦ SG55138	TI	SN55138	
♦ SG55154	TI	SN55154	
SG55188	TI	SNJ55188	
SG55189	TI	SNJ55189	
♦ SG5520	National	LM5520	
♦ SG5521	National	LM5521	
♦ SG5522	Motorola	MC5522	
		MC5523	
♦ SG5522	National	LM5522	
♦ SG5523	National	LM5523	
SG55234	Ferranti	ZN440	
	SiliconSys	SSI6040	
	TI	SN55234	
		SNJ55234	
SG55235	SiliconG	SG55236	
	TI	SNJ55236	
SG55236	SiliconSys	SSI982	
	Teltone	M982	
SG55236A	Ferranti	ZN435	
	SiliconSys	SSI6030	
♦ SG5524	Fairchild	MC5524	
	Motorola	MC5524	
	National	LM5524	
	Raytheon	RM5524	
	TI	SNJ5524	
♦ SG5525	Fairchild	MC5525	
	Motorola	MC5525	
	National	LM5525	
♦ SG5528	Fairchild	MC5528	
	Motorola	MC5528	
	National	LM5528	
♦ SG5529	Fairchild	MC5529	
	Motorola	MC5529	
	National	LM5529	
SG55325	Motorola	MC55325	
	National	DS55325	
	TI	SN55325	
		SNJ55325	
SG55326	TI	SN55326	
		SNJ55326	
SG55327	Motorola	MC75325	
	National	DS75325	
	SiliconG	SG75325	
	TI	SN55327	
♦ SG5534	Fairchild	MC5534	
	Motorola	MC5534	
	National	LM5534	
♦ SG5535	Motorola	MC5535	
	National	LM5535	
♦ SG5538	National	LM5538	
♦ SG5539	Motorola	MC5539	
	National	LM5539	
SG55450	Fairchild	μA55450	
	TI	SNJ55450	
SG55450B	Signetics	55450	
	TI	SN55450	
SG55451	TI	SNJ55451	
SG55451B	Fairchild	55451	
	National	DS55451	
	Signetics	55451	
	SiliconG	SG55451	
	TI	SN55451	
SG55452	Fairchild	μA55452	
	National	DS55452	
	Signetics	55452	
	TI	SN55452	
		SNJ55452	
SG55453	Fairchild	55453	
	National	DS55453	
		LM55453	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG55453			(Cont'd)
	Signetics	55453	
	TI	SN55453	
		SNJ55453	
SG55454	TI	SNJ55454	
SG55454B	National	DS55454	
	Signetics	55454	
	SiliconG	SG55454	
	TI	SN55454	
SG55460	National	DS55460	
	TI	SNJ55460	
SG55461	National	DS55461	
	TI	SN55461	
		SNJ55461	
SG55462	Fairchild	μA55462	
	National	DS55462	
	TI	SN55462	
		SNJ55462	
SG55463	National	DS55463	
	TI	SN55463	
		SNJ55463	
SG55464	National	DS55464	
	TI	SN55464	
		SNJ55464	
SG55470	GE/RCA	CD22221	
	National	DS55470	
	SiliconSys	SSIK221	
	TI	SN55470	
		SNJ55470	
SG55471	TI	SN55471	
		SNJ55471	
SG55472	TI	SN55472	
		SNJ55472	
SG55473	TI	SN55473	
		SNJ55473	
SG55474	TI	SN55474	
		SNJ55474	
♦ SG555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
♦ SG555	**Motorola**	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
♦ SG555	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
♦ SG6118	Dionics	DI513B	
		DI514	
		DI514B	
♦ SG6118	Exar	XR6118	
	Motorola	MC3490	
	National	DM8887	
		DS8887	
♦ SG6118	OKI	MSL912	
	Sanyo	LB1290	
	Signetics	NE594	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
♦ SG6118	Toshiba	TD62781	
SG723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	μA723	
	TI	μA723	
		μA723M	
	Thomson	SFC2723	
		μA723	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SG733	Fairchild	μA733	
	GE/Intersil	μA733	
	Hitachi	HA17733	
	Motorola	**MC1733**	**(2920)**
		NE592	**(2960)**
♦ SG733	National	LM733	
	Signetics	μA733	
	SiliconG	SG1401	
	TI	μA733	
		μA733M	
SG741	AD	AD741	
	Fairchild	μA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	μPC151	
		μPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	μA741	
	TI	μA741	
		μA741M	
	Thomson	μA741	
	Toshiba	TA7504	
♦ SG747	Fairchild	μA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	μPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
♦ SG747	Raytheon	RC747	
		RM747	
♦ SG747	Signetics	μA747	
	TeledyneS	747	
	TI	μA747	
		μA747M	
♦ SG748	Fairchild	μA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
♦ SG748	National	LM748	
	SGS	LM748	
		LS148	
♦ SG748	SiliconG	SG201	
	TI	LM201	
		LM748	
		SN72748P	
		μA748	
♦ SG748	Thomson	LM201	
		LM748	
♦ SG75138	TI	SN75138	
♦ SG75154	National	DS75154	
	TI	SN75154	
SG75188	Exar	XR1488	
	Fairchild	MC1488	
		μA212A	
		μA750	
	GoldStar	**GD75188**	**(2694)**
	Hitachi	HD75188	
	National	DS1488	
	Signetics	MC1488	
		MC1489	
	SiliconG	SG75788	
	TI	MC1488	
		MC1489	
		SN75188	
		SN75189	
SG75189	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		μA212A	
		μA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG2501A	
		SG3501A	
		SG4501	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Silicon General (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG75189			(Cont'd)
	TI	MC1489	
		SN75189	
	Toshiba	TA7179	
♦ SG7520	Fairchild	7520	
	Motorola	MC7520	
♦ SG7521	Fairchild	7521	
	Motorola	MC7521	
	National	LM7521	
♦ SG7522	Motorola	MC7522	
♦ SG7523	Motorola	MC7523	
	National	LM7523	
	Raytheon	RC7523	
SG75236	SiliconG	SG75236A	
SG75236A	SiliconG	SG75236	
♦ SG7524	Motorola	MC7524	
	National	DS75S24	
	Signetics	7524	
♦ SG7525	Fairchild	7525	
	Motorola	MC7525	
	National	LM7525	
♦ SG7528	Motorola	MC7528	
	Raytheon	RC7528	
	Thomson	SFC2528	
♦ SG7529	Fairchild	7529	
	Motorola	MC7529	
	National	LM7529	
	Raytheon	RC7529	
SG75325	Motorola	MC75325	
	National	DS75325	
	SiliconG	SG55327	
	TI	SN55327	
SG75326	**Burr-Brown**	**OPA8780**	**(2545)**
♦ SG7534	Motorola	MC7534	
♦ SG7535	Motorola	MC7535	
	National	LM7535	
♦ SG7538	Fairchild	7538	
	Motorola	MC7538	
	National	LM7538	
♦ SG7539	Fairchild	7539	
	Motorola	MC7539	
	National	LM7539	
SG75430	Fairchild	75430	
SG75431	Ferranti	ZN445	
	SiliconSys	SSI6042	
SG75432	Ferranti	ZN443	
	SiliconSys	SSI6044	
SG75433	Samsung	KM2864AH	
	SEEQ	DQ52B33H	
	Xicor	**X2864H**	**(3391, 3408)**
SG75434	SiliconSys	SSI80C60	
SG75450	Fairchild	μA75450	
	TI	SN75450	
SG75450A	Hitachi	HD75450A	
SG75450B	Fairchild	75450	
	National	DS75450	
SG75451	Fairchild	75451	
	National	DS75451	
	TI	SN75451	
SG75451A	Hitachi	HD75451A	
	SiliconG	SG75451B	
	TI	SN75451B	
SG75451B	Hitachi	HD75451A	
	SiliconG	SG75451A	
	TI	SN75451B	
SG75452	Fairchild	μA75452	
	TI	SN75452	
SG75452A	Fairchild	75452	
	National	DS75452	
	SiliconG	SG75452B	
	TI	SN75452B	
SG75452B	Fairchild	75452	
	National	DS75452	
	SiliconG	SG75452A	
	TI	SN75452B	
SG75453	Fairchild	μA75453	
	National	LM340-08	
	SiliconG	SG340-08	
SG75453A	Fairchild	75453	
	Motorola	MC75453	
	National	DS75453	
		LM75453	
	SiliconG	SG75453B	
	TI	SN75453B	
SG75453B	Fairchild	75453	
	Motorola	MC75453	
	National	DS75453	
		LM75453	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG75453B			(Cont'd)
	SiliconG	SG75453A	
	TI	SN75453B	
SG75454B	National	DS75454	
	SiliconG	SG75453B	
		SG7545A	
	TI	SN75454B	
SG7545A	National	DS75454	
	SiliconG	SG75453B	
		SG75454B	
	TI	SN75454B	
SG75460	Motorola	MC75460	
	National	DS75460	
SG75461	Fairchild	μA75461	
	Motorola	MC75401	
	National	DS75461	
	TI	SN75461	
SG75462	Fairchild	μA75462	
	Motorola	MC75402	
	National	DS75462	
	TI	SN75462	
SG75463	Motorola	MC75403	
	National	DS75463	
	TI	SN75463	
SG75464	Motorola	MC75404	
	National	DS75464	
		SG75464	
SG75471	National	DS3611	
		LM3611	
	Sprague	**UDN3611**	**(3203)**
	TI	SN75471	
SG75472	National	DS3612	
		DS3632	
		LM3612	
	Sprague	**UDN3612**	**(3203)**
	TI	SN75472	
SG75473	TI	SN75473	
SG75474	National	DS3614	
		LM3614	
	Sprague	**UDN3614**	**(3203)**
SG75788	Exar	XR1488	
	Fairchild	MC1488	
		μA212A	
		μA750	
	GoldStar	**GD75188**	**(2694)**
	Hitachi	HD75188	
	National	DS1488	
	Signetics	MC1488	
		MC1489	
	SiliconG	SG75188	
	TI	MC1488	
		MC1489	
		SN75188	
		SN75189	
SG7805	Fairchild	μA7805	
	GoldStar	GL7805	
	Gould	μA7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
		LM7805	
	Samsung	MC7805	
	SiliconG	SG7805A	
	TI	μA7805	
	Toshiba	TA78005	
		TA79005	
	Unitrode	**UC7805**	**(3325)**
SG7805A	Fairchild	μA7805	
	GoldStar	GL7805	
	Gould	μA7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
		LM7805	
	Samsung	MC7805	
	SiliconG	SG7805	
	TI	μA7805	
	Toshiba	TA78005	
		TA79005	
	Unitrode	**UC7805**	**(3325)**
SG7805AT	Fairchild	μA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	μPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7812AT	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG7805AT			(Cont'd)
	TI	μA78M05	
	Toshiba	TA78M05	
SG7806	Fairchild	μA7806	
	Motorola	**MC7806**	**(2927)**
	National	LM7806	
	NEC	μPC7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806A	
	TI	μA7806	
	Thomson	μA7806	
	Toshiba	TA78006	
SG7806A	Fairchild	μA7806	
	Motorola	**MC7806**	**(2927)**
	National	LM7806	
	NEC	μPC7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806	
	TI	μA7806	
	Thomson	μA7806	
	Toshiba	TA78006	
SG7808	Fairchild	μA7808	
	GoldStar	GL7808	
	Gould	μA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	NEC	μPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808A	
	TI	μA7808	
	Thomson	μA7808	
	Toshiba	TA78008	
SG7808A	Fairchild	μA7808	
	GoldStar	GL7808	
	Gould	μA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	NEC	μPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
	TI	μA7808	
	Thomson	μA7808	
	Toshiba	TA78008	
SG7812	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812A	
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
SG7812A	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
	TI	μA7812	
	Toshiba	TA78012	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG7812A			(Cont'd)
	Unitrode	UC340-12	
		UC7812	**(3325)**
SG7812AT	Fairchild	μA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	μPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
	TI	μA78M05	
	Toshiba	TA78M05	
SG7815	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
SG7815A	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
SG7818	National	LM340-18	
	NEC	μPC7818	
	SiliconG	SG340-18	
		SG7818A	
	TI	LM340-18	
	Thomson	μA7818	
SG7818A	National	LM340-18	
	NEC	μPC7818	
	SiliconG	SG340-18	
		SG7818	
	TI	LM340-18	
	Thomson	μA7818	
SG7820	Fairchild	μA7820	
		μA7910	
	National	LM7820	
	SGS	L7820	
	SiliconG	SG7820A	
	TI	μA7820	
		μA7910	
	Toshiba	TA78020	
SG7820A	Fairchild	μA7820	
		μA7910	
	National	LM7820	
	SGS	L7820	
	SiliconG	SG7820	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Silicon General (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SG7820A			(Cont'd)
	TI	µA7820	
		µA7910	
	Toshiba	TA78020	
SG7824	Fairchild	µA7824	
	GoldStar	GL7824	
	Gould	µA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	µPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824A	
	TI	LM340-24	
		µA7824	
	Thomson	µA7824	
	Toshiba	TA78024	
SG7824A	Fairchild	µA7824	
	GoldStar	GL7824	
	Gould	µA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	µPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
	TI	LM340-24	
		µA7824	
	Thomson	µA7824	
	Toshiba	TA78024	
SG7905	Fairchild	MC7905	
		µA7905	
	GoldStar	**GL7905**	**(2701)**
	Gould	µA7905	
	Motorola	MC7905	
	Samsung	MC7905	
	SGS	L7905	
	SiliconG	SG7905A	
SG7905A	Fairchild	MC7905	
		µA7905	
	GoldStar	**GL7905**	**(2701)**
	Gould	µA7905	
	Motorola	MC7905	
	Samsung	MC7905	
	SGS	L7905	
	SiliconG	SG7905	
SG7908	Fairchild	MC7908	
		µA7908	
		µA79M08	
	Motorola	MC7908	
	National	LM7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908A	
	TI	µA7908	
		µA79M08	
	Toshiba	TA79008	
SG7908A	Fairchild	MC7908	
		µA7908	
		µA79M08	
	Motorola	MC7908	
	National	LM7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908	
	TI	µA7908	
		µA79M08	
	Toshiba	TA79008	
SG7912	Fairchild	µA7912	
		µA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	µA7824	
		µA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	µPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
	TI	µA7912	
	Thomson	µA7912	
	Toshiba	TA78024	
		TA79012	
SG7915	Fairchild	µA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	µA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	µPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915A	
	TI	µA7915	
	Thomson	µA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
SG7915A	Fairchild	µA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	µA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	µPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
	TI	µA7915	
	Thomson	µA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
SG7918	Fairchild	µA7918	
	Motorola	MC7918	
	National	LM7918	
	Samsung	MC7918	
	SGS	L7918	
	SiliconG	SG7918A	
	TI	µA7918	
	Toshiba	TA79018	
SG7918A	Fairchild	µA7918	
	Motorola	MC7918	
	National	LM7918	
	Samsung	MC7918	
	SGS	L7918	
	SiliconG	SG7918	
	TI	µA7918	
	Toshiba	TA79018	
SG7920	Fairchild	µA7920	
	National	LM7920	
	SGS	L7920	
	SiliconG	SG7920A	
	SiliconSys	SSI957	
	TI	µA7920	
	Toshiba	TA79020	
SG7920A	Fairchild	µA7920	
	National	LM7920	
	SGS	L7920	
	SiliconG	SG7920	
	SiliconSys	SSI957	
	TI	µA7920	
	Toshiba	TA79020	
SH12005	Fairchild	µA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	µA7905	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SH12005			(Cont'd)
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	µPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
	TI	µA7905	
	Unitrode	UC320-05	
		UC7905	**(3325)**
SM600	Unitrode	PIC600	
		PIC7501	
		PIC7519	
SM601	Unitrode	PIC601	
		PIC7502	
		PIC7520	
SM602	Unitrode	PIC602	
		PIC7503	
SM610	Unitrode	PIC610	
		PIC7504	
		PIC7522	
SM611	Unitrode	PIC611	
		PIC7505	
		PIC7523	
SM612	Unitrode	PIC612	
		PIC7506	
		PIC7524	
SM625	Unitrode	PIC625	
		PIC7507	
		PIC7525	
SM626	Unitrode	PIC626	
		PIC7508	
		PIC7526	
SM627	Unitrode	PIC627	
		PIC7509	
		PIC7527	
SM635	SiliconSys	SSI980	
	Teltone	M957	
	Unitrode	PIC635	
		PIC7510	
		PIC7528	
SM636	SiliconSys	SSI981	
	Teltone	M980	
		M981	
	Unitrode	PIC636	
		PIC7511	
		PIC7529	
SM637	Unitrode	PIC637	
		PIC7512	
		PIC7530	
SM645	Unitrode	PIC645	
		PIC7513	
		PIC7531	
SM646	Unitrode	PIC646	
		PIC7514	
		PIC7532	
SM647	Unitrode	PIC647	
		PIC7515	
		PIC7533	
SM655	Unitrode	PIC655	
		PIC7516	
		PIC7534	
SM656	IMI	MPY012	
	Unitrode	PIC656	
		PIC7517	
		PIC7535	
SM657	Unitrode	PIC657	
		PIC7518	

Silicon Systems Inc.

104	Fujitsu	MB4111	
105	Fujitsu	MB4112	
SSI108	AD	AD108	
	Fairchild	µA108	
	GE/Intersil	LM108	
	LinearTech	LM108	
	MicroPwr	MP108	
	Motorola	**LM108**	**(2919)**
	National	LM108	
	PMI	**PM108**	**(2970)**
SSI117	Cherry	CS117	
	Fairchild	SSI117	
	MicroLinear	ML117	
SSI202	**GE/Intersil**	**IH5141**	**(2680)**
	GE/RCA	**CD22202**	**(2636)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SSI202			(Cont'd)
	Maxim	IH5141	
	Siliconix	DG5141	
SSI203	Atmel	27HC641	
		AT27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C263	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GE/RCA	**CD22203**	**(2636)**
	GIM	27HC641	
	ICT	27CX642	
	Sharp	**LH5749**	**(2994)**
		LH5762	**(2994)**
	Waferscale	**WS57C49**	**(3376)**
SSI204	Fairchild	93Z459	
	GE/RCA	**CD22204**	**(2636)**
	Signetics	N82S100	
SSI20C89	Sierra	SC11289	
SSI20C90	Sierra	SC11290	
SSI22100	**GE/RCA**	**CD22100**	**(2638)**
	Motorola	MC1452100	
	SGS	M22100	
SSI22101	**GE/RCA**	**CD22101**	**(2638)**
SSI22102	**GE/RCA**	**CD22102**	**(2638)**
SSI223	**GE/Intersil**	**IH5144**	**(2680)**
	GE/RCA	**CD22223**	**(2637)**
	Maxim	IH5144	
	Siliconix	DG5144	
SSI22301	**GE/RCA**	**CD22301**	**(2637)**
SSI3525	Gould	S3525A	
SSI501	MicroLinear	ML501	
SSI510	MicroLinear	ML510A	
SSI511	MicroLinear	ML511	
SSI541	Exar	XR541	
	Fairchild	FGC8000	
	MicroLinear	ML541	
	PMI	**DAC88**	**(2974)**
SSI6020	**Datel**	**ADC856**	**(2575)**
	Ferranti	ZN433	
SSI6030	Ferranti	ZN435	
	SiliconG	SG55236A	
SSI6040	Ferranti	ZN440	
	SiliconG	SG55234	
	TI	SN55234	
		SNJ55234	
SSI6041	Ferranti	ZN441	
SSI6042	Ferranti	ZN445	
	SiliconG	SG75431	
SSI6044	Ferranti	ZN443	
	SiliconG	SG75432	
SSI6050	Fairchild	µA309	
	Ferranti	ZN447	
	Motorola	**LM309**	**(2926)**
	National	LM309	
	SiliconG	SG309	
SSI6051	Fairchild	µA224	
	Ferranti	ZN448	
	Motorola	**LM224**	**(2923, 2958)**
	SiliconG	SG224	
	TI	LM224	
SSI6052	**Datel**	**ADC847**	**(2575)**
	Ferranti	ZN449	
SSI6070C	Ferranti	ZN502	
	National	LM240-05	
		LM240-5	
	SiliconG	SG240-05	
SSI6070M	Ferranti	ZN501	
	SiliconG	SG224A	
SSI6072C	Ferranti	ZN504	
	SiliconG	SG2811	
	Sprague	**ULN2811**	**(3203)**
		ULS2811	
SSI6072M	Ferranti	ZN503	
	Motorola	**LM340-05**	**(2926, 2928)**
	National	LM340-5	
	SiliconG	SG340-05	
	Unitrode	UC340-05	
SSI6074	Ferranti	ZN512	
	SiliconG	SG2812	
	Sprague	**ULN2812**	**(3203)**
		ULS2812	
SSI6080	Ferranti	ZN439	
	SiliconG	SG2813	
	Sprague	**ULN2813**	**(3203)**
SSI6082	Ferranti	ZN509	
	SiliconG	SG2814	
	Sprague	**ULN2814**	**(3203)**

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Silicon Systems Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SSI6220	Ferranti	ZN426	
	SiliconG	SG2815	
	Sprague	**ULN2815**	**(3203)**
SSI6240	Ferranti	ZN429	
	SiliconG	SG2825	
	Sprague	**ULN2825**	**(3203)**
SSI6260	Ferranti	ZN436	
	Motorola	MC3523	
	SiliconG	SG3523A	
SSI6270	AD	AD558	
	Ferranti	ZN558	
	GE/Intersil	**ICL8023**	**(2673)**
	SiliconG	SG1253	
SSI6272	Ferranti	ZN438	
	SiliconG	SG2825	
	Sprague	**ULN2825**	**(3203)**
SSI6274	Ferranti	ZN508	
	SiliconG	SG1253	
SSI6276	Ferranti	ZN518	
	Motorola	**LM124**	**(2924)**
	SiliconG	SG124A	
SSI6280	Ferranti	ZN454	
	LinearTech	LT138	
	SiliconG	SG138	
SSI6282	Ferranti	ZN455	
	SiliconG	SG138A	
SSI6284	Ferranti	ZN515	
	National	LM205	
	SiliconG	SG205	
SSI6410	Fairchild	μA209	
	Ferranti	ZN437	
	Motorola	**LM208**	**(2919, 2958)**
	National	LM209	
	SiliconG	SG209	
SSI6505	Fairchild	μA305	
	Ferranti	ZNREF025	
	National	LM305	
	SiliconG	SG305	
SSI6507	Ferranti	ZNREF100	
	LinearTech	LM307	
	National	LM307	
	SiliconG	SG307	
	TI	LM307	
SSI80C50	Intel	80C50	
	NEC	μPD80C50	
	Toshiba	**TMP80C50**	**(3306)**
SSI80C60	SiliconG	SG75434	
SSI8500	Motorola	MC8500	
SSI8502	Motorola	MC8502	
SSI8520	Motorola	MC8520	
SSI957	Fairchild	μA7920	
	National	LM7920	
	SGS	L7920	
	SiliconG	SG7920	
		SG7920A	
	TI	μA7920	
	Toshiba	TA79020	
SSI980	SiliconG	SM635	
	Teltone	M957	
	Unitrode	PIC635	
		PIC7510	
		PIC7528	
SSI981	SiliconG	SM636	
	Teltone	M980	
		M981	
	Unitrode	PIC636	
		PIC7511	
		PIC7529	
SSI982	SiliconG	SG55236	
	Teltone	M982	
SSIK212	**GE/Intersil**	**IH5140**	**(2679)**
	GE/RCA	**CD22212**	**(2637)**
	Maxim	IH5140	
	Siliconix	DG5140	
SSIK221	GE/RCA	CD22221	
	National	DS55470	
	SiliconG	SG55470	
	TI	SN55470	
		SNJ55470	

Siliconix

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ D123	**GE/Intersil**	**D123**	**(2679)**
D125	**GE/Intersil**	**D125**	**(2679)**
	TeledyneC	CDR125	
♦ DF320	ITT	DF320	
	Mitel	MT4320	
	Plessey	MV4320	
DG123	**GE/Intersil**	**DG123**	**(2679)**
DG125	**GE/Intersil**	**DG125**	**(2680)**
DG126	**GE/Intersil**	**DG126**	**(2679)**
	National	AH0126	
DG129	**GE/Intersil**	**DG129**	**(2680)**
	National	AH0129	
DG133	**GE/Intersil**	**DG133**	**(2680)**
	National	AH0133	
DG134	**GE/Intersil**	**DG134**	**(2680)**
	National	AH0134	
DG139	**GE/Intersil**	**DG139**	**(2679)**
	National	AH0139	
DG140	**GE/Intersil**	**DG140**	**(2680)**
	National	AH0140	
DG141	**GE/Intersil**	**DG141**	**(2679)**
	National	AH0141	
DG142	**GE/Intersil**	**DG142**	**(2680)**
	National	AH0142	
DG143	**GE/Intersil**	**DG143**	**(2680)**
	National	AH0143	
DG144	**GE/Intersil**	**DG144**	**(2680)**
	National	AH0144	
DG145	**GE/Intersil**	**DG145**	**(2680)**
	National	AH0145	
DG146	**GE/Intersil**	**DG146**	**(2680)**
	National	AH0146	
♦ DG151	**GE/Intersil**	**DG151**	**(2680)**
	National	AH0151	
♦ DG152	**GE/Intersil**	**DG152**	**(2680)**
	National	AH0152	
♦ DG153	**GE/Intersil**	**DG153**	**(2680)**
	National	AH0153	
♦ DG154	**GE/Intersil**	**DG154**	**(2680)**
	National	AH0154	
		AM0154	
♦ DG161	**GE/Intersil**	**DG161**	**(2680)**
	National	AH0161	
♦ DG162	**GE/Intersil**	**DG162**	**(2680)**
	National	AH0162	
♦ DG163	**GE/Intersil**	**DG163**	**(2680)**
	National	AH0163	
		AM0163	
♦ DG164	**GE/Intersil**	**DG164**	**(2680)**
	National	AH0164	
		AM0164	
DG172	GE/Intersil	DG118	
DG180	**GE/Intersil**	**DG180**	**(2679)**
DG181	**GE/Intersil**	**DG181**	**(2680)**
		IH5048	**(2679)**
	Harris	**HI381**	**(2707)**
		HI5048	**(2707, 2737)**
	Maxim	DG381A	
		IH5048	
	Siliconix	DG381A	
DG182	**GE/Intersil**	**DG182**	**(2680)**
DG184	**GE/Intersil**	**DG184**	**(2680)**
		IH5049	**(2680)**
	Harris	**HI384**	**(2707)**
		HI5049	**(2707, 2737, 2747)**
	Maxim	DG384A	
		IH5049	
	Siliconix	DG384A	
DG185	**GE/Intersil**	**DG185**	**(2680)**
		IH5045	**(2680)**
	Harris	**HI5045**	**(2707, 2737, 2747)**
	Maxim	IH5045	
	Siliconix	DG5045	
	TI	TL185	
DG186	**GE/Intersil**	**DG186**	**(2680)**
DG187	**GE/Intersil**	**DG187**	**(2680)**
		IH5050	**(2680)**
	Harris	**HI387**	**(2707)**
		HI5050	**(2707, 2737, 2747)**
	Maxim	DG387A	
		IH5050	
	Siliconix	DG387A	
DG188	**GE/Intersil**	**DG188**	**(2680)**
		IH5042	**(2680)**
	Harris	**HI5042**	**(2707, 2737)**
	Maxim	IH5042	
	Siliconix	DG5042	
DG189	**GE/Intersil**	**DG189**	**(2680)**
DG190	**GE/Intersil**	**DG190**	**(2680)**
		IH5051	**(2680)**
	Harris	**HI5051**	**(2707, 2737, 2747)**
	Maxim	IH5051	
		IH5052	
DG191	**GE/Intersil**	**DG191**	**(2680)**
		IH5043	**(2680)**
	Harris	**HI5043**	**(2707, 2737, 2747)**
	Maxim	IH5043	
	Siliconix	DG243	
		DG5043	
DG200A	AD	ADG200	
	GE/Intersil	**DG200**	**(2679)**
		IH200	
		IH5200	
	Harris	**HI200**	**(2707, 2737, 2747)**
	PMI	SW05	
DG201A	AD	ADG201	
	GE/Intersil	**DG201**	**(2679)**
		DG201A	**(2679)**
		IH201	
		IH5201	
	Harris	**HI201**	**(2707, 2737, 2747)**
	Maxim	DG201A	
		MAX331	
	MicroPwr	MP201	
	National	LF11201	
		LF13201	
	PMI	**SW201**	**(2975)**
DG202	Maxim	MAX332	
	PMI	**SW02**	**(2975)**
DG211	**GE/Intersil**	**DG211**	**(2679)**
DG243	**GE/Intersil**	**DG191**	**(2680)**
		IH5043	**(2680)**
	Harris	**HI5043**	**(2707, 2737, 2747)**
	Maxim	IH5043	
	Siliconix	DG191	
		DG5043	
DG300A	**Harris**	**HI300**	**(2707)**
	Maxim	DG300A	
DG301A	**Harris**	**HI301**	**(2707)**
	Maxim	DG301A	
DG302A	**Harris**	**HI302**	**(2707)**
	Maxim	DG302A	
	MicroPwr	MP302	
DG303A	**Harris**	**HI303**	**(2707)**
	Maxim	DG303A	
	MicroPwr	MP303	
DG304A	**Harris**	**HI304**	**(2707)**
	Maxim	DG304A	
DG305A	**Harris**	**HI305**	**(2707)**
DG306A	**Harris**	**HI306**	**(2707)**
	Maxim	DG306A	
DG307A	**Harris**	**HI307**	**(2707)**
	Maxim	DG307A	
DG381A	**GE/Intersil**	**DG181**	**(2680)**
		IH5048	**(2679)**
	Harris	**HI381**	**(2707)**
		HI5048	**(2707, 2737)**
	Maxim	DG381A	
		IH5048	
	Siliconix	DG181	
DG384A	**GE/Intersil**	**DG184**	**(2680)**
		IH5049	**(2680)**
	Harris	**HI384**	**(2707)**
		HI5049	**(2707, 2737, 2747)**
	Maxim	DG384A	
		IH5049	
	Siliconix	DG184	
DG387A	**GE/Intersil**	**DG187**	**(2680)**
		IH5050	**(2680)**
	Harris	**HI387**	**(2707)**
		HI5050	**(2707, 2737, 2747)**
	Maxim	DG387A	
		IH5050	
	Siliconix	DG187	
DG390A	**Harris**	**HI390**	**(2707)**
	Maxim	DG390A	
DG5040	**GE/Intersil**	**IH5040**	**(2679)**
	Harris	**HI5040**	**(2707, 2737)**
	Maxim	IH5040	
DG5041	**GE/Intersil**	**IH5041**	**(2680)**
	Harris	**HI5041**	**(2707, 2737)**
	Maxim	IH5041	
DG5042	**GE/Intersil**	**DG188**	**(2680)**
		IH5042	**(2680)**
DG5042			(Cont'd)
	Harris	**HI5042**	**(2707, 2737)**
	Maxim	IH5042	
	Siliconix	DG188	
DG5043	**GE/Intersil**	**DG191**	**(2680)**
		IH5043	**(2680)**
	Harris	**HI5043**	**(2707, 2737, 2747)**
	Maxim	IH5043	
	Siliconix	DG191	
		DG243	
DG5044	**GE/Intersil**	**IH5044**	**(2680)**
	Harris	**HI5044**	**(2707, 2737, 2747)**
	Maxim	IH5044	
DG5045	**GE/Intersil**	**DG185**	**(2680)**
		IH5045	**(2680)**
	Harris	**HI5045**	**(2707, 2737, 2747)**
	Maxim	IH5045	
	Siliconix	DG185	
	TI	TL185	
DG506A	AD	AD7506	
	Datel	**MV1606**	**(2577)**
		MX1606	**(2577)**
	GE/Intersil	**IH6116**	**(2681)**
	Harris	**HI506**	**(2703, 2738, 2748)**
	MicroPwr	MP7506	
	Motorola	MC7506	
	PMI	**MUX16**	**(2975)**
♦ DG507	AD	AD7507	
	Datel	**MVD807**	**(2577)**
		MXD807	**(2577)**
♦ DG507	**GE/Intersil**	**IH6216**	**(2681)**
	Harris	**HI507**	**(2703, 2738, 2748)**
	MicroPwr	MP7507	
	PMI	**MUX28**	**(2975)**
	Siliconix	DG507A	
	TeledyneP	4551	
DG507A	AD	AD7507	
	Datel	**MVD807**	**(2577)**
		MXD807	**(2577)**
	GE/Intersil	**IH6216**	**(2681)**
	Harris	**HI507**	**(2703, 2738, 2748)**
	MicroPwr	MP7507	
	PMI	**MUX28**	**(2975)**
	TeledyneP	4551	
♦ DG508	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
♦ DG508	GE/Intersil	ICL6108	
		IH6108	**(2681)**
♦ DG508	**Harris**	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
♦ DG508	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
♦ DG508	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
♦ DG508	Siliconix	DG508A	
	TeledyneP	4554	
DG508A	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
	TeledyneP	4554	
♦ DG509	GE/Intersil	ICL6109	
		IH6208	**(2681)**
♦ DG509	**Harris**	**HI509**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX359	
		MAX369	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Siliconix			**(Cont'd)**
♦ DG509	MicroPwr	MP7509DI	
	National	LF11509	
		LF13509	
♦ DG509	**PMI**	**MUX24**	**(2975)**
	Siliconix	DG509A	
	TeledyneP	4553	
DG509A	GE/Intersil	ICL6109	
		IH6208	**(2681)**
	Harris	**HI509**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX359	
		MAX369	
	MicroPwr	MP7509DI	
	National	LF11509	
		LF13509	
	PMI	**MUX24**	**(2975)**
	TeledyneP	4553	
DG5140	**GE/Intersil**	**IH5140**	**(2679)**
	GE/RCA	**CD22212**	**(2637)**
	Maxim	IH5140	
	SiliconSys	SSIK212	
DG5141	**GE/Intersil**	**IH5141**	**(2680)**
	GE/RCA	**CD22202**	**(2636)**
	Maxim	IH5141	
	SiliconSys	SSI202	
DG5142	**GE/Intersil**	**IH5142**	**(2680)**
	Maxim	IH5142	
DG5143	**GE/Intersil**	**IH5143**	**(2680)**
	Maxim	IH5143	
DG5144	**GE/Intersil**	**IH5144**	**(2680)**
	GE/RCA	**CD22223**	**(2637)**
	Maxim	IH5144	
	SiliconSys	SSI223	
DG5145	**GE/Intersil**	**IH5145**	**(2680)**
	Maxim	IH5145	
♦ G115	GE/Intersil	G115	
♦ G116	GE/Intersil	G116	
G118	GE/Intersil	G118	
G119	GE/Intersil	G119	
L144	Siltronics	SL144	
MP7622	HybridSys	HS3120	
	MicroPwr	MP7622	
PWM125	Cherry	CS1525A	
	Exar	**XR1525A**	**(2607)**
	IPS	**IP1525A**	**(2854)**
	LinearTech	LT1525A	
	Motorola	**SG1525A**	**(2931)**
	SGS	SG1524A	
	SiliconG	SG1525A	
	Unitrode	**UC1525**	**(3323)**
		UC1525A	**(3323)**
PWM25	Cherry	CS3525A	
	Exar	**XR3525A**	**(2607)**
	IPS	**IP3525A**	**(2854)**
	LinearTech	LT3525A	
	Motorola	**SG3525A**	**(2931)**
	RIFA	RL3525A	
	SGS	SG3525A	
	SiliconG	SG3525A	
	TI	SG3525A	
	Unitrode	**UC3525A**	**(3323)**
PWM25B	Cherry	CS2525A	
	Exar	**XR2525A**	**(2607)**
	IPS	IP2525A	
	LinearTech	LT2525A	
	Motorola	**SG2525A**	**(2931)**
	SiliconG	SG2525A	
	TI	SG2525A	
	Unitrode	**UC2525A**	**(3323)**
PWM27	Cherry	CS1527A	
	IPS	**IP1527A**	**(2854)**
	LinearTech	LT1527A	
	Motorola	**SG1527A**	**(2931)**
	SGS	SG1527A	
	SiliconG	SG1527A	
	Unitrode	**UC1527A**	**(3323)**
PWM27B	**Unitrode**	**UC2527A**	**(3323)**
SI25HC04	AMD	AM2504	
SI3002	Fairchild	SH3002	
SI5200	Siliconix	SD5200	
♦ SI552	GE/Intersil	MM552	
♦ SI555	GE/Intersil	MM555	
SI55554	TI	SN55554	
SI7135	**GE/Intersil**	**ICL7135**	**(2667)**
	Maxim	ICL7135	
	TeledyneS	TSC7135	
SI7541A	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SI7541A			(Cont'd)
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	TeledyneP	TP7541	
SI7652	LinearTech	LTC1052	
	Maxim	ICL7652	
SI7660	**Datel**	**VI7660**	**(2577)**
	LinearTech	LTC1044	
	Maxim	ICL7660	
	TI	LTC1044	
SI9551	**Intel**	**27513**	**(2863)**
		N27513	
		P27513	
	Sprague	**UCN5851**	**(3203)**
	Supertex	HV5122	
	TI	SN75551	
SI9552	Fujitsu	D51C68	
	Hitachi	D51C68	
	Sprague	**UCN5852**	**(3203)**
	Supertex	HV5222	
	TI	D51C68	
		SN75552	
SI9553	Fujitsu	P51C68	
	Hitachi	P51C68	
	Intel	MB2168	
	Sprague	**UCN5853**	**(3203)**
	Supertex	HV5306	
	TI	P51C68	
		SN75553	
SI9554	Fujitsu	D51C69	
	Hitachi	D51C69	
	Intel	TMS2168	
	Sprague	**UCN5854**	**(3203)**
	Supertex	HV5308	
	TI	D51C69	
		SN75554	
SI9555	Fairchild	μA7815	
	GoldStar	GL7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	
		LM340T-15	
		LM78L15	
	NEC	μPC78L15	
	Supertex	HV5406	
	TI	SN75555	
		μA78L15	
	Toshiba	TA78L015	
SI9556	Supertex	HV5408	
	TI	SN75556	
SI9560	TI	SN75563	
		SN75564	
SN0120	Supertex	AN0120	
SN0130	Supertex	AN0130	
SN0140	Supertex	AN0140	

Siltronics

SL144	Siliconix	L144	

Solid State Micro Technology for Music

SSM2134	AnalogSys	MA332	
	Datel	**AM453-2C**	**(2577)**
	Exar	XR5534	
	Raytheon	RC5534	
	Signetics	**NE5534**	**(3091)**
		NE5534A	**(3091)**
	TI	NE5534	
		NE5534A	

Solitron Devices

CM4000	**GE/RCA**	**CD4000**	**(2633)**
	Motorola	MC14000	
	National	CD4000	
	SGS	HCC/HCF4000	
	Signetics	HEF400	
	Sprague	SCL4000	

Manufacturer Device	Replacement Source	Device	IC Master Page
CM4001	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
	Motorola	MC14001	
	National	CD4001	
		MM74C02	
	OKI	MSM4001	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Sprague	SCL4001	
	Toshiba	**TC4001**	**(3308)**
CM4002	Fairchild	F4002	
	GE/RCA	**CD4002**	**(2633)**
	Motorola	MC14002	
	National	CD4002	
	SGS	HCC/HCF4002	
	Signetics	HEF4002	
	Sprague	SCL4002	
	Toshiba	**TC4002**	**(3308)**
CM4006	Fairchild	F4006	
	GE/RCA	**CD4006**	**(2634)**
	National	CD4006	
	SGS	HCC/HCF4006	
	Signetics	HEF4006	
	Sprague	SCL4006	
	Toshiba	**TC4006**	**(3308)**
CM4007	Fairchild	F4007	
	GE/RCA	**CD4007**	**(2633)**
	Motorola	MC14007	
	National	CD4007	
	SGS	HCC/HCF4007	
	Signetics	HEF4007	
	Sprague	SCL4007	
	Toshiba	**TC4007**	**(3308)**
CM4008	Fairchild	F4008	
	GE/RCA	**CD4008**	**(2636)**
	Motorola	MC14008	
	National	CD4008	
		MM74C83	
	SGS	HCC/HCF4008	
	Signetics	HEF4008	
	Sprague	SCL4008	
	Toshiba	**TC4008**	**(3308)**
CM4009	**GE/RCA**	**CD4009**	**(2633)**
	Motorola	MC14009	
	National	CD4009	
	SGS	HCC/HCF4009	
	Sprague	SCL4009	
	Toshiba	**TC4009**	**(3308)**
CM4010	**GE/RCA**	**CD4010**	**(2633)**
	Motorola	MC14010	
	National	CD4010	
	SGS	HCC/HCF4010	
	Sprague	SCL4010	
	Toshiba	**TC4010**	**(3308)**
CM4011	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	Motorola	MC14011	
	National	CD4011	
		MM74C00	
	OKI	MSM4011	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Sprague	SCL4011	
	Toshiba	**TC4011**	**(3308)**
CM4012	Fairchild	F4012	
	GE/RCA	**CD4012**	**(2633)**
	Motorola	MC14012	
	National	CD4012	
	SGS	HCC/HCF4012	
	Signetics	HEF4012	
	Sprague	SCL4012	
	Toshiba	**TC4012**	**(3308)**
CM4013	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	CD4013	
		MM74C74	
	OKI	MSM4013	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
	Signetics	HEF4013	
	Sprague	SCL4013	
	Toshiba	**TC4013**	**(3308)**
CM4014	Fairchild	F4014	
	GE/RCA	**CD4014**	**(2634)**
	Motorola	MC14014	
	National	CD4014	
	SGS	HCC/HCF4014	
	Signetics	HEF4014	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CM4014			(Cont'd)
	Sprague	SCL4014	
	Toshiba	**TC4014**	**(3308)**
CM4015	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	CD4015	
		MM74C164	
	OKI	MSM4015	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Sprague	SCL4015	
	Toshiba	**TC4015**	**(3308)**
CM4016	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
CM4017	Fairchild	F4017	
	GE/RCA	**CD4017**	**(2635)**
	Motorola	MC14017	
	National	CD4017	
	SGS	HCC/HCF4017	
	Signetics	HEF4017	
	Sprague	SCL4017	
	Toshiba	**TC4017**	**(3308)**
CM4018	Fairchild	F4018	
	GE/RCA	**CD4018**	**(2635)**
	Motorola	MC14018	
	National	CD4018	
	SGS	HCC/HCF4018	
	Signetics	HEF4018	
	Sprague	SCL4018	
	Toshiba	**TC4018**	**(3308)**
CM4019	Fairchild	F4019	
	GE/RCA	**CD4019**	**(2633, 2635)**
	National	CD4019	
	OKI	MSM4019	
	Sanyo	LC4019	
	SGS	HCC/HCF4019	
	Signetics	HEF4019	
	Sprague	SCL4019	
	Toshiba	**TC4019**	**(3308)**
CM4020	Fairchild	F4020	
	GE/RCA	**CD4020**	**(2634)**
	Motorola	MC14020	
	National	CD4020	
	SGS	HCC/HCF4020	
	Signetics	HEF4020	
	Sprague	SCL4020	
	Toshiba	**TC4020**	**(3308)**
CM4022	Fairchild	F4022	
	GE/RCA	**CD4022**	**(2635)**
	Motorola	MC14022	
	National	CD4022	
	SGS	HCC/HCF4022	
	Signetics	HEF4022	
	Sprague	SCL4022	
	Toshiba	**TC4022**	**(3308)**
CM4023	Fairchild	F4023	
	GE/RCA	**CD4023**	**(2633)**
	Motorola	MC14023	
	National	CD4023	
		MM74C10	
	SGS	HCC/HCF4023	
	Signetics	HEF4023	
	Sprague	SCL4023	
	Toshiba	**TC4023**	**(3308)**
CM4024	Fairchild	F4024	
	GE/RCA	**CD4024**	**(2634)**
	Motorola	MC14024	
	National	CD4024	
	SGS	HCC/HCF4024	
	Signetics	HEF4024	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Solitron Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
CM4024			(Cont'd)
	Sprague	SCL4024	
	Toshiba	**TC4024**	**(3308)**
CM4025	Fairchild	F4025	
	GE/RCA	**CD4025**	**(2633)**
	Motorola	MC14025	
	National	CD4025	
	SGS	HCC/HCF4025	
	Signetics	HEF4025	
	Sprague	SCL4025	
	Toshiba	**TC4025**	**(3308)**
CM4026	SGS	HCC/HCF4026	
	Sprague	SCL4026	
CM4027	Fairchild	F4027	
	GE/RCA	**CD4027**	**(2634)**
	Motorola	MC14027	
	National	CD4027	
		MM74C76	
	OKI	MSM4027	
	Sanyo	LC4027	
	SGS	HCC/HCF4027	
	Signetics	HEF4027	
	Sprague	SCL4027	
CM4028	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	CD4028	
		MM74C42	
	OKI	MSM4028	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	
	Sprague	SCL4028	
	Toshiba	**TC4028**	**(3308)**
CM4029	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
CM4030	Fairchild	F4030	
	GE/RCA	**CD4030**	**(2633, 2636)**
	National	CD4030	
	SGS	HCC/HCF4030	
	Signetics	HEF4030	
	Sprague	SCL4030	
	Toshiba	**TC4030**	**(3308)**
CM4032	**GE/RCA**	**CD4032**	**(2636)**
	Motorola	MC14032	
	SGS	HCC/HCF4032	
	Toshiba	**TC4032**	**(3308)**
CM4033	**GE/RCA**	**CD4033**	**(2635)**
	SGS	HCC/HCF4033	
	Sprague	SCL4033	
CM4034	Fairchild	F4034	
	GE/RCA	**CD4034**	**(2634, 2636)**
	Motorola	MC14034	
	National	CD4034	
	SGS	HCC/HCF4034	
	Sprague	SCL4034	
	Toshiba	**TC4034**	**(3308)**
CM4035	Fairchild	F4035	
	GE/RCA	**CD4035**	**(2634)**
	Motorola	MC14035	
	SGS	HCC/HCF4035	
	Signetics	HEF4035	
	Toshiba	TC4035	
CM4036	**Toshiba**	**TC4036**	**(3308)**
CM4037	GE/RCA	CD4037	
CM4038	**GE/RCA**	**CD4038**	**(2636)**
	Motorola	MC14038	
	SGS	HCC/HCF4038	
	Toshiba	**TC4038**	**(3308)**
CM4039	GE/RCA	CD4039	
	Toshiba	**TC4039**	**(3308)**
CM4040	Fairchild	F4040	
	GE/RCA	**CD4040**	**(2634)**
	Motorola	MC14040	
	National	CD4040	
	SGS	HCC/HCF4040	
	Signetics	HEF4040	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CM4040			(Cont'd)
	Sprague	SCL4040	
	Toshiba	**TC4040**	**(3308)**
CM4041	Fairchild	F4041	
	GE/RCA	**CD4041**	**(2633)**
	National	CD4041	
	SGS	HCC/HCF4041	
	Signetics	HEF4041	
	Sprague	SCL4041	
CM4042	Fairchild	F4042	
	GE/RCA	**CD4042**	**(2634)**
	Motorola	MC14042	
	National	CD4042	
	SGS	HCC/HCF4042	
	Signetics	HEF4042	
	Sprague	SCL4042	
	Toshiba	**TC4042**	**(3308)**
CM4043	**GE/RCA**	**CD4043**	**(2634)**
	Motorola	MC14043	
	National	CD4043	
	SGS	HCC/HCF4043	
	Signetics	HEF4043	
	Sprague	SCL4043	
	Toshiba	**TC4043**	**(3308)**
CM4044	Fairchild	F4044	
	GE/RCA	**CD4044**	**(2634)**
	Motorola	MC14044	
	National	CD4044	
	SGS	HCC/HCF4044	
	Signetics	HEF4044	
	Toshiba	**TC4044**	**(3308)**
CM4045	Fairchild	F4521	
	Motorola	MC14521	
	SGS	HCC/HCF4045	
	Signetics	HEF4521	
	Sprague	SCL4445	
	Toshiba	**TC4521**	**(3308)**
CM4046	Fairchild	F4046	
	GE/RCA	**CD4046**	**(2635)**
	Motorola	MC14046	
	National	CD4046	
	SGS	HCC/HCF4046	
	Sprague	SCL4046	
CM4047	Fairchild	F4047	
	GE/RCA	**CD4047**	**(2634)**
	National	CD4047	
	SGS	HCC/HCF4047	
	Signetics	HEF4047	
	Sprague	SCL4047	
	Toshiba	**TC4047**	**(3308)**
CM4048	**GE/RCA**	**CD4048**	**(2633)**
	National	CD4048	
	SGS	HCC/HCF4048	
	Sprague	SCL4402	
CM4049	Fairchild	F4049	
	GE/RCA	**CD4049**	**(2633)**
	Motorola	MC14049	
	National	CD4049	
	OKI	MSM4049	
	Sanyo	LC4049	
	SGS	HCC/HCF4049	
	Signetics	HEF4049	
	Sprague	SCL4049	
	Toshiba	**TC4049**	**(3308)**
CM4050	Fairchild	F4050	
	GE/RCA	**CD4050**	**(2633)**
	Motorola	MC14050	
	National	CD4050	
	SGS	HCC/HCF4050	
	Signetics	HEF4050	
	Sprague	SCL4050	
	Toshiba	**TC4050**	**(3308)**
CM4051	Fairchild	F4051	
	GE/RCA	**CD4051**	**(2635)**
	Motorola	MC14051	
	National	CD4051	
	SGS	HCC/HCF4051	
	Signetics	HEF4051	
	Sprague	SCL4051	
	Toshiba	**TC4051**	**(3308)**
CM4052	**Harris**	**HI1828A**	**(2703, 2738, 2748)**
	National	CD4052	
	Sprague	SCL4052	
	Toshiba	**TC4052**	**(3308)**
CM4053	Fairchild	F4053	
	GE/RCA	**CD4053**	**(2635)**
	Motorola	MC14053	
	National	CD4053	
	SGS	HCC/HCF4053	
	Signetics	HEF4053	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CM4053			(Cont'd)
	Sprague	SCL4053	
	Toshiba	**TC4053B**	**(3308)**
CM4066	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
CM4068	Fairchild	F4068	
	GE/RCA	**CD4068**	**(2633)**
	Motorola	MC14068	
	SGS	HCC/HCF4068	
	Signetics	HEF4068	
	Sprague	SCL4068	
	Toshiba	**TC4068**	**(3308)**
CM4069	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Sprague	SCL4069	
		SCL4449	
	Toshiba	**TC4069**	**(3308)**
CM4070	Fairchild	F4070	
	GE/RCA	**CD4070**	**(2633, 2636)**
	Motorola	MC14070	
	National	CD4070	
		MM74C86	
	SGS	HCC/HCF4070	
	Signetics	HEF4070	
	Sprague	SCL4070	
CM4071	Fairchild	F4071	
	GE/RCA	**CD4071**	**(2633)**
	Motorola	MC14071	
	National	CD4071	
		MM74C32	
	OKI	MSM4071	
	Sanyo	LC4071	
	SGS	HCC/HCF4071	
	Signetics	HEF4071	
	Sprague	SCL4071	
CM4073	Fairchild	F4073	
	GE/RCA	**CD4073**	**(2633)**
	Motorola	MC14073	
	National	CD4073	
	SGS	HCC/HCF4073	
	Signetics	HEF4073	
	Sprague	SCL4073	
	Toshiba	TC4073	
CM4075	Fairchild	F4075	
	GE/RCA	**CD4075**	**(2633)**
	Motorola	MC14075	
	National	CD4075	
	SGS	HCC/HCF4075	
	Signetics	HEF4075	
	Sprague	SCL4075	
	Toshiba	TC4075	
CM4076	Fairchild	F4076	
	GE/RCA	**CD4076**	**(2634)**
	Motorola	MC14076	
	National	CD4076	
		MM54C173	
		MM74C173	
	SGS	HCC/HCF4076	
	Signetics	HEF4076	
	Sprague	SCL4076	
	Toshiba	**TC4076**	**(3308)**
CM4077	Fairchild	F4077	
	GE/RCA	**CD4077**	**(2633, 2636)**
	Motorola	MC14077	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CM4077			(Cont'd)
	National	CD4077	
	SGS	HCC/HCF4077	
	Signetics	HEF4077	
	Sprague	SCL4077	
CM4078	Fairchild	F4078	
	GE/RCA	**CD4078**	**(2633)**
	Motorola	MC14078	
	SGS	HCC/HCF4078	
	Signetics	HEF4078	
	Sprague	SCL4078	
	Toshiba	**TC4078**	**(3308)**
CM4081	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	CD4081	
		MM74C08	
	OKI	MSM4081	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Sprague	SCL4081	
	Toshiba	TC4081	
♦ CM4508	**GE/RCA**	**CD4508**	**(2634)**
	Motorola	MC14508	
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**
		HEF4508	
		N82147	
♦ CM4508	Sprague	SCL4508	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
CM4510	Fairchild	F4510	
	GE/RCA	**CD4510**	**(2635)**
	Motorola	MC14510	
	National	CD4510	
	SGS	HCC/HCF4510	
	Signetics	HEF4510	
	Sprague	SCL4510	
	Toshiba	**TC4510**	**(3308)**
CM4511	Fairchild	F4511	
	GE/RCA	**CD4511**	**(2635)**
	Motorola	MC14511	
	National	CD4511	
	NEC	μPD4511	
	SGS	HCC/HCF4511	
	Signetics	HEF4511	
	Sprague	SCL4511	
	Toshiba	**TC4511**	**(3308)**
CM4514	Fairchild	F4514	
	GE/RCA	**CD4514**	**(2633)**
	Motorola	MC14514	
	National	CD4514	
	SGS	HCC/HCF4514	
	Signetics	HEF4514	
	Sprague	SCL4514	
	Toshiba	**TC4514**	**(3308)**
CM4515	Fairchild	F4515	
	GE/RCA	**CD4515**	**(2633)**
	Motorola	MC14515	
	National	CD4515	
	SGS	HCC/HCF4515	
	Signetics	HEF4515	
	Sprague	SCL4515	
	Toshiba	**TC4515**	**(3308)**
CM4516	Fairchild	F4516	
	GE/RCA	**CD4516**	**(2635)**
	Motorola	MC14516	
	National	CD4516	
	SGS	HCC/HCF4516	
	Signetics	HEF4516	
	Sprague	SCL4516	
	Toshiba	**TC4516**	**(3308)**
CM4518	Fairchild	F4518	
	GE/RCA	**CD4518**	**(2635)**
	Motorola	MC14518	
	National	CD4518	
	SGS	HCC/HCF4518	
	Signetics	HEF4518	
	Sprague	SCL4518	
	Toshiba	**TC4518**	**(3308)**
CM4520	Fairchild	F4520	
	GE/RCA	**CD4520**	**(2635)**
	Motorola	MC14520	
	National	CD4520	
	OKI	MSM4520	
	Sanyo	LC4520	
	SGS	HCC/HCF4520	
	Signetics	HEF4520	
	Sprague	SCL4520	
	Toshiba	**TC4520**	**(3308)**

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Solitron Devices (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
HCF4016	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
UC4250	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	SGS	MC1776	
	TI	TL061	
		TLC251	
		TLC271	
	Thomson	μA776	
μA2556	Solitron	μA2656	
		μA3556	
		μA3656	
μA2656	Solitron	μA2556	
		μA3556	
		μA3656	
μA3556	Solitron	μA2556	
		μA2656	
		μA3656	
μA3656	Solitron	μA2556	
		μA2656	
		μA3556	

Sony Corporation of America

Manufacturer Device	Replacement Source	Device	IC Master Page
CVK5864	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CVK5864			(Cont'd)
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
CXK58256	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
	Vitelic	V62C256	

Sprague Electric Company

Manufacturer Device	Replacement Source	Device	IC Master Page
883C21C16	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
883C21C16			(Cont'd)
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
BCM20C16	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	NMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
BCM20C16	Toshiba		(Cont'd)
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
BCM2114	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
BCM21C14	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
BCM21C16	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Sprague Electric Company (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
BCM21C16	Mitsubishi	(Cont'd)	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
BCM5101	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	SCM5101	
	Toshiba	TC5501	
BCM6167	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
MC3495	Dionics	DI504	

Manufacturer Device	Replacement Source	Device	IC Master Page
SCL4000	**GE/RCA**	**CD4000**	**(2633)**
	Motorola	MC14000	
	National	CD4000	
	SGS	HCC/HCF4000	
	Signetics	HEF400	
	Solitron	CM4000	
SCL4001	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
	Motorola	MC14001	
	National	CD4001	
		MM74C02	
	OKI	MSM4001	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Solitron	CM4001	
	Toshiba	**TC4001**	**(3308)**
SCL4002	Fairchild	F4002	
	GE/RCA	**CD4002**	**(2633)**
	Motorola	MC14002	
	National	CD4002	
	SGS	HCC/HCF4002	
	Signetics	HEF4002	
	Solitron	CM4002	
	Toshiba	**TC4002**	**(3308)**
SCL4006	Fairchild	F4006	
	GE/RCA	**CD4006**	**(2634)**
	National	CD4006	
	SGS	HCC/HCF4006	
	Signetics	HEF4006	
	Solitron	CM4006	
	Toshiba	**TC4006**	**(3308)**
SCL4007	Fairchild	F4007	
	GE/RCA	**CD4007**	**(2633)**
	Motorola	MC14007	
	National	CD4007	
	SGS	HCC/HCF4007	
	Signetics	HEF4007	
	Solitron	CM4007	
	Toshiba	**TC4007**	**(3308)**
SCL4008	Fairchild	F4008	
	GE/RCA	**CD4008**	**(2636)**
	Motorola	MC14008	
	National	CD4008	
		MM74C83	
	SGS	HCC/HCF4008	
	Signetics	HEF4008	
	Solitron	CM4008	
	Toshiba	**TC4008**	**(3308)**
SCL4009	**GE/RCA**	**CD4009**	**(2633)**
	Motorola	MC14009	
	National	CD4009	
	SGS	HCC/HCF4009	
	Solitron	CM4009	
	Toshiba	**TC4009**	**(3308)**
SCL4010	**GE/RCA**	**CD4010**	**(2633)**
	Motorola	MC14010	
	National	CD4010	
	SGS	HCC/HCF4010	
	Solitron	CM4010	
	Toshiba	**TC4010**	**(3308)**
SCL4011	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	Motorola	MC14011	
	National	CD4011	
		MM74C00	
	OKI	MSM4011	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Toshiba	**TC4011**	**(3308)**
SCL4012	Fairchild	F4012	
	GE/RCA	**CD4012**	**(2633)**
	Motorola	MC14012	
	National	CD4012	
	SGS	HCC/HCF4012	
	Signetics	HEF4012	
	Solitron	CM4012	
	Toshiba	**TC4012**	**(3308)**
SCL4013	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	CD4013	
		MM74C74	
	OKI	MSM4013	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
	Signetics	HEF4013	
	Solitron	CM4013	
	Toshiba	**TC4013**	**(3308)**

Manufacturer Device	Replacement Source	Device	IC Master Page
SCL4014	Fairchild	F4014	
	GE/RCA	**CD4014**	**(2634)**
	Motorola	MC14014	
	National	CD4014	
	SGS	HCC/HCF4014	
	Signetics	HEF4014	
	Solitron	CM4014	
	Toshiba	**TC4014**	**(3308)**
SCL4015	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	CD4015	
		MM74C164	
	OKI	MSM4015	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Toshiba	**TC4015**	**(3308)**
SCL4016	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4066	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
SCL4017	Fairchild	F4017	
	GE/RCA	**CD4017**	**(2635)**
	Motorola	MC14017	
	National	CD4017	
	SGS	HCC/HCF4017	
	Signetics	HEF4017	
	Solitron	CM4017	
	Toshiba	**TC4017**	**(3308)**
SCL4018	Fairchild	F4018	
	GE/RCA	**CD4018**	**(2635)**
	Motorola	MC14018	
	National	CD4018	
	SGS	HCC/HCF4018	
	Signetics	HEF4018	
	Solitron	CM4018	
	Toshiba	**TC4018**	**(3308)**
SCL4019	Fairchild	F4019	
	GE/RCA	**CD4019**	**(2633, 2635)**
	National	CD4019	
	OKI	MSM4019	
	Sanyo	LC4019	
	SGS	HCC/HCF4019	
	Signetics	HEF4019	
	Solitron	CM4019	
	Toshiba	**TC4019**	**(3308)**
SCL4020	Fairchild	F4020	
	GE/RCA	**CD4020**	**(2634)**
	Motorola	MC14020	
	National	CD4020	
	SGS	HCC/HCF4020	
	Signetics	HEF4020	
	Solitron	CM4020	
	Toshiba	**TC4020**	**(3308)**
SCL4021	Fairchild	F4021	
	GE/RCA	**CD4021**	**(2634)**
	Motorola	MC14021	
	National	CD4021	
	SGS	HCC/HCF4021	
	Signetics	HEF4021	
	Toshiba	**TC4021**	**(3308)**
SCL4022	Fairchild	F4022	
	GE/RCA	**CD4022**	**(2635)**
	Motorola	MC14022	
	National	CD4022	
	SGS	HCC/HCF4022	
	Signetics	HEF4022	
	Solitron	CM4022	
	Toshiba	**TC4022**	**(3308)**
SCL4023	Fairchild	F4023	
	GE/RCA	**CD4023**	**(2633)**
	Motorola	MC14023	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SCL4023			(Cont'd)
	National	CD4023	
		MM74C10	
	SGS	HCC/HCF4023	
	Signetics	HEF4023	
	Solitron	CM4023	
	Toshiba	**TC4023**	**(3308)**
SCL4024	Fairchild	F4024	
	GE/RCA	**CD4024**	**(2634)**
	Motorola	MC14024	
	National	CD4024	
	SGS	HCC/HCF4024	
	Signetics	HEF4024	
	Solitron	CM4024	
	Toshiba	**TC4024**	**(3308)**
SCL4025	Fairchild	F4025	
	GE/RCA	**CD4025**	**(2633)**
	Motorola	MC14025	
	National	CD4025	
	SGS	HCC/HCF4025	
	Signetics	HEF4025	
	Solitron	CM4025	
	Toshiba	**TC4025**	**(3308)**
SCL4026	SGS	HCC/HCF4026	
	Solitron	CM4026	
SCL4027	Fairchild	F4027	
	GE/RCA	**CD4027**	**(2634)**
	Motorola	MC14027	
	National	CD4027	
		MM74C76	
	OKI	MSM4027	
	Sanyo	LC4027	
	SGS	HCC/HCF4027	
	Signetics	HEF4027	
	Solitron	CM4027	
SCL4028	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	CD4028	
		MM74C42	
	OKI	MSM4028	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	
	Solitron	CM4028	
	Toshiba	**TC4028**	**(3308)**
SCL4029	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4192	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
SCL4030	Fairchild	F4030	
	GE/RCA	**CD4030**	**(2633, 2636)**
	National	CD4030	
	SGS	HCC/HCF4030	
	Signetics	HEF4030	
	Solitron	CM4030	
	Toshiba	**TC4030**	**(3308)**
SCL4033	**GE/RCA**	**CD4033**	**(2635)**
	SGS	HCC/HCF4033	
	Solitron	CM4033	
SCL4034	Fairchild	F4034	
	GE/RCA	**CD4034**	**(2634, 2636)**
	Motorola	MC14034	
	National	CD4034	
	SGS	HCC/HCF4034	
	Solitron	CM4034	
	Toshiba	**TC4034**	**(3308)**
SCL4040	Fairchild	F4040	
	GE/RCA	**CD4040**	**(2634)**
	Motorola	MC14040	
	National	CD4040	
	SGS	HCC/HCF4040	
	Signetics	HEF4040	
	Solitron	CM4040	
	Toshiba	**TC4040**	**(3308)**
SCL4041	Fairchild	F4041	
	GE/RCA	**CD4041**	**(2633)**
	National	CD4041	
	SGS	HCC/HCF4041	
	Signetics	HEF4041	
	Solitron	CM4041	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Sprague Electric Company (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SCL4042	Fairchild	F4042	
	GE/RCA	**CD4042**	**(2634)**
	Motorola	MC14042	
	National	CD4042	
	SGS	HCC/HCF4042	
	Signetics	HEF4042	
	Solitron	CM4042	
	Toshiba	**TC4042**	**(3308)**
SCL4043	**GE/RCA**	**CD4043**	**(2634)**
	Motorola	MC14043	
	National	CD4043	
	SGS	HCC/HCF4043	
	Signetics	HEF4043	
	Solitron	CM4043	
	Toshiba	**TC4043**	**(3308)**
SCL4046	Fairchild	F4046	
	GE/RCA	**CD4046**	**(2635)**
	Motorola	MC14046	
	National	CD4046	
	SGS	HCC/HCF4046	
	Solitron	CM4046	
SCL4047	Fairchild	F4047	
	GE/RCA	**CD4047**	**(2634)**
	National	CD4047	
	SGS	HCC/HCF4047	
	Signetics	HEF4047	
	Solitron	CM4047	
	Toshiba	**TC4047**	**(3308)**
SCL4049	Fairchild	F4049	
	GE/RCA	**CD4049**	**(2633)**
	Motorola	MC14049	
	National	CD4049	
	OKI	MSM4049	
	Sanyo	LC4049	
	SGS	HCC/HCF4049	
	Signetics	HEF4049	
	Solitron	CM4049	
	Toshiba	**TC4049**	**(3308)**
SCL4050	Fairchild	F4050	
	GE/RCA	**CD4050**	**(2633)**
	Motorola	MC14050	
	National	CD4050	
	SGS	HCC/HCF4050	
	Signetics	HEF4050	
	Solitron	CM4050	
	Toshiba	**TC4050**	**(3308)**
SCL4051	Fairchild	F4051	
	GE/RCA	**CD4051**	**(2635)**
	Motorola	MC14051	
	National	CD4051	
	SGS	HCC/HCF4051	
	Signetics	HEF4051	
	Solitron	CM4051	
	Toshiba	**TC4051**	**(3308)**
SCL4052	**Harris**	**HI1828A**	**(2703, 2738, 2748)**
	National	CD4052	
	Solitron	CM4052	
	Toshiba	**TC4052**	**(3308)**
♦ SCL4052B	Motorola	MC14052	
	National	CD4052B	
SCL4053	Fairchild	F4053	
	GE/RCA	**CD4053**	**(2635)**
	Motorola	MC14053	
	National	CD4053	
	SGS	HCC/HCF4053	
	Signetics	HEF4053	
	Solitron	CM4053	
	Toshiba	**TC4053B**	**(3308)**
SCL4060	**GE/RCA**	**CD4060**	**(2634)**
	Motorola	MC14060	
	National	CD4060	
	SGS	HCC/HCF4060	
	Signetics	HEF4060	
SCL4066	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SCL4066			(Cont'd)
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
	Toshiba	**TC4016**	**(3308)**
		TC4066	**(3308)**
SCL4068	Fairchild	F4068	
	GE/RCA	**CD4068**	**(2633)**
	Motorola	MC14068	
	SGS	HCC/HCF4068	
	Signetics	HEF4068	
	Solitron	CM4068	
	Toshiba	**TC4068**	**(3308)**
SCL4069	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4449	
	Toshiba	**TC4069**	**(3308)**
SCL4070	Fairchild	F4070	
	GE/RCA	**CD4070**	**(2633, 2636)**
	Motorola	MC14070	
	National	CD4070	
		MM74C86	
	SGS	HCC/HCF4070	
	Signetics	HEF4070	
	Solitron	CM4070	
SCL4071	Fairchild	F4071	
	GE/RCA	**CD4071**	**(2633)**
	Motorola	MC14071	
	National	CD4071	
		MM74C32	
	OKI	MSM4071	
	Sanyo	LC4071	
	SGS	HCC/HCF4071	
	Signetics	HEF4071	
	Solitron	CM4071	
SCL4072	Fairchild	F4072	
	GE/RCA	**CD4072**	**(2633)**
	Motorola	MC14072	
	National	CD4072	
	SGS	HCC/HCF4072	
	Signetics	HEF4072	
	Toshiba	TC4072	
SCL4073	Fairchild	F4073	
	GE/RCA	**CD4073**	**(2633)**
	Motorola	MC14073	
	National	CD4073	
	SGS	HCC/HCF4073	
	Signetics	HEF4073	
	Solitron	CM4073	
	Toshiba	TC4073	
SCL4075	Fairchild	F4075	
	GE/RCA	**CD4075**	**(2633)**
	Motorola	MC14075	
	National	CD4075	
	SGS	HCC/HCF4075	
	Signetics	HEF4075	
	Solitron	CM4075	
	Toshiba	TC4075	
SCL4076	Fairchild	F4076	
	GE/RCA	**CD4076**	**(2634)**
	Motorola	MC14076	
	National	CD4076	
		MM54C173	
		MM74C173	
	SGS	HCC/HCF4076	
	Signetics	HEF4076	
	Solitron	CM4076	
	Toshiba	**TC4076**	**(3308)**
SCL4077	Fairchild	F4077	
	GE/RCA	**CD4077**	**(2633, 2636)**
	Motorola	MC14077	
	National	CD4077	
	SGS	HCC/HCF4077	
	Signetics	HEF4077	
	Solitron	CM4077	
SCL4078	Fairchild	F4078	
	GE/RCA	**CD4078**	**(2633)**
	Motorola	MC14078	
	SGS	HCC/HCF4078	
	Signetics	HEF4078	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SCL4078			(Cont'd)
	Solitron	CM4078	
	Toshiba	**TC4078**	**(3308)**
SCL4081	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	CD4081	
		MM74C08	
	OKI	MSM4081	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Toshiba	TC4081	
SCL4082	Fairchild	F4082	
	GE/RCA	**CD4082**	**(2633)**
	Motorola	MC14082	
	National	CD4082	
	SGS	HCC/HCF4082	
	Signetics	HEF4082	
	Toshiba	TC4082	
♦ SCL4085B	National	CD4085B	
♦ SCL4086B	**GE/RCA**	**CD4086B**	**(2633)**
	Motorola	MC14506	
	SGS	HCC/HCF4086	
	Signetics	HEF4086B	
♦ SCL4093B	Fairchild	F4093B	
	GE/RCA	**CD4093B**	**(2633)**
	Motorola	MC14093	
	National	CD4093B	
♦ SCL4094B	**GE/RCA**	**CD4094B**	**(2634)**
	Motorola	MC14094	
♦ SCL4099B	**GE/RCA**	**CD4099B**	**(2634)**
	Motorola	MC14099	
		MC14099B	
♦ SCL4099B	National	CD4099B	
SCL4160	Fairchild	F40160	
	GE/RCA	**CD40160**	**(2635)**
	Motorola	MC14160	
	National	CD40160	
SCL4161	Fairchild	F40161	
	GE/RCA	**CD40161**	**(2635)**
	Motorola	MC14161	
	National	CD40161	
SCL4162	Fairchild	F40162	
	GE/RCA	**CD40162**	**(2635)**
	Motorola	MC14162	
	National	CD40162	
SCL4163	Fairchild	F40163	
	GE/RCA	**CD40163**	**(2635)**
	Motorola	MC14163	
	National	CD40163	
♦ SCL4174B	Fairchild	F40174B	
	GE/RCA	**CD40174B**	**(2634)**
	Motorola	MC14174	
	National	CD40174B	
SCL4192	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
	Toshiba	**TC40192**	**(3308)**
		TC4029	**(3308)**
SCL4193	Fairchild	F40193	
	GE/RCA	**CD40193**	**(2635)**
	National	CD40193	
		MM54C193	
		MM74C193	
	SGS	HCC/HCF40193	
	Signetics	HEF40193	
	Toshiba	**TC40193**	**(3308)**
SCL4402	**GE/RCA**	**CD4048**	**(2633)**
	National	CD4048	
	SGS	HCC/HCF4048	
	Solitron	CM4048	
SCL4445	Fairchild	F4521	
	Motorola	MC14521	
	SGS	HCC/HCF4045	
	Signetics	HEF4521	
	Solitron	CM4045	
	Toshiba	**TC4521**	**(3308)**
SCL4449	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SCL4449	National		(Cont'd)
		MM54C04	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
	Toshiba	**TC4069**	**(3308)**
SCL4502	**GE/RCA**	**CD4502**	**(2633)**
	Motorola	MC14502	
	SGS	HCC/HCF4502	
	Signetics	HEF4502	
♦ SCL4504B	Motorola	MC14504	
		MC14504B	
SCL4508	**GE/RCA**	**CD4508**	**(2634)**
	Motorola	MC14508	
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**
		HEF4508	
		N82147	
	TI	SN74147	
	Toshiba	**TC4508**	**(3308)**
SCL4510	Fairchild	F4510	
	GE/RCA	**CD4510**	**(2635)**
	Motorola	MC14510	
	National	CD4510	
	SGS	HCC/HCF4510	
	Signetics	HEF4510	
	Solitron	CM4510	
	Toshiba	**TC4510**	**(3308)**
SCL4511	Fairchild	F4511	
	GE/RCA	**CD4511**	**(2635)**
	Motorola	MC14511	
	National	CD4511	
	NEC	μPD4511	
	SGS	HCC/HCF4511	
	Signetics	HEF4511	
	Solitron	CM4511	
	Toshiba	**TC4511**	**(3308)**
SCL4512	Fairchild	F4512	
	GE/RCA	**CD4512**	**(2635)**
	Motorola	MC14512	
	National	CD4512	
	SGS	HCC/HCF4512	
	Toshiba	**TC4512**	**(3308)**
SCL4514	Fairchild	F4514	
	GE/RCA	**CD4514**	**(2633)**
	Motorola	MC14514	
	National	CD4514	
	SGS	HCC/HCF4514	
	Signetics	HEF4514	
	Solitron	CM4514	
	Toshiba	**TC4514**	**(3308)**
SCL4515	Fairchild	F4515	
	GE/RCA	**CD4515**	**(2633)**
	Motorola	MC14515	
	National	CD4515	
	SGS	HCC/HCF4515	
	Signetics	HEF4515	
	Solitron	CM4515	
	Toshiba	**TC4515**	**(3308)**
SCL4516	Fairchild	F4516	
	GE/RCA	**CD4516**	**(2635)**
	Motorola	MC14516	
	National	CD4516	
	SGS	HCC/HCF4516	
	Signetics	HEF4516	
	Solitron	CM4516	
	Toshiba	**TC4516**	**(3308)**
SCL4517	**GE/RCA**	**CD4517**	**(2634)**
	Motorola	MC14517	
	SGS	HCC/HCF4517	
	Signetics	HEF4517	
SCL4518	Fairchild	F4518	
	GE/RCA	**CD4518**	**(2635)**
	Motorola	MC14518	
	National	CD4518	
	SGS	HCC/HCF4518	
	Signetics	HEF4518	
	Solitron	CM4518	
	Toshiba	**TC4518**	**(3308)**
SCL4520	Fairchild	F4520	
	GE/RCA	**CD4520**	**(2635)**
	Motorola	MC14520	
	National	CD4520	
	OKI	MSM4520	
	Sanyo	LC4520	
	SGS	HCC/HCF4520	
	Signetics	HEF4520	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Sprague Electric Company (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SCL4520			(Cont'd)
	Solitron	CM4520	
	Toshiba	**TC4520**	**(3308)**
SCL4522	Fairchild	F4522	
	Motorola	MC14522B	
	National	CD4522	
SCL4526	Fairchild	F4526	
	Motorola	MC14526	
	National	CD4526	
	Signetics	HEF4526	
	Toshiba	**TC4526**	**(3308)**
SCL4527	Fairchild	F4527	
	GE/RCA	**CD4527**	**(2636)**
	Motorola	MC14527	
	National	CD4527	
	SGS	HCC/HCF4527	
	Signetics	HEF4527	
	Toshiba	**TC4527**	**(3308)**
♦ SCL4528	Fairchild	F4528	
	Motorola	MC14528	
	National	CD4528	
		MM74C221	
♦ SCL4528	SGS	HCC/HCF4098	
	Signetics	HEF4528	
	Toshiba	**TC4528**	**(3308)**
SCL4531	Fairchild	F4531	
	Motorola	MC14531	
	SGS	HCC/HCF40101	
	Signetics	HEF4531	
	Toshiba	**TC4531**	**(3308)**
SCL4532	Fairchild	F4532	
	GE/RCA	CD4532	
	Motorola	MC14532	
	SGS	HCC/HCF4532	
	Signetics	HEF4532	
	Toshiba	**TC4532**	**(3308)**
♦ SCL4543B	Fairchild	F4543	
	GE/RCA	**CD4543**	**(2635)**
	Motorola	MC14543	
		MC14543B	
♦ SCL4543B	National	CD4543	
	Signetics	HEF4543	
	Toshiba	**TC4543**	**(3308)**
SCL4555	Fairchild	F4555	
	GE/RCA	**CD4555**	**(2633, 2635)**
	Motorola	MC14555	
	SGS	HCC/HCF4555	
	Signetics	HEF4555	
	Toshiba	**TC4555**	**(3308)**
SCL4556	Fairchild	F4556	
	GE/RCA	**CD4556**	**(2633, 2635)**
	Motorola	MC14556	
	SGS	HCC/HCF4556	
	Signetics	HEF4556	
	Toshiba	**TC4556**	**(3308)**
SCL4581	**GE/RCA**	**CD40181**	**(2636)**
	Motorola	MC14581	
	National	74C181	
	SGS	HCC/HCF40181	
SCL4582	Fairchild	F4582	
	GE/RCA	**CD40182**	**(2636)**
	Motorola	MC14582	
	National	74C182	
	SGS	HCC/HCF40182	
SCL4584	Fairchild	F400014	
		F40014	
	GE/RCA	**CD40106**	**(2633)**
	Motorola	MC14106	
		MC14584	
	National	CD40106	
		CD4584	
		MM54C14	
		MM74C14	
	SGS	HCC/HCF40106	
	Signetics	HEF40106	
SCL4585	Fairchild	F40085	
	GE/RCA	**CD4585**	**(2636)**
	Motorola	MC14585	
	National	MM74C85	
	SGS	HCC/HCF4585	
	Signetics	HEF4585	
	Toshiba	**TC4585**	**(3308)**
SCM2114A	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SCM2114A			(Cont'd)
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
SCM2116	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	5117	
		M5M8725	
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
		MK6116	
	Toshiba	TC5516	
		TC5517	
		TC5517A	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	
SCM21C14	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
	UMC	UM6114	
SCM21C16	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SCM21C16			(Cont'd)
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
♦ SCM23C128	AMD	AM92128	
	GIM	R09128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
♦ SCM23C128	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
♦ SCM23C128	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
♦ SCM23C256	GIM	R09256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
♦ SCM23C256	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
♦ SCM23C256	**S-MOS**	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SCM23C256	Signetics	23256	
		23256A	
♦ SCM23C256	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
♦ SCM23C256	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
♦ SCM27C128	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
♦ SCM27C128	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
♦ SCM27C128	Hitachi	HM4827256	
		HN27256	
		HN27C256	
♦ SCM27C128	Mitel	M27256	
		M27C256	
		M5L27256	
♦ SCM27C128	Mitsubishi	M5L27256	
		MSL27256	
♦ SCM27C128	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
♦ SCM27C128	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
♦ SCM27C128	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
♦ SCM27C128	**Waferscale**	**WS57C256**	**(3376)**
SCM27C256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
♦ SCM27C64	AMD	AM2764	
		AM27C64	
♦ SCM27C64	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
♦ SCM27C64	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
♦ SCM27C64	**Hyundai**	**HY27C64**	**(2770)**
	Intel	2764	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Sprague Electric Company (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SCM27C64	Intel		(Cont'd)
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
♦ SCM27C64	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
♦ SCM27C64	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
♦ SCM27C64	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
♦ SCM27C64	Thomson	ET2764	
		TS27C64	
♦ SCM27C64	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
♦ SCM27C64	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
SCM5101	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
	Toshiba	TC5501	
SCM5114	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
	UMC	UM6104	
SCM6113	SiliconG	SG3851	
	Sprague	**ULN2011**	**(3203)**
♦ SCM6116	AMD	AM9128	
		AM9218	
♦ SCM6116	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ SCM6116	Fujitsu	MB8128	
		MB8416	
♦ SCM6116	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ SCM6116	Hitachi	HM6116	
		HM6166	
♦ SCM6116	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ SCM6116	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SCM6116	Matra-Harris		(Cont'd)
		HM65162	
		HM65163	
		HN65728	
♦ SCM6116	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ SCM6116	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ SCM6116	National	MMC2116	
	NEC	μPD4016	
		μPD446	
♦ SCM6116	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ SCM6116	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ SCM6116	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ SCM6116	Stantel-STC	STC6116	
		STC6166	
♦ SCM6116	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ SCM6116	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ SCM6116	Vitelic	V61C16	
		V62C16	
SCM6167	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
SCM6168	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SCM6168			(Cont'd)
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
SN54HC137	**GE/RCA**	**CD54HC137**	**(2632)**
	Motorola	MC54HC137	
	National	MM54HC137	
	Sprague	SS54HC137	
	TI	SN54HC137	
SN54HC237	**GE/RCA**	**CD54HC237**	**(2632)**
	Motorola	MC54HC237	
	National	MM54HC237	
	TI	SN54HC237	
♦ SND5027	SMC	CRT5027	
♦ SND5037	SMC	CRT5037	
♦ SND8002	SMC	CRT8002	
SP16LC8	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
SPL12LC10	MMI	PAL12L10	
	National	PAL12L10	
SPL14LC8	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL14L8	
		PALC22V10	
	National	PAL14L8	
	Signetics	**PLS173**	**(3155, 3172)**
	TI	**TIBPAL22V10**	**(4320)**
SPL16LC6	Fairchild	F100112	
	Hitachi	HD100112	
	Signetics	**100112**	**(3020)**
SPL16RC4	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
SPL16RC6	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SPL16RC6			(Cont'd)
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
SPL16RC8	Cypress	CYPAL16R8	
	Harris	**HPL16RC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R8	
		PAL16R8A	
	National	DMPAL16R8	
	TI	SN74PAL16R8A	
		TIBPAL16R8-15	**(4320)**
		TIBPAL16R8-20	**(4320)**
		TIBPAL16R8-25	**(4320)**
		TIBPAL16R8-30	**(4320)**
SPL18LC4	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL18L4	
		PALC22V10	
	TI	**TIBPAL22V10**	**(4320)**
SPL20LC10	Cypress	CUPLDC20G10	
		PAL20L10	
	MMI	PAL20L10	
	National	DMPAL20L10	
		PAL20L10	
	TI	**TIBPAL20L10**	**(4320)**
		TIBPAL20L10-25	**(3217, 4320)**
SPL20LC2	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20L2	
		PALC22V10	
	National	PAL20L2	
	TI	**TIBPAL22V10**	**(4320)**
SPL20LC8	Cypress	CUPLDC20G10	
	Fairchild	F100165	
	Hitachi	HD100165	
		HM6288	
	MMI	PAL20L8	
		PAL20L8B	
	National	PAL20L8	
	Signetics	**100165**	**(3020)**
	TI	PAL20L8	
		TIBPAL20L8-20	**(3217, 4320)**
	Toshiba	TC55416	
SPL20RC4	Cypress	CUPLDC20G10	
	Fairchild	F100179	
	Hitachi	HD100179	
	MMI	PAL20R4	
		PAL20R4B	
	TI	PAL20R4	
		TIBPAL20R4-20	**(3217, 4320)**
SPL20RC6	Cypress	CUPLDC20G10	
	Fairchild	F100170	
	Hitachi	HD100170	
	MMI	PAL20R6	
		PAL20R6B	
	Signetics	**100170**	**(3020)**
	TI	PAL20R6	
		TIBPAL20R6-20	**(3217, 4320)**
SPL20RC8	Cypress	CUPLDC20G10	
	Fairchild	F100166	
	Hitachi	HD100166	
	MMI	PAL20R8	
		PAL20R8B	
	National	PAL20R8	
	TI	PAL20R8	
		TIBPAL20R8-20	**(3217, 4320)**

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Sprague Electric Company (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SPL20XC10	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X10	
		PALC22V10	
	National	DMPAL20X10	
		PAL20X10	
	TI	**TIBPAL20X10-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
SPL20XC4	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X4	
		PALC22V10	
	National	DMPAL20X4	
		PAL20X4	
	TI	**TIBPAL20X4-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
SPL20XC8	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X8	
		PALC22V10	
	National	DMPAL20X8	
		PAL20X8	
	TI	**TIBPAL20X8-25**	**(3217, 4320)**
		TIBPAL22V10	**(4320)**
SS54HC00	**GE/RCA**	**CD54HC00**	**(2631)**
	Motorola	MC54HC00	
	National	MM54HC00	
	Signetics	54HC00	
	TI	SN54HC00	
♦ SS54HC02	**GE/RCA**	**CD54HC02**	**(2631)**
	Motorola	MC54HC02	
	National	MM54HC02	
	Signetics	54HC02	
	TI	SN54HC02	
♦ SS54HC04	**GE/RCA**	**CD54HC04**	**(2631)**
	Motorola	MC54HC04	
	National	MM54HC04	
	Signetics	54HC04	
	TI	SN54HC04	
SS54HC137	**GE/RCA**	**CD54HC137**	**(2632)**
	Motorola	MC54HC137	
	National	MM54HC137	
	Sprague	SN54HC137	
	TI	SN54HC137	
SS54HC138	**GE/RCA**	**CD54HC138**	**(2632)**
	Motorola	MC54HC138	
	National	MM54HC138	
	Signetics	54HC138	
	TI	SN54HC138	
SS54HC139	**GE/RCA**	**CD54HC139**	**(2632)**
	Motorola	MC54HC139	
	National	MM54HC139	
	Signetics	54HC139	
	TI	SN54HC139	
♦ SS54HC147	**GE/RCA**	**CD54HC147**	**(2632)**
	Motorola	MC54HC147	
	National	MM54HC147	
	Signetics	54HC147	
♦ SS54HC157	**GE/RCA**	**CD54HC157**	**(2632)**
	Motorola	MC54HC157	
	Signetics	54HC157	
	TI	SN54HC157	
♦ SS54HC161	**GE/RCA**	**CD54HC161**	**(2632)**
	Motorola	MC54HC161	
	National	MM54HC161	
	Signetics	54HC161	
	TI	SN54HC161	
♦ SS54HC163	**GE/RCA**	**CD54HC163**	**(2632)**
	Motorola	MC54HC163	
	National	MM54HC163	
	Signetics	54HC163	
♦ SS54HC174	**GE/RCA**	**CD54HC174**	**(2631)**
	Motorola	MC54HC174	
	National	MM54HC174	
	Signetics	54HC174	
	TI	SN54HC174	
♦ SS54HC175	**GE/RCA**	**CD54HC175**	**(2631)**
	Motorola	MC54HC175	
	National	MM54HC175	
	Signetics	54HC175	
	TI	SN54HC175	
♦ SS54HC192	**GE/RCA**	**CD54HC192**	**(2632)**
	Motorola	MC54HC192	
	National	MM54HC192	
	Signetics	54HC192	
	TI	SN54HC192	
♦ SS54HC237	**GE/RCA**	**CD54HC237**	**(2632)**
	Motorola	MC54HC237	
	National	MM54HC237	
	Sprague	SN54HC237	
	TI	SN54HC237	
SS54HC238	**GE/RCA**	**CD54HC238**	**(2632)**
	Signetics	54HC238	
	TI	SN54HC238	
SS54HC240	**GE/RCA**	**CD54HC240**	**(2631)**
	Motorola	MC54HC240	
	National	MM54HC240	
	Signetics	54HC240	
	Supertex	SI54HC240	
	TI	SN54HC240	
SS54HC241	**GE/RCA**	**CD54HC241**	**(2631)**
	Motorola	MC54HC241	
	National	MM54HC241	
	Signetics	54HC241	
	Supertex	SI54HC241	
	TI	SN54HC241	
♦ SS54HC242	**GE/RCA**	**CD54HC242**	**(2631)**
	Motorola	MC54HC242	
	National	MM54HC242	
	Signetics	54HC242	
	TI	SN54HC242	
♦ SS54HC243	Fairchild	54HC243	
	GE/RCA	**CD54HC243**	**(2631)**
	Motorola	MC54HC243	
	National	MM54HC243	
	Signetics	54HC243	
	TI	SN54HC243	
SS54HC244	**GE/RCA**	**CD54HC244**	**(2631)**
	Motorola	MC54HC244	
	National	MM54HC244	
	Signetics	54HC244	
	Supertex	SI54HC244	
	TI	SN54HC244	
SS54HC245	**GE/RCA**	**CD54HC245**	**(2631)**
	Motorola	MC54HC245	
	National	MM54HC245	
	Signetics	54HC245	
	TI	SN54HC245	
♦ SS54HC251	**GE/RCA**	**CD54HC251**	**(2632)**
	Motorola	MC54HC251	
	National	MM54HC251	
	Signetics	54HC251	
	TI	SN54HC251	
♦ SS54HC253	**GE/RCA**	**CD54HC253**	**(2632)**
	Motorola	MC54HC253	
	National	MM54HC253	
	Signetics	54HC253	
	TI	SN54HC253	
♦ SS54HC27	**GE/RCA**	**CD54HC27**	**(2631)**
	Motorola	MC54HC27	
	National	MM54HC27	
	Signetics	54HC27	
	TI	SN54HC27	
♦ SS54HC273	CTI	54HC273	
	GE/RCA	**CD54HC273**	**(2631)**
	Motorola	MC54HC273	
	Signetics	54HC273	
	TI	SN54HC273	
♦ SS54HC354	**GE/RCA**	**CD54HC354**	**(2632)**
	Motorola	MC54HC354	
	National	MM54HC354	
	Signetics	54HC354	
♦ SS54HC365	**GE/RCA**	**CD54HC365**	**(2631)**
	Motorola	MC54HC365	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SS54HC365			(Cont'd)
	National	MM54HC365	
	Signetics	54HC365	
	TI	SN54HC365	
SS54HC373	**GE/RCA**	**CD54HC373**	**(2632)**
	Motorola	MC54HC373	
	National	MM54HC373	
	Signetics	54HC373	
	Supertex	SI54HC373	
	TI	SN54HC373	
SS54HC374	**GE/RCA**	**CD54HC374**	**(2631)**
	Motorola	MC54HC374	
	National	MM54HC374	
	Signetics	54HC374	
	Supertex	SI54HC374	
	TI	SN54HC374	
♦ SS54HC377	**GE/RCA**	**CD54HC377**	**(2631)**
	Motorola	MC54HC377	
	Signetics	54HC377	
	TI	SN54HC377	
SS54HC533	**GE/RCA**	**CD54HC533**	**(2632)**
	Motorola	MC54HC533	
	National	MM54HC533	
	Signetics	54HC533	
	TI	SN54HC533	
SS54HC534	**GE/RCA**	**CD54HC534**	**(2631)**
	Motorola	MC54HC534	
	National	MM54HC534	
	Signetics	54HC534	
	TI	SN54HC534	
SS54HC540	**GE/RCA**	**CD54HC540**	**(2631)**
	Motorola	MC54HC540	
	Signetics	54HC540	
	TI	SN54HC540	
SS54HC541	**GE/RCA**	**CD54HC541**	**(2631)**
	Signetics	54HC541	
	TI	SN54HC541	
SS54HC563	**GE/RCA**	**CD54HC563**	**(2632)**
	National	MM54HC563	
	Signetics	54HC563	
	TI	SN54HC563	
SS54HC564	**GE/RCA**	**CD54HC564**	**(2631)**
	Motorola	MC54HC564	
	National	MM54HC564	
	Signetics	54HC564	
	TI	SN54HC564	
SS54HC573	**GE/RCA**	**CD54HC573**	**(2632)**
	Motorola	MC54HC573	
	National	MM54HC573	
	Signetics	54HC573	
	TI	SN54HC573	
SS54HC574	**GE/RCA**	**CD54HC574**	**(2631)**
	Motorola	MC54HC574	
	National	MM54HC574	
	Signetics	54HC574	
	TI	SN54HC574	
SS54HC640	**GE/RCA**	**CD54HC640**	**(2631)**
	Motorola	MC54HC640	
	National	MM54HC640	
	Signetics	54HC640	
	TI	SN54HC640	
♦ SS54HC643	**GE/RCA**	**CD54HC643**	**(2631)**
	Motorola	MC54HC643	
	National	MM54HC643	
	Signetics	54HC643	
	TI	SN54HC643	
SS54HC645	National	MM54HC645	
	Signetics	54HC645	
	TI	SN54HC645	
♦ SS54HC646	**GE/RCA**	**CD54HC646**	**(2631)**
	Motorola	MC54HC646	
	National	MM54HC646	
	Signetics	54HC646	
♦ SS54HC648	**GE/RCA**	**CD54HC648**	**(2631)**
	Motorola	MC54HC648	
	National	MM54HC648	
	Signetics	54HC648	
♦ SS54HCT00	**GE/RCA**	**CD54HCT00**	**(2631)**
	Motorola	MC54HCT00	
	Signetics	54HCT00	
♦ SS54HCT02	**GE/RCA**	**CD54HCT02**	**(2631)**
	Signetics	54HCT02	
♦ SS54HCT04	Fairchild	54HCT04	
	GE/RCA	**CD54HCT04**	**(2631)**
	Motorola	MC54HCT04	
	National	MM54HCT04	
	Signetics	54HCT04	
	TI	SN54HCT04	
♦ SS54HCT137	CTI	54HCT137	
	GE/RCA	**CD54HCT137**	**(2632)**
	Supertex	54HCT137	
	TI	SN54HCT137	
SS54HCT138	CTI	54HCT138	
	GE/RCA	**CD54HCT138**	**(2632)**
	Mitel	MD54HCT138	
	Motorola	MC54HCT138	
	National	MM54HCT138	
	Signetics	54HCT138	
	Supertex	54HCT138	
	TI	SN54HCT138	
SS54HCT139	CTI	54HCT139	
	GE/RCA	**CD54HCT139**	**(2632)**
	Mitel	MD54HCT139	
	National	MM54HCT139	
	Signetics	54HCT139	
	Supertex	54HCT139	
♦ SS54HCT147	**GE/RCA**	**CD54HCT147**	**(2632)**
	Signetics	54HCT147	
♦ SS54HCT157	**GE/RCA**	**CD54HCT157**	**(2632)**
	Motorola	MC54HCT157	
	Signetics	54HCT157	
♦ SS54HCT161	**GE/RCA**	**CD54HCT161**	**(2632)**
	Signetics	54HCT161	
♦ SS54HCT163	**GE/RCA**	**CD54HCT163**	**(2632)**
	Signetics	54HCT163	
♦ SS54HCT174	**GE/RCA**	**CD54HCT174**	**(2631)**
	Signetics	54HCT174	
♦ SS54HCT175	**GE/RCA**	**CD54HCT175**	**(2631)**
	Signetics	54HCT175	
♦ SS54HCT192	**GE/RCA**	**CD54HCT192**	**(2632)**
	Signetics	54HCT192	
♦ SS54HCT237	CTI	54HCT237	
	GE/RCA	**CD54HCT237**	**(2632)**
	Supertex	54HCT237	
	TI	SN54HCT237	
SS54HCT238	CTI	54HCT238	
	GE/RCA	**CD54HCT238**	**(2632)**
	Signetics	54HCT238	
	TI	SN54HCT238	
♦ SS54HCT240	CTI	54HCT240	
	GE/RCA	**CD54HCT240**	**(2631)**
	Hitachi	HD54HCT240	
	Micrel	MC54HCT240	
		MIC54HCT240	
♦ SS54HCT240	Mitel	MD54HCT240	
	Motorola	MC54HCT240	
	National	MM54HCT240	
	Signetics	54HCT240	
	Supertex	SI54HCT240	
	TI	SN54HCT240	
SS54HCT241	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	
	Signetics	54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Sprague Electric Company (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SS54HCT241			(Cont'd)
	Vitelic	V51C256	
		V51C257	
♦ SS54HCT242	**GE/RCA**	**CD54HCT242**	**(2631)**
	Signetics	54HCT242	
♦ SS54HCT243	**GE/RCA**	**CD54HCT243**	**(2631)**
	Signetics	54HCT243	
SS54HCT244	CTI	54HCT244	
	GE/RCA	**CD54HCT244**	**(2631)**
	Micrel	MIC54HCT244	
	Mitel	MD54HCT244	
	Motorola	MC54HCT244	
	National	MM54HCT244	
	Signetics	54HCT244	
	Supertex	SI54HCT244	
	TI	SN54HCT244	
SS54HCT245	CTI	54HCT245	
	GE/RCA	**CD54HCT245**	**(2631)**
	Mitel	MD54HCT245	
	Motorola	MC54HCT245	
	National	MM54HCT245	
	Signetics	54HCT245	
	Supertex	54HCT245	
	TI	SN54HCT245	
♦ SS54HCT251	**GE/RCA**	**CD54HCT251**	**(2632)**
	Signetics	54HCT251	
♦ SS54HCT253	**GE/RCA**	**CD54HCT253**	**(2632)**
	Signetics	54HCT253	
♦ SS54HCT27	**GE/RCA**	**CD54HCT27**	**(2631)**
	Signetics	54HCT27	
♦ SS54HCT273	**GE/RCA**	**CD54HCT273**	**(2631)**
	Signetics	54HCT273	
♦ SS54HCT354	**GE/RCA**	**CD54HCT354**	**(2632)**
	Signetics	54HCT354	
♦ SS54HCT365	**GE/RCA**	**CD54HCT365**	**(2631)**
	Signetics	54HCT365	
SS54HCT373	CTI	54HCT373	
	GE/RCA	**CD54HCT373**	**(2632)**
	Micrel	MIC54HCT373	
	Mitel	MD54HCT373	
	Motorola	MC54HCT373	
	National	MM54HCT373	
	Signetics	54HCT373	
	Supertex	SI54HCT373	
	TI	SN54HCT373	
SS54HCT374	CTI	54HCT374	
	GE/RCA	54HCT374	
		CD54HCT374	**(2631)**
	Micrel	MIC54HCT374	
		MICHCT374	
	Mitel	MD54HCT374	
	Motorola	MC54HCT374	
	National	MM54HCT374	
	Supertex	SI54HCT374	
	TI	SN54HCT374	
♦ SS54HCT377	**GE/RCA**	**CD54HCT377**	**(2631)**
	Signetics	54HCT377	
SS54HCT533	CTI	54HCT533	
	GE/RCA	**CD54HCT533**	**(2632)**
	Motorola	MC54HCT533	
	Signetics	54HCT533	
SS54HCT534	CTI	54HCT534	
	GE/RCA	**CD54HCT534**	**(2631)**
	Motorola	MC54HCT534	
	Signetics	54HCT534	
SS54HCT540	CTI	54HCT540	
	GE/RCA	**CD54HCT540**	**(2631)**
	Mitel	MD54HCT540	
	Motorola	MC54HCT540	
	National	MM54HCT540	
	Signetics	54HCT540	
	Supertex	54HCT540	
	TI	SN54HCT540	
SS54HCT541	CTI	54HCT541	
	GE/RCA	**CD54HCT541**	**(2631)**
	Mitel	MD54HCT541	
	Motorola	MC54HCT541	
	National	MM54HCT541	
	Signetics	54HCT541	
	Supertex	54HCT541	
	TI	SN54HCT541	
SS54HCT563	CTI	54HCT563	
	GE/RCA	**CD54HCT563**	**(2632)**
	Signetics	54HCT563	
SS54HCT564	CTI	54HCT564	
	GE/RCA	**CD54HCT564**	**(2631)**
	Signetics	54HCT564	
SS54HCT573	CTI	54HCT573	
	GE/RCA	**CD54HCT573**	**(2632)**
	Mitel	MD54HCT573	
	Signetics	54HCT573	
SS54HCT574	CTI	54HCT574	
	GE/RCA	**CD54HCT574**	**(2631)**
	Mitel	MD54HCT574	
	Signetics	54HCT574	
SS54HCT640	**GE/RCA**	**CD54HCT640**	**(2631)**
	Motorola	MC54HCT640	
	Signetics	54HCT640	
♦ SS54HCT643	**GE/RCA**	**CD54HCT643**	**(2631)**
	Motorola	MC54HCT643	
	Signetics	54HCT643	
SS54HCT645	Signetics	54HCT645	
♦ SS54HCT646	**GE/RCA**	**CD54HCT646**	**(2631)**
	Signetics	54HCT646	
♦ SS54HCT648	**GE/RCA**	**CD54HCT648**	**(2631)**
	Signetics	54HCT648	
♦ SS74HC00	**GE/RCA**	**CD74HC00**	**(2631)**
	Hitachi	HD74HC00	
	Motorola	MC74HC00	
	National	MM74HC00	
	SGS	M74HC00	
	Signetics	**74HC00**	**(3003)**
	TI	SN74HC00	
	Toshiba	TC40H000	
♦ SS74HC02	**GE/RCA**	**CD74HC02**	**(2631)**
	Hitachi	HD74HC02	
	Motorola	MC74HC02	
	National	MM74HC02	
	SGS	M74HC02	
	Signetics	**74HC02**	**(3003)**
	TI	SN74HC02	
	Toshiba	TC40H002	
♦ SS74HC04	**GE/RCA**	**CD74HC04**	**(2631)**
	Hitachi	HD74HC04	
	Motorola	MC74HC04	
	National	MM74HC04	
	SGS	M74HC04	
	TI	SN74HC04	
	Toshiba	TC40H004	
♦ SS74HC137	Hitachi	HD74HC137	
	Motorola	MC74HC137	
	National	MM74HC137	
	SGS	M74HC137	
	Toshiba	**TC74HC137**	**(3307)**
SS74HC138	**GE/RCA**	**CD74HC138**	**(2632)**
	Hitachi	HD74HC138	
	Motorola	MC74HC138	
	National	MM74HC138	
	SGS	M74HC138	
	Signetics	**74HC138**	**(3003)**
	TI	SN74HC138	
SS74HC139	**GE/RCA**	**CD74HC139**	**(2632)**
	Hitachi	HD74HC139	
	National	MM74HC139	
	SGS	M74HC139	
	Signetics	**74HC139**	**(3003)**
	TI	SN74HC139	
	Toshiba	TC40H139	
♦ SS74HC147	**GE/RCA**	**CD74HC147**	**(2632)**
	Hitachi	HD74HC147	
	Motorola	MC74HC147	
	National	MM74HC147	
	SGS	M74HC147	
♦ SS74HC147			(Cont'd)
	Signetics	**74HC147**	**(3003)**
	TI	SN74HC147	
♦ SS74HC157	**GE/RCA**	**CD74HC157**	**(2632)**
	Hitachi	HD74HC157	
	Motorola	MC74HC157	
	National	MM74HC157	
	SGS	M74HC157	
	Signetics	**74HC157**	**(3003)**
	TI	SN74HC157	
	Toshiba	TC40H157	
♦ SS74HC161	**GE/RCA**	**CD74HC161**	**(2632)**
	Hitachi	HD74HC161	
	Motorola	MC74HC161	
	National	MM74HC161	
	SGS	M74HC161	
	Signetics	**74HC161**	**(3003)**
	TI	SN74HC161	
♦ SS74HC163	**GE/RCA**	**CD74HC163**	**(2632)**
	Hitachi	HD74HC163	
	Motorola	MC74HC163	
	National	MM74HC163	
	SGS	M74HC163	
	Signetics	**74HC163**	**(3003)**
	TI	SN74HC163	
♦ SS74HC174	**GE/RCA**	**CD74HC174**	**(2631)**
	Hitachi	HD74HC174	
	Motorola	MC74HC174	
	National	MM74HC174	
	SGS	M74HC174	
	Signetics	**74HC174**	**(3003)**
	TI	SN74HC174	
	Toshiba	TC40H174	
♦ SS74HC175	**GE/RCA**	**CD74HC175**	**(2631)**
	Hitachi	HD74HC175	
	Motorola	MC74HC175	
	National	MM74HC175	
	SGS	M74HC175	
	Signetics	**74HC175**	**(3003)**
	TI	SN74HC175	
	Toshiba	TC40H175	
♦ SS74HC192	**GE/RCA**	**CD74HC192**	**(2632)**
	Hitachi	HD74HC192	
	Motorola	MC74HC192	
	National	MM74HC192	
	SGS	M74HC192	
	Signetics	**74HC192**	**(3003)**
	TI	SN74HC192	
	Toshiba	TC40H192	
♦ SS74HC237	Motorola	MC74HC237	
	SGS	M74HC237	
	TI	SN74HC237	
	Toshiba	**TC74HC237**	**(3307)**
SS74HC238	**GE/RCA**	**CD74HC238**	**(2632)**
	SGS	M74HC238	
	Signetics	**74HC238**	**(3003)**
	TI	SN74HC238	
SS74HC240	**GE/RCA**	**CD74HC240**	**(2631)**
	Hitachi	HD74HC240	
	Mitel	MD74HC240	
	Motorola	MC74HC240	
	National	MM74HC240	
	SGS	M74HC240	
	Signetics	**74HC240**	**(3003)**
	Supertex	SI74HC240	
	TI	SN74HC240	
	Toshiba	TC40H240	
SS74HC241	**GE/RCA**	**CD74HC241**	**(2631)**
	Hitachi	HD74HC241	
	Mitel	MD74HC241	
	Motorola	MC74HC241	
	National	MM74HC241	
	SGS	M74HC241	
	Signetics	**74HC241**	**(3003)**
	Supertex	SI74HC241	
	TI	SN74HC241	
♦ SS74HC242	**GE/RCA**	**CD74HC242**	**(2631)**
	Hitachi	HD74HC242	
	Motorola	MC74HC242	
	National	MM74HC242	
	SGS	M74HC242	
	Signetics	**74HC242**	**(3003)**
	TI	SN74HC242	
♦ SS74HC243	**GE/RCA**	**CD74HC243**	**(2631)**
	Hitachi	HD74HC243	
	Motorola	MC74HC243	
	National	MM74HC243	
	SGS	M74HC243	
		M74HC245	
♦ SS74HC243	**Signetics**	**74HC243**	**(3003)**
	TI	SN74HC243	
SS74HC244	**GE/RCA**	**CD74HC244**	**(2631)**
	Hitachi	HD74HC244	
	Mitel	MD74HC244	
	Motorola	MC74HC244	
	National	MM74HC244	
	SGS	M74HC244	
	Signetics	**74HC244**	**(3003)**
	Supertex	SI74HC244	
	TI	SN74HC244	
SS74HC245	**GE/RCA**	**CD74HC245**	**(2631)**
	Hitachi	HD74HC245	
	Motorola	MC74HC245	
	National	MM74HC245	
	Signetics	**74HC245**	**(3003)**
	TI	SN74HC245	
♦ SS74HC251	**GE/RCA**	**CD74HC251**	**(2632)**
	Hitachi	HD74HC251	
	Motorola	MC74HC251	
	National	MM74HC251	
	SGS	M74HC251	
	Signetics	**74HC251**	**(3003)**
	TI	SN74HC251	
♦ SS74HC253	**GE/RCA**	**CD74HC253**	**(2632)**
	Hitachi	HD74HC253	
	Motorola	MC74HC253	
	National	MM74HC253	
	SGS	M74HC253	
	Signetics	**74HC253**	**(3003)**
	TI	SN74HC253	
♦ SS74HC27	**GE/RCA**	**CD74HC27**	**(2631)**
	Hitachi	HD74HC27	
	Motorola	MC74HC27	
	National	MM74HC27	
	SGS	M74HC27	
	Signetics	**74HC27**	**(3003)**
	TI	SN74HC27	
	Toshiba	TC40H027	
	Universal	US74HC27	
♦ SS74HC273	CTI	74HC273	
	GE/RCA	**CD74HC273**	**(2631)**
	Hitachi	HD74HC273	
	Motorola	MC74HC273	
	SGS	M74HC273	
	Signetics	**74HC273**	**(3003)**
	TI	SN74HC273	
♦ SS74HC354	**GE/RCA**	**CD74HC354**	**(2632)**
	Hitachi	HD74HC354	
	Motorola	MC74HC354	
	National	MM74HC354	
	SGS	M74HC354	
	Signetics	**74HC354**	**(3003)**
	TI	SN74HC354	
♦ SS74HC365	**GE/RCA**	**CD74HC365**	**(2631)**
	Hitachi	HD74HC365	
	Motorola	MC74HC365	
	National	MM74HC365	
	SGS	M74HC365	
	TI	SN74HC365	
SS74HC373	**GE/RCA**	**CD74HC373**	**(2632)**
	Hitachi	HD74HC373	
	Mitel	MD74HC373	
	Motorola	MC74HC373	
	National	MM74HC373	
	SGS	M74HC373	
	Signetics	**74HC373**	**(3003)**
	Supertex	SI74HC373	
	TI	SN74HC373	
SS74HC374	**GE/RCA**	**CD74HC374**	**(2631)**
	Hitachi	HD74HC374	
	Mitel	MD74HC374	
	Motorola	MC74HC374	
	National	MM74HC374	
	SGS	M74HC374	
	Signetics	**74HC374**	**(3003)**
	TI	SN74HC374	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Sprague Electric Company (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SS74HC377	**GE/RCA**	**CD74HC377**	**(2631)**
	Hitachi	HD74HC377	
	Motorola	MC74HC377	
	SGS	M74HC377	
	Signetics	**74HC377**	**(3003)**
	TI	SN74HC377	
SS74HC533	**GE/RCA**	**CD74HC533**	**(2632)**
	Hitachi	HD74HC533	
	Motorola	MC74HC533	
	National	MM74HC533	
	SGS	M74HC533	
	Signetics	**74HC533**	**(3003)**
	TI	SN74HC533	
SS74HC534	**GE/RCA**	**CD74HC534**	**(2631)**
	Hitachi	HD74HC534	
	Motorola	MC74HC534	
	National	MM74HC534	
	SGS	M74HC534	
	Signetics	**74HC534**	**(3003)**
	TI	SN74HC534	
SS74HC540	**GE/RCA**	**CD74HC540**	**(2631)**
	Hitachi	HD74HC540	
	Motorola	MC74HC540	
	SGS	M74HC540	
	Signetics	**74HC540**	**(3003)**
	TI	SN74HC540	
	Toshiba	**TC74HC540**	**(3307)**
SS74HC541	**GE/RCA**	**CD74HC541**	**(2631)**
	Hitachi	HD74HC541	
	Motorola	MC74HC541	
	SGS	M74HC541	
	Signetics	**74HC541**	**(3003)**
	TI	SN74HC541	
SS74HC563	**GE/RCA**	**CD74HC563**	**(2632)**
	Hitachi	HD74HC563	
	Motorola	MC74HC563	
	National	MM74HC563	
	SGS	M74HC563	
	Signetics	**74HC563**	**(3003)**
	TI	SN74HC563	
SS74HC564	**GE/RCA**	**CD74HC564**	**(2631)**
	Hitachi	HD74HC564	
	Motorola	MC74HC564	
	National	MM74HC564	
	SGS	M74HC564	
	Signetics	**74HC564**	**(3003)**
	TI	SN74HC564	
SS74HC573	**GE/RCA**	**CD74HC573**	**(2632)**
	Hitachi	HD74HC573	
	Motorola	MC74HC573	
	National	MM74HC573	
	SGS	M74HC573	
	Signetics	**74HC573**	**(3003)**
	TI	SN74HC573	
	Toshiba	**TC74HC573**	**(3307)**
SS74HC574	**GE/RCA**	**CD74HC574**	**(2631)**
	Hitachi	HD74HC574	
	Motorola	MC74HC574	
	National	MM74HC574	
	SGS	M74HC574	
	Signetics	**74HC574**	**(3003)**
	TI	SN74HC574	
SS74HC640	**GE/RCA**	**CD74HC640**	**(2631)**
	Hitachi	HD74HC640	
	Motorola	MC74HC640	
	National	MM74HC640	
	Signetics	**74HC640**	**(3003)**
	TI	SN74HC640	
SS74HC643	**GE/RCA**	**CD74HC643**	**(2631)**
	Hitachi	HD74HC643	
	Motorola	MC74HC643	
	National	MM74HC643	
	SGS	M74HC643	
	Signetics	**74HC643**	**(3003)**
	TI	SN74HC643	
SS74HC645	National	MM74HC645	
	TI	SN74HC645	
♦ SS74HC646	**GE/RCA**	**CD74HC646**	**(2631)**
	Hitachi	HD74HC646	
	Motorola	MC74HC646	
	National	MM74HC646	
	SGS	M74HC646	
	Signetics	**74HC646**	**(3003)**
	TI	SN74HC646	
♦ SS74HC648	**GE/RCA**	**CD74HC648**	**(2631)**
	Hitachi	HD74HC648	
	Motorola	MC74HC648	
	National	MM74HC648	
	Signetics	**74HC648**	**(3003)**
	TI	SN74HC648	
♦ SS74HCT00	**GE/RCA**	**CD74HCT00**	**(2631)**
	Motorola	MC74HCT00	
♦ SS74HCT02	**GE/RCA**	**CD74HCT02**	**(2631)**
	Signetics	**74HCT02**	**(3003)**
♦ SS74HCT04	**GE/RCA**	**CD74HCT04**	**(2631)**
	Motorola	MC74HCT04	
	SGS	M74HCT04	
♦ SS74HCT137	CTI	74HCT137	
	GE/RCA	**CD74HCT137**	**(2632)**
	Plessey	MV74HCT137	
	SGS	M74HCT137	
	Supertex	74HCT137	
	TI	SN74HCT137	
	Toshiba	TC74HCT137	
SS74HCT138	CTI	74HCT138	
	GE/RCA	**CD74HCT138**	**(2632)**
	Hitachi	HD74HCT138	
	Mitel	MD74HCT138	
	National	MM74HCT138	
	Plessey	MV74HCT138	
	SGS	M74HCT138	
	Signetics	**74HCT138**	**(3003)**
	TI	SN74HCT138	
	Toshiba	TC74HCT138	
SS74HCT139	CTI	74HCT139	
	GE/RCA	**CD74HCT139**	**(2632)**
		CD74HCT273	**(2631)**
	Signetics	**74HCT273**	**(3003)**
♦ SS74HCT147	**GE/RCA**	**CD74HCT147**	**(2632)**
	Signetics	**74HCT147**	**(3003)**
♦ SS74HCT157	**GE/RCA**	**CD74HCT157**	**(2632)**
	Signetics	**74HCT157**	**(3003)**
♦ SS74HCT161	**GE/RCA**	**CD74HCT161**	**(2632)**
	Signetics	**74HCT161**	**(3003)**
♦ SS74HCT163	**GE/RCA**	**CD74HCT163**	**(2632)**
	Signetics	**74HCT163**	**(3003)**
♦ SS74HCT174	**GE/RCA**	**CD74HCT174**	**(2631)**
	Signetics	**74HCT174**	**(3003)**
♦ SS74HCT175	**GE/RCA**	**CD74HCT175**	**(2631)**
	Signetics	**74HCT175**	**(3003)**
♦ SS74HCT192	**GE/RCA**	**CD74HCT192**	**(2632)**
	Signetics	**74HCT192**	**(3003)**
♦ SS74HCT237	**GE/RCA**	**CD74HCT237**	**(2632)**
	Plessey	MV74HCT237	
	Supertex	74HCT237	
	TI	SN74HCT237	
SS74HCT238	CTI	74HCT238	
	GE/RCA	**CD74HCT238**	**(2632)**
	Plessey	MV74HCT238	
	Signetics	**74HCT238**	**(3003)**
	TI	SN74HCT238	
SS74HCT240	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Supertex	SI74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
SS74HCT241	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Supertex	SI74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
♦ SS74HCT242	**GE/RCA**	**CD74HCT242**	**(2631)**
	Hitachi	HD74HCT242	
	Micrel	MIC74HCT242	
	Signetics	**74HCT242**	**(3003)**
	TI	SN74HCT242	
♦ SS74HCT243	**GE/RCA**	**CD74HCT243**	**(2631)**
	Hitachi	HD74HCT243	
	Micrel	MIC74HCT243	
	Signetics	**74HCT243**	**(3003)**
	TI	SN74HCT243	
SS74HCT244	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Supertex	SI74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
SS74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
♦ SS74HCT251	**GE/RCA**	**CD74HCT251**	**(2632)**
	Signetics	**74HCT251**	**(3003)**
♦ SS74HCT253	**GE/RCA**	**CD74HCT253**	**(2632)**
	Signetics	**74HCT253**	**(3003)**
♦ SS74HCT27	**GE/RCA**	**CD74HCT27**	**(2631)**
	Signetics	**74HCT27**	**(3003)**
♦ SS74HCT273	CTI	74HCT139	
	GE/RCA	**CD74HCT139**	**(2632)**
		CD74HCT273	**(2631)**
♦ SS74HCT273	**Signetics**	**74HCT273**	**(3003)**
	Sprague	SS74HCT139	
♦ SS74HCT354	**GE/RCA**	**CD74HCT354**	**(2632)**
	Signetics	**74HCT354**	**(3003)**
♦ SS74HCT365	**GE/RCA**	**CD74HCT365**	**(2631)**
	Signetics	**74HCT365**	**(3003)**
SS74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
SS74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
♦ SS74HCT377	**GE/RCA**	**CD74HCT377**	**(2631)**
	Signetics	**74HCT377**	**(3003)**
SS74HCT533	CTI	74HCT533	
	GE/RCA	**CD74HCT533**	**(2632)**
	Hitachi	HD74HCT533	
	Micrel	MIC74HCT533	
	Motorola	MC74HCT533	
	Plessey	MV74HCT533	
	Signetics	**74HCT533**	**(3003)**
	TI	SN74HCT533	
SS74HCT534	CTI	74HCT534	
	GE/RCA	**CD74HCT534**	**(2631)**
	Hitachi	HD74HCT534	
	Micrel	MIC74HCT534	
	Motorola	MC74HCT534	
	Plessey	MV74HCT534	
	Signetics	**74HCT534**	**(3003)**
	TI	SN74HCT534	
SS74HCT540	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
SS74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
SS74HCT563	CTI	74HCT563	
	GE/RCA	**CD74HCT563**	**(2632)**
	Hitachi	HD74HCT563	
	Micrel	MIC74HCT563	
	Plessey	MV74HCT563	
	SGS	M74HCT563	
	Signetics	**74HCT563**	**(3003)**
	TI	SN74HCT563	
	Toshiba	TC74HCT563	
SS74HCT564	CTI	74HCT564	
	GE/RCA	**CD74HCT564**	**(2631)**
	Hitachi	HD74HCT564	
	Micrel	MIC74HCT564	
	Plessey	MV74HCT564	
		MV74HCT573	
	SGS	M74HCT564	
	Signetics	**74HCT564**	**(3003)**
	TI	SN74HCT564	
SS74HCT573	CTI	74HCT573	
	GE/RCA	**CD74HCT573**	**(2632)**
	Hitachi	HD74HCT573	
	Micrel	MIC74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Signetics	**74HCT573**	**(3003)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Sprague Electric Company (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SS74HCT573			(Cont'd)
	Supertex	74HCT573	
	TI	SN74HCT573	
	Toshiba	TC74HCT573	
SS74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
SS74HCT640	**GE/RCA**	**CD74HCT640**	**(2631)**
	Hitachi	HD74HCT640	
	Motorola	MC74HCT640	
	SGS	M74HCT640	
	Signetics	**74HCT640**	**(3003)**
	TI	SN74HCT640	
	Toshiba	TC74HCT640	
♦ SS74HCT643	**GE/RCA**	**CD74HCT643**	**(2631)**
	Hitachi	HD74HCT643	
	Motorola	MC74HCT643	
	SGS	M74HCT643	
	Signetics	**74HCT643**	**(3003)**
	TI	SN74HCT643	
	Toshiba	TC74HCT643	
SS74HCT645	Signetics	75HCT645	
	TI	SN74HCT645	
♦ SS74HCT646	**GE/RCA**	**CD74HCT646**	**(2631)**
	Hitachi	HD74HCT646	
	Signetics	**74HCT646**	**(3003)**
	TI	SN74HCT646	
	Toshiba	TC74HCT646	
♦ SS74HCT648	**GE/RCA**	**CD74HCT648**	**(2631)**
	Hitachi	HD74HCT648	
	Signetics	**74HCT648**	**(3003)**
	TI	SN74HCT648	
	Toshiba	TC74HCT648	
UCN4801	AMD	29516/7	
		29516A/7	
	AD	ADSP1016/7A	
	Cypress	**CY7C516/7**	**(2569)**
	IDT	**IDT7216/7**	**(2806, 2832)**
	MMI	67C7016/7	
	Sprague	**UCN5801**	**(3203)**
	Weitek	WTL1016/7	
		WTL2516/7D	
♦ UCN4810	Gould	S4534	
	Sprague	**UCN5810**	**(3203, 3205)**
	TI	TL4810	
		UCN4810A	
♦ UCN4815	**Sprague**	**UCN5815**	**(3203)**
UCN5801	AMD	29516/7	
		29516A/7	
	AD	ADSP1016/7A	
	Cypress	**CY7C516/7**	**(2569)**
	IDT	**IDT7216/7**	**(2806, 2832)**
	MMI	67C7016/7	
	Sprague	UCN4801	
	Weitek	WTL1016/7	
		WTL2516/7D	
UCN5810	Gould	S4534	
	TI	TL4810	
		UCN4810A	
UCN5812	**Sprague**	**UCN5812A**	**(3203, 3205)**
	TI	TL5812	
UCN5812A	**Sprague**	**UCN5812**	**(3203, 3205)**
	TI	TL5812	
UCN5818	Gould	S4535	
	TI	SN75518	
UCN5851	**Intel**	**27513**	**(2863)**
		N27513	
		P27513	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
UCN5851			(Cont'd)
	Siliconix	SI9551	
	Supertex	HV5122	
	TI	SN75551	
UCN5852	Fujitsu	D51C68	
	Hitachi	D51C68	
	Siliconix	SI9552	
	Supertex	HV5222	
	TI	D51C68	
		SN75552	
UCN5853	Fujitsu	P51C68	
	Hitachi	P51C68	
	Intel	MB2168	
	Siliconix	SI9553	
	Supertex	HV5306	
	TI	P51C68	
		SN75553	
UCN5854	Fujitsu	D51C69	
	Hitachi	D51C69	
	Intel	TMS2168	
	Siliconix	SI9554	
	Supertex	HV5308	
	TI	D51C69	
		SN75554	
♦ UDN2541	TI	SN75437A	
UDN2841	Motorola	UDN2841	
♦ UDN2845	Motorola	UDN2845	
UDN2935	SiliconG	SG3635	
UDN2950	TI	SN75605	
UDN2981	Mitsubishi	M54563	
UDN3611	National	DS3611	
		LM3611	
	SiliconG	SG75471	
	TI	SN75471	
UDN3612	National	DS3612	
		DS3632	
		LM3612	
	SiliconG	SG75472	
	TI	SN75472	
UDN3613	National	DS3613	
		LM3613	
	TI	SN75473	
UDN3614	National	DS3614	
		LM3614	
	SiliconG	SG75474	
UDN5711	TI	SN75476	
		UDN5711	
	Toshiba	TD62476	
UDN5712	**Motorola**	**MC1472**	**(2954)**
	TI	UDN5712	
	Toshiba	TD62477	
UDN5713	TI	SN75478	
		UDN5713	
	Toshiba	TD62478	
UDN5714	**Motorola**	**MC1374**	**(2947)**
	TI	SN75479	
		UDN5714	
	Toshiba	TD62479	
UDN5722	TI	SN75477	
UDN6116	Dionics	DI508	
UDN6118	Dionics	DI513B	
		DI514	
		DI514B	
	Exar	XR6118	
	Motorola	MC3490	
	National	DM8887	
		DS8887	
	OKI	MSL912	
	Sanyo	LB1290	
	Signetics	NE594	
	Sprague	**UDN6128**	**(3203)**
	Toshiba	TD62781	
UDN6128	Exar	XR6128	
	Toshiba	TD62782	
UDN6144A	Dionics	DI502	
♦ UDN6148	Sprague	UDN6138	
UDN6164A	Dionics	DI507	
	Sprague	UHPD490	
		UHPD491	
♦ UDN6184	Dionics	DI513B	
		DI514	
		DI514B	
♦ UDN6184	Exar	XR6118	
	Motorola	MC3490	
	National	DM8887	
		DS8887	
♦ UDN6184	OKI	MSL912	
	Sanyo	LB1290	
	Signetics	NE594	
	Sprague	**UDN6118**	**(3203)**
		UDN6128	**(3203)**
♦ UDN6184	Toshiba	TD62781	

Manufacturer Device	Replacement Source	Device	IC Master Page
UDN6510	Dionics	DI510	
UDN7180	Dionics	DI300	
		DI302	
	Sprague	UDN7183	
		UDN7184	
		UDN7186	
UDN7183	Dionics	DI300	
		DI302	
	Sprague	UDN7180	
		UDN7184	
		UDN7186	
UDN7184	Dionics	DI300	
		DI302	
	Sprague	UDN7180	
		UDN7183	
		UDN7186	
UDN7186	Dionics	DI300	
		DI302	
	Sprague	UDN7180	
		UDN7183	
		UDN7184	
UDQ6118	Signetics	SA594	
UHD508	Fairchild	μA1489	
		μA212A	
		μA750	
	Motorola	**MC1489**	**(2952, 2958)**
	Signetics	MC1489	
	SiliconG	SG1489	
		SG508	
	TI	MC1489	
		SN55189	
		SN75189	
UHP480	Dionics	DI480	
UHP481	Dionics	DI481	
UHP482	Dionics	DI482	
♦ UHP495	Toshiba	TD62703	
UHPD490	Dionics	DI507	
	Sprague	UDN6164A	
		UHPD491	
UHPD491	Dionics	DI507	
	Sprague	UDN6164A	
		UHPD490	
UHPD495	Dionics	DI604	
	National	DM8891	
		DS8891	
ULN2001	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
ULN2002	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	ULS2002	
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
ULN2003	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ULN2003			(Cont'd)
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
ULN2004	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
ULN2005	Exar	XR2205	
	TI	ULN2005	
ULN2011	Exar	XR2011C	
	SiliconG	SG2011	
	Sprague	ULS2011	
ULN2012	SiliconG	SG2012	
	Sprague	ULS2012	
ULN2013	Exar	XR2013C	
	SiliconG	SG2013	
		SG3853	
	Sprague	ULS2013	
ULN2014	Exar	XR2014C	
	SiliconG	SG2014	
		SG3854	
	Sprague	ULS2014	
ULN2021	SiliconG	SG2021	
	Sprague	ULS2021	
	TI	SN75466	
ULN2022	SiliconG	SG2002	
		SG2022	
	Sprague	ULS2022	
	TI	SN75467	
ULN2023	Exar	XR2003	
	SiliconG	SG2023	
	Sprague	ULQ2003	
		ULS2023	
	TI	SN75468	
ULN2024	SiliconG	SG2024	
	Sprague	ULS2024	
	TI	SN75469	
ULN2025	TI	SN75465	
ULN2046	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Thomson	SFC2046	
ULN2054	Fairchild	μA3054	
	GE/RCA	**CA3054**	**(2647, 2649)**
	Motorola	**CA3054**	**(2948)**
	National	LM3054	
	Thomson	SFC2054	
ULN2064	Mitsubishi	M54532	
	SiliconG	SG2064	
ULN2065	IPS	IP2065	
	Motorola	ULN2065	
	SGS	ULN2065	
	SiliconG	SG2065	
	TI	SN75065	
		ULN2065	
	Toshiba	TD62064	
ULN2066	IPS	IP2066	
	Motorola	ULN2066	
	SGS	ULN2066	
	SiliconG	SG2066	
	TI	SN75066	
		ULN2066	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Sprague Electric Company (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
ULN2067	IPS	IP2067	
	Motorola	ULN2067	
	SGS	ULN2067	
	SiliconG	SG2067	
	TI	SN75067	
		ULN2067	
ULN2068	IPS	IP2068	
	Motorola	**ULN2068**	**(2954)**
	SGS	ULN2068	
	SiliconG	SG2068	
	TI	SN75068	
		ULN2068	
ULN2069	IPS	IP2069	
	Motorola	ULN2069	
	SGS	ULN2069	
	SiliconG	SG2069	
	TI	SN75069	
		ULN2069	
ULN2070	SGS	ULN2070	
	SiliconG	SG2070	
ULN2071	SGS	ULN2071	
	SiliconG	SG2071	
ULN2074	IPS	IP2074	
	Motorola	**ULN2074**	**(2954)**
	SGS	ULN2074	
	SiliconG	SG2074	
	TI	ULN2074	
	Toshiba	TD62074	
ULN2075	IPS	IP2075	
	Motorola	ULN2075	
	SGS	ULN2075	
	SiliconG	SG2075	
	TI	ULN2075	
ULN2076	SGS	ULN2076	
	SiliconG	SG2076	
ULN2081	**GE/RCA**	**CA3081**	**(2648, 2653)**
ULN2082	**GE/RCA**	**CA3082**	**(2648, 2653)**
ULN2083	**GE/RCA**	**CA3083**	**(2648)**
	SiliconG	SG3083	
		SG3183	
ULN2086	**GE/RCA**	**CA3086**	**(2648)**
	National	LM3086	
	Plessey	SL3086	
	Sanyo	LA3086	
	SiliconG	SG3086	
		SG3886	
	Thomson	SFC2086	
ULN2111	GE/RCA	CA2111A	
	National	LM2111	
		LM2113	
	Signetics	N5111	
	TI	SN76642	
		SN76643	
♦ ULN2113	GE/RCA	CA2111A	
	National	LM2111	
		LM2113	
♦ ULN2113	Signetics	N5111	
	Sprague	ULN2111	
	TI	SN76642	
		SN76643	
ULN2204	Telefunken	TDA1083	
		U417B	
	Toshiba	TA7613	
ULN2243	Sanyo	LA1150	
♦ ULN2244	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
♦ ULN2244	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
♦ ULN2244	TI	SN76111	
		SN76116	
♦ ULN2245	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
♦ ULN2245	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
♦ ULN2245	TI	SN76111	
		SN76116	
ULN2249	Hitachi	HA1199	
ULN2270	Fairchild	μA7327	
	GoldStar	**GL1170**	**(2699)**
	SGS	TDA1170	
	Telefunken	TDA1170	
ULN2280	National	LM380	
♦ ULN2281	National	LM384	
	Sprague	ULN3784	
ULN2290	SGS	TDA1190Z	
		TDA3190	
ULN2429	Cherry	CS166	
ULN2801	Mitsubishi	M54517	
	Sanyo	LB1275	
	Toshiba	TD62081	
		TD62105	
ULN2802	Hitachi	HM27128	
	Mitel	M5L27128	
	SGS	ULN2802	
	SiliconG	SG2802	
	Sprague	ULS2802	
	Toshiba	TD62082	
		TMN27128	
ULN2803	SGS	ULN2803	
	SiliconG	SG2803	
		SG2813	
	Sprague	ULS2803	
	Toshiba	TD62083	
ULN2804	**Motorola**	**ULN2804**	**(2954)**
	SGS	ULN2804	
	SiliconG	SG2804	
	Sprague	ULS2804	
	Toshiba	TD62084	
ULN2805	SGS	ULN2805	
	SiliconG	SG2805	
ULN2811	Ferranti	ZN504	
	SiliconG	SG2811	
	SiliconSys	SSI6072C	
	Sprague	ULS2811	
ULN2812	Ferranti	ZN512	
	SiliconG	SG2812	
	SiliconSys	SSI6074	
	Sprague	ULS2812	
ULN2813	Ferranti	ZN439	
	SiliconG	SG2813	
	SiliconSys	SSI6080	
ULN2814	Ferranti	ZN509	
	SiliconG	SG2814	
	SiliconSys	SSI6082	
ULN2815	Ferranti	ZN426	
	SiliconG	SG2815	
	SiliconSys	SSI6220	
ULN2821	SGS	L601	
	SiliconG	SG2821	
	Sprague	ULS2821	
ULN2822	SGS	L602	
	SiliconG	SG2822	
	Sprague	ULS2822	
ULN2823	SGS	L603	
	SiliconG	SG2823	
	Sprague	ULS2823	
ULN2824	SGS	L604	
	SiliconG	SG2824	
	Sprague	ULS2824	
ULN2825	Ferranti	ZN429	
	SiliconG	SG2825	
	SiliconSys	SSI6240	
ULN2950	National	DM54ALS1003	
		DM54AS168	
	SiliconG	SG2950	
ULN3054	Fairchild	μA3054	
	National	TP3054	
	Sierra	SC11301	
	Thomson	ETC5054	
ULN3701	National	LM2002	
		LM2002A	
		LM383	
		LM383A	
	Sprague	ULN3702	
ULN3702	National	LM2002	
		LM2002A	
		LM383	
		LM383A	
	Sprague	ULN3701	
ULN3703	Fairchild	TDA2003	
	Thomson	TDA2003	
ULN3751	SGS	L165	
	SiliconG	SG1173	
ULN3784	National	LM384	
ULN3793	AMD	29520/1	
		29520/1A	
	AD	AD3445	
	Hitachi	HA1393	
	Maxim	AD3554	
	MMI	29C520/1	
ULN3809	Fairchild	μA705	
	National	LM1800	
ULN3809			(Cont'd)
	Sanyo	LA705	
		LA758	
	Signetics	μA758	
	Sprague	ULN3812	
	TI	SN76111	
		SN76116	
♦ ULN3810	Exar	XR1310	
	National	LM1310	
	TI	SN76115	
	Toshiba	TA7157	
ULN3812	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
	Signetics	μA758	
	Sprague	ULN3809	
	TI	SN76111	
		SN76116	
ULN3820	AD	AD7628	
	Maxim	AD7628	
	Motorola	MC12020	
	Siemens	SO41P	
	Signetics	**NE604**	**(3103)**
		SA604	
ULN3859	**Motorola**	**MC3359**	**(2939, 2959)**
ULN3862	**Motorola**	**MC3361**	**(2939, 2959)**
	Samsung	MC3361	
	Signetics	MC3361	
♦ ULN3889	SGS	TCA3189	
♦ ULN8124	Fairchild	μA3524	
	LinearTech	SG3524	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
		SG3525A	
♦ ULN8124	TI	SG3525	
	Unitrode	**UC3524**	**(3323)**
		UC3524A	**(3323)**
♦ ULN8125	LinearTech	LT3525	
		SG3525	
♦ ULN8125	SiliconG	SG3525	
	Unitrode	**UC3525**	**(3323)**
♦ ULN8126	Cherry	CH1526	
	IPS	**IP1526**	**(2854, 2856)**
	LinearTech	LT1526	
	Motorola	**SG1526**	**(2931)**
		SG3526	**(2931)**
♦ ULN8126	SiliconG	SG1526	
		SG3525	
		SG3526	
♦ ULN8126	**Unitrode**	**UC1526**	**(3323)**
♦ ULN8127	SiliconG	SG3727	
♦ ULN8160	Ferranti	ZN1060	
	Signetics	**NE5560**	**(3129)**
♦ ULN8161	Cherry	CS5561	
		CS5561N	
♦ ULN8161	**IPS**	**IP5561C**	**(2854)**
	Signetics	**NE5561**	**(3130)**
ULN8168	**Signetics**	**NE5568**	**(3133)**
♦ ULN8194	Cherry	CS594	
	Fujitsu	MB3759	
	IPS	**IP494**	**(2854)**
	TI	TL494M	
		TL594M	
♦ ULN8194	**Unitrode**	**UC494A**	**(3323)**
♦ ULN8194A	Cherry	CS494M	
	Exar	XR494	
	IPS	**IP494A**	**(2854)**
	Motorola	**TL494**	**(2931)**
	TI	TL494M	
		TL594M	
♦ ULN8194A	**Unitrode**	**UC494A**	**(3323)**
♦ ULN8195	Cherry	CS595	
	Fujitsu	MB3760	
ULQ2001	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULS2001	
ULQ2001			(Cont'd)
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
ULQ2002	Exar	XR2002	
ULQ2003	Exar	XR2003	
	SiliconG	SG2023	
	Sprague	**ULN2023**	**(3203)**
		ULS2023	
	TI	SN75468	
ULQ2004	Exar	XR2004	
♦ ULQ8125	Cherry	CS2525	
	SiliconG	SG2525	
	TI	TL2525	
	Unitrode	**UC2525**	**(3323)**
♦ ULQ8126	Cherry	CH1526	
	IPS	**IP1526**	**(2854, 2856)**
	LinearTech	LT1526	
	Motorola	**SG1526**	**(2931)**
		SG3526	**(2931)**
♦ ULQ8126	SiliconG	SG1526	
		SG3525	
		SG3526	
♦ ULQ8126	**Unitrode**	**UC1526**	**(3323)**
♦ ULQ8127	Cherry	CS2526	
	IPS	**IP2526**	**(2856)**
	LinearTech	LT2526	
	Motorola	**SG2526**	**(2931)**
	SiliconG	SG2526	
		SG2527	
♦ ULQ8127	**Unitrode**	**UC2526**	**(3323)**
♦ ULQ8194	Fujitsu	MB3759	
	TI	TL494I	
		TL594I	
♦ ULQ8195	Fujitsu	MB3760	
	TI	TL495I	
		TL595I	
ULS2001	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
		TD62101	
ULS2002	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
	TI	ULN2002	
		ULN2002A	
	Toshiba	TD62002	
ULS2003	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	

(Continued)

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Sprague Electric Company (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
ULS2004	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
		TD62104	
ULS2011	Exar	XR2011C	
	SiliconG	SG2011	
	Sprague	**ULN2011**	**(3203)**
ULS2012	SiliconG	SG2012	
	Sprague	**ULN2012**	**(3203)**
ULS2013	Exar	XR2013C	
	SiliconG	SG2013	
		SG3853	
	Sprague	**ULN2013**	**(3203)**
ULS2014	Exar	XR2014C	
	SiliconG	SG2014	
		SG3854	
	Sprague	**ULN2014**	**(3203)**
ULS2021	SiliconG	SG2021	
	Sprague	**ULN2021**	**(3203)**
	TI	SN75466	
ULS2022	SiliconG	SG2002	
		SG2022	
	Sprague	**ULN2022**	**(3203)**
	TI	SN75467	
ULS2023	Exar	XR2003	
	SiliconG	SG2023	
	Sprague	**ULN2023**	**(3203)**
		ULQ2003	
	TI	SN75468	
ULS2024	SiliconG	SG2024	
	Sprague	**ULN2024**	**(3203)**
	TI	SN75469	
ULS2041	SiliconG	SG3854	
	Sprague	**ULN2014**	**(3203)**
ULS2045	Fairchild	UA3045	
	National	LM3045	
	Plessey	SL3086	
	Sanyo	LA3045	
	SGS	LM3045	
ULS2801	**Motorola**	**ULN2801**	**(2954)**
	SGS	ULN2801	
	SiliconG	SG2801	
	Toshiba	TD62081	
ULS2802	Hitachi	HM27128	
	Mitel	M5L27128	
	SGS	ULN2802	
	SiliconG	SG2802	
	Sprague	**ULN2802**	**(3203)**
	Toshiba	TD62082	
		TMN27128	
ULS2803	SGS	ULN2803	
	SiliconG	SG2803	
		SG2813	
	Sprague	**ULN2803**	**(3203)**
	Toshiba	TD62083	
ULS2804	**Motorola**	**ULN2804**	**(2954)**
	SGS	ULN2804	
	SiliconG	SG2804	
	Sprague	**ULN2804**	**(3203)**
	Toshiba	TD62084	
ULS2811	Ferranti	ZN504	
	SiliconG	SG2811	
	SiliconSys	SSI6072C	
	Sprague	**ULN2811**	**(3203)**
ULS2812	Ferranti	ZN512	
	SiliconG	SG2812	
	SiliconSys	SSI6074	
	Sprague	**ULN2812**	**(3203)**
ULS2821	SGS	L601	
	SiliconG	SG2821	
	Sprague	**ULN2821**	**(3203)**
ULS2822	SGS	L602	
	SiliconG	SG2822	
	Sprague	**ULN2822**	**(3203)**
ULS2823	SGS	L603	
	SiliconG	SG2823	
	Sprague	**ULN2823**	**(3203)**
ULS2824	SGS	L604	
	SiliconG	SG2824	
	Sprague	**ULN2824**	**(3203)**
♦ ULS8124	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	μA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	
♦ ULS8124	National	LM1524	
	SGS	SG1524	
		UC1524A	
♦ ULS8124	SiliconG	SG1524	
		SG1524B	
♦ ULS8124	**Unitrode**	**UC1524**	**(3323)**
		UC1524A	**(3323)**
♦ ULS8125	Cherry	CS1525	
	LinearTech	LT1525	
		SG1525	
♦ ULS8125	SiliconG	SG1525	
	TI	TL1525	
♦ ULS8127	Cherry	CS1527	
	LinearTech	LT1527	
		SG1527	
♦ ULS8127	SiliconG	1526	
		SG1527	
♦ ULS8127	TI	TL1527	
	Unitrode	**UC1527**	**(3323)**
♦ ULS8160	Signetics	SE5560	
♦ ULS8161	Cherry	CS5561S	
	IPS	**IP5561**	**(2854)**
	Signetics	SE5561	
♦ ULS8194	Cherry	CS494M	
	Exar	XR494	
	IPS	**IP494A**	**(2854)**
	Motorola	**TL494**	**(2931)**
	TI	TL494M	
		TL594M	
♦ ULS8194	**Unitrode**	**UC494A**	**(3323)**
♦ ULS8195	TI	TLS9SM	
	Unitrode	**UC495A**	**(3323)**
♦ US7438	**Sprague**	**UHP408**	**(3203)**
♦ US7439	**Sprague**	**UHP408**	**(3203)**

Standard Microsystems Corporation

Manufacturer Device	Replacement Source	Device	IC Master Page
AY2661	Motorola	MC2661	
		MC68661	**(2898)**
	Signetics	SCN2661	
	SMC	COM2661	
COM1671	Western	UC1671	
COM1863	TI	SN55113	
	Western	TR1863	
COM2651	National	INS2651	
	Signetics	SCN2651	
COM2661	Motorola	MC2661	
		MC68661	**(2898)**
	Signetics	SCN2661	
	SMC	AY2661	
COM5016	Western	BR1941	
COM7210	NEC	μPD7210	
COM8017	GIM	AY31015	
COM8116	GIM	AY5-8116	
	Western	WD1943	
COM8136	GIM	AY5-8136	
	Western	WD1945	
COM8251A	AMD	8251	
	Intel	P8251	
	National	INS8251	
	NEC	μPD8251A	
	OKI	MSM82C51A	
	S-MOS	SMC82C51AC	
	Toshiba	**TMP8251**	**(3306)**
COM9064	National	DP8340	
CRT9007	Stantel-STC	CRT9007	
CRT9212	Stantel-STC	CRT9212	
FDC1791	SMC	FDC9791	
	Western	FD1791	
FDC1792	Western	FD1792	
FDC1793	SMC	FDC9793	
	Western	FD1793	
FDC1794	Western	FD1794	
FDC1795	Siemens	SAB1795	
	SMC	FDC9795	
	Western	FD1795	
FDC1797	Siemens	SAB1797	
	SMC	FDC9797	
	Western	FD1797	
FDC7265	NEC	μPD7265	
FDC72C65	NEC	μPD72065	
		μPD7654A	
		μPD765A	
	Rockwell	**R6765A**	**(2990)**
	SMC	FDC765A	
	Zilog	Z765A	
FDC765	NEC	μPD765	
FDC765A	NEC	μPD72065	
		μPD7654A	
		μPD765A	
	Rockwell	**R6765A**	**(2990)**
	SMC	FDC72C65	
	Zilog	Z765A	
FDC9216	SMC	FDC92C36	
	UMC	UM9216	
	Western	FD9216	
		FD92C32	
FDC9229	Hitachi	HA17818	
	National	μA7818	
	VDA	V3829	
	VLSI Tech	V86	
FDC92C36	SMC	FDC9216	
	UMC	UM9216	
	Western	FD9216	
		FD92C32	
FDC9791	SMC	FDC1791	
	Western	FD1791	
FDC9793	SMC	FDC1793	
	Western	FD1793	
FDC9795	Siemens	SAB1795	
	SMC	FDC1795	
	Western	FD1795	
FDC9797	Siemens	SAB1797	
	SMC	FDC1797	
	Western	FD1797	
HDC7261	NEC	μPD7261A	
HDC9224	**Fujitsu**	**MBM100490**	**(2618)**
	Hitachi	HM100490	
KR9600	GIM	AY53600	
MPU800	National	NSC800	
MPU810	National	NSC810	
MPU830	National	NSC830	
MPU831	National	NSC831	
SR5015	Fairchild	3347	

Stantel-STC

Manufacturer Device	Replacement Source	Device	IC Master Page
CRT9007	SMC	CRT9007	
CRT9212	SMC	CRT9212	
STC2147	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
	NEC	μPD2147	
	OKI	MSM5104	
	Thomson	ET2147	
	Toshiba	TMM3150	
STC2167	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
STC2167			(Cont'd)
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
STC2168	AMD	AM2168	
		AM9968	
		AM99CL68	
	Fairchild	F1620	
	Fujitsu	MB8168	
		MB81C69	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HM6168	
		HM6268	
	Inmos	IMS1420	
		IMS1421	
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Matra-Harris	HM65682	
		HMI65769	
	Motorola	MCM1423	
		MCM6168	
		MCM6288	
	NEC	μPD4314	
	S-MOS	SRM2274	
	Sprague	SCM6168	
	TI	SMJ64C16	
	Thomson	**MK41H68**	**(3265)**
	Toshiba	TMM2068	
	Vitelic	V61C62	
		V61C68	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C69	**(3349)**
STC4027	Fairchild	M4027	
	Motorola	MCM4027	
STC4116	AMD	AM9016	
	Fairchild	F16K	
		F4116	
	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Toshiba	TMM416	
STC5089	Gould	S25089	
	ITT	SBA5089	
	National	TP5089	
	Samsung	MK5089	
	Sharp	LR4089	
	TI	TCM5089	
	Thomson	MK5089	
	UMC	UM5089	
STC6116	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Stantel-STC (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
STC6116	Mitsubishi		(Cont'd)
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
STC6166	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
STC6166	Sprague		(Cont'd)
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
STC6167	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
STC6264	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
STC6264	Toshiba		(Cont'd)
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
TEL5413	Marconi	MA5413	
TEL5453	Burr-Brown	3293	
	Marconi	MA5433	

Supertex Inc.

Manufacturer Device	Replacement Source	Device	IC Master Page
23SC32	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
23SC64	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
23SC64/A	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
54HCT137	CTI	54HCT137	
	GE/RCA	**CD54HCT137**	**(2632)**
	TI	SN54HCT137	
54HCT138	CTI	54HCT138	
	GE/RCA	**CD54HCT138**	**(2632)**
	Mitel	MD54HCT138	
	Motorola	MC54HCT138	
	National	MM54HCT138	
	Signetics	54HCT138	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
54HCT138			(Cont'd)
	Sprague	SS54HCT138	
	TI	SN54HCT138	
54HCT139	CTI	54HCT139	
	GE/RCA	**CD54HCT139**	**(2632)**
	Mitel	MD54HCT139	
	National	MM54HCT139	
	Signetics	54HCT139	
	Sprague	SS54HCT139	
54HCT237	CTI	54HCT237	
	GE/RCA	**CD54HCT237**	**(2632)**
	TI	SN54HCT237	
54HCT245	CTI	54HCT245	
	GE/RCA	**CD54HCT245**	**(2631)**
	Mitel	MD54HCT245	
	Motorola	MC54HCT245	
	National	MM54HCT245	
	Signetics	54HCT245	
	Sprague	SS54HCT245	
	TI	SN54HCT245	
54HCT540	CTI	54HCT540	
	GE/RCA	**CD54HCT540**	**(2631)**
	Mitel	MD54HCT540	
	Motorola	MC54HCT540	
	National	MM54HCT540	
	Signetics	54HCT540	
	Sprague	SS54HCT540	
	TI	SN54HCT540	
54HCT541	CTI	54HCT541	
	GE/RCA	**CD54HCT541**	**(2631)**
	Mitel	MD54HCT541	
	Motorola	MC54HCT541	
	National	MM54HCT541	
	Signetics	54HCT541	
	Sprague	SS54HCT541	
	TI	SN54HCT541	
74HCT137	CTI	74HCT137	
	GE/RCA	**CD74HCT137**	**(2632)**
	Plessey	MV74HCT137	
	SGS	M74HCT137	
	TI	SN74HCT137	
	Toshiba	TC74HCT137	
74HCT139	**GE/RCA**	**CD74HCT139**	**(2632)**
	IDT	IDT74HCT139	
	Mitel	MD74HCT139	
	National	MM74HCT139	
	Plessey	MV74HCT139	
	Signetics	**74HCT139**	**(3003)**
	Sprague	SS74HCT139	
74HCT237	**GE/RCA**	**CD74HCT237**	**(2632)**
	Plessey	MV74HCT237	
	TI	SN74HCT237	
74HCT240	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Supertex Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
74HCT541			(Cont'd)
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
74HCT573	CTI	74HCT573	
	GE/RCA	**CD74HCT573**	**(2632)**
	Hitachi	HD74HCT573	
	Micrel	MIC74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Signetics	**74HCT573**	**(3003)**
	Sprague	SS74HCT573	
	TI	SN74HCT573	
	Toshiba	TC74HCT573	
74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
AN0120	Siliconix	SN0120	
AN0130	Siliconix	SN0130	
AN0140	Siliconix	SN0140	
CM1310	AMD	AM92128	
	GIM	R09128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
CM2560	GIM	R09256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
CM3200	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	R03-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
CM3200			(Cont'd)
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
CM6400	Fairchild	F3568	
		F3569	
		F3570	
	GIM	R03-9365	
		R09864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
HV5122	**Intel**	**27513**	**(2863)**
		N27513	
		P27513	
	Siliconix	SI9551	
	Sprague	**UCN5851**	**(3203)**
	TI	SN75551	
HV5222	Fujitsu	D51C68	
	Hitachi	D51C68	
	Siliconix	SI9552	
	Sprague	**UCN5852**	**(3203)**
	TI	D51C68	
		SN75552	
HV5306	Fujitsu	P51C68	
	Hitachi	P51C68	
	Intel	MB2168	
	Siliconix	SI9553	
	Sprague	**UCN5853**	**(3203)**
	TI	P51C68	
		SN75553	
HV5308	Fujitsu	D51C69	
	Hitachi	D51C69	
	Intel	TMS2168	
	Siliconix	SI9554	
	Sprague	**UCN5854**	**(3203)**
	TI	D51C69	
		SN75554	
HV5406	Fairchild	μA7815	
	GoldStar	GL7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	
		LM340T-15	
		LM78L15	
	NEC	μPC78L15	
	Siliconix	SI9555	
	TI	SN75555	
		μA78L15	
	Toshiba	TA78L015	
HV5408	Siliconix	SI9556	
	TI	SN75556	
SI54HC240	**GE/RCA**	**CD54HC240**	**(2631)**
	Motorola	MC54HC240	
	National	MM54HC240	
	Signetics	54HC240	
	Sprague	SS54HC240	
	TI	SN54HC240	
SI54HC241	**GE/RCA**	**CD54HC241**	**(2631)**
	Motorola	MC54HC241	
	National	MM54HC241	
	Signetics	54HC241	
	Sprague	SS54HC241	
	TI	SN54HC241	
SI54HC244	**GE/RCA**	**CD54HC244**	**(2631)**
	Motorola	MC54HC244	
	National	MM54HC244	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SI54HC244			(Cont'd)
	Signetics	54HC244	
	Sprague	SS54HC244	
	TI	SN54HC244	
SI54HC373	**GE/RCA**	**CD54HC373**	**(2632)**
	Motorola	MC54HC373	
	National	MM54HC373	
	Signetics	54HC373	
	Sprague	SS54HC373	
	TI	SN54HC373	
SI54HC374	**GE/RCA**	**CD54HC374**	**(2631)**
	Motorola	MC54HC374	
	National	MM54HC374	
	Signetics	54HC374	
	Sprague	SS54HC374	
	TI	SN54HC374	
SI54HCT240	CTI	54HCT240	
	GE/RCA	**CD54HCT240**	**(2631)**
	Hitachi	HD54HCT240	
	Micrel	MC54HCT240	
		MIC54HCT240	
	Mitel	MD54HCT240	
	Motorola	MC54HCT240	
	National	MM54HCT240	
	Signetics	54HCT240	
	TI	SN54HCT240	
SI54HCT241	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	TI	SN54HCT241	
		TMS4256	**(3259)**
	Vitelic	V51C256	
		V51C257	
SI54HCT244	CTI	54HCT244	
	GE/RCA	**CD54HCT244**	**(2631)**
	Micrel	MIC54HCT244	
	Mitel	MD54HCT244	
	Motorola	MC54HCT244	
	National	MM54HCT244	
	Signetics	54HCT244	
	Sprague	SS54HCT244	
	TI	SN54HCT244	
SI54HCT373	CTI	54HCT373	
	GE/RCA	**CD54HCT373**	**(2632)**
	Micrel	MIC54HCT373	
	Mitel	MD54HCT373	
	Motorola	MC54HCT373	
	National	MM54HCT373	
	Signetics	54HCT373	
	Sprague	SS54HCT373	
	TI	SN54HCT373	
SI54HCT374	CTI	54HCT374	
	GE/RCA	54HCT374	
		CD54HCT374	**(2631)**
	Micrel	MIC54HCT374	
		MICHCT374	
	Mitel	MD54HCT374	
	Motorola	MC54HCT374	
	National	MM54HCT374	
	Sprague	SS54HCT374	
	TI	SN54HCT374	
SI74HC240	**GE/RCA**	**CD74HC240**	**(2631)**
	Hitachi	HD74HC240	
	Mitel	MD74HC240	
	Motorola	MC74HC240	
	National	MM74HC240	
	SGS	M74HC240	
	Signetics	**74HC240**	**(3003)**
	Sprague	SS74HC240	
	TI	SN74HC240	
	Toshiba	TC40H240	
SI74HC241	**GE/RCA**	**CD74HC241**	**(2631)**
	Hitachi	HD74HC241	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SI74HC241			(Cont'd)
	Mitel	MD74HC241	
	Motorola	MC74HC241	
	National	MM74HC241	
	SGS	M74HC241	
	Signetics	**74HC241**	**(3003)**
	Sprague	SS74HC241	
	TI	SN74HC241	
SI74HC244	**GE/RCA**	**CD74HC244**	**(2631)**
	Hitachi	HD74HC244	
	Mitel	MD74HC244	
	Motorola	MC74HC244	
	National	MM74HC244	
	SGS	M74HC244	
	Signetics	**74HC244**	**(3003)**
	Sprague	SS74HC244	
	TI	SN74HC244	
SI74HC373	**GE/RCA**	**CD74HC373**	**(2632)**
	Hitachi	HD74HC373	
	Mitel	MD74HC373	
	Motorola	MC74HC373	
	National	MM74HC373	
	SGS	M74HC373	
	Signetics	**74HC373**	**(3003)**
	Sprague	SS74HC373	
	TI	SN74HC373	
SI74HCT240	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Sprague	SS74HCT240	
	TI	SN74HCT240	
	Toshiba	TC74HCT240	
SI74HCT241	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Sprague	SS74HCT241	
	TI	SN74HCT241	
	Toshiba	TC74HCT241	
SI74HCT244	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Sprague	SS74HCT244	
	TI	SN74HCT244	
	Toshiba	TC74HCT244	
SI74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
SI74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Supertex Inc. (Cont'd)			
SI74HCT374			(Cont'd)
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
Teledyne Crystalonics			
CDR125	**GE/Intersil**	**D125**	**(2679)**
	Siliconix	D125	
LH0002	Elantec	EL2002	
		EL2003	**(2591, 2595)**
		ELH0002	**(2592)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	Hytek	HY0002	
	LinearTech	LT1010	
	Micra	MC0002	
		MC0021	
	National	LH0002	
	OEI	9910	
LH0032	AD	ADLH0032	
		HOS-060	
		HOS050	
		MOS050	
	Elantec	**ELH0032**	**(2593)**
	Harris	**HA2542**	**(2737, 2747, 2750)**
	Micra	MC0032	
	National	LH0032	
	TeledyneP	0032	
LH0033	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneP	1359	
♦ TSC7117	**GE/Intersil**	**ICL7117**	**(2666)**
	Maxim	ICL7117	
		ICL7126	
♦ TSC7117	TeledyneS	TSC7117	
♦ TSC7650	**Datel**	**AM7650**	**(2577)**
	LinearTech	LTC1052	
		LTC7652	
♦ TSC7650	Maxim	ICL7650	
		ICL7652	
♦ TSC7650	Siliconix	SI7135	
♦ TSC7660	**Datel**	**VI7660**	**(2577)**
	LinearTech	LTC1044	
	Maxim	ICL7660	
	Siliconix	SI7660	
	TI	LTC1044	
Teledyne Philbrick			
0032	AD	ADLH0032	
		HOS-060	
		HOS050	
		MOS050	
	Elantec	**ELH0032**	**(2593)**
	Harris	**HA2542**	**(2737, 2747, 2750)**
	Micra	MC0032	
	National	LH0032	
	TeledyneC	LH0032	
1319-01	AD	AD504	
1322	AD	AD509	
	Burr-Brown	**3507**	**(2535)**
	Harris	**HA2520**	**(2705, 2737, 2747)**
1323	Datel	AM470-2	
		AM470-2C	
		AM470-2M	
1326	**Elantec**	**EHA2600**	**(2594)**
	Harris	**HA2600**	**(2706, 2737, 2747)**
	Hitachi	HA17741	
	Motorola	**MC1556**	**(2921)**
		ML1556	
	Signetics	SE556	
	TI	MC1556	
		SE556M	
1332	**Datel**	**AM464-2**	**(2577)**
	Harris	HA2645	
	Motorola	**MC1436**	**(2920, 2958)**
	National	LM1436	
		LM343	
	SiliconG	SG1436	
		SG343	
1341	**Harris**	**HA2540**	**(2737, 2747, 2752)**
		HA5190	**(2707, 2737, 2747)**
1342	**Harris**	**HA2539**	**(2737, 2747, 2753)**
		HA5190	**(2707, 2737, 2747)**
	Signetics	**NE5539**	**(3087)**
1344	**Harris**	**HA5160**	**(2706, 2737, 2747)**
1345	Harris	HA5162	
1346	Burr-Brown	3527	
	Harris	**HA5180**	**(2706, 2737, 2747)**
	PMI	**OP43**	**(2970)**
1347	**Harris**	**HA5180A**	**(2706, 2737, 2747)**
1359	AD	ADLH0033	
		HOS100	
	Burr-Brown	**OPA633**	**(2534, 2536)**
	Elantec	**EL2004**	**(2591)**
		EL2005	**(2591)**
		EL2033	**(2592)**
		ELH0033	**(2593)**
		ELH2004	
		ELH2005	
	Harris	**HA5033**	**(2706, 2738, 2748)**
	Maxim	LH0033	
		MAX460	
	Micra	MC0033	
	MicroPwr	MP0033	
		MP0033C	
		MP2004	
	National	LH0033	
	OEI	AH001	
	TeledyneC	LH0033	
1424	AD	AD506	
		AD542	
	National	LH0022	
		LH740A	
		LM0052	
	TeledyneP	1425	
1425	AD	AD506	
		AD542	
	National	LH0022	
		LH740A	
		LM0052	
	TeledyneP	1424	
1430	**Datel**	**AM500**	**(2577)**
1437	HyComp	HC1437	
1468	**Apex**	**PA10**	**(2458)**
		PA12	**(2458)**
	Burr-Brown	**OPA511**	**(2536)**
		OPA512	**(2536)**
1480	**Apex**	**PA83**	**(2458)**
3554	**Burr-Brown**	**3554**	**(2535)**
4140	**Datel**	**ADCEK8B**	**(2575)**
	TeledyneS	8700	
4141	**Datel**	**ADCEK10B**	**(2575)**
	TeledyneS	8701	
4142	**Datel**	**ADCEK12B**	**(2575)**
	TeledyneS	8702	
4143	Datel	ADCET8B	
	TeledyneS	8703	
4144	Datel	ADCET10B	
	TeledyneS	8704	
4145	Datel	ADCET12B	
	TeledyneS	8705	
4146	Datel	ADCEK12D	
	TeledyneS	8750	
4551	AD	AD7507	
	Datel	**MVD807**	**(2577)**
		MXD807	**(2577)**
	GE/Intersil	**IH6216**	**(2681)**
	Harris	**HI507**	**(2703, 2738, 2748)**
	MicroPwr	MP7507	
	PMI	**MUX28**	**(2975)**
	Siliconix	DG507A	
4552	**Harris**	**HI506A**	**(2703, 2738, 2748)**
4553	GE/Intersil	ICL6109	
		IH6208	**(2681)**
	Harris	**HI509**	**(2703, 2738, 2748)**
	Maxim	DG509A	
		MAX359	
		MAX369	
	MicroPwr	MP7509DI	
	National	LF11509	
		LF13509	
	PMI	**MUX24**	**(2975)**
	Siliconix	DG509A	
4554	**Burr-Brown**	**MPC8S**	**(2543)**
	Datel	MUX808	
		MX808	**(2577)**
	GE/Intersil	ICL6108	
		IH6108	**(2681)**
	Harris	**HI508**	**(2703, 2738, 2748)**
	Maxim	DG508A	
		MAX358	
		MAX368	
	MicroPwr	MP7508DI	
	National	LF11508	
		LF13508	
	PMI	DMX88	
		MUX08	**(2975)**
		MUX88	**(2975)**
	Siliconix	DG508A	
4780	**Datel**	**VFQ1**	**(2577)**
	TeledyneS	9400	
4781	TeledyneS	9401	
4782	TeledyneS	9402	
4856	AD	AD583	
	Datel	**SHMIC-1**	**(2577)**
	Harris	HA2475	
	PMI	**SMP10**	**(2975)**
		SMP11	**(2975)**
4860	**AD**	**HTC0300A**	**(2423)**
	Intech	**SH376**	**(2799)**
	MicroNet	MN0300A	
		MN376	
		MN377	
4866	**Burr-Brown**	**SHC5320**	**(2543)**
	Datel	SHM20	
	Harris	**HA5320**	**(2737, 2747)**
TP4860	Burr-Brown	SCH804	
		SHC804	**(2543)**
	Datel	**SHM4860**	**(2577)**
	ILC-DDC	THA05203	
TP5214	AD	AD5214	
	Datel	**ADC5214**	**(2575)**
	HybridSys	MN5214	
	MicroNet	MN5214	
TP565A	AD	AD565A	
		AD565J	
	Fairchild	μA565	
	Harris	**HI565A**	**(2738, 2749)**
	Maxim	AD565A	
	MicroNet	MN565A	
TP574A	AD	AD574	
	Burr-Brown	**ADC574A**	**(2541)**
	Datel	**ADC574A**	**(2575)**
	Harris	**HI574**	**(2703, 2738, 2744)**
	HybridSys	HS574	
	Intech	**ADC574**	**(2799)**
	Maxim	MAX574	
	MCE	MCE574	
	MicroNet	MN574A	
	MicroPwr	MP574	
TP7541	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
	GE/Intersil	**AD7541**	**(2668)**
		AD7641	
TP7541			(Cont'd)
	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
TPDAC80	AD	ADDAC80	
		ADDAC85	
		DAC80	
	Burr-Brown	**DAC80**	**(2542)**
		DAC800	
		DAC85	**(2542)**
		DAC850	
	Datel	DAC85	
		DAC85C	
		DACHZ12B	**(2576)**
	Harris	HI5685	
	HybridSys	DAC9356	
		HSDAC80	
	MicroNet	DAC80	
		DAC85	
	National	DAC1280	
		DAC1285	
TSC7541	National	LM240-24	
	SiliconG	SG240-24	
TSC9491	AD	AD589	
	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM185-1	
		LM385-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM113	
		LM313	
	TeledyneS	9491	
		TSC9491	
Teledyne Semiconductor			
747	Fairchild	μA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	μPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	μA747	
	TI	μA747	
		μA747M	
♦ 7541	AD	AD7541	
	Burr-Brown	**DAC7541A**	**(2541)**
	Datel	DA867541	
		DAC7541	**(2576)**
♦ 7541	**GE/Intersil**	**AD7541**	**(2668)**
		AD7641	
♦ 7541	Harris	HI7541	
	HybridSys	DAC331	
		HS7541	
♦ 7541	Maxim	AD7541	
	MicroPwr	MP7541	
		MP7621	
♦ 7541	National	AD7521	
	PMI	**PM7541**	**(2974, 2976)**
	Siliconix	SI7541A	
	TeledyneP	TP7541	
8700	**Datel**	**ADCEK8B**	**(2575)**
	TeledyneP	4140	
8701	**Datel**	**ADCEK10B**	**(2575)**
	TeledyneP	4141	
8702	**Datel**	**ADCEK12B**	**(2575)**
	TeledyneP	4142	
8703	Datel	ADCET8B	
	TeledyneP	4143	
8704	Datel	ADCET10B	
	TeledyneP	4144	
8705	Datel	ADCET12B	
	TeledyneP	4145	
8750	Datel	ADCEK12D	
	TeledyneP	4146	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Teledyne Semiconductor (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
9400	**Datel**	**VFQ1**	**(2577)**
	TeledyneP	4780	
9401	TeledyneP	4781	
9402	TeledyneP	4782	
9491	AD	AD589	
	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM185-1	
		LM385-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM113	
		LM313	
	TeledyneP	TSC9491	
	TeledyneS	TSC9491	
♦ 9495	AD	ADREF02	
	Gennum	REF02	
	Maxim	REF02	
	MicroPwr	MPREF-02	
		MPREF02	
♦ 9495	**PMI**	**REF02**	**(2975)**
	Raytheon	REF02	
TSC14433	**Motorola**	**MC14433**	**(2937)**
	TeledyneS	TSC14433A	
TSC7106	**GE/Intersil**	**ICL7106**	**(2666)**
	Maxim	ICL7106	
TSC7107	**GE/Intersil**	**ICL7107**	**(2666)**
	Maxim	ICL7107	
TSC7109	**Datel**	**ADC7109**	**(2575)**
	GE/Intersil	**ICL7109**	**(2667)**
	Maxim	ICL7109	
TSC7116	**GE/Intersil**	**ICL7116**	**(2666)**
	Maxim	ICL7116	
TSC7117	**GE/Intersil**	**ICL7117**	**(2666)**
	Maxim	ICL7117	
		ICL7126	
TSC7126	**GE/Intersil**	**ICL7126**	**(2666)**
	Maxim	ICL7126	
	Samsung	KS7126	
TSC7135	**GE/Intersil**	**ICL7135**	**(2667)**
	Maxim	ICL7135	
	Siliconix	SI7135	
TSC7211	**GE/Intersil**	**ICM7211**	**(2671)**
	GE/RCA	CD22104	
	Hughes	H7211	
	Maxim	ICM7211	
TSC7212	**GE/Intersil**	**ICM7212**	**(2671)**
	Maxim	ICM7212	
TSC7541	**Burr-Brown**	**DAC7541A**	**(2541)**
	PMI	**PM7541**	**(2974, 2976)**
TSC9491	AD	AD589	
	Ferranti	ZN423	
	GE/Intersil	**ICL8069**	**(2676)**
	Gennum	LM185-1	
		LM385-1	
	LinearTech	LT1004	
	Maxim	ICL8069	
	MicroPwr	MP5010	
	National	LM113	
		LM313	
	TeledyneP	TSC9491	
	TeledyneS	9491	
TSC9495	AD	AD581	
		ADREF01	
	Gennum	REF01	
	LinearTech	LT1019-10	
		LTREF01	
		REF01A	
	Maxim	AD581	
		REF01	
	MicroPwr	MP5531	
		MPREF01	
	Motorola	MC1400AG10	
		MC1400AU10	
	PMI	**REF01**	**(2975)**
		REF01AZ	**(2975)**
	Raytheon	REF01	
TSC9496	AD	ADREF02	
	Gennum	REF02	
	LinearTech	LT1019-5	
		LTREF02	
		REF02E	
	Maxim	REF02	
	MicroPwr	MP5532	
		MPREF02	
	PMI	**REF02**	**(2975)**
		REF02EZ	**(2975)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TSC9496			(Cont'd)
	Raytheon	REF02	

Telefunken

TBA120	National	TBA120	
	Siemens	TBA120	
TBA530	Plessey	TBA530	
TBA540	Plessey	TBA540	
TBA560	Plessey	TBA560	
TDA1083	Sprague	ULN2204	
	Telefunken	U417B	
	Toshiba	TA7613	
TDA1170	Fairchild	μA7327	
	GoldStar	**GL1170**	**(2699)**
	SGS	TDA1170	
	Sprague	ULN2270	
♦ TDA2002	Hitachi	TDA2002	
	NEC	μPC2002	
	SGS	TDA2002	
TDA2003	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	TI	ULN2003	
	Toshiba	TD62003	
		TD62103	
TDA2030	MicroLinear	ML510	
	SGS	TDA2030	
	Thomson	TDA2030	
TDA2140	SGS	TDA2140	
TDA2151	SGS	TDA2151	
TDA2161	SGS	TDA2161	
TDA2591	National	TDA2591	
TDA2593	National	TDA2593	
	Plessey	TDA2593	
	Signetics	TDA2593	
	Thomson	TDA2593	
♦ TDA4420	SGS	TDA4420	
TDA800	Fairchild	TBA800	
	Plessey	TBA800	
	SGS	TBA800	
TDA810	Fairchild	TBA810	
	SGS	TBA810	
U2029	NCM	NCM6001Z	
U3870	Thomson	MK2870	
U417B	Sprague	ULN2204	
	Telefunken	TDA1083	
	Toshiba	TA7613	
μ684	**AD**	**AD7576**	**(2414)**
	Maxim	AD7576	
	Plessey	SP4632	
		SP4653	
	SEEQ	**8023**	**(2991)**
	Siemens	S062P	
		SDA2211	
		SDA4212	
	Telefunken	μ686BS	
μ686BS	**AD**	**AD7576**	**(2414)**
	Maxim	AD7576	
	Plessey	SP4632	
		SP4653	
	SEEQ	**8023**	**(2991)**
	Siemens	S062P	
		SDA2211	
		SDA4212	
	Telefunken	μ684	

Teltone Corporation

M-988	Aptek	AMS3101	
	Burr-Brown	3293	
M957	SiliconG	SM635	
	SiliconSys	SSI980	
	Unitrode	PIC635	
		PIC7510	
		PIC7528	
M980	SiliconG	SM636	
	SiliconSys	SSI981	
	Teltone	M981	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
M980			(Cont'd)
	Unitrode	PIC636	
		PIC7511	
		PIC7529	
M981	SiliconG	SM636	
	SiliconSys	SSI981	
	Teltone	M980	
	Unitrode	PIC636	
		PIC7511	
		PIC7529	
M982	SiliconG	SG55236	
	SiliconSys	SSI982	

Texas Instruments

2133	**AT&T**	**T7513**	**(2484)**
	Intel	2913	
		29C13	
	TI	TCM2913	
		TCM29C13	
♦ 24S81	AMD	27S185	
		AM2725S291	
		AM27S185	
♦ 24S81	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
♦ 24S81	**Raytheon**	**29651**	**(2985)**
		29651A	**(2985)**
♦ 24S81	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
24S81-55	AMD	27S185	
		AM2725S291	
		AM27S185	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**
	Signetics	N82S185	
	TI	28S165-35	
27C292	Cypress	7C291	
	EXEL	46C16	
	SEEQ	**36C16**	**(2991)**
	Waferscale	57C291	
28586-60	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28S86-60	
		JBP28L86A	
28L22	Fujitsu	MB7118	
	Signetics	N82LS135	
28S165-35	AMD	27S185	
		AM2725S291	
		AM27S185	
	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
	Raytheon	**29651**	**(2985)**
		29651A	**(2985)**
	Signetics	N82S185	
	TI	24S81-55	
♦ 28S166	AMD	27S191	
		AM27S191	
♦ 28S166	**Cypress**	**CY7C291**	**(2565)**
		CY7C292	**(2565)**

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 28S166	Fairchild	932511	
		93Z511	
♦ 28S166	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
♦ 28S166	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
♦ 28S166	Signetics	82S191	
		N82S191	
		N82S191A	
♦ 28S166	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
♦ 28S166	**Waferscale**	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
♦ 28S42	AMD	27S29	
	Fairchild	LF157A	
	National	545472	
		74S472	
		LF157A	
		LF351	
		LF353	
♦ 28S42	**PMI**	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF351	
		LF353	
♦ 28S86	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
♦ 28S86	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ 28S86	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ 28S86	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ 28S86	Signetics	N82S181	
		S82S181	
♦ 28S86	TI	28586-60	
		28S86-60	
		JBP28L86A	
28S86-60	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		JBP28L86A	
28SA030-25	AMD	AM27518	
		AM27LS18	
	National	74S188	
		DM54S188	
		DM7577	
	Signetics	N82S23	
		S82S23	
	TI	38SA030	
		38SA030-25	
34S162-25	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
34S162-25			(Cont'd)
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-45	
		JBP34L162	
		JBP34S162	
		TBP34S162	
34S162-45	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		JBP34L162	
		JBP34S162	
		TBP34S162	
34SA10-25	AMD	AM27S20	
	MMI	5300-1	
		53S140	
		63S140	
	National	DM54S387	
	Signetics	N82S126	
		S82S126	
38S165-35	AMD	AM27S191	
		AM27S291	
		AM27S291A	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
	Motorola	MCM76	
	National	87S291	
		DM878291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
38SA030	AMD	AM27S18	
		AM27LS18	
	National	74S188	
		DM54S188	
		DM7577	
	Signetics	N82S23	
		S82S23	
	TI	28SA030-25	
		38SA030-25	
38SA030-25	AMD	AM27S18	
		AM27LS18	
	National	74S188	
		DM54S188	
		DM7577	
	Signetics	N82S23	
		S82S23	
	TI	28SA030-25	
		38SA030	
54AC11000	Signetics	54AC11000	
54AC11002	Signetics	54AC11002	
54AC11004	Signetics	54AC11004	
54AC11008	Signetics	54AC11008	
54AC11010	Signetics	54AC11010	
54AC11011	Signetics	54AC11011	
54AC11020	Signetics	54AC11020	
54AC11027	Signetics	54AC11027	
54AC11030	Signetics	54AC11030	
54AC11032	Signetics	54AC11032	
54AC11034	Signetics	54AC11034	
54AC11074	Signetics	54AC11074	
54AC11109	Signetics	54AC11109	
54AC11112	Signetics	54AC11112	
54AC11151	Signetics	54AC11151	
54AC11153	Signetics	54AC11153	
54AC11157	Signetics	54AC11157	
54AC11158	Signetics	54AC11158	
54AC11161	Signetics	54AC11161	
54AC11163	Signetics	54AC11163	
54AC11169	Signetics	54AC11169	
54AC11174	Signetics	54AC11174	
54AC11175	Signetics	54AC11175	
54AC11191	Signetics	54AC11191	
54AC11194	Signetics	54AC11194	
54AC11240	Signetics	54AC11240	
54AC11241	Signetics	54AC11241	
54AC11244	Signetics	54AC11244	
54AC11245	Signetics	54AC11245	
54AC11251	Signetics	54AC11251	
54AC11253	Signetics	54AC11253	
54AC11257	Signetics	54AC11257	
54AC11258	Signetics	54AC11258	
54AC11280	Signetics	54AC11280	
54AC11352	Signetics	54AC11352	
54AC11353	Signetics	54AC11353	
54AC11373	Signetics	54AC11373	
54AC11374	Signetics	54AC11374	
54AC11533	Signetics	54AC11533	
54AC11534	Signetics	54AC11534	
54ACT11000	Signetics	54ACT11000	
54ACT11030	Signetics	54ACT11030	
54ACT11032	Signetics	54ACT11032	
54ACT11074	Signetics	54ACT11074	
54ACT11109	Signetics	54ACT11109	
54ACT11138	Signetics	54ACT11138	
54ACT11240	Signetics	54ACT11240	
54ACT11244	Signetics	54ACT11244	
54ACT11245	Signetics	54ACT11245	
54ACT11299	Signetics	54ACT11299	
54ACT11373	Signetics	54ACT11373	
54ACT11374	Signetics	54ACT11374	
54ALS1010A	National	DM54ALS1010	
	TI	SN54ALS1010	
74AC11000	Signetics	74AC11000	
74AC11002	Signetics	74AC11002	
74AC11004	Signetics	74AC11004	
74AC11008	Signetics	74AC11008	
74AC11010	Signetics	74AC11010	
74AC11011	Signetics	74AC11011	
74AC11012	Signetics	74AC11013	
74AC11014	Signetics	74AC11014	
74AC11020	Signetics	74AC11020	
74AC11021	Signetics	74AC11021	
74AC11027	Signetics	74AC11027	
74AC11030	Signetics	74AC11030	
74AC11032	Signetics	74AC11032	
74AC11034	Signetics	74AC11034	
74AC11074	Signetics	74AC11074	
		74AC11112	
	TI	**74AC11112**	**(3252)**
74AC11109	Signetics	74AC11109	
		74AC11132	
	TI	**74AC11132**	**(3252)**
74AC11112	Signetics	74AC11074	
		74AC11112	
	TI	**74AC11074**	**(3252)**
74AC11132	Signetics	74AC11109	
		74AC11132	
	TI	**74AC11109**	**(3252)**
74AC11138	Signetics	74AC11138	
74AC11139	Signetics	74AC11139	
74AC11151	Signetics	74AC11151	
74AC11153	Signetics	74AC11153	
74AC11157	Signetics	74AC11157	
74AC11158	Signetics	74AC11158	
74AC11160	Signetics	74AC11160	
74AC11161	Signetics	74AC11161	
74AC11162	Signetics	74AC11162	
74AC11163	Signetics	74AC11163	
74AC11168	Signetics	74AC11168	
74AC11169	Signetics	74AC11169	
74AC11174	Signetics	74AC11174	
74AC11175	Signetics	74AC11175	
74AC11181	Signetics	74AC11181	
74AC11190	Signetics	74AC11190	
74AC11191	Signetics	74AC11191	
74AC11192	Signetics	74AC11192	
74AC11193	Signetics	74AC11193	
74AC11194	Signetics	74AC11194	
74AC11238	Signetics	74AC11238	
74AC11239	Signetics	74AC11239	
74AC11240	Signetics	74AC11240	
74AC11241	Signetics	74AC11241	
74AC11244	Signetics	74AC11244	
74AC11245	Signetics	74AC11245	
74AC11251	Signetics	74AC11251	
74AC11253	Signetics	74AC11253	
74AC11257	Signetics	74AC11257	
74AC11258	Signetics	74AC11258	
74AC11269	Signetics	74AC11269	
74AC11280	Signetics	74AC11280	
74AC11286	Signetics	74AC11286	
74AC11299	Signetics	74AC11299	
74AC11323	Signetics	74AC11323	
74AC11352	Signetics	74AC11352	
74AC11353	Signetics	74AC11353	
74AC11373	Signetics	74AC11373	
74AC11374	Signetics	74AC11374	
74AC11378	Signetics	74AC11378	
74AC11379	Signetics	74AC11379	
74AC11520	Signetics	74AC11520	
74AC11521	Signetics	74AC11521	
74AC11533	Signetics	74AC11533	
74AC11534	Signetics	74AC11534	
74AC11568	Signetics	74AC11568	
74AC11569	Signetics	74AC11569	
74AC11579	Signetics	74AC11579	
74AC11620	Signetics	74AC11620	
74AC11623	Signetics	74AC11623	
74AC11640	Signetics	74AC11640	
74AC11643	Signetics	74AC11643	
74AC11646	Signetics	74AC11646	
74AC11648	Signetics	74AC11648	
74AC11651	Signetics	74AC11651	
74AC11657	Signetics	74AC11657	
74AC11818	Signetics	74AC11818	
74AC11819	Signetics	74AC11819	
74AC11821	Signetics	74AC11821	
74AC11822	Signetics	74AC11822	
74AC11823	Signetics	74AC11823	
74AC11824	Signetics	74AC11824	
74AC11825	Signetics	74AC11825	
74AC11826	Signetics	74AC11826	
74AC11827	Signetics	74AC11827	
74AC11828	Signetics	74AC11828	
74AC11833	Signetics	74AC11833	
74AC11834	Signetics	74AC11834	
74AC11841	Signetics	74AC11841	
74AC11842	Signetics	74AC11842	
74AC11843	Signetics	74AC11843	
74AC11844	Signetics	74AC11844	
74AC11845	Signetics	74AC11845	
74AC11846	Signetics	74AC11846	
74AC11853	Signetics	74AC11853	
74AC11854	Signetics	74AC11854	
74AC11861	Signetics	74AC11861	
74AC11862	Signetics	74AC11862	
74AC11863	Signetics	74AC11863	
74AC11864	Signetics	74AC11864	
74ACT11000	Signetics	74ACT11000	
74ACT11002	Signetics	74ACT11002	
74ACT11004	Signetics	74ACT11004	
74ACT11008	Signetics	74ACT11008	
74ACT11010	Signetics	74ACT11010	
74ACT11011	Signetics	74ACT11011	
74ACT11013	Signetics	74ACT11013	
74ACT11014	Signetics	74ACT11014	
74ACT11020	Signetics	74ACT11020	
74ACT11021	Signetics	74ACT11021	
74ACT11027	Signetics	74ACT11027	
74ACT11030	Signetics	74ACT11030	
74ACT11032	Signetics	74ACT11032	
74ACT11034	Signetics	74ACT11034	
74ACT11074	Signetics	74ACT11074	
74ACT11109	Signetics	74ACT11109	
74ACT11112	Signetics	74ACT11112	
74ACT11132	Signetics	74ACT11132	
74ACT11138	Signetics	74ACT11138	
74ACT11139	Signetics	74ACT11139	
74ACT11151	Signetics	74ACT11151	
74ACT11153	Signetics	74ACT11153	
74ACT11157	Signetics	74ACT11157	
74ACT11158	Signetics	74ACT11158	
74ACT11160	Signetics	74ACT11160	
74ACT11161	Signetics	74ACT11161	
74ACT11162	Signetics	74ACT11162	
74ACT11163	Signetics	74ACT11163	
74ACT11168	Signetics	74ACT11168	
74ACT11169	Signetics	74ACT11169	
74ACT11174	Signetics	74ACT11174	
74ACT11175	Signetics	74ACT11175	
74ACT11181	Signetics	74ACT11181	
74ACT11190	Signetics	74ACT11190	
74ACT11191	Signetics	74ACT11191	
74ACT11192	Signetics	74ACT11192	
74ACT11193	Signetics	74ACT11193	
74ACT11194	Signetics	74ACT11194	
74ACT11238	Signetics	74ACT11238	
74ACT11240	Signetics	74ACT11240	
74ACT11241	Signetics	74ACT11241	
74ACT11244	Signetics	74ACT11244	
74ACT11245	Signetics	74ACT11245	
74ACT11251	Signetics	74ACT11251	
74ACT11253	Signetics	74ACT11253	
74ACT11257	Signetics	74ACT11257	
74ACT11258	Signetics	74ACT11258	
74ACT11269	Signetics	74ACT11269	
74ACT11280	Signetics	74ACT11280	
74ACT11286	Signetics	74ACT11286	
74ACT11299	Signetics	74ACT11299	
74ACT11323	Signetics	74ACT11323	
74ACT11352	Signetics	74ACT11352	
74ACT11353	Signetics	74ACT11353	
74ACT11373	Signetics	74ACT11373	
74ACT11374	Signetics	74ACT11374	
74ACT11378	Signetics	74ACT11378	
74ACT11379	Signetics	74ACT11379	
74ACT11520	Signetics	74ACT11520	
74ACT11521	Signetics	74ACT11521	
74ACT11533	Signetics	74ACT11533	
74ACT11534	Signetics	74ACT11534	
74ACT11568	Signetics	74ACT11568	
74ACT11569	Signetics	74ACT11569	
74ACT11579	Signetics	74ACT11579	
74ACT11620	Signetics	74ACT11620	
74ACT11623	Signetics	74ACT11623	
74ACT11640	Signetics	74ACT11640	
74ACT11643	Signetics	74ACT11643	
74ACT11646	Signetics	74ACT11646	
74ACT11648	Signetics	74ACT11648	
74ACT11651	Signetics	74ACT11651	
74ACT11652	Signetics	74ACT11652	
74ACT11657	Signetics	74ACT11657	
74ACT11818	Signetics	74ACT11818	
74ACT11819	Signetics	74ACT11819	
74ACT11821	Signetics	74ACT11821	
74ACT11822	Signetics	74ACT11822	
74ACT11823	Signetics	74ACT11823	
74ACT11824	Signetics	74ACT11824	
74ACT11825	Signetics	74ACT11825	
74ACT11826	Signetics	74ACT11826	
74ACT11827	Signetics	74ACT11827	
74ACT11828	Signetics	74ACT11828	
74ACT11833	Signetics	74ACT11833	
74ACT11834	Signetics	74ACT11834	
74ACT11841	Signetics	74ACT11841	
74ACT11842	Signetics	74ACT11842	
74ACT11843	Signetics	74ACT11843	
74ACT11844	Signetics	74ACT11844	
74ACT11845	Signetics	74ACT11845	
74ACT11846	Signetics	74ACT11846	
74ACT11853	Signetics	74ACT11853	
74ACT11854	Signetics	74ACT11854	
74ACT11861	Signetics	74ACT11861	
74ACT11862	Signetics	74ACT11862	
74ACT11863	Signetics	74ACT11863	
74ACT11864	Signetics	74ACT11864	
74ACT11873	Signetics	74ACT11873	
74ACT11874	Signetics	74ACT11874	
74ACT11881	Signetics	74ACT11881	
74ACT11882	Signetics	74ACT11882	
74AS805B	National	DM74AS805A	
♦ 9615	Fairchild	96115	
	TI	SN55115	
		SN75115	
9636	Motorola	MC3488	
	TI	9636A	
ADC0801	National	ADC0801	
ADC0802	**GE/Intersil**	**ADC0802**	**(2667)**
	National	ADC0802	
ADC0803	Datel	ADC830	
	GE/Intersil	**ADC0803**	**(2667)**
	National	ADC0803	
	Signetics	ADC0803	
ADC0804	**GE/Intersil**	**ADC0804**	**(2667)**
	National	ADC0804	
ADC0805	National	ADC0805	
	Signetics	ADC0805	
	TI	ADC0824A	
ADC0808	National	ADC0808	
	Siemens	SDA0808	
	Thomson	MK0808	
ADC0809	MicroLinear	ADC0809	
	National	ADC0809	
ADC0824A	National	ADC0805	
	Signetics	ADC0805	
	TI	ADC0805	
ADC0831	Intel	ADC0831	
ADC0831A	MicroLinear	ADC0831	
	National	ADC0831	
ADC0832	Intel	ADC0832	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
ADC0832B	MicroLinear	ADC0832	
	National	ADC0832	
ADC0834A	MicroLinear	ADC0834	
	National	ADC0834	
ADC0838B	MicroLinear	ADC0838	
	Motorola	MC74F251	
	National	ADC0838	
AM26LS31	AMD	AM26LS31	
	Motorola	**AM26LS31**	**(2952)**
	National	DS26LS31	
AM26LS32A	AMD	AM26LS32	
	National	DS26LS32	
	TI	AM26LS32AM	
AM26LS32AM	AMD	AM26LS32	
	National	DS26LS32	
	TI	AM26LS32A	
AM26LS33A	AMD	AM26LS33	
	TI	AM26LS33AM	
AM26LS33AM	AMD	AM26LS33	
	TI	AM26LS33A	
AM26S10	AMD	AM26S10	
	Motorola	**MC26S10**	**(2952)**
	National	DS26S10	
AM26S11	AMD	AM26S11	
	National	DS26S11	
D51C68	Fujitsu	D51C68	
	Hitachi	D51C68	
	Siliconix	SI9552	
	Sprague	**UCN5852**	**(3203)**
	Supertex	HV5222	
	TI	SN75552	
D51C69	Fujitsu	D51C69	
	Hitachi	D51C69	
	Intel	TMS2168	
	Siliconix	SI9554	
	Sprague	**UCN5854**	**(3203)**
	Supertex	HV5308	
	TI	SN75554	
♦ DM54S472	Fujitsu	MBM7124	
	Signetics	S82S147	
DP8480	National	DP8480	
DP8481	National	DP8481	
DS3680	Fairchild	μA3680	
	National	DS3680	
♦ DS7831	National	DS7831	
♦ DS7832	National	DS7832	
HA17082	Exar	XR082	
	GE/RCA	**CA082**	**(2645)**
	SGS	TL082	
	TI	TL082	
	Thomson	LF353	
JANB55325	National	DM54ALS1000	
		DM54AS160	
	SiliconG	JAN55325	
JBP28L86A	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
	Raytheon	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
	Signetics	N82S181	
		S82S181	
	TI	28586-60	
		28S86-60	
JBP34L162	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34S162	
		TBP34S162	
JBP34S162	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		TBP34S162	
JBP38L165	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38S165	
	Waferscale	**WS57C191**	**(3376)**
JBP38S030	AMD	27S19	
		AM27LS19	
		AM27S19	
	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
JBP38S165	AMD	AM9716	
	Cypress	**CY7C291**	**(2565)**
	EXEL	XL46C16	
	Fairchild	932511M	
	Fujitsu	MB7138E	
	GE/Intersil	IM6716	
	Harris	**HM6616**	**(2768)**
	Hitachi	HN25169S	
	National	DM77S291	
		DM77S291A	
	OKI	M5M2716	
	Raytheon	**29681**	**(2985)**
		29681A	**(2985)**
		29683	**(2985)**
		29683A	**(2985)**
	Signetics	N82S191	
	TI	JBP38L165	
	Waferscale	**WS57C191**	**(3376)**
L293	**IPS**	**IP293**	**(2854)**
	Polycore	PL293	
	SGS	L293	
	TI	SN754410	
L293D	SGS	L283D	
L298	SGS	L298	
	TI	TLP298	
	Unitrode	**L298**	**(3326)**
LF347	National	LF347	
LF347B	National	LF347B	
LF351	AMD	27S29	
	Fairchild	LF157A	
	National	545472	
		74S472	
		LF157A	
		LF351	
		LF353	
LF351			(Cont'd)
	PMI	**PM157A**	**(2971)**
	Raytheon	29621	
	TI	LF353	
LF353	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF411	
	Thomson	LF155	
LF411	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
	Thomson	LF155	
LF411C	National	LF411C	
LF412	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	μPC1458	
		μPC251	
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	TL4558	
	Thomson	μA1458	
	Toshiba	TA75458	
		TA75558	
LF4126	National	LF4126	
LL081BC	**Motorola**	**MC34001A**	**(2920, 2959)**
♦ LM101	AMD	LM101	
	AD	AD101	
	Fairchild	μA101	
	GE/Intersil	AD101	
	LinearTech	LM101	
	Motorola	LM101	
	Raytheon	LM101	
	SGS	LS101	
	SiliconG	SG101	
	Thomson	LM101	
♦ LM101A	LinearTech	LM101A	
	National	LM101A	
LM106	National	LM106	
♦ LM107	AD	AD741S	
	Burr-Brown	3500	
	LinearTech	LM107	
	National	LH741A	
		LM107	
♦ LM107	PMI	PM741	
	Raytheon	RC741	
	SiliconG	SG107	
	Thomson	LM107	
♦ LM108	AD	AD108	
	Fairchild	μA108	
	GE/Intersil	LM108	
	LinearTech	LM108	
	MicroPwr	MP108	
	Motorola	**LM108**	**(2919)**
	National	LM108	
	PMI	**PM108**	**(2970)**
	SiliconSys	SSI108	
♦ LM111	AD	AD111	
	Fairchild	μA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
♦ LM111			(Cont'd)
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	TI	TL111	
	Thomson	LM111	
♦ LM117	Fairchild	μA117	
	IPS	**IP117**	**(2854)**
	LinearTech	LM117	
	MCE	MCELM117	
	Motorola	**LM117**	**(2929)**
	National	LM117	
	SiliconG	SG117	
	TI	TL117	
	Thomson	LM117	
	Unitrode	**UC117**	**(3325)**
♦ LM118	LinearTech	LM118	
	National	LM118	
LM124	Fairchild	μA124	
	GE/RCA	**CA124**	**(2645)**
	LinearTech	LT1014	
	National	LM124A	
	SiliconG	SG124	
♦ LM137	**IPS**	**IP137**	**(2854)**
	LinearTech	LM137	
		LT137	
♦ LM137	MCE	MCELM137	
	Motorola	**LM137**	**(2929)**
	National	LM137	
	SiliconG	SG137	
		SG137A	
♦ LM137	Thomson	LM137	
	Unitrode	**UC137**	**(3325)**
LM139	Fairchild	μA139	
	GE/RCA	**CA139**	**(2647)**
	Motorola	**LM139**	**(2925)**
	National	LM139	
	PMI	**CMP04**	**(2975)**
		PM139	**(2975)**
	Raytheon	LM139	
	Signetics	LM139	
LM139A	**GE/RCA**	**CA139A**	**(2647)**
	Motorola	**LM139A**	**(2925)**
	National	LM139A	
	PMI	**CMP04**	**(2975)**
		PM139A	**(2975)**
LM148	Exar	XR4741	
	Fairchild	μA148	
	Harris	**HA4741**	**(2706, 2737, 2747)**
		MA5104	
	LinearTech	LT1014	
	MicroPwr	MPOP11	
	Motorola	**LM148**	**(2924)**
		MC33174	**(2924, 2959)**
	National	LM148	
	PMI	**OP11**	**(2972)**
		OP421	**(2970, 2972)**
		PM148	
	Raytheon	LM148	
		RM4156	
		RM4158	
LM158	**GE/RCA**	**CA158A**	**(2645)**
	LinearTech	LT1013	
	Motorola	**LM158**	**(2922)**
	National	LM158A	
	Raytheon	RM4139	
	Signetics	LM158	
LM193	**Motorola**	**LM193**	**(2925)**
	National	LM193A	
	Signetics	LM193	
LM201	Fairchild	μA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
	National	LM748	
	SGS	LM748	
		LS148	
	SiliconG	SG201	
	TI	LM748	
		SN72748P	
		μA748	
	Thomson	LM201	
		LM748	
LM201A	National	LM201A	
LM207	Ferranti	ZNREF050	
	National	LM207	
	SiliconG	SG207	
	SiliconSys	SSI6505	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM211	AD	AD211	
	Motorola	**LM211**	**(2925, 2958)**
	National	LM211	
	PMI	PM211	
	Signetics	LM211	
	SiliconG	SG211	
	Thomson	LM211	
♦ LM217	**IPS**	**IP217**	**(2854)**
	MCE	MCELM217	
	Motorola	**LM217**	**(2929)**
	National	LM217	
	SGS	LM217	
	SiliconG	SG217	
		SG217A	
♦ LM217	Thomson	LM217	
	Unitrode	**UC217**	**(3325)**
LM218	National	LM218	
	Thomson	LM218	
LM224	Fairchild	μA224	
	Ferranti	ZN448	
	Motorola	**LM224**	**(2923, 2958)**
	SiliconG	SG224	
	SiliconSys	SSI6051	
♦ LM237	**IPS**	**IP237**	**(2854)**
	MCE	MCELM237	
	Motorola	**LM237**	**(2929)**
	National	LM237	
	SiliconG	SG237	
		SG237A	
♦ LM237	**Unitrode**	**UC237**	**(3325)**
LM239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
		μA239	
	GE/RCA	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
	Raytheon	LM239	
	Signetics	LM239	
	Thomson	LM239	
♦ LM248	National	LM248	
	Thomson	LM248	
LM258	**GE/RCA**	**CA258A**	**(2645)**
	Motorola	**LM258**	**(2922, 2958)**
	National	LM258A	
	PMI	**OP221**	**(2970, 2972)**
	Signetics	LM258	
	Thomson	LM258	
LM2900	Hitachi	HA17301	
	Motorola	**LM2900**	**(2924)**
		MC3301	**(2924)**
	National	LM2900	
		LM3301	
	Raytheon	LM2900	
		RC3301	
LM2901	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM3302	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
LM2902	Fairchild	μA2902	
		μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM2902	**Motorola**		**(Cont'd)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	μPC324	
		μPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
LM2903	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM311	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM2904	**GE/RCA**	**CA2904**	**(2645)**
	Motorola	**LM2904**	**(2922, 2958)**
	SGS	LM2904	
	Thomson	LM2904	
	Toshiba	TA75358	
LM293	**Motorola**	**LM293**	**(2925, 2958)**
	National	LM293	
	Signetics	LM293	
LM301	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301A	
		μA301	
	Thomson	LM301A	
	Toshiba	TA7506	
LM301A	AD	AD301	
	Fairchild	μA301	
		μA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	μPC157	
		μPC301	
		μPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		μA301	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM301A			(Cont'd)
	Thomson	LM301A	
	Toshiba	TA7506	
LM306	National	LM306	
LM307	Ferranti	ZNREF100	
	LinearTech	LM307	
	National	LM307	
	SiliconG	SG307	
	SiliconSys	SSI6507	
LM311	AD	AD311	
	Fairchild	μA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	μPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
	Thomson	LM2903	
		LM311	
	Toshiba	TA75393	
LM317	Fairchild	μA317	
	IPS	**IP317**	**(2854)**
	LinearTech	LM317	
	MCE	MCELM317	
	Motorola	**LM317**	**(2929)**
	National	LM317	
	SGS	LM317	
	SiliconG	SG317	
	Thomson	LM317	
		TDB0117	
	Unitrode	**UC317**	**(3325)**
LM318	AD	AD518	
	LinearTech	LM318	
	National	LM318	
	NEC	μPC318	
	Thomson	LM318	
♦ LM320-12	Fairchild	μA7912	
		μA79M12	
♦ LM320-12	GoldStar	GL7824	
		GL7912	**(2701)**
♦ LM320-12	Gould	μA7824	
		μA7912	
♦ LM320-12	**IPS**	**IP320-12**	**(2854)**
		IP7912	**(2854)**
♦ LM320-12	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
♦ LM320-12	NEC	μPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
♦ LM320-12	TI	μA7912	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
♦ LM320-5	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
♦ LM320-5	**Motorola**	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
♦ LM320-5	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
♦ LM320-5	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
LM324	Fairchild	μA2902	
		μA324	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM324			(Cont'd)
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	μPC324	
		μPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM2902	
	Thomson	LM2902	
	Toshiba	TA75902	
		TA79502	
LM324A	National	LM324A	
	Samsung	LM324A	
	SGS	LM324A	
LM3302	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	μA2901	
		μA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
	Thomson	LM2901	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
LM337	**IPS**	**IP337**	**(2854)**
	LinearTech	LM337	
		LT337	
	MCE	MCELM337	
	Motorola	**LM337**	**(2929)**
	National	LM337	
	SiliconG	SG337	
		SG337A	
	Thomson	LM337	
	Unitrode	**UC337**	**(3325)**
LM339	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	Thomson	LM339	
	Toshiba	TA75339	
LM340-15	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM340-15			(Cont'd)
	TI	μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
LM340-18	National	LM340-18	
	NEC	μPC7818	
	SiliconG	SG340-18	
		SG7818	
		SG7818A	
	Thomson	μA7818	
LM340-24	Fairchild	μA7824	
	GoldStar	GL7824	
	Gould	μA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	μPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
	TI	μA7824	
	Thomson	μA7824	
	Toshiba	TA78024	
LM348	Exar	XR4751	
	Fairchild	μA348	
	GE/Intersil	LM348	
	GoldStar	**GL348**	**(2700)**
	Motorola	**LM348**	**(2923, 2958)**
		MC4741	**(2923, 2959)**
	National	LM348	
	Raytheon	HA4741	
LM350	Fairchild	μA350	
		μA78HGA	
	IPS	**IP350**	**(2854)**
	LinearTech	LM350	
		LT350	
	Motorola	**LM350**	**(2929)**
	National	LM350	
	SiliconG	SG350	
	Unitrode	**UC350**	**(3325)**
LM358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
	Thomson	LM358	
	Toshiba	TA75358	
♦ LM388	National	LM388	
LM3900	**GE/RCA**	**CA3401**	**(2645)**
	Motorola	**MC3401**	**(2923, 2959)**
	National	LM3401	
		LM3900	
	Raytheon	LM3900	
		RC3401	
LM393	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	μPC393	
	Sanyo	LA6393	
	Signetics	LM393	
	Toshiba	TA75393	
LM748	Fairchild	μA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
	National	LM748	
	SGS	LM748	
		LS148	
	SiliconG	SG201	
	TI	LM201	
		SN72748P	
		μA748	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM748			(Cont'd)
	Thomson	LM201	
		LM748	
LP111	National	LP111	
LP211	National	LP211	
LP311	National	LP311	
LP339	National	LP339	
LP365	National	LP365	
LT1007	Gennum	LT1007	
LT1009	Gennum	LT1009	
LT1011	Gennum	LT1011	
LT1011A	Gennum	LT1011A	
LT1037	Gennum	LT1037	
LT1070	LinearTech	LT1070	
LTC1011	LinearTech	LT1011	
LTC1044	Gennum	LTC104A	
LTC7660	Gennum	LTC7660	
MC1445	Motorola	MC1445	
MC1456	Burr-Brown	3506	
	Datel	**AM460-2**	**(2577)**
	Elantec	**EHA2605**	**(2594)**
	Harris	HA2605	
	Motorola	**MC1456**	**(2920)**
MC1458	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
MC1488	TI	SN75188	
MC1489	Fairchild	μA1489	
		μA212A	
		μA750	
	Motorola	**MC1489**	**(2952, 2958)**
	Signetics	MC1489	
	SiliconG	SG1489	
		SG508	
	Sprague	UHD508	
	TI	SN55189	
		SN75189	
MC1556	**Elantec**	**EHA2600**	**(2594)**
	Harris	**HA2600**	**(2706, 2737, 2747)**
	Hitachi	HA17741	
	Motorola	**MC1556**	**(2921)**
		ML1556	
	Signetics	SE556	
	TeledyneP	1326	
	TI	SE556M	
MC3303	Fairchild	μA3303	
	Motorola	**MC3303**	**(2924)**
	SGS	MC3303	
	Signetics	MC3303	
MC3403	**Motorola**	**MC3403**	**(2923, 2959)**
	SGS	MC3403	
	Signetics	MC3404	
MC3423	**Motorola**	**MC3423**	**(2959)**
	SiliconG	SG3423	
MC3446	**Motorola**	**MC3446A**	**(2952)**
MC3450	**Motorola**	**MC3450**	**(2952, 2959)**
	National	DS3650	
MC3452	**Motorola**	**MC3452**	**(2952, 2959)**
	National	DS3652	
MC3453	**Motorola**	**MC3453**	**(2952)**
MC3471	Cherry	CS3471	
	Motorola	**MC3471**	**(2949)**
MC3481	**Motorola**	**MC3481**	**(2952)**
MC3486	**Motorola**	**MC3486**	**(2952, 2959)**
	National	DS3486	
	TI	SN75ALS195	
MC3487	**Motorola**	**MC3487**	**(2952, 2959)**
	National	DS3487	
	TI	SN75ALS194	

Manufacturer Device	Replacement Source	Device	IC Master Page
MC3503	Raytheon	RM4137	
	Signetics	MC3503	
MC3523	Motorola	MC3523	
	SiliconG	SG3523	
MC4558C	Signetics	NE4558	
NE5532	Exar	XR5532	
	Signetics	**NE5532**	**(3090)**
		NE5532A	**(3090)**
		SE5532	
		SE5532A	
	TI	NE5532A	
NE5532A	Exar	XR5532	
	Signetics	**NE5532**	**(3090)**
		NE5532A	**(3090)**
		SE5532	
		SE5532A	
	TI	NE5532	
NE5533	Exar	XR5533	
	Signetics	NE5533	
		NE5533A	
NE5534	AnalogSys	MA332	
	Datel	**AM453-2C**	**(2577)**
	Exar	XR5534	
	Raytheon	RC5534	
	Signetics	**NE5534**	**(3091)**
		NE5534A	**(3091)**
	SSM	SSM2134	
	TI	NE5534A	
NE5534A	AnalogSys	MA332	
	Datel	**AM453-2C**	**(2577)**
	Exar	XR5534	
	Raytheon	RC5534	
	Signetics	**NE5534**	**(3091)**
		NE5534A	**(3091)**
	SSM	SSM2134	
	TI	NE5534	
NE555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	Thomson	NE555	
	Toshiba	TA7555	
NE556	**GoldStar**	**GLC556**	**(2700)**
	National	LM556	
	NCR	NCR65C00-1	
	NEC	μPC556	
	Rockwell	**R65C10**	**(2988)**
NE592	Signetics	NE592	
NE592-8	GE/Intersil	NE592-8	
OP07D	AD	AD517	
		OP07	
	Fairchild	μA714	
	Harris	**HA5130**	**(2737, 2747)**
		HA5135	**(2706)**
	LinearTech	LT1001	
		OP07	
	Maxim	MAX400	
		OP07	
	Micra	MC0021	
	MicroPwr	MPOP07	
	Raytheon	**OP07**	**(2979)**
OP12	LinearTech	LT1012	
	MicroPwr	MPOP12	
	PMI	**OP12**	**(2970)**
OP27	Burr-Brown	OP27	
	LinearTech	OP27	
	Maxim	OP27	
	MicroPwr	MPOP27	
	PMI	**OP27**	**(2970)**
	Raytheon	**OP27**	**(2979)**
OP37	Burr-Brown	OP37	
	LinearTech	OP37	
	Maxim	OP37	
	MicroPwr	MP0P37	
		MPOP37	
	Raytheon	**OP37**	**(2979)**

Manufacturer Device	Replacement Source	Device	IC Master Page
P51C68	Fujitsu	P51C68	
	Hitachi	P51C68	
	Intel	MB2168	
	Siliconix	SI9553	
	Sprague	**UCN5853**	**(3203)**
	Supertex	HV5306	
	TI	SN75553	
P51C69	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
PAL16L825	AMD	AMPAL16L8A	
	Fairchild	16P8B2	
	MMI	87097	
	National	DMPAL16L8A	
		DMPAL16L8B2	
	TI	**TIBPAL16L8-30**	**(4320)**
PAL16L8A	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
PAL16L8A-2	AMD	AMPAL16L8L	
	MMI	PAL16L8A-2	
	Sprague	SPL16LC8	
PAL16R425	AMD	AMPAL16R4A	
	Fairchild	16RP4B2	
	MMI	PAL16R4B2	
	National	DMPAL16R42	
		DMPAL16R4A	
PAL16R4A	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	**TIBPAL16R4-15**	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
PAL16R4A-2	MMI	PAL16R4A-2	
PAL16R625	AMD	AMPAL16R6A	
	Fairchild	16RP6B2	
	MMI	PAL16R6B2	
	National	DMPAL16R6A	
	TI	TIBPAL16RS-30	
PAL16R6A	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Texas Instruments			**(Cont'd)**
PAL16R6A			(Cont'd)
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	**TIBPAL16R6-15**	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
PAL16R6A-2	AMD	AMPAL16R6L	
	MMI	PAL16R6A-2	
PAL16R825	AMD	AMPAL16R8A	
	Fairchild	16RP8B2	
	MMI	PAL16R8B2	
	National	DMPAL16R8A	
		DMPAL16R8B2	
PAL16R8A-2	AMD	AMPAL16R8L	
	MMI	PAL16R8A-2	
	Sprague	SPL16RC8	
PAL20L8	Cypress	CUPLDC20G10	
	Fairchild	F100165	
	Hitachi	HD100165	
		HM6288	
	MMI	PAL20L8	
		PAL20L8B	
	National	PAL20L8	
	Signetics	**100165**	**(3020)**
	Sprague	SPL20LC8	
	TI	**TIBPAL20L8-20**	**(3217, 4320)**
	Toshiba	TC55416	
PAL20R4	Cypress	CUPLDC20G10	
	Fairchild	F100179	
	Hitachi	HD100179	
	MMI	PAL20R4	
		PAL20R4B	
	Sprague	SPL20RC4	
	TI	**TIBPAL20R4-20**	**(3217, 4320)**
PAL20R6	Cypress	CUPLDC20G10	
	Fairchild	F100170	
	Hitachi	HD100170	
	MMI	PAL20R6	
		PAL20R6B	
	Signetics	**100170**	**(3020)**
	Sprague	SPL20RC6	
	TI	**TIBPAL20R6-20**	**(3217, 4320)**
PAL20R8	Cypress	CUPLDC20G10	
	Fairchild	F100166	
	Hitachi	HD100166	
	MMI	PAL20R8	
		PAL20R8B	
	National	PAL20R8	
	Sprague	SPL20RC8	
	TI	**TIBPAL20R8-20**	**(3217, 4320)**
RC4136	CMD Micro	G65SC51	
	GoldStar	**GL4559**	**(2700)**
	Raytheon	RC4136	
RC4558	Exar	XR4558	
	Fairchild	µA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	µPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
RC4559	Raytheon	RC4559	
RM4136	Exar	XR4136M	
	Raytheon	RM4136	
RM4558	Exar	XR4558	
	Fairchild	µA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	µPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
RV4136	Raytheon	RV4136	
SE5534	TI	SE5534A	
SE5534A	TI	SE5534	
SE555	Exar	XR555M	
	GE/Intersil	SE555	
	Motorola	MC1555	
	Raytheon	RM555	
	Signetics	SE555	
	TI	SE555M	
SE555M	Exar	XR555M	
	GE/Intersil	SE555	
	Motorola	MC1555	
	Raytheon	RM555	
	Signetics	SE555	
	TI	SE555	
SE556M	**Elantec**	**EHA2600**	**(2594)**
	Harris	**HA2600**	**(2706, 2737, 2747)**
	Hitachi	HA17741	
	Motorola	**MC1556**	**(2921)**
		ML1556	
	Signetics	SE556	
	TeledyneP	1326	
	TI	MC1556	
SE592	GE/Intersil	SE592	
	Motorola	SE592	
	Signetics	SE592	
♦ SG1524	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	µA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	
♦ SG1524	National	LM1524	
	SGS	SG1524	
		UC1524A	
♦ SG1524	SiliconG	SG1524	
		SG1524B	
♦ SG1524	**Unitrode**	**UC1524**	**(3323)**
		UC1524A	**(3323)**
♦ SG1525A	Cherry	CS1525A	
	Exar	**XR1525A**	**(2607)**
	IPS	**IP1525A**	**(2854)**
	LinearTech	LT1525A	
	Motorola	**SG1525A**	**(2931)**
	SGS	SG1524A	
	SiliconG	SG1525A	
	Siliconix	PWM125	
	Unitrode	**UC1525**	**(3323)**
		UC1525A	**(3323)**
♦ SG1527A	Cherry	CS1527A	
	IPS	**IP1527A**	**(2854)**
	LinearTech	LT1527A	
	Motorola	**SG1527A**	**(2931)**
	SGS	SG1527A	
	SiliconG	SG1527A	
	Siliconix	PWM27	
	Unitrode	**UC1527A**	**(3323)**
SG2524	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	µA2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
		SG2524B	
SG2524			(Cont'd)
	Unitrode	**UC2524**	**(3323)**
		UC2524A	**(3323)**
SG2525A	Cherry	CS2525A	
	Exar	**XR2525A**	**(2607)**
	IPS	IP2525A	
	LinearTech	LT2525A	
	Motorola	**SG2525A**	**(2931)**
	SiliconG	SG2525A	
	Siliconix	PWM25B	
	Unitrode	**UC2525A**	**(3323)**
SG2527A	Cherry	CS2527A	
	Exar	**XR2527A**	**(2607)**
	IPS	IP2527A	
	LinearTech	LT2527A	
	Motorola	**SG2527A**	**(2931)**
	SiliconG	SG2527A	
	Unitrode	**UC2527A**	**(3323)**
SG3524	Cherry	CS3524	
	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	SG3524	
		UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
	Toshiba	TA76524	
	Unitrode	**UC3524A**	**(3323)**
SG3525	Fairchild	µA3524	
	LinearTech	SG3524	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
		SG3525A	
	Unitrode	**UC3524**	**(3323)**
		UC3524A	**(3323)**
SG3525A	Cherry	CS3525A	
	Exar	**XR3525A**	**(2607)**
	IPS	**IP3525A**	**(2854)**
	LinearTech	LT3525A	
	Motorola	**SG3525A**	**(2931)**
	RIFA	RL3525A	
	SGS	SG3525A	
	SiliconG	SG3525A	
	Siliconix	PWM25	
	Unitrode	**UC3525A**	**(3323)**
SG3527	LinearTech	LT3527	
		SG3527	
	SiliconG	SG3527	
		SG3527A	
	Unitrode	**UC3527A**	**(3323)**
SG3527A	Cherry	CS3527	
		CS3527A	
	Exar	**XR3527A**	**(2607)**
	IPS	**IP3527**	**(2854)**
	LinearTech	LT3527A	
	Motorola	**SG3527A**	**(2931)**
	SGS	SG3527A	
	SiliconG	SG3527A	
SM4164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	µPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	TMS4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
SMJ27C128	AMD	AM27128	
	Intel	M27128	
		M27C128	
SMJ27C128			(Cont'd)
	SEEQ	M27128	
	VLSI Tech	VT27C128	
	Waferscale	**WS27C128**	**(3376)**
SMJ27C256	AMD	AM27256	
		AM27C256	
	Intel	27256	
		27C256	**(2861)**
		M27256	
		M27C256	
	National	NMC27C256	
	SEEQ	**27C256**	**(2991)**
	SGS	M27256	
	VLSI Tech	VT27C256	
	Waferscale	**WS27C256**	**(3376)**
SMJ32010	AMD	AM90C256	
	GIM	WS57C256	
	MicronTech	MT1256	
	Motorola	MCM6256	
		MCM6257	
		MCM64256	
	TI	**SMJ4256**	**(3220)**
	Thomson	MK45H56	
	Vitelic	V51C256	
		V51C257	
SMJ4164	Inmos	IMS2600M	
SMJ4256	AMD	AM90C256	
	GIM	WS57C256	
	MicronTech	MT1256	
	Motorola	MCM6256	
		MCM6257	
		MCM64256	
	TI	SMJ32010	
	Thomson	MK45H56	
	Vitelic	V51C256	
		V51C257	
SMJ4469	Fujitsu	MB81464	
	Hitachi	HM50464	
		HM50465	
	Inmos	IMS2820	
	MicronTech	MT4064	
	Mitsubishi	M5M4464	
		MSM4464P	
	NEC	µPD41464	
	OKI	MSM41464	
	Samsung	KM41464	
	TI	**TMS4464**	**(3259)**
	Toshiba	TMM41464	
♦ SMJ5517	AMD	AM9128	
		AM9218	
♦ SMJ5517	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ SMJ5517	Fujitsu	MB8128	
		MB8416	
♦ SMJ5517	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ SMJ5517	Hitachi	HM6116	
		HM6166	
♦ SMJ5517	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ SMJ5517	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ SMJ5517	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ SMJ5517	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ SMJ5517	National	MMC2116	
	NEC	µPD4016	
		µPD446	
♦ SMJ5517	OKI	MSM2128	
		MSM5126	
		MSM5127	

(Continued)

(Continued)

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SMJ5517	OKI		(Cont'd)
		MSM5128	
		MSM5129	
♦ SMJ5517	Performance S-MOS	P4C116 6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ SMJ5517	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ SMJ5517	Stantel-STC	STC6116	
		STC6166	
♦ SMJ5517	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ SMJ5517	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ SMJ5517	Vitelic	V61C16	
		V62C16	
SMJ61CD16	Cypress	AM2167	
	CY7C167		**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
SMJ61CD64	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
		TC5562	
SMJ64C16	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SMJ64C16			(Cont'd)
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
SMJ64C64	**Cypress**	**CY7C164**	**(2562)**
	Fairchild	F100181	
	Hitachi	HD100181	
	IDT	**IDT7188**	**(2802)**
	Signetics	**100181**	**(3020)**
	Vitelic	V61C62	
	VLSI Tech	CT64KS4	
SMJ68CE16	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SMJ68CE16			(Cont'd)
	Vitelic	V61C16	
		V62C16	
SMJ68CE64	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
SMJ69CE72	AMD	AM99C89	
SN10144	Fairchild	F10144	
	Motorola	**MCM10144**	**(2918)**
SN10147	**Motorola**	**MCM10147**	**(2918)**
SN10148	Hitachi	HD10148	
	Motorola	**MCM10148**	**(2918)**
SN10164	Hitachi	HD10164	
	Motorola	MC10164	
	Signetics	**10164**	**(3021)**
SN10174	Hitachi	HD10174	
	Motorola	MC10174	
	Signetics	**10174**	**(3021)**
SN5400	Fairchild	5400	
	National	DM5400	
	Signetics	5400	
SN5401	National	DM5401	
SN5402	Fairchild	5402	
	National	DM5402	
SN5403	National	DM5403	
SN5405	National	DM5405	
SN5406	National	DM5406	
SN5407	National	DM5407	
SN5408	Fairchild	5408	
	National	DM5408	
SN5409	Fairchild	5409	
	National	DM5409	
SN5410	Fairchild	5410	
	National	DM5410	
SN54107	National	DM54107	

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54109	National	DM54109	
	Signetics	54109	
SN54116	Signetics	54116	
SN54121	Fairchild	54121	
	National	DM54121	
	Signetics	54121	
SN54122	Fairchild	54122	
SN54123	Fairchild	54123	
	National	DM54123	
	Signetics	54123	
SN54125	Fairchild	54125	
	National	DM54125	
		DM7093	
SN54126	National	DM54126	
		DM7094	
	Signetics	54126	
SN5413	National	DM5413	
SN54132	National	DM54132	
	Signetics	54132	
SN5414	Fairchild	5414	
	National	DM5414	
	Signetics	5414	
♦ SN54145	National	DM54145	
SN54147	National	DM54147	
	Signetics	54147	
SN54148	National	DM54148	
		DM9318	
	Signetics	54148	
SN54150	Fairchild	54150	
	National	DM54150	
SN54153	Fairchild	54153	
	National	DM54153	
	Signetics	54153	
SN54155	National	DM54155	
SN54156	National	DM54156	
SN54157	Fairchild	54157	
	National	DM54157	
	Signetics	54157	
SN5416	National	DM5416	
SN54160	National	DM54160	
	Raytheon	RM9310	
	Signetics	54160	
SN54161	Fairchild	54161	
	National	DM54161	
	Signetics	54161	
♦ SN541616	AMD	AM29516	
		AM29C516	
♦ SN541616	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LogicDev	LMU16	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TI	SN741616	
	TRW-LSI	MPY016H	
		MPY016K	
		TMC216H	
		TMC216K	
♦ SN541616	Weitek	WTL1016	
		WTL1516	
		WTL2516	
SN54162	National	DM54162	
SN54163	National	DM54163	
	Signetics	54163	
SN54164	Fairchild	54164	
	National	DM54164	
		DM7570	
	Signetics	54164	
SN54165	Fairchild	54165	
	National	DM54165	
		DM7590	
	Signetics	54165	
SN54166	National	DM54166	
	Signetics	54166	
SN5417	National	DM5417	
SN54170	Fairchild	54170	
	National	DM54170	
SN54173	Fairchild	54173	
	National	DM54173	
		DM7551	
	Raytheon	RM8T10	
SN54174	Fairchild	54174	
	National	DM54174	
	Signetics	54174	
SN54175	Fairchild	54175	
	National	DM54175	
	Signetics	54175	
SN54176	National	DM54176	
	Raytheon	RM8280	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Texas Instruments (Cont'd)			
SN54176			(Cont'd)
	Signetics	54176	
		S8280	
SN54177	National	DM54177	
		DM7281	
	Raytheon	RM8281	
	Signetics	S7281	
SN54178	Raytheon	RM8270	
	Signetics	S8270	
SN54179	Raytheon	RM8271	
	Signetics	S8271	
SN54180	National	DM54180	
	Signetics	54180	
SN54181	National	DM54181	
	Raytheon	RM9341	
	Signetics	54181	
SN54182	National	DM54182	
	Raytheon	RM9342	
SN54184	National	DM54184	
SN54185A	National	DM54185A	
♦ SN54187	National	DM54187	
SN54190	National	DM54190	
	Signetics	54190	
SN54191	Fairchild	54191	
	National	DM54191	
	Signetics	54191	
SN54192	National	DM54192	
		DM7560	
SN54193	National	DM54193	
		DM7563	
♦ SN54194	National	DM54194	
	Signetics	54194	
SN54195	Fairchild	9300	
	National	DM54195	
SN54196	National	DM54196	
	Signetics	54196	
SN54197	Fairchild	54197	
	National	DM54197	
SN54198	National	DM54198	
SN54199	National	DM54199	
SN5420	Fairchild	5420	
	National	DM5420	
	Signetics	5420	
SN5422	Fairchild	5422	
	GE/RCA	**CA5422**	**(2645)**
SN54221	Signetics	54221	
SN5423	National	DM5423	
SN5425	Fairchild	5425	
	National	DM5425	
SN54251	National	DM54251	
		DM7121	
SN5426	National	DM5426	
	Signetics	5426	
SN5427	National	DM5427	
SN54279	Fairchild	54279	
	Signetics	54279	
♦ SN54284	National	DM7875A	
♦ SN54285	National	DM7875B	
SN54298	Fairchild	54298	
SN5430	Fairchild	5430	
	National	DM5430	
SN5432	Fairchild	5432	
	National	DM5432	
	Signetics	5432	
SN5433	Signetics	5433	
SN54365A	National	DM7095	
	Signetics	S8T95	
SN54366A	National	DM7096	
SN54367A	National	DM7097	
	Signetics	S8T97	
SN54368A	National	DM7098	
	Signetics	S8T98	
SN5437	Fairchild	5437	
	National	DM5437	
SN5438	National	DM5438	
SN5440	Fairchild	5440	
	National	DM5440	
♦ SN54425	Fairchild	54125	
	National	DM54125	
		DM7093	
♦ SN54425	TI	SN54125	
SN5442A	Fairchild	5442A	
	National	DM5442	
	Signetics	5442	
♦ SN5443A	Signetics	5443	
SN5445	National	DM5445	
	Siemens	S042	
	Signetics	**NE602**	**(3101)**
		SA602	

Manufacturer Device	Replacement Source	Device	IC Master Page
SN5446	Fairchild	5446	
	National	DM5446	
SN5447A	National	DM5447A	
SN5448	Fairchild	5448	
	National	DM5448	
SN5450	National	DM5450	
SN5451	National	DM5451	
SN5453	National	DM5453	
SN5454	National	DM5454	
SN5470	National	DM5470	
SN5472	National	DM5472	
SN5473	Fairchild	5473	
	National	DM5473	
	Signetics	5473	
SN5474	Fairchild	5474	
	National	DM5474	
	Signetics	5474	
SN5475	Fairchild	5475	
	National	DM5475	
	Signetics	5475	
SN5476	Fairchild	5476	
	National	DM5476	
	Signetics	5476	
♦ SN5477	Signetics	5477	
SN547F373	Fairchild	54F373	
	Motorola	54F373	
		MC54F373	
	Signetics	54F373	
SN5483A	Fairchild	5483A	
	Signetics	5483A	
SN5485	Fairchild	5485	
	National	DM5485	
	Signetics	5485	
SN5486	Fairchild	5486	
	National	DM5486	
	Signetics	5486	
SN5490A	National	DM5490A	
SN5491	Fairchild	5491	
	Motorola	MC5491	
	National	SN5491	
	Signetics	5491	
SN5492	Fairchild	5492	
	National	5492	
		DM5492	
SN5493A	MMI	MC10H106	
	National	DM5493A	
SN5495	Fairchild	5495	
	National	DM5495	
	Signetics	5495	
SN5496	National	DM5496	
	Signetics	5496	
SN5497	Fairchild	5497	
SN54ALS00A	Motorola	SN54ALS00	
	National	DM54ALS00	
SN54ALS01	National	DM54ALS01	
SN54ALS02	Motorola	SN54ALS02	
	National	DM54ALS02	
SN54ALS03B	National	DM54ALS03	
SN54ALS05A	National	DM54ALS05	
SN54ALS08	Motorola	SN54ALS08	
	National	DM54ALS08	
	TI	SN54ALS09	
SN54ALS09	Motorola	SN54ALS08	
	National	DM54ALS08	
	TI	SN54ALS08	
♦ SN54ALS1000A			
	National	DM54ALS1000	
		DM54AS160	
♦ SN54ALS1000A			
	SiliconG	JAN55325	
	TI	JANB55325	
♦ SN54ALS1002A			
	National	DM54ALS1002	
		DM54AS162	
♦ SN54ALS1002A			
	SiliconG	SG3049	
♦ SN54ALS1003A			
	National	DM54ALS1003	
		DM54AS168	
♦ SN54ALS1003A			
	SiliconG	SG2950	
	Sprague	ULN2950	
♦ SN54ALS1004			
	National	DM54ALS1004	
		DM54AS175	
♦ SN54ALS1004			
	SiliconG	SG2813	
	Sprague	**ULN2813**	**(3203)**
	TI	SN54AS175	
♦ SN54ALS1005			
	National	DM54ALS1005	
		DM54AS243	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SN54ALS1005			
	SiliconG	SG2814	
	Sprague	**ULN2814**	**(3203)**
SN54ALS1008A			
	National	DM54ALS1008	
		DM54AS245	
	SiliconG	SG2815	
	Sprague	**ULN2815**	**(3203)**
	TI	SN54AS245	
SN54ALS1010			
	National	DM54ALS1010	
	TI	54ALS1010A	
♦ SN54ALS1011A			
	National	DM54ALS1011	
		DM54AS258	
♦ SN54ALS1020A			
	National	DM54ALS1020	
		DM54AS264	
♦ SN54ALS1032A			
	National	DM54ALS1032	
		DM54ALS40	
		DM54AS808	
♦ SN54ALS1032A			
	TI	SN54AS808B	
SN54ALS1034			
	National	DM54ALS1034	
SN54ALS1035			
	National	DM54ALS1035	
		DM54ALS131	
	TI	SN54AS832B	
SN54ALS109A			
	National	DM54ALS109	
SN54ALS10A	National	DM54ALS10	
SN54ALS112A			
	National	DM54ALS112	
SN54ALS113A			
	National	DM54ALS113	
SN54ALS114A			
	National	DM54ALS114	
SN54ALS11A	National	DM54ALS11	
♦ SN54ALS1240			
	National	DM54ALS1240	
♦ SN54ALS1241			
	National	DM54ALS1241	
♦ SN54ALS1242			
	National	DM54ALS1242	
		DM54ALS1243	
♦ SN54ALS1243			
	National	DM54ALS1242	
		DM54ALS1243	
SN54ALS1244A			
	National	DM54ALS1244	
SN54ALS1245			
	National	DM54ALS1245	
SN54ALS12A	National	DM54ALS12	
♦ SN54ALS131	National	DM54ALS1035	
		DM54ALS131	
♦ SN54ALS131	TI	SN54ALS1035	
		SN54AS832B	
SN54ALS133	National	DM54ALS133	
♦ SN54ALS137	National	DM54ALS137	
SN54ALS138	National	DM54ALS138	
SN54ALS139	Motorola	54ALS139	
SN54ALS151	National	DM54ALS151	
SN54ALS153	National	DM54ALS153	
♦ SN54ALS157	National	DM54ALS157	
♦ SN54ALS158	National	DM54ALS158	
SN54ALS15A	National	DM54ALS15	
♦ SN54ALS160B			
	Motorola	SN54ALS160	
	National	DM54ALS160	
		DM54ALS160B	
SN54ALS161B			
	Motorola	SN54ALS161	
	National	DM54ALS161	
SN54ALS162B			
	Motorola	SN54ALS162	
	National	DM54ALS162	
SN54ALS163B			
	Motorola	SN54ALS163	
	National	DM54ALS163	
♦ SN54ALS168B			
	National	DM54ALS1240	
		DM54ALS168B	
		DM54AS880	
SN54ALS169B			
	National	DM54ALS169	
SN54ALS174	National	DM54ALS174	
SN54ALS175	National	DM54ALS175	
SN54ALS191	National	DM54ALS191	
SN54ALS193	National	DM54ALS193	
SN54ALS20A	National	DM54ALS20	
SN54ALS21A	National	DM54ALS21	
SN54ALS22B	National	DM54ALS22	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SN54ALS231	National	DM54ALS231	
		DM74ALS157	
♦ SN54ALS231	TI	SN54AS881A	
SN54ALS240A			
	Motorola	SN54ALS240	
	National	DM54ALS240	
SN54ALS241A			
	Motorola	SN54ALS241	
	National	DM54ALS241	
SN54ALS242B			
	Motorola	SN54ALS242	
	National	DM54ALS242	
SN54ALS243A			
	Motorola	SN54ALS243	
	National	DM54ALS243	
SN54ALS244A			
	Motorola	SN54ALS244	
	National	DM54ALS244	
SN54ALS245A			
	Motorola	SN54ALS245	
	National	DM54ALS245	
SN54ALS251	National	DM54ALS251	
SN54ALS253	National	DM54ALS253	
SN54ALS257	National	DM54ALS257	
SN54ALS258	National	DM54ALS258	
SN54ALS27	National	DM54ALS27	
SN54ALS273	Motorola	SN54ALS273	
	National	DM54ALS273	
SN54ALS28A	National	DM54ALS28	
SN54ALS32	Motorola	SN54ALS32	
	National	DM54ALS32	
SN54ALS33A	National	DM54ALS33	
SN54ALS352	National	DM54ALS352	
SN54ALS353	Mitsubishi	M74ALS158	
	National	DM54ALS353	
		DM54AS1000	
		DM74ALS158	
	Signetics	74ALS158	
	TI	SN74ALS158	
SN54ALS373	Motorola	SN54ALS373	
	National	DM54ALS373	
SN54ALS374	Motorola	SN54ALS374	
	National	DM54ALS374	
SN54ALS38A	National	DM54ALS38	
♦ SN54ALS40	National	DM54ALS1032	
		DM54ALS40	
		DM54AS808	
♦ SN54ALS40	TI	SN54AS808B	
♦ SN54ALS465A			
	National	DM54ALS465	
		DM54AS1004	
		DM74ALS231	
♦ SN54ALS465A			
	TI	SN54AS1004A	
		SN74ALS231	
♦ SN54ALS466A			
	National	DM54ALS466	
		DM54AS1008	
♦ SN54ALS467A			
	National	DM54ALS467	
		DM54AS1032	
♦ SN54ALS467A			
	TI	SN54AS1032A	
♦ SN54ALS468A			
	LinearTech	UC1846	
	National	DM54ALS468	
		DM54AS1034	
♦ SN54ALS468A			
	SiliconG	SG1846	
	TI	SN54AS1034A	
	Unitrode	**UC1846**	**(3323)**
♦ SN54ALS519	National	DM54ALS519	
		DM54AS1036	
♦ SN54ALS519	SiliconG	SG2846	
	TI	SN54AS1036A	
	Unitrode	**UC2846**	**(3323)**
SN54ALS520	National	DM54ALS520	
SN54ALS522	National	DM54ALS522	
		DM54AS32	
	SiliconG	SG2847	
	TI	SN54AS32	
	Unitrode	**UC2847**	**(3323)**
♦ SN54ALS533	National	DM54ALS533	
♦ SN54ALS534	National	DM54ALS534	
SN54ALS563A			
	National	DM54ALS563	
SN54ALS564A			
	National	DM54ALS564	
SN54ALS573B			
	Motorola	SN54ALS573	
	National	DM54ALS573	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Device	Source	Device	IC Master Page
SN54ALS574A			
	Motorola	SN54ALS574	
	National	DM54ALS574	
SN54ALS576A			
	Motorola	SN54ALS576	
	National	DM54ALS576	
SN54ALS580A			
	Motorola	SN54ALS580	
	National	DM54ALS580	
♦ SN54ALS620A			
	Motorola	SN54ALS620	
	National	DM54ALS620	
♦ SN54ALS623A			
	Motorola	SN54ALS623	
	National	DM54ALS623	
SN54ALS640A			
	Motorola	SN54ALS640	
	National	DM54ALS640	
SN54ALS645A			
	National	DM54ALS645	
SN54ALS688	LinearTech	UC1847	
	National	DM54ALS521	
		DM54AS04	
	SiliconG	SG1847	
	TI	SN54AS04	
	Unitrode	**UC1847**	**(3323)**
♦ SN54ALS689	National	DM54AS74	
		JAN101A	
♦ SN54ALS689	SiliconG	JAN101A	
	TI	SN54AS74	
SN54ALS74A	Motorola	SN54ALS74	
	National	DM54ALS74	
SN54ALS804A			
	National	DM54ALS804	
SN54ALS805A			
	National	DM54ALS805	
SN54ALS832A			
	National	DM54ALS832	
SN54ALS86	National	DM54ALS86	
SN54ALS873B			
	Motorola	SN54ALS873	
	National	DM54ALS873	
SN54ALS874B			
	Motorola	SN54ALS874	
♦ SN54ALS876A			
	Motorola	SN54ALS876	
	National	DM54ALS876	
SN54ALS880B			
	Motorola	SN54ALS880	
	National	DM54ALS880	
SN54AS00	National	DM54AS00	
SN54AS02	National	DM54AS02	
SN54AS04	LinearTech	UC1847	
	National	DM54ALS521	
		DM54AS04	
	SiliconG	SG1847	
	TI	SN54ALS688	
	Unitrode	**UC1847**	**(3323)**
SN54AS08	National	DM54AS08	
SN54AS10	National	DM54AS10	
♦ SN54AS1000A			
	Mitsubishi	M74ALS158	
	National	DM54ALS353	
		DM54AS1000	
		DM74ALS158	
♦ SN54AS1000A			
	Signetics	74ALS158	
	TI	SN54ALS353	
		SN74ALS158	
SN54AS1004A			
	National	DM54ALS465	
		DM54AS1004	
		DM74ALS231	
	TI	SN74ALS231	
♦ SN54AS1008	National	DM54ALS466	
		DM54AS1008	
SN54AS1032A			
	National	DM54ALS467	
		DM54AS1032	
SN54AS1034A			
	LinearTech	UC1846	
	National	DM54ALS468	
		DM54AS1034	
	SiliconG	SG1846	
	Unitrode	**UC1846**	**(3323)**
SN54AS1036A			
	National	DM54ALS519	
		DM54AS1036	
	SiliconG	SG2846	
	Unitrode	**UC2846**	**(3323)**
SN54AS109	National	DM54AS109	
♦ SN54AS11	National	DM54AS11	
♦ SN54AS112	National	DM54AS112	
♦ SN54AS113	National	DM54AS113	
♦ SN54AS114	National	DM54AS114	
♦ SN54AS157	National	DM54AS157	
♦ SN54AS158	National	DM54AS158	
♦ SN54AS160	National	DM54ALS1000	
		DM54AS160	
♦ SN54AS160	SiliconG	JAN55325	
	TI	JANB55325	
SN54AS161	National	DM54AS161	
♦ SN54AS162	National	DM54ALS1002	
		DM54AS162	
♦ SN54AS162	SiliconG	SG3049	
SN54AS163	National	DM54AS163	
♦ SN54AS168	National	DM54ALS1003	
		DM54AS168	
♦ SN54AS168	SiliconG	SG2950	
	Sprague	ULN2950	
♦ SN54AS169A	National	DM54AS169	
SN54AS174	National	DM54AS174	
SN54AS175	National	DM54ALS1004	
		DM54AS175	
	SiliconG	SG2813	
	Sprague	**ULN2813**	**(3203)**
SN54AS181B	National	DM54AS181	
SN54AS20	National	DM54AS20	
SN54AS21	National	DM54AS21	
SN54AS230	National	DM54AS230	
♦ SN54AS231	National	DM54AS231	
SN54AS240	National	DM54AS240	
SN54AS241	National	DM54AS241	
SN54AS242	National	DM54AS242	
♦ SN54AS243	National	DM54ALS1005	
		DM54AS243	
♦ SN54AS243	SiliconG	SG2814	
	Sprague	**ULN2814**	**(3203)**
SN54AS244	National	DM54AS244	
SN54AS245	National	DM54ALS1008	
		DM54AS245	
	SiliconG	SG2815	
	Sprague	**ULN2815**	**(3203)**
	TI	SN54ALS1008A	
♦ SN54AS251	National	DM54AS251	
♦ SN54AS257	National	DM54AS257	
♦ SN54AS258	National	DM54ALS1011	
		DM54AS258	
♦ SN54AS264	National	DM54ALS1020	
		DM54AS264	
SN54AS27	National	DM54AS27	
SN54AS280	National	DM54AS280	
♦ SN54AS282	National	DM54AS282	
♦ SN54AS286	National	DM54AS286	
SN54AS30	National	DM54AS30	
SN54AS32	National	DM54ALS522	
		DM54AS32	
	SiliconG	SG2847	
	TI	SN54ALS522	
	Unitrode	**UC2847**	**(3323)**
SN54AS34	National	DM54AS34	
♦ SN54AS352	National	DM54AS352	
SN54AS373	National	DM54AS373	
SN54AS374	National	DM54AS374	
♦ SN54AS503	National	DM54AS533	
SN54AS573	National	DM54AS573	
SN54AS574	National	DM54AS574	
SN54AS575	National	DM54AS575	
♦ SN54AS576	National	DM54AS576	
♦ SN54AS580	National	DM54AS580	
SN54AS640	National	DM54AS640	
SN54AS645	National	DM54AS645	
SN54AS646	National	DM54AS646	
♦ SN54AS648	National	DM54AS648	
SN54AS651	National	DM54AS651	
♦ SN54AS652	National	DM54AS652	
SN54AS74	National	DM54AS74	
		JAN101A	
	SiliconG	JAN101A	
SN54AS804B	National	DM54AS804	
SN54AS805B	National	DM54AS805	
SN54AS808B	National	DM54ALS1032	
		DM54ALS40	
		DM54AS808	
SN54AS832B	National	DM54ALS1035	
		DM54ALS131	
	TI	SN54ALS1035	
SN54AS873	National	DM54AS873	
SN54AS874	National	DM54AS874	
♦ SN54AS880	National	DM54ALS1240	
		DM54ALS168B	
		DM54AS880	
SN54AS881A	National	DM54ALS231	
		DM74ALS157	
SN54F00	Fairchild	54F00	
	Motorola	MC54F00	
	Signetics	54F00	
SN54F02	Fairchild	54F02	
	Motorola	MC54F02	
	Signetics	54F02	
SN54F04	Fairchild	54F04	
	Motorola	MC54F04	
	Signetics	54F04	
		S4F04	
SN54F08	Fairchild	54F08	
	Motorola	MC54F08	
	Signetics	54F08	
SN54F10	Fairchild	54F10	
	Motorola	MC54F10	
	Signetics	54F10	
SN54F109	Fairchild	54F109	
	Motorola	MC54F109	
	Signetics	54F109	
SN54F112	Fairchild	54F112	
	Motorola	MC54F112	
SN54F138	Fairchild	54F138	
	Motorola	MC54F138	
	Signetics	54F138	
SN54F153	Fairchild	54F153	
	Motorola	MC54F153	
SN54F157	Fairchild	54F157	
	Motorola	MC54F157	
	Signetics	54F157	
SN54F158	Fairchild	54F158	
	Motorola	MC54F158	
	Signetics	54F158	
SN54F20	Fairchild	54F20	
	Motorola	MC54F20	
	Signetics	54F20	
SN54F241	Fairchild	54F241	
	Motorola	MC54F241	
	Signetics	54F241	
SN54F242	Fairchild	54F242	
	Motorola	MC54F242	
	Signetics	54F242	
SN54F243	Fairchild	54F243	
	Motorola	MC54F243	
	Signetics	54F243	
SN54F244	Fairchild	54F244	
	Motorola	MC54F244	
	Signetics	54F244	
SN54F245	Fairchild	54F245	
	Motorola	MC54F245	
	Signetics	54F245	
SN54F253	Fairchild	54F253	
SN54F257	Fairchild	54F257	
	Motorola	MC54F257	
	Signetics	54F257	
SN54F258	Fairchild	54F258	
	Motorola	MC54F258	
	Signetics	54F258	
SN54F27	Fairchild	54F27	
SN54F280	Fairchild	54F280	
	Motorola	MC54F280	
	Signetics	54F280	
SN54F283	Fairchild	54F283	
	Motorola	MC54F283	
SN54F299	Fairchild	54F299	
SN54F30	Fairchild	54F30	
SN54F32	Fairchild	54F32	
	Motorola	MC54F32	
	Signetics	54F32	
SN54F350	Fairchild	54F350	
	Motorola	MC54F350	
SN54F352	Fairchild	54F352	
	Motorola	MC54F352	
SN54F353	Fairchild	54F353	
	Motorola	MC54F353	
SN54F374	Fairchild	54F374	
	Motorola	MC54F374	
	Signetics	54F374	
SN54F381	Fairchild	54F381	
	Motorola	MC54F381	
SN54F382	Fairchild	54F382	
	Motorola	MC54F382	
SN54F521	Fairchild	54F521	
	Motorola	MC54F521	
	Signetics	54F521	
SN54F533	Fairchild	54F533	
	Motorola	MC54F533	
SN54F534	Fairchild	54F534	
	Motorola	MC54F534	
	Signetics	54F534	
SN54F543	Fairchild	54F543	
SN54F544	Fairchild	54F544	
SN54F573	Fairchild	54F573	
SN54F620	Fairchild	54F620	
	Motorola	MC54F620	
	Signetics	54F620	
SN54F621	Fairchild	54F621	
SN54F623	Fairchild	54F623	
	Motorola	MC54F623	
SN54F74	Fairchild	54F74	
	Motorola	MC54F74	
♦ SN54H00	National	DM54H00	
♦ SN54H04	National	DM54H04	
♦ SN54H10	National	DM54H10	
♦ SN54H103	National	DM54H103	
♦ SN54H108	GoldStar	GL7806	
	Gould	μA7806	
	National	DM54H108	
♦ SN54H11	National	DM54H11	
♦ SN54H50	National	DM54H50	
♦ SN54H53	National	DM54H53	
♦ SN54H74	National	DM54H74	
♦ SN54H76	National	DM54H76	
SN54HC00	**GE/RCA**	**CD54HC00**	**(2631)**
	Motorola	MC54HC00	
	National	MM54HC00	
	Signetics	54HC00	
	Sprague	SS54HC00	
SN54HC02	**GE/RCA**	**CD54HC02**	**(2631)**
	Motorola	MC54HC02	
	National	MM54HC02	
	Signetics	54HC02	
SN54HC03	**GE/RCA**	**CD54HC03**	**(2631)**
	Motorola	54HC03	
	National	MM54HC03	
SN54HC04	**GE/RCA**	**CD54HC04**	**(2631)**
	Motorola	MC54HC04	
	National	MM54HC04	
	Signetics	54HC04	
SN54HC08	**GE/RCA**	**CD54HC08**	**(2631)**
	Motorola	MC54HC08	
	National	MM54HC08	
	Signetics	54HC08	
SN54HC10	**GE/RCA**	**CD54HC10**	**(2631)**
	Motorola	MC54HC10	
	National	MM54HC10	
	Signetics	54HC10	
SN54HC107	**GE/RCA**	**CD54HC107**	**(2631)**
	Motorola	MC54HC107	
	National	MM54HC107	
	Signetics	54HC107	
SN54HC109	**GE/RCA**	**CD54HC109**	**(2631)**
	Motorola	MC54HC109	
	National	MM54HC109	
	Signetics	54HC109	
SN54HC11	**GE/RCA**	**CD54HC11**	**(2631)**
	Motorola	MC54HC11	
	National	MM54HC11	
	Signetics	54HC11	
SN54HC112	**GE/RCA**	**CD54HC112**	**(2631)**
	Motorola	MC54HC112	
	National	MM54HC112	
	Signetics	54HC112	
SN54HC113	Motorola	54HC113	
SN54HC125	Fairchild	54HC125	
	GE/RCA	**CD54HC125**	**(2631)**
		CDHC125	
	Motorola	MC54HC125	
	National	MM54HC125	
SN54HC126	**GE/RCA**	**CD54HC126**	**(2631)**
SN54HC132	Fairchild	54HC132	
	GE/RCA	**CD54HC132**	**(2631)**
	Motorola	MC54HC132	
	National	MM54HC132	
	Signetics	54HC132	
SN54HC133	Motorola	MC54HC133	
	National	MM54HC133	
	Signetics	54HC133	
SN54HC137	**GE/RCA**	**CD54HC137**	**(2632)**
	Motorola	MC54HC137	
	National	MM54HC137	
	Sprague	SN54HC137	
		SS54HC137	
SN54HC138	**GE/RCA**	**CD54HC138**	**(2632)**
	Motorola	MC54HC138	
	National	MM54HC138	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54HC138			(Cont'd)
	Signetics	54HC138	
	Sprague	SS54HC138	
SN54HC139	**GE/RCA**	**CD54HC139**	**(2632)**
	Motorola	MC54HC139	
	National	MM54HC139	
	Signetics	54HC139	
	Sprague	SS54HC139	
SN54HC14	**GE/RCA**	**CD54HC14**	**(2631)**
	Motorola	MC54HC14	
	National	MM54HC14	
	Signetics	54HC14	
SN54HC151	**GE/RCA**	**CD54HC151**	**(2632)**
	Motorola	MC54HC151	
	National	MM54HC151	
	Signetics	54HC151	
SN54HC153	**GE/RCA**	**CD54HC153**	**(2632)**
	Motorola	MC54HC153	
	National	MM54HC153	
	Signetics	54HC153	
SN54HC157	**GE/RCA**	**CD54HC157**	**(2632)**
	Motorola	MC54HC157	
	Signetics	54HC157	
SN54HC158	**GE/RCA**	**CD54HC158**	**(2632)**
	Motorola	MC54HC158	
	National	MM54HC158	
	Signetics	54HC158	
SN54HC160	**GE/RCA**	**CD54HC160**	**(2632)**
	Motorola	MC54HC160	
	National	MM54HC160	
	Signetics	54HC160	
SN54HC161	**GE/RCA**	**CD54HC161**	**(2632)**
	Motorola	MC54HC161	
	National	MM54HC161	
	Signetics	54HC161	
SN54HC162	**GE/RCA**	**CD54HC162**	**(2632)**
	Motorola	MC54HC162	
	National	MM54HC162	
	Signetics	54HC162	
♦ SN54HC163	**GE/RCA**	**CD54HC163**	**(2632)**
	Motorola	MC54HC163	
	National	MM54HC163	
	Signetics	54HC163	
SN54HC164	**GE/RCA**	**CD54HC164**	**(2631)**
	Motorola	MC54HC164	
	National	MM54HC164	
	Signetics	54HC164	
SN54HC165	**GE/RCA**	**CD54HC165**	**(2631)**
	Motorola	MC54HC165	
	National	MM54HC165	
	Signetics	54HC165	
SN54HC166	**GE/RCA**	**CD54HC166**	**(2631)**
	Motorola	MC54HC166	
	Signetics	54HC166	
SN54HC173	**GE/RCA**	**CD54HC173**	**(2631)**
	Motorola	MC54HC173	
	National	MM54HC173	
	Signetics	54HC173	
SN54HC174	**GE/RCA**	**CD54HC174**	**(2631)**
	Motorola	MC54HC174	
	National	MM54HC174	
	Signetics	54HC174	
SN54HC175	**GE/RCA**	**CD54HC175**	**(2631)**
	Motorola	MC54HC175	
	National	MM54HC175	
	Signetics	54HC175	
SN54HC190	**GE/RCA**	**CD54HC190**	**(2632)**
	Motorola	MC54HC190	
SN54HC191	**GE/RCA**	**CD54HC191**	**(2632)**
	Signetics	54HC191	
SN54HC192	**GE/RCA**	**CD54HC192**	**(2632)**
	Motorola	MC54HC192	
SN54HC192			(Cont'd)
	National	MM54HC192	
	Signetics	54HC192	
SN54HC193	**GE/RCA**	**CD54HC193**	**(2632)**
	Motorola	MC54HC193	
	National	MM54HC193	
	Signetics	54HC193	
SN54HC194	**GE/RCA**	**CD54HC194**	**(2631)**
	Motorola	MC54HC194	
	National	MM54HC194	
	Signetics	54HC194	
SN54HC195	**GE/RCA**	**CD54HC195**	**(2631)**
	Motorola	MC54HC195	
	National	MM54HC195	
	Signetics	54HC195	
SN54HC20	**GE/RCA**	**CD54HC20**	**(2631)**
	Motorola	MC54HC20	
	National	MM54HC20	
	Signetics	54HC20	
SN54HC21	**GE/RCA**	**CD54HC21**	**(2631)**
SN54HC237	**GE/RCA**	**CD54HC237**	**(2632)**
	Motorola	MC54HC237	
	National	MM54HC237	
	Sprague	SN54HC237	
SN54HC238	**GE/RCA**	**CD54HC238**	**(2632)**
	Signetics	54HC238	
	Sprague	SS54HC238	
♦ SN54HC239	Motorola	MC54HC239	
SN54HC240	**GE/RCA**	**CD54HC240**	**(2631)**
	Motorola	MC54HC240	
	National	MM54HC240	
	Signetics	54HC240	
	Sprague	SS54HC240	
	Supertex	SI54HC240	
SN54HC241	**GE/RCA**	**CD54HC241**	**(2631)**
	Motorola	MC54HC241	
	National	MM54HC241	
	Signetics	54HC241	
	Sprague	SS54HC241	
	Supertex	SI54HC241	
SN54HC242	**GE/RCA**	**CD54HC242**	**(2631)**
	Motorola	MC54HC242	
	National	MM54HC242	
	Signetics	54HC242	
SN54HC243	Fairchild	54HC243	
	GE/RCA	**CD54HC243**	**(2631)**
	Motorola	MC54HC243	
	National	MM54HC243	
	Signetics	54HC243	
SN54HC244	**GE/RCA**	**CD54HC244**	**(2631)**
	Motorola	MC54HC244	
	National	MM54HC244	
	Signetics	54HC244	
	Sprague	SS54HC244	
	Supertex	SI54HC244	
SN54HC245	**GE/RCA**	**CD54HC245**	**(2631)**
	Motorola	MC54HC245	
	National	MM54HC245	
	Signetics	54HC245	
	Sprague	SS54HC245	
SN54HC251	**GE/RCA**	**CD54HC251**	**(2632)**
	Motorola	MC54HC251	
	National	MM54HC251	
	Signetics	54HC251	
SN54HC253	**GE/RCA**	**CD54HC253**	**(2632)**
	Motorola	MC54HC253	
	National	MM54HC253	
	Signetics	54HC253	
SN54HC257	**GE/RCA**	**CD54HC257**	**(2632)**
	Motorola	MC54HC257	
	National	MM54HC257	
	Signetics	54HC257	
SN54HC258	**GE/RCA**	**CD54HC258**	**(2632)**
SN54HC259	**GE/RCA**	**CD54HC259**	**(2632)**
	Motorola	MC54HC259	
	National	MM54HC259	
	Signetics	54HC259	
SN54HC266	Motorola	MC54HC266	
	National	MM54HC266	
	Signetics	54HC266	
SN54HC27	**GE/RCA**	**CD54HC27**	**(2631)**
	Motorola	MC54HC27	
	National	MM54HC27	
	Signetics	54HC27	
SN54HC273	CTI	54HC273	
	GE/RCA	**CD54HC273**	**(2631)**
	Motorola	MC54HC273	
	Signetics	54HC273	
SN54HC280	**GE/RCA**	**CD54HC280**	**(2632)**
	Motorola	MC54HC280	
	National	MM54HC280	
	Signetics	54HC280	
SN54HC30	**GE/RCA**	**CD54HC30**	**(2631)**
	Motorola	MC54HC30	
	National	MM54HC30	
	Signetics	54HC30	
SN54HC32	**GE/RCA**	**CD54HC32**	**(2631)**
	Motorola	MC54HC32	
	National	MM54HC32	
	Signetics	54HC32	
SN54HC365	**GE/RCA**	**CD54HC365**	**(2631)**
	Motorola	MC54HC365	
	National	MM54HC365	
	Signetics	54HC365	
SN54HC366	**GE/RCA**	**CD54HC366**	**(2631)**
	Motorola	MC54HC366	
	National	MM54HC366	
	Signetics	54HC366	
SN54HC367	**GE/RCA**	**CD54HC367**	**(2631)**
	Motorola	MC54HC367	
	National	MM54HC367	
	Signetics	54HC367	
SN54HC368	**GE/RCA**	**CD54HC368**	**(2631)**
	Motorola	MC54HC368	
	National	MM54HC368	
	Signetics	54HC368	
SN54HC373	**GE/RCA**	**CD54HC373**	**(2632)**
	Motorola	MC54HC373	
	National	MM54HC373	
	Signetics	54HC373	
	Sprague	SS54HC373	
	Supertex	SI54HC373	
SN54HC374	**GE/RCA**	**CD54HC374**	**(2631)**
	Motorola	MC54HC374	
	National	MM54HC374	
	Signetics	54HC374	
	Sprague	SS54HC374	
	Supertex	SI54HC374	
SN54HC377	**GE/RCA**	**CD54HC377**	**(2631)**
	Motorola	MC54HC377	
	Signetics	54HC377	
SN54HC386	Motorola	MC54HC386	
SN54HC390	**GE/RCA**	**CD54HC390**	**(2632)**
	Motorola	MC54HC390	
	National	MM54HC390	
	Signetics	54HC390	
SN54HC393	**GE/RCA**	**CD54HC393**	**(2632)**
	Motorola	MC54HC393	
	National	MM54GC393	
	Signetics	54HC393	
SN54HC4002	**GE/RCA**	**CD54HC4002**	**(2631)**
	Motorola	MC54HC4002	
	National	MM54HC4002	
	Signetics	54HC4002	
SN54HC4016	GE/RCA	CD54HC4016	
	Motorola	MC54HC4016	
	National	MM54HC4016	
♦ SN54HC4020	**GE/RCA**	**CD54HC4020**	**(2632)**
	National	MM54HC4020	
	Signetics	54HC4020	
♦ SN54HC4024	**GE/RCA**	**CD54HC4024**	**(2632)**
	Motorola	MC54HC4024	
	Signetics	54HC4024	
SN54HC404	GE/RCA	CD54HC404	
	Motorola	MC54HC404	
	National	MM54HC404	
♦ SN54HC4040	**GE/RCA**	**CD54HC4040**	**(2632)**
	Motorola	MC54HC4040	
	National	MM54HC4040	
	Signetics	54HC4040	
♦ SN54HC4060	**GE/RCA**	**CD54HC4060**	**(2632)**
	Motorola	MC54HC4060	
	National	MM54HC4060	
	Signetics	54HC4060	
SN54HC4066	**GE/RCA**	**CD54HC4066**	**(2631)**
	Motorola	MC54HC4066	
	National	MM54HC4066	
SN54HC4075	**GE/RCA**	**CD54HC4075**	**(2631)**
	Motorola	MC54HC4075	
	National	MM54HC4075	
SN54HC4078A			
	Motorola	MC54HC4078	
	National	MM54HC4078	
SN54HC42	**GE/RCA**	**CD54HC42**	**(2632)**
	Motorola	MC54HC42	
	National	MM54HC42	
	Signetics	54HC42	
SN54HC51	Motorola	54HC51	
	National	MM54HC51	
SN54HC533	**GE/RCA**	**CD54HC533**	**(2632)**
	Motorola	MC54HC533	
	National	MM54HC533	
	Signetics	54HC533	
	Sprague	SS54HC533	
SN54HC534	**GE/RCA**	**CD54HC534**	**(2631)**
	Motorola	MC54HC534	
	National	MM54HC534	
	Signetics	54HC534	
	Sprague	SS54HC534	
SN54HC540	**GE/RCA**	**CD54HC540**	**(2631)**
	Motorola	MC54HC540	
	Signetics	54HC540	
	Sprague	SS54HC540	
SN54HC541	**GE/RCA**	**CD54HC541**	**(2631)**
	Signetics	54HC541	
	Sprague	SS54HC541	
SN54HC563	**GE/RCA**	**CD54HC563**	**(2632)**
	National	MM54HC563	
	Signetics	54HC563	
	Sprague	SS54HC563	
SN54HC564	**GE/RCA**	**CD54HC564**	**(2631)**
	Motorola	MC54HC564	
	National	MM54HC564	
	Signetics	54HC564	
	Sprague	SS54HC564	
SN54HC573	**GE/RCA**	**CD54HC573**	**(2632)**
	Motorola	MC54HC573	
	National	MM54HC573	
	Signetics	54HC573	
	Sprague	SS54HC573	
SN54HC574	**GE/RCA**	**CD54HC574**	**(2631)**
	Motorola	MC54HC574	
	National	MM54HC574	
	Signetics	54HC574	
	Sprague	SS54HC574	
♦ SN54HC589	Motorola	MC54HC589	
SN54HC590A	Motorola	MC54HC590	
♦ SN54HC592	Motorola	MC54HC592	
♦ SN54HC593	Motorola	MC54HC593	
SN54HC595	Motorola	MC54HC595	
	National	MM54HC595	
SN54HC620	Hitachi	HD54HC620	
	Motorola	MC54HC620	
SN54HC623	Motorola	MC54HC623	
SN54HC640	**GE/RCA**	**CD54HC640**	**(2631)**
	Motorola	MC54HC640	
	National	MM54HC640	
	Signetics	54HC640	
	Sprague	SS54HC640	
SN54HC643	**GE/RCA**	**CD54HC643**	**(2631)**
	Motorola	MC54HC643	
	National	MM54HC643	
	Signetics	54HC643	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54HC645	National	MM54HC645	
	Signetics	54HC645	
	Sprague	SS54HC645	
♦ SN54HC646	**GE/RCA**	**CD54HC646**	**(2631)**
	Motorola	MC54HC646	
	National	MM54HC646	
	Signetics	54HC646	
♦ SN54HC648	**GE/RCA**	**CD54HC648**	**(2631)**
	Motorola	MC54HC648	
	National	MM54HC648	
	Signetics	54HC648	
♦ SN54HC651	Motorola	MC54HC651	
♦ SN54HC652	Motorola	MC54HC652	
♦ SN54HC658	Motorola	MC54HC658	
♦ SN54HC659	Motorola	MC54HC659	
♦ SN54HC664	Motorola	MC54HC664	
♦ SN54HC665	Motorola	MC54HC665	
♦ SN54HC670	**GE/RCA**	**CD54HC670**	**(2631)**
	Signetics	54HC670	
SN54HC688	Fairchild	54HC688	
	GE/RCA	**CD54HC688**	**(2632)**
	Motorola	MC54HC688	
	National	MM54HC688	
	Signetics	54HC688	
SN54HC74	**GE/RCA**	**CD54HC74**	**(2631)**
	Motorola	MC54HC74	
	National	MM54HC74	
	Signetics	54HC74	
SN54HC75	**GE/RCA**	**CD54HC75**	**(2632)**
	Motorola	MC54HC75	
	National	MM54HC75	
	Signetics	54HC75	
SN54HC86	**GE/RCA**	**CD54HC86**	**(2631)**
	Motorola	MC54HC86	
	National	MM54HC86	
	Signetics	54HC86	
SN54HCT04	Fairchild	54HCT04	
	GE/RCA	**CD54HCT04**	**(2631)**
	Motorola	MC54HCT04	
	National	MM54HCT04	
	Signetics	54HCT04	
SN54HCT137	CTI	54HCT137	
	GE/RCA	**CD54HCT137**	**(2632)**
	Supertex	54HCT137	
SN54HCT138	CTI	54HCT138	
	GE/RCA	**CD54HCT138**	**(2632)**
	Mitel	MD54HCT138	
	Motorola	MC54HCT138	
	National	MM54HCT138	
	Signetics	54HCT138	
	Sprague	SS54HCT138	
	Supertex	54HCT138	
SN54HCT237	CTI	54HCT237	
	GE/RCA	**CD54HCT237**	**(2632)**
	Supertex	54HCT237	
SN54HCT238	CTI	54HCT238	
	GE/RCA	**CD54HCT238**	**(2632)**
	Signetics	54HCT238	
	Sprague	SS54HCT238	
SN54HCT240	CTI	54HCT240	
	GE/RCA	**CD54HCT240**	**(2631)**
	Hitachi	HD54HCT240	
	Micrel	MC54HCT240	
		MIC54HCT240	
	Mitel	MD54HCT240	
	Motorola	MC54HCT240	
	National	MM54HCT240	
	Signetics	54HCT240	
	Supertex	SI54HCT240	
SN54HCT241	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54HCT241			(Cont'd)
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	**TMS4256**	**(3259)**
	Vitelic	V51C256	
		V51C257	
SN54HCT244	CTI	54HCT244	
	GE/RCA	**CD54HCT244**	**(2631)**
	Micrel	MIC54HCT244	
	Mitel	MD54HCT244	
	Motorola	MC54HCT244	
	National	MM54HCT244	
	Signetics	54HCT244	
	Sprague	SS54HCT244	
	Supertex	SI54HCT244	
SN54HCT245	CTI	54HCT245	
	GE/RCA	**CD54HCT245**	**(2631)**
	Mitel	MD54HCT245	
	Motorola	MC54HCT245	
	National	MM54HCT245	
	Signetics	54HCT245	
	Sprague	SS54HCT245	
	Supertex	54HCT245	
SN54HCT373	CTI	54HCT373	
	GE/RCA	**CD54HCT373**	**(2632)**
	Micrel	MIC54HCT373	
	Mitel	MD54HCT373	
	Motorola	MC54HCT373	
	National	MM54HCT373	
	Signetics	54HCT373	
	Sprague	SS54HCT373	
	Supertex	SI54HCT373	
SN54HCT374	CTI	54HCT374	
	GE/RCA	54HCT374	
		CD54HCT374	**(2631)**
	Micrel	MIC54HCT374	
		MICHCT374	
	Mitel	MD54HCT374	
	Motorola	MC54HCT374	
	National	MM54HCT374	
	Sprague	SS54HCT374	
	Supertex	SI54HCT374	
SN54HCT540	CTI	54HCT540	
	GE/RCA	**CD54HCT540**	**(2631)**
	Mitel	MD54HCT540	
	Motorola	MC54HCT540	
	National	MM54HCT540	
	Signetics	54HCT540	
	Sprague	SS54HCT540	
	Supertex	54HCT540	
SN54HCT541	CTI	54HCT541	
	GE/RCA	**CD54HCT541**	**(2631)**
	Mitel	MD54HCT541	
	Motorola	MC54HCT541	
	National	MM54HCT541	
	Signetics	54HCT541	
	Sprague	SS54HCT541	
	Supertex	54HCT541	
♦ SN54HCT651	Motorola	MC54HCT651	
♦ SN54HCT652	Motorola	MC54HCT652	
♦ SN54HCT658	Motorola	MC54HCT658	
♦ SN54HCT659	Motorola	MC54HCT659	
♦ SN54HCT664	Motorola	MC54HCT664	
♦ SN54HCT665	Motorola	MC54HCT665	
♦ SN54L02	National	DM54L02	
♦ SN54L03	National	DM54L03	
♦ SN54L10	National	DM54L10	
♦ SN54L157	National	DM71L22	
♦ SN54L164	National	DM54L164	
		DM76L70	
♦ SN54L51	National	DM54L51	
♦ SN54L55	National	DM54L55	
♦ SN54L71	National	DM54L71	
♦ SN54L72	National	DM54L72	
♦ SN54L73	National	DM54L73	
♦ SN54L74	National	DM54L74	
♦ SN54L75	National	DM54L75	
♦ SN54L78	National	DM54L78	
♦ SN54L85	National	DM54L85	
♦ SN54L86	National	DM54L86	
♦ SN54L90	National	DM54L90	
♦ SN54L93	National	DM54L93	
♦ SN54L95	National	DM54L95	
♦ SN54L98	National	DM54L98	

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS00	Fairchild	54LS00	
	Motorola	SN54LS00	
	National	DM54LS00	
	SGS	T54LS00	
	Signetics	54LS00	
SN54LS01	Motorola	SN54LS01	
	National	DM54LS01	
SN54LS02	Fairchild	54LS02	
	Motorola	SN54LS02	
	National	DM54LS02	
	SGS	T54LS02	
	Signetics	54LS02	
SN54LS03	Fairchild	54LS03	
	Motorola	SN54LS03	
	National	DM54LS03	
	SGS	T54LS03	
SN54LS04	Fairchild	54LS04	
	Motorola	SN54LS04	
	National	DM54LS04	
	SGS	T54LS04	
	Signetics	54LS04	
SN54LS05	Fairchild	54LS05	
	Motorola	SN54LS05	
	National	DM54LS05	
	SGS	T54LS05	
SN54LS08	Fairchild	54LS08	
	Motorola	SN54LS08	
	National	DM54LS08	
	SGS	T54LS08	
	Signetics	54LS08	
SN54LS09	Fairchild	54LS09	
	Motorola	SN54LS09	
	National	DM54LS09	
	SGS	T54LS09	
SN54LS10	Fairchild	54LS10	
	Motorola	SN54LS10	
	National	DM54LS10	
	SGS	54LS10	
		T54LS10	
	Signetics	54LS10	
SN54LS107	Motorola	SN54LS107	
	National	DM54LS107	
	Signetics	54LS107	
SN54LS109	Fairchild	54LS109	
	Motorola	SN54LS109	
	National	DM54LS109	
	SGS	54LS109	
		T54LS109	
	Signetics	54LS109	
SN54LS11	Fairchild	54LS11	
	Motorola	SN54LS11	
	National	DM54LS11	
	SGS	T54LS11	
♦ SN54LS114A	Fairchild	54LS114	
	SGS	T54LS114	
SN54LS12	Motorola	SN54LS12	
	National	DM54LS12	
SN54LS122	Motorola	SN54LS122	
	National	DM54LS122	
SN54LS123	Motorola	SN54LS123	
	National	DM54LS123	
SN54LS125A	Fairchild	54LS125A	
	Motorola	SN54LS125	
		SN54LS125A	
	National	DM54LS125	
	SGS	T54LS125	
	Signetics	54LS125A	
SN54LS126	Fairchild	54LS126	
	Motorola	SN54LS126	
	National	DM54LS126	
	SGS	54LS126	
		T54LS126	
	Signetics	54LS126	
SN54LS13	Fairchild	54LS13	
	Motorola	SN54LS13	
	National	DM54LS13	
	SGS	T54LS13	
SN54LS132	Motorola	SN54LS132	
	National	DM54LS132	
	SGS	T54LS132	
	Signetics	54LS132	
SN54LS136	Fairchild	54LS136	
	Motorola	SN54LS136	
	National	DM54LS136	
	SGS	T54LS136	
	Signetics	54LS136	
SN54LS137	Motorola	SN54LS137	
SN54LS138	Fairchild	54LS138	
	Motorola	SN54LS138	
	National	DM54LS138	
	SGS	T54LS138	
	Signetics	54LS138	

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS139A	Fairchild	54LS139	
	Motorola	SN54LS139	
	National	DM54LS139	
	SGS	T54LS139	
	Signetics	54LS139	
SN54LS14	Fairchild	54LS14	
	Motorola	SN54LS14	
	National	DM54LS14	
	SGS	T54LS14	
	Signetics	54LS14	
SN54LS145	Motorola	SN54LS145	
SN54LS147	Motorola	SN54LS147	
SN54LS148	Motorola	SN54LS148	
SN54LS15	Fairchild	54LS15	
	Motorola	SN54LS15	
	National	DM54LS15	
	SGS	T54LS15	
SN54LS151	Fairchild	54LS151	
	Motorola	SN54LS151	
	National	DM54LS151	
	SGS	T54LS151	
	Signetics	54LS151	
SN54LS153	Fairchild	54LS153	
	Motorola	SN54LS153	
	National	DM54LS153	
	SGS	T54LS153	
	Signetics	54LS153	
SN54LS155A	Fairchild	54LS155	
	Motorola	SN54LS155	
	National	DM54LS155	
	SGS	T54LS155	
SN54LS156	Fairchild	54LS156	
	Motorola	SN54LS156	
	National	DM54LS156	
	SGS	T54LS156	
SN54LS157	Fairchild	54LS157	
	Motorola	SN54LS157	
	National	DM54LS157	
	SGS	T54LS157	
	Signetics	54LS157	
SN54LS158	Fairchild	54LS158	
	Motorola	SN54LS158	
	National	DM54LS158	
	SGS	T54LS158	
	Signetics	54LS158	
SN54LS160A	Fairchild	54LS160A	
	Motorola	SN54LS160A	
	SGS	T54LS160	
	Signetics	54LS160A	
SN54LS161A	Fairchild	54LS161A	
	Motorola	SN54LS161A	
	National	DM54LS161A	
	SGS	T54LS161	
	Signetics	54LS161A	
SN54LS162A	Fairchild	54LS162A	
	Motorola	SN54LS162A	
	National	DM54LS162A	
	SGS	T54LS162	
	Signetics	54LS162A	
SN54LS163A	Fairchild	54LS163A	
	Motorola	SN54LS163A	
	National	DM54LS163	
		DM54LS163A	
	SGS	T54LS163	
	Signetics	54LS163A	
SN54LS164	Fairchild	54LS164	
	Motorola	SN54LS164	
	SGS	T54LS164	
	Signetics	54LS164	
SN54LS165A	Fairchild	54LS165	
	Motorola	SN54LS165	
SN54LS166A	Motorola	SN54LS166	
♦ SN54LS168	Fairchild	54LS168	
	Motorola	SN54LS168	
	National	DM54LS168	
	SGS	T54LS168	
SN54LS169B	Fairchild	54LS169	
	Motorola	SN54LS169	
	National	DM54LS169	
	SGS	T54LS169	
SN54LS170	Fairchild	54LS170	
	National	DM54LS170	
	SGS	T54LS170	
SN54LS173A	Fairchild	54LS173	
	Motorola	SN54LS173A	
	National	DM54LS173	
	Signetics	54LS173	
SN54LS174	Fairchild	54LS174	
	Motorola	SN54LS174	
	National	DM54LS174	
	SGS	T54LS174	
	Signetics	54LS174	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS175	Fairchild	54LS175	
	Motorola	SN54LS175	
	National	DM54LS175	
	SGS	T54LS175	
	Signetics	54LS175	
SN54LS181	Fairchild	54LS181	
	Motorola	SN54LS181	
	SGS	T54LS181	
	Signetics	54LS181	
SN54LS183	Motorola	54LS183	
SN54LS189	Fairchild	54LS189	
SN54LS190	Motorola	SN54LS190	
	National	DM54LS190	
	SGS	T54LS190	
	Signetics	54LS190	
SN54LS191	Motorola	SN54LS191	
	National	DM54LS191	
	SGS	T54LS191	
	Signetics	54LS191	
SN54LS192	Fairchild	54LS192	
	Motorola	SN54LS192	
	National	DM54LS192	
	SGS	T54LS192	
	Signetics	54LS192	
SN54LS193	Fairchild	54LS193	
	Motorola	SN54LS193	
	National	DM54LS193	
	SGS	T54LS193	
	Signetics	54LS193	
SN54LS194A	Fairchild	54LS194A	
	Motorola	SN54LS194A	
	SGS	T54LS194	
SN54LS195A	Fairchild	54LS195A	
	Motorola	SN54LS195A	
	SGS	T54LS195	
	Signetics	54LS195A	
SN54LS196	Motorola	SN54LS196	
	National	DM54LS196	
	SGS	T54LS196	
SN54LS197	Motorola	SN54LS197	
	National	DM54LS197	
	SGS	T54LS197	
	Signetics	54LS197	
SN54LS20	Fairchild	54LS20	
	Motorola	SN54LS20	
	National	DM54LS20	
	SGS	T54LS20	
	Signetics	54LS20	
SN54LS21	Fairchild	54LS21	
	Motorola	SN54LS21	
	National	DM54LS21	
	SGS	T54LS21	
SN54LS22	Fairchild	54LS22	
	National	DM54LS22	
	SGS	T54LS22	
SN54LS221	Motorola	SN54LS221	
	National	DM54LS221	
	Signetics	54LS221	
SN54LS240	Fairchild	54LS240	
	MMI	SN54LS240	
	Motorola	SN54LS240	
	SGS	T54LS240	
SN54LS241	Fairchild	54LS241	
	MMI	SN54LS241	
	Motorola	SN54LS241	
	SGS	T54LS241	
SN54LS242	Motorola	SN54LS242	
SN54LS243	Motorola	SN54LS243	
SN54LS244	Fairchild	54LS244	
	MMI	SN54LS244	
	Motorola	SN54LS244	
	SGS	T54LS244	
SN54LS245	Fairchild	54LS245	
	MMI	SN54LS245	
	Motorola	SN54LS245	
	National	DM54LS245	
	Signetics	54LS245	
SN54LS247	Fairchild	54LS247	
	Motorola	SN54LS247	
	National	DM54LS247	
SN54LS248	Fairchild	54LS248	
	Motorola	SN54LS248	
	National	DM54LS248	
	Signetics	54LS248	
SN54LS249	Fairchild	54LS249	
	Motorola	SN54LS249	
	National	DM54LS249	
SN54LS251	Fairchild	54LS251	
	Motorola	SN54LS251	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS251			(Cont'd)
	SGS	T54LS251	
	Signetics	54LS251	
SN54LS253	Fairchild	54LS253	
	Motorola	SN54LS253	
	National	DM54LS253	
		DM7214	
	SGS	T54LS253	
	Signetics	54LS253	
SN54LS257B	Motorola	SN54LS257A	
SN54LS258B	Fairchild	54LS258A	
	Motorola	SN54LS258A	
SN54LS259B	Fairchild	54LS259	
	Motorola	SN54LS259	
	SGS	T54LS259	
SN54LS26	Fairchild	54LS26	
	Motorola	SN54LS26	
	National	DM54LS26	
	SGS	T54LS26	
SN54LS266	Fairchild	54LS266	
	Motorola	SN54LS266	
	National	DM54LS266	
	SGS	T54LS266	
	Signetics	54LS266	
SN54LS27	Fairchild	54LS27	
	Motorola	SN54LS27	
	National	DM54LS27	
	SGS	T54LS27	
SN54LS273	Fairchild	54LS273	
	MMI	SN54LS273	
	Motorola	SN54LS273	
	SGS	T54LS273	
	Signetics	54LS273	
SN54LS279A	Fairchild	54LS279	
	Motorola	SN54LS279	
	National	DM54LS279	
	SGS	T54LS279	
	Signetics	54LS279	
SN54LS28	Fairchild	54LS28	
	Motorola	SN54LS28	
	SGS	T54LS28	
	Signetics	54LS194A	
		54LS28	
SN54LS280	Motorola	SN54LS280	
	SGS	T54LS280	
SN54LS283	Fairchild	54LS283	
	Motorola	SN54LS283	
	National	DM54LS283	
	SGS	T54LS283	
	Signetics	54LS283	
SN54LS289	Fairchild	54LS289	
SN54LS290	Motorola	SN54LS290	
	National	DM54LS290	
	SGS	T54LS290	
	Signetics	54LS290	
SN54LS293	Motorola	SN54LS293	
	National	DM54LS293	
	SGS	T54LS293	
	Signetics	54LS293	
SN54LS295B	Fairchild	54LS295A	
	Motorola	SN54LS295A	
	SGS	T54LS295	
SN54LS298	Fairchild	54LS298	
	Motorola	SN54LS298	
	National	DM54LS298	
	SGS	54LS298	
		T54LS298	
	Signetics	54LS298	
SN54LS299	Fairchild	54LS299	
	Motorola	DM54LS299	
SN54LS30	Fairchild	54LS30	
	Motorola	SN54LS30	
	National	DM54LS30	
	SGS	T54LS30	
	Signetics	54LS30	
SN54LS32	Fairchild	54LS32	
	Motorola	SN54LS32	
	National	DM54LS32	
	SGS	T54LS32	
	Signetics	54LS32	
SN54LS322A	Fairchild	54LS322	
SN54LS323	Fairchild	54LS323	
		74LS323	
	Motorola	SN74LS323	
	TI	SN74LS323	
SN54LS33	Fairchild	54LS33	
	Motorola	SN54LS33	
	SGS	T54LS33	
SN54LS347	Fairchild	54LS347	
SN54LS348	Motorola	SN54LS348	
SN54LS352	Fairchild	54LS352	
	Motorola	SN54LS352	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS352			(Cont'd)
	National	DM54LS352	
	SGS	T54LS352	
SN54LS353	Fairchild	54LS353	
	Motorola	SN54LS353	
	National	DM54LS353	
	SGS	T54LS353	
		T54LS354	
SN54LS365A	Fairchild	54LS365A	
	Motorola	SN54LS365A	
	SGS	T54LS365	
	Signetics	54LS365	
		54LS365A	
SN54LS366A	Fairchild	54LS366A	
	Motorola	SN54LS366A	
	National	DM54LS366	
	SGS	T54LS366	
	Signetics	54LS366A	
SN54LS367A	Fairchild	54LS367A	
	Motorola	SN54LS367A	
	National	DM54LS367	
	SGS	T54LS367	
	Signetics	54LS367	
		54LS367A	
SN54LS368A	Fairchild	54LS368A	
	Motorola	SN54LS368A	
	National	DM54LS368	
	SGS	T54LS368	
	Signetics	54LS368	
		54LS368A	
SN54LS37	Fairchild	54LS37	
	Motorola	SN54LS37	
	National	DM54LS37	
	SGS	T54LS37	
	Signetics	54LS37	
SN54LS373	MMI	SN54LS373	
	Motorola	SN54LS373	
	SGS	T54LS373	
	Signetics	54LS373	
SN54LS374	Fairchild	54LS374	
	MMI	SN54LS374	
	Motorola	SN54LS374	
	National	DM54LS374	
	SGS	T54LS374	
SN54LS375	Fairchild	54LS375	
	Motorola	SN54LS375	
	Signetics	54LS375	
SN54LS377	Fairchild	54LS377	
	Motorola	SN54LS377	
	SGS	T54LS377	
	Signetics	54LS377	
SN54LS378	AMD	SN54LS378	
	Motorola	SN54LS378	
	Signetics	54LS378	
SN54LS379	AMD	SN54LS379	
	Fairchild	54LS379	
	Motorola	SN54LS379	
	SGS	T54LS379	
SN54LS38	Fairchild	54LS38	
	Motorola	SN54LS38	
	National	DM54LS38	
	SGS	T54LS38	
SN54LS385	AMD	SN54LS385	
	Motorola	SN54LS385	
SN54LS386	Motorola	SN54LS386	
	National	DM54LS386	
	Raytheon	RM8241	
SN54LS390	Motorola	SN54LS390	
	SGS	T54LS390	
SN54LS393	Motorola	SN54LS393	
	SGS	T54LS393	
SN54LS395	Fairchild	54LS395	
	Motorola	SN54LS395	
	SGS	T54LS395	
	Signetics	54LS395	
SN54LS398	Motorola	SN54LS398	
SN54LS399	SGS	TS4LS393	
SN54LS40	Fairchild	54LS40	
	Motorola	SN54LS40	
	National	DM54LS40	
	SGS	T54LS40	
SN54LS42	Fairchild	54LS42	
	Motorola	SN54LS42	
	National	DM54LS42	
	SGS	T54LS42	
	Signetics	54LS42	
SN54LS47	Fairchild	54LS47	
	Motorola	SN54LS47	
	National	DM54LS47	
SN54LS48	Fairchild	54LS48	
	Motorola	SN54LS48	
	National	DM54LS48	

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS49	Fairchild	54LS49	
	Motorola	SN54LS49	
	National	DM54LS49	
SN54LS490	Fairchild	54LS490	
	Motorola	SN54LS490	
	SGS	T54LS490	
SN54LS51	Fairchild	54LS51	
	Motorola	SN54LS51	
	National	DM54LS51	
	SGS	T54LS51	
	Signetics	54LS51	
SN54LS54	Fairchild	54LS54	
	Motorola	SN54LS54	
	National	DM54LS54	
	SGS	T54LS54	
SN54LS540	Motorola	SN54LS540	
SN54LS541	Fairchild	54LS541	
	Motorola	SN54LS541	
	Signetics	54LS541	
♦ SN54LS623	Motorola	SN54LS623	
SN54LS640	Motorola	SN54LS640	
SN54LS641	Motorola	SN54LS641	
SN54LS642	Motorola	SN54LS642	
SN54LS644	Motorola	SN54LS644	
SN54LS645	Motorola	SN54LS645	
SN54LS668	Motorola	SN54LS668	
SN54LS669	Motorola	SN54LS669	
SN54LS670	Fairchild	54LS670	
	Motorola	SN54LS670	
	National	DM54LS670	
	SGS	T54LS670	
	Signetics	54LS670	
SN54LS673	Motorola	SN54LS673	
SN54LS674	Motorola	SN54LS674	
SN54LS682	Motorola	SN54LS682	
SN54LS683	Motorola	SN54LS683	
SN54LS684	Motorola	SN54LS684	
SN54LS685	Motorola	SN54LS685	
SN54LS688	Motorola	SN54LS688	
SN54LS689	Motorola	SN54LS689	
SN54LS73A	Motorola	SN54LS73A	
	National	DM54LS73	
		DM54LS73A	
	Signetics	54LS73	
SN54LS74A	Fairchild	54LS74	
	Motorola	SN54LS74A	
	National	DM54LS74	
		DM54LS74A	
	SGS	T54LS74	
	Signetics	54LS74	
SN54LS75	Motorola	SN54LS75	
	National	DM54LS75	
	Signetics	54LS75	
SN54LS76A	Motorola	SN54LS76A	
	National	DM54LS76	
	Signetics	54LS76	
♦ SN54LS77	Motorola	SN54LS77	
	National	DM54LS77	
SN54LS78A	Motorola	SN54LS78A	
	National	DM54LS78	
SN54LS83A	Fairchild	54LS83A	
	Motorola	SN54LS83A	
	National	DM54LS83A	
	SGS	T54LS83	
	Signetics	54LS83	
		54LS83A	
SN54LS85	Fairchild	54LS85	
	Motorola	SN54LS85	
	National	DM54LS85	
	Signetics	54LS85	
SN54LS86A	Motorola	SN54LS86	
	National	DM54LS86	
	SGS	T54LS86	
	Signetics	54LS86	
SN54LS90	Motorola	SN54LS90	
	National	DM54LS90	
	SGS	T54LS90	
	Signetics	54LS90	
SN54LS91	Motorola	SN54LS91	
SN54LS92	Motorola	SN54LS92	
	National	DM54LS92	
	SGS	T54LS92	
	Signetics	54LS92	
SN54LS93	Motorola	SN54LS93	
	National	DM54LS93	
	SGS	T54LS93	
	Signetics	54LS93	
SN54LS95B	Fairchild	54LS95B	
	Motorola	SN54LS95B	
	National	DM54LS95B	
	SGS	T54LS95	
	Signetics	54LS95B	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN54LS96	Signetics	54LS96	
SN54S00	Signetics	54S00	
SN54S02	Signetics	54S02	
SN54S03	National	DM54S03	
	Signetics	54S03	
SN54S04	Signetics	54S04	
SN54S08	Signetics	54S08	
SN54S10	Fairchild	54S10	
	National	DM54S10	
	Signetics	54S10	
SN54S11	Signetics	54S11	
SN54S114	Fairchild	54S114	
SN54S132	Fairchild	54S132	
SN54S133	Fairchild	54S133	
	National	DM54S133	
	Signetics	54S133	
SN54S134	Fairchild	54S134	
	National	DM54S134	
SN54S135	Fairchild	54S135	
	National	DM54S135	
	Signetics	54S135	
SN54S138	Fairchild	54S138	
	National	DM54S138	
	Signetics	54S138	
SN54S139	Fairchild	54S139	
	National	DM54S139	
	Signetics	54S139	
SN54S140	National	DM54S140	
	Signetics	54S140	
SN54S151	Fairchild	54S151	
	National	DM54S151	
	Signetics	54S151	
SN54S153	Fairchild	54S153	
	National	DM54S153	
	Signetics	54S153	
SN54S157	Fairchild	54S157	
	National	DM54S157	
	Signetics	54S157	
SN54S158	Fairchild	54S158	
	National	DM54S158	
	Signetics	54S158	
SN54S168	Signetics	54S168	
SN54S169	Signetics	54S169	
SN54S175	Fairchild	54S175	
	National	DM54S175	
	Signetics	54S175	
SN54S181	Signetics	54S181	
SN54S194	Fairchild	54S194	
	National	DM54S194	
	Signetics	54S134	
SN54S195	National	DM54S195	
	Signetics	54S195	
SN54S20	Fairchild	54S20	
	National	DM54S20	
	Signetics	54S20	
SN54S22	National	DM54S22	
SN54S240	MMI	SN54S240	
SN54S241	MMI	SN54S241	
SN54S244	MMI	SN54S244	
	Signetics	54S244	
SN54S251	National	DM54S251	
	Signetics	54S251	
SN54S257	National	DM54S257	
	Signetics	54S257	
SN54S258	Fairchild	54S258	
	National	DM54S258	
	Signetics	54S258	
♦ SN54S260	Signetics	54S260	
SN54S280	Fairchild	54S280	
	National	DM54S280	
	Signetics	54S280	
SN54S299	National	DM54S299	
SN54S30	Fairchild	54S30	
	National	DM54S30	
SN54S37	Signetics	54S37	
SN54S373	MMI	SN54S373	
SN54S374	MMI	SN54S374	
SN54S38	Signetics	54S38	
SN54S40	Fairchild	54S40	
	National	DM54S40	
	Signetics	54S40	
SN54S51	Fairchild	54S51	
	National	DM54S51	
	Signetics	54S51	
SN54S64	Fairchild	54S64	
	National	DM54S64	
	Signetics	54S64	
SN54S65	Fairchild	54S65	
	National	DM54S65	
	Signetics	54S65	
SN54S74	Fairchild	54S74	
	Signetics	54S74	
SN54S85	Signetics	54S85	
SN54S86	Signetics	54S86	
SN55107A	Motorola	MC55107	
	National	DS55107	
		LM55107A	
	TI	SN55107B	
SN55108A	Fairchild	55108	
	Motorola	MC55108	
	National	DS55108	
		LM55108A	
	TI	SN55108B	
SN55113	SMC	COM1863	
	Western	TR1863	
SN55114	Fairchild	96114	
	TI	SN75114	
SN55115	Fairchild	96115	
	TI	SN75115	
SN55121	National	DS55121	
	Signetics	S8T13	
SN55122	National	DS55122	
♦ SN55123	Fairchild	SH123	
		UA138	
		μA123	
♦ SN55123	**IPS**	**IP123**	**(2854)**
	LinearTech	LM123	
		LT123	
♦ SN55123	**Motorola**	**LM123**	**(2927)**
		MC78T05	**(2926)**
♦ SN55123	National	LM123	
	SiliconG	SG123	
		SG123A	
SN55157	Fairchild	55157	
SN55173	AMD	55173	
♦ SN55180	National	DM7800	
SN55182	AD	AD7820	
	Maxim	AD7820	
		MAX150	
	National	DS7820	
SN55183	National	DS7830	
SN55189	Fairchild	μA1489	
		μA212A	
		μA750	
	Motorola	**MC1489**	**(2952, 2958)**
	Signetics	MC1489	
	SiliconG	SG1489	
		SG508	
	Sprague	UHD508	
	TI	MC1489	
		SN75189	
♦ SN5520	National	LM5520	
♦ SN5522	Motorola	MC5522	
		MC5523	
♦ SN5522	National	LM5522	
SN55234	Ferranti	ZN440	
	SiliconG	SG55234	
	SiliconSys	SSI6040	
	TI	SNJ55234	
♦ SN55236	SiliconG	SG55236	
	SiliconSys	SSI982	
	Teltone	M982	
♦ SN5524	Fairchild	MC5524	
	Motorola	MC5524	
	National	LM5524	
	Raytheon	RM5524	
	TI	SNJ5524	
♦ SN5525	Fairchild	MC5525	
	Motorola	MC5525	
	National	LM5525	
♦ SN5528	Fairchild	MC5528	
	Motorola	MC5528	
	National	LM5528	
SN55325	Motorola	MC55325	
	National	DS55325	
	SiliconG	SG55325	
	TI	SNJ55325	
SN55326	SiliconG	SG55326	
	TI	SNJ55326	
SN55327	Motorola	MC75325	
	National	DS75325	
	SiliconG	SG55327	
		SG75325	
♦ SN5535	Motorola	MC5535	
	National	LM5535	
SN55365	National	DS55365	
SN55450	Signetics	55450	
	SiliconG	SG55450B	
SN55451	Fairchild	55451	
	National	DS55451	
	Signetics	55451	
SN55451			(Cont'd)
	SiliconG	SG55451	
		SG55451B	
SN55452	Fairchild	μA55452	
	National	DS55452	
	Signetics	55452	
	SiliconG	SG55452	
	TI	SNJ55452	
SN55453	Fairchild	55453	
	National	DS55453	
		LM55453	
	Signetics	55453	
	SiliconG	SG55453	
	TI	SNJ55453	
SN55454	National	DS55454	
	Signetics	55454	
	SiliconG	SG55454	
		SG55454B	
♦ SN55460	National	DS55460	
	SiliconG	SG55460	
	TI	SNJ55460	
SN55461	National	DS55461	
	SiliconG	SG55461	
	TI	SNJ55461	
SN55462	Fairchild	μA55462	
	National	DS55462	
	SiliconG	SG55462	
	TI	SNJ55462	
SN55463	National	DS55463	
	SiliconG	SG55463	
	TI	SNJ55463	
SN55464	National	DS55464	
	SiliconG	SG55464	
	TI	SNJ55464	
SN55470	GE/RCA	CD22221	
	National	DS55470	
	SiliconG	SG55470	
	SiliconSys	SSIK221	
	TI	SNJ55470	
SN55471	SiliconG	SG55471	
	TI	SNJ55471	
SN55472	SiliconG	SG55472	
	TI	SNJ55472	
SN55473	SiliconG	SG55473	
	TI	SNJ55473	
SN55474	SiliconG	SG55474	
	TI	SNJ55474	
SN72748P	Fairchild	μA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
	National	LM748	
	SGS	LM748	
		LS148	
	SiliconG	SG201	
	TI	LM201	
		LM748	
		μA748	
	Thomson	LM201	
		LM748	
SN7400	Fairchild	7400	
	National	DM7400	
	Signetics	**7400**	**(3003)**
	Toshiba	TC7400	
SN7401	Fairchild	7401	
	National	DM7401	
SN7402	Fairchild	7402	
	National	DM7402	
	Signetics	**7402**	**(3003)**
SN7403	Fairchild	7403	
	National	DM7403	
	Signetics	**7403**	**(3003)**
SN7404	Fairchild	7404	
	National	DM7404	
	Signetics	**7404**	**(3003)**
	Toshiba	TC7404	
SN7405	Fairchild	7405	
	National	DM7405	
	Signetics	**7405**	**(3003)**
SN7406	Fairchild	7406	
	National	DM7406	
	Signetics	**7406**	**(3003)**
SN7407	Fairchild	7407	
	Hitachi	HD7407	
	National	DM7407	
	Signetics	**7407**	**(3003)**
SN7408	Fairchild	7408	
	National	DM7408	
	Signetics	**7408**	**(3003)**
SN7409	Fairchild	7409	
	National	DM7409	
SN7410	Fairchild	7410	
	National	DM7410	
SN7410			(Cont'd)
	Signetics	**7410**	**(3003)**
	Toshiba	TC7410	
SN74107	National	DM74107	
	Signetics	**74107**	**(3003)**
SN74109	National	DM74109	
	Signetics	**74109**	**(3003)**
SN74121	Fairchild	74121	
	National	DM74121	
	Signetics	**74121**	**(3003)**
SN74122	Fairchild	9601	
	National	DM8601	
		DM9601	
	Raytheon	RF8601	
		RF9601	
	Signetics	N8T22	
		S8T22	
SN74123	Fairchild	74123	
	National	DM74123	
	Signetics	**74123**	**(3003)**
SN74125	Fairchild	74125	
	National	DM74125	
		DM8093	
	Signetics	**74125**	**(3003)**
SN74126	National	DM74126	
		DM8094	
	Signetics	**74126**	**(3003)**
SN74128	**Signetics**	**74128**	**(3003)**
SN7413	National	DM7413	
	Signetics	**7413**	**(3003)**
SN74132	Fairchild	74132	
	National	DM74132	
	Signetics	**74132**	**(3003)**
SN74136	Fairchild	74136	
SN7414	Fairchild	7414	
	National	DM7414	
	Signetics	**7414**	**(3003)**
♦ SN74141	Fairchild	93141	
	Hitachi	HD7441	
	National	DM74141	
		DM7441	
♦ SN74141	Signetics	74141	
		7441	
SN74145	Fairchild	74145	
	National	DM74145	
	Signetics	**74145**	**(3003)**
SN74147	**GE/RCA**	**CD4508**	**(2634)**
	Motorola	MC14508	
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**
		HEF4508	
		N82147	
	Sprague	SCL4508	
	Toshiba	**TC4508**	**(3308)**
SN74148	National	DM74148	
		DM8318	
	Signetics	**74148**	**(3003)**
		N82148	
SN74150	Fairchild	74150	
	National	DM74150	
	Signetics	**74150**	**(3003)**
SN74153	Fairchild	74153	
	National	DM74153	
	Signetics	**74153**	**(3003)**
SN74155	Fairchild	74155	
	National	DM74155	
	Signetics	**74155**	**(3003)**
SN74156	National	DM74156	
	Signetics	**74156**	**(3003)**
SN74157	National	DM74157	
	Signetics	**74157**	**(3003)**
SN74159	Fairchild	74159	
SN7416	Fairchild	7416	
	National	DM7416	
	Signetics	**7416**	**(3003)**
SN74160	National	DM74160	
	Signetics	**74160**	**(3003)**
SN74161	Fairchild	74161	
	National	DM74161	
	Signetics	**74161**	**(3003)**
SN741616	AMD	AM29516	
		AM29C516	
	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LogicDev	LMU16	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TRW-LSI	MPY016H	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Texas Instruments (Cont'd)			
SN741616	TRW-LSI		(Cont'd)
		MPY016K	
		TMC216H	
		TMC216K	
	Weitek	WTL1016	
		WTL1516	
		WTL2516	
SN74162	National	DM74162	
SN74163	Fairchild	74163	
	National	DM74163	
	Signetics	**74163**	**(3003)**
SN74165	Fairchild	74165	
	National	DM74165	
		DM8590	
	Signetics	**74165**	**(3003)**
SN74166	Fairchild	74166	
	National	DM74166	
	Signetics	**74166**	**(3003)**
SN7417	Fairchild	7417	
	National	DM7417	
	Signetics	**7417**	**(3003)**
SN74170	Fairchild	74170	
	Hitachi	HD74170	
	National	DM74170	
	Signetics	**74170**	**(3003)**
SN74172	Signetics	74172	
SN74173	Fairchild	74173	
	National	DM74173	
		DM8551	
	Raytheon	RC8T10	
	Signetics	**N8T10**	**(3022)**
SN74174	Fairchild	74174	
	National	DM74174	
	Signetics	**74174**	**(3003)**
SN74175	Fairchild	74175	
	National	DM74175	
SN74176	Fairchild	96176	
	National	DM74176	
		DM8280	
	Raytheon	RC8280	
	Signetics	74176	
SN74177	National	DM74177	
		DM8281	
	Raytheon	RC8281	
	Signetics	74177	
♦ SN74178	Raytheon	RC8270	
♦ SN74179	Raytheon	RC8271	
	Signetics	**N8271**	**(3022)**
SN74180	Fairchild	74180	
	National	DM74180	
	Signetics	**74180**	**(3003)**
♦ SN74181	Hitachi	HD74181	
	National	DM74181	
	Raytheon	RC9341	
	Signetics	**74181**	**(3003)**
♦ SN74182	National	DM74182	
♦ SN74184	National	DM74184	
♦ SN74185A	National	DM74185A	
SN74190	National	DM74190	
	Signetics	**74190**	**(3003)**
SN74191	National	DM74191	
	Signetics	**74191**	**(3003)**
SN74192	National	DM74192	
		DM8560	
	Raytheon	RC9360	
	Signetics	**74192**	**(3003)**
SN74194	National	DM74194	
	Signetics	**74194**	**(3003)**
SN74195	National	DM74195	
	Signetics	**74195**	**(3003)**
SN74196	National	DM74196	
		DM8290	
	Raytheon	RC8290	
	Signetics	74196	
SN74197	Fairchild	74197	
	National	DM74197	
		DM8291	
	Raytheon	RC8291	
	Signetics	74197	
SN74198	National	DM74198	
	Signetics	74198	
SN74199	National	DM74199	
	Signetics	**74199**	**(3003)**
SN7420	Fairchild	7420	
		9004	
	National	DM7420	
		DM9004C	
	Signetics	**7420**	**(3003)**
	Toshiba	TC7420	
SN74221	**Signetics**	**74221**	**(3003)**

Manufacturer Device	Replacement Source	Device	IC Master Page
SN7423	National	DM7423	
SN7425	Fairchild	7425	
	National	DM7425	
SN74251	National	DM74251	
		DM8121	
SN7426	Fairchild	μA75451	
	National	DM7426	
		DM8810	
	Signetics	**7426**	**(3003)**
SN7427	Fairchild	7427	
	National	DM7427	
	Signetics	**7427**	**(3003)**
SN74279	Fairchild	74279	
	Signetics	**74279**	**(3003)**
SN7428	**Signetics**	**7428**	**(3003)**
SN74283	Fairchild	74283	
SN74284	National	DM8875A	
SN74285	National	DM8875B	
SN74298	**Signetics**	**74298**	**(3003)**
SN7430	Fairchild	7430	
	National	DM7430	
	Signetics	**7430**	**(3003)**
SN7432	Fairchild	7432	
	National	DM7432	
	Signetics	**7432**	**(3003)**
SN7433	**Signetics**	**7433**	**(3003)**
SN74365	**Motorola**	**MC6885**	**(2951)**
		MC8T95	**(2951)**
	National	DM8095	
	Signetics	**N8T95**	**(3022)**
SN74365A	**Signetics**	**74365A**	**(3003)**
	TI	SN74366A	
SN74366A	**Signetics**	**74365A**	**(3003)**
	TI	SN74365A	
SN74367A	**Signetics**	**74367A**	**(3003)**
SN74368A	**Signetics**	**74368A**	**(3003)**
SN7437	Fairchild	7437	
	National	DM7437	
	Signetics	**7437**	**(3003)**
SN7438	Fairchild	7438	
	National	DM7438	
	Signetics	**7438**	**(3003)**
SN7440	Fairchild	7440	
	National	DM7440	
	Signetics	**7440**	**(3003)**
♦ SN74425	Fairchild	74125	
	National	DM74125	
		DM8093	
♦ SN74425	**Signetics**	**74125**	**(3003)**
	TI	SN74125	
♦ SN74426	National	DM74126	
		DM8094	
♦ SN74426	**Signetics**	**74126**	**(3003)**
	TI	SN74126	
♦ SN7443	TI	SN7443A	
SN7445	Fairchild	7445	
	Signetics	**7445**	**(3003)**
SN7450	Fairchild	7450	
	National	DM7450	
	Signetics	**7450**	**(3003)**
SN7451	Fairchild	7451	
	Hitachi	HD7451	
	National	DM7451	
	Signetics	**7451**	**(3003)**
♦ SN7453	National	DM7453	
SN7454	National	DM7454	
♦ SN7460	National	DM7460	
SN7470	Hitachi	HD7470	
	National	DM7470	
♦ SN7472	National	DM7472	
SN7473	Fairchild	7473	
	National	DM7473	
	Signetics	**7473**	**(3003)**
SN7474	Fairchild	7474	
	National	DM7474	
	Signetics	**7474**	**(3003)**
SN7475	Fairchild	7475	
	National	DM7475	
	Signetics	**7475**	**(3003)**
SN7476	Fairchild	7476	
	National	DM7476	
	Signetics	**7476**	**(3003)**
♦ SN7482	Hitachi	HD7482	
	National	DM7482	
SN7485	Fairchild	7485	
	National	DM7485	
	Signetics	**7485**	**(3003)**
SN7486	Fairchild	7486	
	National	DM7486	
	Signetics	**7486**	**(3003)**
♦ SN7494	Hitachi	HD7494	
	Signetics	**7494**	**(3003)**

Manufacturer Device	Replacement Source	Device	IC Master Page
SN7496	National	DM7496	
	Signetics	**7496**	**(3003)**
SN7497	Fairchild	7497	
SN74ALS00	Motorola	SN74ALS00	
	National	DM74ALS00	
	Signetics	74ALS00	
	TI	SN74ALS00A	
SN74ALS00A	Motorola	SN74ALS00	
	National	DM74ALS00	
	Signetics	74ALS00	
	TI	SN74ALS00	
SN74ALS01	National	DM74ALS01	
SN74ALS02	Motorola	SN74ALS02	
	National	DM74ALS02	
	Signetics	74ALS02	
SN74ALS03A	National	DM74ALS03	
SN74ALS04	Motorola	SN74ALS04	
	National	DM74ALS04	
	Signetics	74ALS04	
	TI	SN74ALS04B	
SN74ALS04B	Motorola	SN74ALS04	
	National	DM74ALS04	
	Signetics	74ALS04	
	TI	SN74ALS04	
SN74ALS05A	National	DM74ALS05	
SN74ALS08	Motorola	SN74ALS08	
	National	DM74ALS08	
	Signetics	74ALS08	
SN74ALS09A	Motorola	SN74ALS09	
	National	DM74ALS09	
SN74ALS10	National	DM74ALS10	
	Signetics	74ALS10	
	TI	SN74ALS10A	
SN74ALS1000A			
	National	DM74ALS1000	
SN74ALS1002A			
	National	DM74ALS1002	
SN74ALS1003A			
	National	DM74ALS1003	
SN74ALS1004			
	National	DM74ALS1004	
SN74ALS1005			
	National	DM74ALS1005	
SN74ALS1008A			
	National	DM74ALS1008	
SN74ALS1010A			
	National	DM74ALS1010	
SN74ALS1011A			
	National	DM74ALS1011	
SN74ALS1020A			
	National	DM74ALS1020	
SN74ALS1032A			
	National	DM74ALS1032	
SN74ALS1034			
	National	DM74ALS1034	
SN74ALS1035			
	National	DM74ALS1035	
SN74ALS109A			
	National	DM74ALS109	
SN74ALS10A	National	DM74ALS10	
	Signetics	74ALS10	
	TI	SN74ALS10	
SN74ALS11	National	DM74ALS11	
	Signetics	74ALS11	
	TI	SN74ALS11A	
SN74ALS112A			
	National	DM74ALS112	
SN74ALS113A			
	National	DM74ALS113	
SN74ALS114A			
	National	DM74ALS114	
SN74ALS11A	National	DM74ALS11	
	Signetics	74ALS11	
	TI	SN74ALS11	
♦ SN74ALS1240			
	National	DM74ALS1240	
SN74ALS1242			
	National	DM74ALS1242	
SN74ALS1243			
	National	DM74ALS1243	
SN74ALS1244A			
	National	DM74ALS1244	
SN74ALS1245A			
	National	DM74ALS1245	
SN74ALS12A	National	DM74ALS12	
SN74ALS131	National	DM74ALS131	
SN74ALS133	National	DM74ALS133	
SN74ALS137	National	DM74ALS137	
SN74ALS138	National	DM74ALS138	
	Signetics	74ALS138	
SN74ALS139	Signetics	74ALS139	

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74ALS151	Mitsubishi	M74ALS151	
	National	DM74ALS151	
	Signetics	74ALS151	
SN74ALS153	Mitsubishi	M74ALS153	
	National	DM74ALS153	
	Signetics	74ALS153	
SN74ALS157	Mitsubishi	M74ALS157	
	Signetics	74ALS157	
SN74ALS158	Mitsubishi	M74ALS158	
	National	DM54ALS353	
		DM54AS1000	
		DM74ALS158	
	Signetics	74ALS158	
	TI	SN54ALS353	
SN74ALS15A	National	DM74ALS15	
SN74ALS160B			
	Motorola	SN74ALS160	
	National	DM74ALS160	
SN74ALS161B			
	Motorola	SN74ALS161	
	National	DM74ALS161	
	Signetics	74ALS161	
SN74ALS1621			
	National	DM74ALS1621	
SN74ALS162A			
	Motorola	SN74ALS162	
	National	DM74ALS162	
SN74ALS163	Mitsubishi	M74ALS163	
	Motorola	SN74ALS242	
	National	DM74ALS242	
	TI	SN74ALS242B	
SN74ALS163A			
	Motorola	SN74ALS163	
	National	DM74ALS163	
	Signetics	74ALS163	
	TI	SN74ALS163B	
SN74ALS163B			
	Motorola	SN74ALS163	
	National	DM74ALS163	
	Signetics	74ALS163	
	TI	SN74ALS163A	
SN74ALS1640A			
	National	DM74ALS1640	
SN74ALS168B			
	National	DM74ALS168	
SN74ALS169B			
	National	DM74ALS169	
SN74ALS174	Mitsubishi	M74ALS174	
	National	DM74ALS174	
	Signetics	74ALS174	
SN74ALS175	Mitsubishi	M74ALS175	
	National	DM74ALS175	
	Signetics	74ALS175	
SN74ALS190	National	DM74ALS190	
SN74ALS191	Mitsubishi	M74ALS191	
	National	DM74ALS191	
	Signetics	74ALS191	
SN74ALS192	Motorola	SN74ALS192	
	National	DM74ALS192	
SN74ALS193	Mitsubishi	M74ALS193	
	Motorola	SN74ALS193	
	National	DM74ALS193	
	Signetics	74ALS193	
SN74ALS20A	National	DM74ALS20	
	Signetics	74ALS20	
SN74ALS21	National	DM74ALS21	
SN74ALS22B	National	DM74ALS22	
SN74ALS231	National	DM54ALS465	
		DM54AS1004	
		DM74ALS231	
	TI	SN54AS1004A	
SN74ALS240A			
	Mitsubishi	M74ALS240	
	Motorola	SN74ALS240	
	National	DM74ALS240	
	Signetics	74ALS240	
SN74ALS240A-1			
	Mitsubishi	M74ALS240A-1	
	Signetics	74ALS240A-1	
SN74ALS241A			
	Mitsubishi	M74ALS241	
	Motorola	SN74ALS241	
	National	DM74ALS241	
	Signetics	74ALS241	
SN74ALS241A-1			
	Mitsubishi	M74ALS241A-1	
	Signetics	74ALS241A-1	
SN74ALS242B			
	Mitsubishi	M74ALS163	
	Motorola	SN74ALS242	
	National	DM74ALS242	
	TI	SN74ALS163	

ALT. SOURCE DIRECTORY

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74ALS243A			
	Motorola	SN74ALS243	
	National	DM74ALS243	
SN74ALS244A			
	Mitsubishi	M74ALS244	
	Motorola	SN74ALS244	
	National	DM74ALS244	
	Signetics	74ALS244	
SN74ALS244A-1			
	Mitsubishi	M74ALS244A-1	
	Signetics	74ALS244A-1	
SN74ALS245A			
	Mitsubishi	M74ALS245	
	Motorola	SN74ALS245	
	National	DM74ALS245	
	Signetics	74ALS245	
SN74ALS245A-1			
	Mitsubishi	M74ALS245A-1	
	Signetics	74ALS245A-1	
SN74ALS251	Mitsubishi	M74ALS251	
	National	DM74ALS251	
	Signetics	74ALS251	
SN74ALS253	Mitsubishi	M74ALS253	
	National	DM74ALS253	
	Signetics	74ALS253	
SN74ALS257	Mitsubishi	M74ALS257	
	National	DM74ALS257	
	Signetics	74ALS257	
SN74ALS258	Mitsubishi	M74ALS258	
	National	DM74ALS258	
	Signetics	74ALS258	
SN74ALS27	National	DM74ALS27	
	Signetics	74ALS27	
SN74ALS273	Mitsubishi	M74ALS273	
	Motorola	SN74ALS273	
	National	DM74ALS273	
	Signetics	74ALS273	
SN74ALS28A	National	DM74ALS28	
SN74ALS30	National	DM74ALS30	
	Signetics	74ALS30	
SN74ALS32	Motorola	SN74ALS32	
	National	DM74ALS32	
	Signetics	74ALS32	
SN74ALS33A	National	DM74ALS33	
SN74ALS352	National	DM74ALS352	
SN74ALS353	National	DM74ALS353	
SN74ALS373	Mitsubishi	M74ALS373	
	Motorola	SN74ALS373	
	National	DM74ALS373	
	Signetics	74ALS373	
SN74ALS374	Mitsubishi	M74ALS374	
	Motorola	SN74ALS374	
	National	DM74ALS374	
	Signetics	74ALS374	
SN74ALS37A	National	DM74ALS37	
SN74ALS38A	National	DM74ALS38	
	Signetics	74ALS38	
SN74ALS40A	National	DM74ALS40	
SN74ALS465A			
	National	DM74ALS465	
SN74ALS466A			
	National	DM74ALS466	
SN74ALS467A			
	National	DM74ALS467	
SN74ALS468A			
	National	DM74ALS468	
SN74ALS518	National	DM74ALS518	
SN74ALS519	National	DM74ALS519	
SN74ALS521	National	DM74ALS521	
SN74ALS522	National	DM74ALS522	
SN74ALS533	National	DM74ALS533	
SN74ALS534	National	DM74ALS534	
SN74ALS563	National	DM74ALS563	
	Signetics	74ALS563	
SN74ALS564	National	DM74ALS564	
	Signetics	74ALS64	
SN74ALS573	Motorola	SN74ALS573	
	National	DM74ALS573	
	Signetics	74ALS73	
SN74ALS574	Motorola	SN74ALS574	
	National	DM74ALS574	
SN74ALS576	Motorola	SN74ALS576	
	National	DM74ALS576	
SN74ALS580A			
	Motorola	SN74ALS580	
	National	DM74ALS580	
SN74ALS620A			
	Mitsubishi	M74ALS620	
	Motorola	SN74ALS620	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74ALS620A			(Cont'd)
	National	DM74ALS620	
	Signetics	74ALS620	
SN74ALS620A-1			
	Mitsubishi	M74ALS620A-1	
	Signetics	74ALS620A-1	
SN74ALS621A			
	Motorola	SN74ALS621	
	National	DM74ALS621	
SN74ALS623A			
	Mitsubishi	M74ALS623	
	Motorola	SN74ALS623	
	National	DM74ALS623	
	Signetics	74ALS623	
SN74ALS623A-1			
	Mitsubishi	M74ALS623A-1	
	Signetics	74ALS623A-1	
SN74ALS640A			
	Motorola	SN74ALS640	
	National	DM74ALS640	
SN74ALS641A			
	Motorola	SN74ALS641	
	National	DM74ALS641	
SN74ALS642A			
	Motorola	SN74ALS642	
	National	DM74ALS642	
SN74ALS643A			
	Motorola	SN74ALS643	
	National	DM74ALS643	
SN74ALS644A			
	Motorola	SN74ALS644	
	National	DM74ALS644	
SN74ALS645A			
	National	DM74ALS645	
SN74ALS689	National	DM74ALS689	
SN74ALS74A	Motorola	SN74ALS74	
	National	DM74ALS74	
SN74ALS804A			
	National	DM74ALS804	
SN74ALS805A			
	National	DM74ALS805	
SN74ALS808A			
	National	DM74ALS808	
SN74ALS810	National	DM74ALS810	
SN74ALS811	National	DM74ALS811	
SN74ALS832A			
	National	DM74ALS832	
SN74ALS873B			
	Motorola	SN74ALS873	
	National	DM74ALS873	
SN74ALS874B			
	Motorola	SN74ALS874	
	National	DM74ALS874	
SN74ALS876A			
	Motorola	SN74ALS876	
	National	DM74ALS876	
SN74ALS880A			
	Motorola	SN74ALS880	
	National	DM74ALS880	
	TI	SN74ALS880B	
SN74ALS880B			
	Motorola	SN74ALS880	
	National	DM74ALS880	
	TI	SN74ALS880A	
SN74AS00	National	DM74AS00	
SN74AS02	National	DM74AS02	
SN74AS04	National	DM74AS04	
SN74AS08	National	DM74AS08	
SN74AS10	National	DM74AS10	
SN74AS1000	National	DM74AS1000	
SN74AS1004	National	DM74AS1004	
SN74AS1008	National	DM74AS1008	
SN74AS1032	National	DM74AS1032	
SN74AS1034	National	DM74AS1034	
SN74AS1036	National	DM74AS1036	
SN74AS109	National	DM74AS109	
SN74AS11	National	DM74AS11	
SN74AS151	National	DM74AS151	
SN74AS153	National	DM74AS153	
SN74AS157	National	DM74AS157	
SN74AS158	National	DM74AS158	
SN74AS160	National	DM74AS160	
SN74AS161	National	DM74AS161	
SN74AS162	National	DM74AS162	
SN74AS163	National	DM74AS163	
SN74AS168	National	DM74AS168	
SN74AS169	National	DM74AS169	
SN74AS174	National	DM74AS174	
SN74AS175	National	DM74AS175	
SN74AS181B	National	DM74AS181	
SN74AS182	National	DM74AS182	
SN74AS20	National	DM74AS20	
SN74AS21	National	DM74AS21	

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74AS230	National	DM74AS230	
SN74AS231	National	DM74AS231	
SN74AS240	National	DM74AS240	
SN74AS241	National	DM74AS241	
SN74AS242	National	DM74AS242	
SN74AS243	National	DM74AS243	
SN74AS244	National	DM74AS244	
SN74AS245	National	DM74AS245	
SN74AS250	National	DM74AS250	
SN74AS253	National	DM74AS253	
SN74AS257	National	DM74AS257	
SN74AS258	National	DM74AS258	
SN74AS2620	National	DM74AS2620	
SN74AS2623	National	DM74AS2623	
SN74AS264	National	DM74AS264	
SN74AS2640	National	DM74AS2640	
SN74AS2645	National	DM74AS2645	
SN74AS27	National	DM74AS27	
SN74AS280	National	DM74AS280	
SN74AS282	National	DM74AS282	
SN74AS286	National	DM74AS286	
SN74AS30	National	DM74AS30	
SN74AS32	National	DM74AS32	
SN74AS34	National	DM74AS34	
SN74AS352	National	DM74AS352	
SN74AS353	National	DM74AS353	
SN74AS373	National	DM74AS373	
SN74AS374	National	DM74AS374	
SN74AS533	National	DM74AS533	
SN74AS534	National	DM74AS534	
SN74AS573	National	DM74AS573	
SN74AS574	National	DM74AS574	
SN74AS575	National	DM74AS575	
SN74AS576	National	DM74AS576	
SN74AS577	National	DM74AS577	
SN74AS580	National	DM74AS580	
SN74AS620	National	DM74AS620	
SN74AS621	National	DM74AS621	
SN74AS622	National	DM74AS622	
SN74AS623	National	DM74AS623	
SN74AS638	National	DM74AS638	
SN74AS639	National	DM74AS639	
SN74AS640	National	DM74AS640	
SN74AS641	National	DM74AS641	
SN74AS642	National	DM74AS642	
SN74AS643	National	DM74AS643	
SN74AS644	National	DM74AS644	
SN74AS645	National	DM74AS645	
SN74AS646	National	DM74AS646	
SN74AS648	National	DM74AS648	
SN74AS651	National	DM74AS651	
SN74AS652	National	DM74AS652	
SN74AS74	National	DM74AS74	
SN74AS804B	National	DM74AS804A	
SN74AS808B	National	DM74AS808A	
SN74AS810	National	DM74AS810	
SN74AS811	National	DM74AS811	
SN74AS821	AMD	AM29821	
		AM29C821	
	TI	SN74BCT29821	
SN74AS822	AMD	AM29822	
		AM29C822	
	TI	SN74BCT29822	
SN74AS823	AMD	AM29823	
		AMC823	
	TI	SN74BCT29823	
SN74AS824	AMD	AM29824	
		AM29C824	
	TI	SN74BCT29824	
SN74AS825	AMD	AM29825	
		AM29C825	
	TI	SN74BCT29825	
SN74AS826	AMD	AM29826	
		AM29C826	
	TI	SN74BCT29826	
SN74AS841	AMD	AM29834	
		AM29841	
		AM29C834	
		AM29C841	
	TI	**SN74BCT29834**	**(3249)**
		SN74BCT29841	
SN74AS843	AMD	AM29843	
		AM29C843	
	TI	SN74BCT29843	
SN74AS844	AMD	AM29844	
		AM29C844	
	TI	SN74BCT29844	
SN74AS845	AMD	AM29845	
		AM29C845	
	TI	SN74BCT29845	

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74AS846	AMD	AM29846	
		AM29C846	
	TI	SN74BCT29846	
SN74AS873	National	DM74AS873	
SN74AS874	National	DM74AS874	
SN74AS876	National	DM74AS876	
SN74AS878	National	DM74AS878	
SN74AS879	National	DM74AS879	
SN74AS880	National	DM74AS880	
SN74AS881A	National	DM74AS881A	
SN74AS95	National	DM74AS95	
SN74BCT240	Fairchild	74F240	
	Motorola	MC74F240	
	Signetics	**74F240**	**(3023)**
	TI	SN74F240	
SN74BCT241	Fairchild	74F241	
	Motorola	MC74F241	
	Signetics	**74F241**	**(3023)**
	TI	SN74F241	
SN74BCT244	Fairchild	74F244	
	Motorola	MC74F244	
	Signetics	**74F244**	**(3023)**
	TI	SN74F244	
SN74BCT245	Fairchild	74F245	
	Motorola	MC74F245	
	Signetics	**74F245**	**(3023)**
	TI	SN74F245	
SN74BCT29818			
	AMD	AM29818A	
		AM29C818	
SN74BCT29821			
	AMD	AM29821	
		AM29C821	
	TI	SN74AS821	
SN74BCT29822			
	AMD	AM29822	
		AM29C822	
	TI	SN74AS822	
SN74BCT29823			
	AMD	AM29823	
		AMC823	
	TI	SN74AS823	
SN74BCT29824			
	AMD	AM29824	
		AM29C824	
	TI	SN74AS824	
SN74BCT29825			
	AMD	AM29825	
		AM29C825	
	TI	SN74AS825	
SN74BCT29826			
	AMD	AM29826	
		AM29C826	
	TI	SN74AS826	
SN74BCT29833			
	AMD	AM29833	
		AM29C833	
SN74BCT29834			
	AMD	AM29834	
		AM29841	
		AM29C834	
		AM29C841	
	TI	SN74AS841	
		SN74BCT29841	
SN74BCT29841			
	AMD	AM29834	
		AM29841	
		AM29C834	
		AM29C841	
	TI	SN74AS841	
		SN74BCT29834	**(3249)**
SN74BCT29842			
	AMD	AM29842	
		AM29C842	
SN74BCT29843			
	AMD	AM29843	
		AM29C843	
	TI	SN74AS843	
SN74BCT29844			
	AMD	AM29844	
		AM29C844	
	TI	SN74AS844	
SN74BCT29845			
	AMD	AM29845	
		AM29C845	
	TI	SN74AS845	
SN74BCT29846			
	AMD	AM29846	
		AM29C846	
	TI	SN74AS846	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74BCT29853			
	AMD	AM29853	
		AM29C853	
SN74BCT29854			
	AMD	AM29854	
		AM29C854	
SN74BCT29861			
	AMD	AM29861	
		AM29C861	
SN74BCT29862			
	AMD	AM29862	
		AM29C862	
SN74BCT29863			
	AMD	AM29863	
		AM29C863	
SN74BCT29864			
	AMD	AM29864	
		AM29C864	
SN74BCT29865			
	AMD	AM29865	
		AM29C865	
SN74BCT29866			
	AMD	AM29866	
		AM29C866	
SN74BCT373	Fairchild	74F373	
	Motorola	MC74F373	
	Signetics	**74F373**	**(3023)**
	TI	SN74F373	
SN74BCT374	Fairchild	74F374	
	Motorola	MC74F374	
	Signetics	**74F374**	**(3023)**
	TI	SN74F374	
SN74BCT533	Fairchild	74F533	
	Motorola	MC74F533	
	Signetics	**74F533**	**(3024)**
	TI	SN74F533	
SN74BCT534	Fairchild	74F534	
	Motorola	MC74F534	
	Signetics	**74F534**	**(3024)**
	TI	SN74F534	
SN74BCT543	Fairchild	74F543	
	Signetics	**74F543**	**(3024)**
	TI	SN74F543	
SN74BCT544	Fairchild	74F544	
	Signetics	**74F544**	**(3024)**
	TI	SN74F544	
SN74BCT620	Fairchild	74F366	
		74F620	
	Motorola	MC74F620	
	Signetics	**74F366**	**(3023)**
		74F620	**(3024)**
	TI	SN74F620	
SN74BCT623	Fairchild	74F367	
		74F623	
	Motorola	MC74F623	
	Signetics	**74F367**	**(3023)**
		74F623	**(3024)**
	TI	SN74F623	
SN74BCT646	Signetics	74F651	
SN74BCT651	Signetics	74F652	
SN74F00	Fairchild	74F00	
	Motorola	MC74F00	
	Signetics	**74F00**	**(3023)**
SN74F02	Fairchild	74F02	
	Motorola	MC74F02	
	Signetics	**74F02**	**(3023)**
SN74F04	Fairchild	74F04	
	Motorola	MC74F04	
	Signetics	**74F04**	**(3023)**
SN74F109	Fairchild	74F109	
	Motorola	MC74F109	
	Signetics	**74F109**	**(3023)**
SN74F11	Fairchild	74F11	
	Motorola	MC74F11	
	Signetics	**74F11**	**(3023)**
SN74F112	Fairchild	74F112	
	Motorola	MC74F112	
	Signetics	**74F112**	**(3023)**
SN74F113	Fairchild	74F113	
	Motorola	ML74F113	
SN74F114	Fairchild	74F114	
	Motorola	MC74F114	
SN74F138	Fairchild	74F138	
	Motorola	MC74F138	
	Signetics	**74F138**	**(3023)**
SN74F151	Fairchild	74F151	
	Motorola	MC74F151	
	Signetics	**74F151**	**(3023)**
SN74F153	Fairchild	74F153	
	Motorola	MC74F153	
	Signetics	**74F153**	**(3023)**
SN74F157	Fairchild	74F157	
	Motorola	MC74F157	
	Signetics	**74F157**	**(3023)**
SN74F158	Fairchild	74F158	
	Motorola	MC74F158	
	Signetics	**74F158**	**(3023)**
SN74F160	Fairchild	74F160	
	Motorola	MC74F160	
	Signetics	74F160	
SN74F161	Fairchild	74F161	
	Motorola	MC74F161	
	Signetics	74F161	
SN74F162	Fairchild	74F162	
	Motorola	MC74F162	
	Signetics	74F162	
SN74F163	Fairchild	74F163	
	Motorola	MC74F163	
	Signetics	74F163	
SN74F168	Fairchild	74F168	
	Motorola	MC74F168	
	Signetics	**74F168**	**(3023)**
SN74F169	Fairchild	74F169	
	Motorola	MC74F169	
	Signetics	**74F169**	**(3023)**
SN74F174	Fairchild	74F174	
	Motorola	MC74F174	
	Signetics	**74F174**	**(3023)**
SN74F175	Fairchild	74F175	
	Motorola	MC74F175	
	Signetics	**74F175**	**(3023)**
SN74F20	Fairchild	74F20	
	Motorola	MC74F20	
	Signetics	**74F20**	**(3023)**
SN74F21	Motorola	MC74F21	
SN74F240	Fairchild	74F240	
	Motorola	MC74F240	
	Signetics	**74F240**	**(3023)**
	TI	**SN74BCT240**	**(3249)**
SN74F241	Fairchild	74F241	
	Motorola	MC74F241	
	Signetics	**74F241**	**(3023)**
	TI	**SN74BCT241**	**(3249)**
SN74F242	Motorola	MC74F242	
	Signetics	**74F242**	**(3023)**
SN74F243	Fairchild	74F243	
	Motorola	MC74F243	
	Signetics	**74F243**	**(3023)**
SN74F244	Fairchild	74F244	
	Motorola	MC74F244	
	Signetics	**74F244**	**(3023)**
	TI	**SN74BCT244**	**(3249)**
SN74F245	Fairchild	74F245	
	Motorola	MC74F245	
	Signetics	**74F245**	**(3023)**
	TI	**SN74BCT245**	**(3249)**
SN74F251	Fairchild	54ACT564	
	GE/RCA	CD54ACT564	
SN74F253	Fairchild	74F253	
	Motorola	MC74F253	
	Signetics	**74F253**	**(3023)**
SN74F257	Fairchild	74F257	
	Motorola	MC74F257	
	Signetics	**74F257**	**(3023)**
SN74F258	Fairchild	74F258	
	Motorola	MC74F258	
	Signetics	**74F258**	**(3023)**
SN74F27	Fairchild	74F27	
		74F395	
	Signetics	74F27	
		74F395	**(3024)**
SN74F273	Fairchild	74F273	
		74F398	
	Motorola	MC74F398	
	Signetics	**74F273**	**(3023)**
		74F398	**(3024)**
SN74F280	Fairchild	74F280	
	Motorola	MC74F280	
	Signetics	**74F280**	**(3023)**
SN74F283	Fairchild	74F283	
	Motorola	MC74F283	
	Signetics	**74F283**	**(3023)**
SN74F299	Fairchild	74F299	
		74F350	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74F299			(Cont'd)
	Motorola	MC74F350	
	Signetics	**74F299**	**(3023)**
		74F350	**(3023)**
	TI	SN74F350	
SN74F30	Fairchild	74F30	
		74F352	
	Motorola	MC74F352	
	Signetics	**74F30**	**(3023)**
		74F352	**(3023)**
	TI	SN74F352	
SN74F323	Fairchild	74F298	
		74F323	
	Motorola	MC74F323	
	Signetics	**74F298**	**(3023)**
		74F323	**(3023)**
SN74F350	Fairchild	74F299	
		74F350	
	Motorola	MC74F350	
	Signetics	**74F299**	**(3023)**
		74F350	**(3023)**
	TI	SN74F299	
SN74F352	Fairchild	74F30	
		74F352	
	Motorola	MC74F352	
	Signetics	**74F30**	**(3023)**
		74F352	**(3023)**
	TI	SN74F30	
SN74F353	Fairchild	74F30244	
		74F353	
	Motorola	MC74F353	
	Signetics	**74F30244**	**(3023)**
		74F353	**(3023)**
SN74F373	Fairchild	74F373	
	Motorola	MC74F373	
	Signetics	**74F373**	**(3023)**
	TI	**SN74BCT373**	**(3249)**
SN74F374	Fairchild	74F374	
	Motorola	MC74F374	
	Signetics	**74F374**	**(3023)**
	TI	**SN74BCT374**	**(3249)**
SN74F377	Fairchild	74F269	
		74F377	
	Signetics	**74F269**	**(3023, 3038)**
		74F377	**(3023)**
SN74F378	Fairchild	74F3037	
		74F378	
	Motorola	MC74F378	
	Signetics	**74F3037**	**(3023, 3043)**
		74F378	**(3023)**
SN74F379	Fairchild	74F3040	
		74F379	
	Motorola	MC74F379	
	Signetics	**74F3040**	**(3023)**
		74F379	**(3023)**
SN74F381	Fairchild	74F322	
		74F381	
	Motorola	MC74F381	
	Signetics	**74F322**	**(3023)**
		74F381	**(3024)**
SN74F382	Fairchild	74F365	
		74F382	
	Motorola	MC74F382	
	Signetics	**74F365**	**(3023)**
		74F382	**(3024)**
SN74F521	Fairchild	74F521	
	Motorola	MC74F521	
	Signetics	**74F521**	**(3024)**
SN74F533	Fairchild	74F533	
	Motorola	MC74F533	
	Signetics	**74F533**	**(3024)**
	TI	**SN74BCT533**	**(3249)**
SN74F534	Fairchild	74F534	
	Motorola	MC74F534	
	Signetics	**74F534**	**(3024)**
	TI	**SN74BCT534**	**(3249)**
SN74F537	Fairchild	74F537	
	Signetics	**74F537**	**(3024)**
SN74F538	Fairchild	74F538	
	Signetics	**74F538**	**(3024)**
SN74F539	Fairchild	74F539	
	Signetics	**74F539**	**(3024)**
SN74F543	Fairchild	74F543	
	Signetics	**74F543**	**(3024)**
	TI	**SN74BCT543**	**(3249)**
SN74F544	Fairchild	74F544	
	Signetics	**74F544**	**(3024)**
	TI	**SN74BCT544**	**(3249)**
SN74F563	Fairchild	74F563	
	Signetics	**74F563**	**(3024)**
SN74F568	Fairchild	74F568	
	Signetics	**74F568**	**(3024)**
SN74F569	Fairchild	74F569	
	Signetics	**74F569**	**(3024)**
SN74F573	Fairchild	74F573	
	Signetics	**74F573**	**(3024)**
SN74F620	Fairchild	74F366	
		74F620	
	Motorola	MC74F620	
	Signetics	**74F366**	**(3023)**
		74F620	**(3024)**
	TI	**SN74BCT620**	**(3249)**
SN74F621	Fairchild	74F621	
	Signetics	**74F621**	**(3024)**
SN74F622	Fairchild	74F622	
	Signetics	**74F622**	**(3024)**
SN74F623	Fairchild	74F367	
		74F623	
	Motorola	MC74F623	
	Signetics	**74F367**	**(3023)**
		74F623	**(3024)**
	TI	**SN74BCT623**	**(3249)**
SN74F64	Fairchild	74F64	
	Signetics	**74F64**	**(3024)**
SN74F653	Fairchild	74ACT151	
		74F653	
	GE/RCA	**CD74ACT151**	**(2629)**
	Motorola	MC74F653	
SN74F74	Fairchild	74F74	
	Motorola	MC74F74	
	Signetics	74F74	
♦ SN74H00	National	DM74H00	
♦ SN74H01	National	DM74H01	
		DM74H08	
♦ SN74H04	National	DM74H04	
SN74H10	National	DM74H10	
♦ SN74H101	Signetics	74H101	
♦ SN74H103	National	DM74H103	
♦ SN74H106	National	DM74H106	
♦ SN74H108	National	DM74H108	
♦ SN74H11	National	DM74H11	
♦ SN74H20	National	DM74H20	
♦ SN74H21	National	DM74H21	
♦ SN74H30	National	DM74H30	
♦ SN74H40	National	DM74H40	
♦ SN74H50	National	DM74H50	
♦ SN74H51	National	DM74H51	
♦ SN74H62	National	DM74H62	
♦ SN74H74	National	DM74H74	
SN74HC00	**GE/RCA**	**CD74HC00**	**(2631)**
	Hitachi	HD74HC00	
	Motorola	MC74HC00	
	National	MM74HC00	
	SGS	M74HC00	
	Signetics	**74HC00**	**(3003)**
	Toshiba	TC40H000	
SN74HC01	Hitachi	HD74HC01	
SN74HC02	**GE/RCA**	**CD74HC02**	**(2631)**
	Hitachi	HD74HC02	
	Motorola	MC74HC02	
	National	MM74HC02	
	SGS	M74HC02	
	Signetics	**74HC02**	**(3003)**
	Toshiba	TC40H002	
SN74HC03	**GE/RCA**	**CD74HC03**	**(2631)**
	Motorola	MC74HC03	
	National	MM74HC03	
	SGS	M74HC03	
	Toshiba	**TC74HC03**	**(3307)**
SN74HC04	**GE/RCA**	**CD74HC04**	**(2631)**
	Hitachi	HD74HC04	
	Motorola	MC74HC04	
	National	MM74HC04	
	SGS	M74HC04	
	Toshiba	TC40H004	
SN74HC05	Motorola	MC74HC05	
SN74HC08	**GE/RCA**	**CD74HC08**	**(2631)**
	Hitachi	HD74HC08	
	Motorola	MC74HC08	
	National	MM74HC08	
	SGS	M74HC08	
	Signetics	**74HC08**	**(3003)**
SN74HC09	Hitachi	HD74HC09	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74HC10	**GE/RCA**	**CD74HC10**	**(2631)**
	Hitachi	HD74HC10	
	Motorola	MC74HC10	
	National	MM74HC10	
	SGS	M74HC10	
	Signetics	**74HC10**	**(3003)**
	Toshiba	TC40H010	
SN74HC107	**GE/RCA**	**CD74HC107**	**(2631)**
	Hitachi	HD74HC107	
	Motorola	MC74HC107	
	National	MM74HC107	
	SGS	M74HC107	
	Signetics	**74HC107**	**(3003)**
	Toshiba	TC40H107	
SN74HC109	**GE/RCA**	**CD74HC109**	**(2631)**
	Hitachi	HD74HC109	
	Motorola	MC74HC109	
	National	MM74HC109	
	SGS	M74HC109	
	Signetics	**74HC109**	**(3003)**
	Toshiba	**TC74HC109**	**(3307)**
SN74HC11	**GE/RCA**	**CD74HC11**	**(2631)**
	Hitachi	HD74HC11	
	Motorola	MC74HC11	
	National	MM74HC11	
	SGS	M74HC11	
	Signetics	**74HC11**	**(3003)**
	Toshiba	TC40H011	
SN74HC112	**GE/RCA**	**CD74HC112**	**(2631)**
	Hitachi	HD74HC112	
	Motorola	MC74HC112	
	National	MM74HC112	
	SGS	M74HC112	
	Signetics	**74HC112**	**(3003)**
SN74HC113	Hitachi	HD74HC113	
	Motorola	MC74HC113	
	National	MM74HC113	
	SGS	M74HC113	
SN74HC114	Hitachi	HD74HC114	
SN74HC123	Hitachi	HD74HC123	
	Motorola	MC74HC123A	
	National	MM74HC123	
	SGS	M74HC123	
	Signetics	**74HC123**	**(3003)**
SN74HC125	**GE/RCA**	**CD74HC125**	**(2631)**
	Hitachi	HD74HC125	
	Motorola	MC74HC125	
	National	MM74HC125	
	SGS	M74HC125	
	Toshiba	**TC74HC125**	**(3307)**
SN74HC132	**GE/RCA**	**CD74HC132**	**(2631)**
	Hitachi	HD74HC132	
	Motorola	MC74HC132	
	National	MM74HC132	
	SGS	M74HC132	
	Signetics	**74HC132**	**(3003)**
SN74HC133	Motorola	MC74HC133	
	National	MM74HC133	
	SGS	M74HC133	
SN74HC138	**GE/RCA**	**CD74HC138**	**(2632)**
	Hitachi	HD74HC138	
	Motorola	MC74HC138	
	National	MM74HC138	
	SGS	M74HC138	
	Signetics	**74HC138**	**(3003)**
	Sprague	SS74HC138	
SN74HC139	**GE/RCA**	**CD74HC139**	**(2632)**
	Hitachi	HD74HC139	
	National	MM74HC139	
	SGS	M74HC139	
	Signetics	**74HC139**	**(3003)**
	Sprague	SS74HC139	
	Toshiba	TC40H139	
SN74HC14	**GE/RCA**	**CD74HC14**	**(2631)**
	Hitachi	HD74HC14	
	Motorola	MC74HC14	
	National	MM74HC14	
	SGS	M74HC14	
	Signetics	**74HC14**	**(3003)**
SN74HC147	**GE/RCA**	**CD74HC147**	**(2632)**
	Hitachi	HD74HC147	
	Motorola	MC74HC147	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74HC147			(Cont'd)
	National	MM74HC147	
	SGS	M74HC147	
	Signetics	**74HC147**	**(3003)**
SN74HC148	Hitachi	HD74HC148	
	SGS	M74HC148	
	Toshiba	**TC74HC148**	**(3307)**
SN74HC151	**GE/RCA**	**CD74HC151**	**(2632)**
	Hitachi	HD74HC151	
	Motorola	MC74HC151	
	National	MM74HC151	
	SGS	M74HC151	
	Signetics	**74HC151**	**(3003)**
	Universal	US74HC151	
SN74HC152	Hitachi	HD74HC152	
SN74HC153	**GE/RCA**	**CD74HC153**	**(2632)**
	Hitachi	HD74HC153	
	Motorola	MC74HC153	
	National	MM74HC153	
	SGS	M74HC153	
	Signetics	**74HC153**	**(3003)**
	Toshiba	TC40H153	
SN74HC154	**GE/RCA**	**CD74HC154**	**(2632)**
	Hitachi	HD74HC154	
	Motorola	MC74HC154	
	National	MM74HC154	
	SGS	M74HC154	
	Signetics	**74HC154**	**(3003)**
SN74HC157	**GE/RCA**	**CD74HC157**	**(2632)**
	Hitachi	HD74HC157	
	Motorola	MC74HC157	
	National	MM74HC157	
	SGS	M74HC157	
	Signetics	**74HC157**	**(3003)**
	Toshiba	TC40H157	
SN74HC158	**GE/RCA**	**CD74HC158**	**(2632)**
	Hitachi	HD74HC158	
	Motorola	MC74HC158	
	National	MM74HC158	
	SGS	M74HC158	
	Signetics	**74HC158**	**(3003)**
	Toshiba	TC40H158	
SN74HC160	**GE/RCA**	**CD74HC160**	**(2632)**
	Motorola	MC74HC160	
	National	MM74HC160	
	SGS	M74HC160	
	Signetics	**74HC160**	**(3003)**
SN74HC161	**GE/RCA**	**CD74HC161**	**(2632)**
	Hitachi	HD74HC161	
	Motorola	MC74HC161	
	National	MM74HC161	
	SGS	M74HC161	
	Signetics	**74HC161**	**(3003)**
SN74HC162	**GE/RCA**	**CD74HC162**	**(2632)**
	Hitachi	HD74HC162	
	Motorola	MC74HC162	
	National	MM74HC162	
	SGS	M74HC162	
	Signetics	**74HC162**	**(3003)**
SN74HC163	**GE/RCA**	**CD74HC163**	**(2632)**
	Hitachi	HD74HC163	
	Motorola	MC74HC163	
	National	MM74HC163	
	SGS	M74HC163	
	Signetics	**74HC163**	**(3003)**
SN74HC164	**GE/RCA**	**CD74HC164**	**(2631)**
	Hitachi	HD74HC164	
	Motorola	MC74HC164	
	National	MM74HC164	
	SGS	M74HC164	
	Signetics	**74HC164**	**(3003)**
SN74HC165	**GE/RCA**	**CD74HC165**	**(2631)**
	Hitachi	HD74HC165	
	Motorola	MC74HC165	
	National	MM74HC165	
	SGS	M74HC165	
	Signetics	**74HC165**	**(3003)**
SN74HC166	**GE/RCA**	**CD74HC166**	**(2631)**
	SGS	M74HC166	
	Signetics	**74HC166**	**(3003)**

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74HC173	**GE/RCA**	**CD74HC173**	**(2631)**
	Hitachi	HD74HC173	
	Motorola	MC74HC173	
	National	MM74HC173	
	SGS	M74HC173	
	Signetics	**74HC173**	**(3003)**
SN74HC174	**GE/RCA**	**CD74HC174**	**(2631)**
	Hitachi	HD74HC174	
	Motorola	MC74HC174	
	National	MM74HC174	
	SGS	M74HC174	
	Signetics	**74HC174**	**(3003)**
	Toshiba	TC40H174	
SN74HC175	**GE/RCA**	**CD74HC175**	**(2631)**
	Hitachi	HD74HC175	
	Motorola	MC74HC175	
	National	MM74HC175	
	SGS	M74HC175	
	Signetics	**74HC175**	**(3003)**
	Toshiba	TC40H175	
SN74HC190	**GE/RCA**	**CD74HC190**	**(2632)**
	Hitachi	HD74HC190	
	Motorola	MC74HC190	
	SGS	M74HC190	
	Signetics	**74HC190**	**(3003)**
		PC74HC190	
		PCF74HC190	
	Toshiba	**TC74HC190**	**(3307)**
SN74HC191	**GE/RCA**	**CD74HC191**	**(2632)**
	Hitachi	HD74HC191	
	Motorola	MC74HC191	
	SGS	M74HC191	
	Signetics	**74HC191**	**(3003)**
SN74HC192	**GE/RCA**	**CD74HC192**	**(2632)**
	Hitachi	HD74HC192	
	Motorola	MC74HC192	
	National	MM74HC192	
	SGS	M74HC192	
	Signetics	**74HC192**	**(3003)**
	Toshiba	TC40H192	
SN74HC193	**GE/RCA**	**CD74HC193**	**(2632)**
	Hitachi	HD74HC193	
	Motorola	MC74HC193	
	National	MM74HC193	
	SGS	M74HC193	
	Signetics	**74HC193**	**(3003)**
	Toshiba	TC40H193	
SN74HC194	**GE/RCA**	**CD74HC194**	**(2631)**
	Hitachi	HD74HC194	
	Motorola	MC74HC194	
	National	MM74HC194	
	SGS	M74HC194	
	Signetics	**74HC194**	**(3003)**
SN74HC195	**GE/RCA**	**CD74HC195**	**(2631)**
	Hitachi	HD74HC195	
	Motorola	MC74HC195	
	National	MM74HC195	
	SGS	M74HC195	
	Signetics	**74HC195**	**(3003)**
SN74HC20	**GE/RCA**	**CD74HC20**	**(2631)**
	Hitachi	HD74HC20	
	Motorola	MC74HC20	
	National	MM74HC20	
	SGS	M74HC20	
	Signetics	**74HC20**	**(3003)**
	Toshiba	TC40H020	
SN74HC21	Hitachi	HD74HC21	
	Motorola	MC74HC21	
	SGS	M74HC21	
	Toshiba	**TC74HC21**	**(3307)**
SN74HC221	Hitachi	HD74HC221	
SN74HC237	Motorola	MC74HC237	
	SGS	M74HC237	
	Toshiba	**TC74HC237**	**(3307)**
SN74HC238	**GE/RCA**	**CD74HC238**	**(2632)**
	SGS	M74HC238	
	Signetics	**74HC238**	**(3003)**
	Sprague	SS74HC238	
SN74HC240	**GE/RCA**	**CD74HC240**	**(2631)**
	Hitachi	HD74HC240	
	Mitel	MD74HC240	
	Motorola	MC74HC240	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74HC240			(Cont'd)
	National	MM74HC240	
	SGS	M74HC240	
	Signetics	**74HC240**	**(3003)**
	Sprague	SS74HC240	
	Supertex	SI74HC240	
	Toshiba	TC40H240	
SN74HC241	**GE/RCA**	**CD74HC241**	**(2631)**
	Hitachi	HD74HC241	
	Mitel	MD74HC241	
	Motorola	MC74HC241	
	National	MM74HC241	
	SGS	M74HC241	
	Signetics	**74HC241**	**(3003)**
	Sprague	SS74HC241	
	Supertex	SI74HC241	
SN74HC242	**GE/RCA**	**CD74HC242**	**(2631)**
	Hitachi	HD74HC242	
	Motorola	MC74HC242	
	National	MM74HC242	
	SGS	M74HC242	
	Signetics	**74HC242**	**(3003)**
SN74HC243	**GE/RCA**	**CD74HC243**	**(2631)**
	Hitachi	HD74HC243	
	Motorola	MC74HC243	
	National	MM74HC243	
	SGS	M74HC243	
		M74HC245	
	Signetics	**74HC243**	**(3003)**
SN74HC244	**GE/RCA**	**CD74HC244**	**(2631)**
	Hitachi	HD74HC244	
	Mitel	MD74HC244	
	Motorola	MC74HC244	
	National	MM74HC244	
	SGS	M74HC244	
	Signetics	**74HC244**	**(3003)**
	Sprague	SS74HC244	
	Supertex	SI74HC244	
SN74HC245	**GE/RCA**	**CD74HC245**	**(2631)**
	Hitachi	HD74HC245	
	Motorola	MC74HC245	
	National	MM74HC245	
	Signetics	**74HC245**	**(3003)**
	Sprague	SS74HC245	
SN74HC251	**GE/RCA**	**CD74HC251**	**(2632)**
	Hitachi	HD74HC251	
	Motorola	MC74HC251	
	National	MM74HC251	
	SGS	M74HC251	
	Signetics	**74HC251**	**(3003)**
SN74HC253	**GE/RCA**	**CD74HC253**	**(2632)**
	Hitachi	HD74HC253	
	Motorola	MC74HC253	
	National	MM74HC253	
	SGS	M74HC253	
	Signetics	**74HC253**	**(3003)**
SN74HC257	**GE/RCA**	**CD74HC257**	**(2632)**
	Hitachi	HD74HC257	
	Motorola	MC74HC257	
	National	MM74HC257	
	SGS	M74HC257	
	Signetics	**74HC257**	**(3003)**
SN74HC258	**GE/RCA**	**CD74HC258**	**(2632)**
	Hitachi	HD74HC258	
	Toshiba	**TC74HC258**	**(3307)**
SN74HC259	**GE/RCA**	**CD74HC259**	**(2632)**
	Hitachi	HD74HC259	
	Motorola	MC74HC259	
	National	MM74HC259	
	Signetics	**74HC259**	**(3003)**
SN74HC266	Hitachi	HD74HC266	
	Motorola	MC74HC266	
	National	MM74HC266	
	SGS	M74HC266	
	Signetics	74HC266	
SN74HC27	**GE/RCA**	**CD74HC27**	**(2631)**
	Hitachi	HD74HC27	
	Motorola	MC74HC27	
	National	MM74HC27	
	SGS	M74HC27	
	Signetics	**74HC27**	**(3003)**
	Toshiba	TC40H027	
	Universal	US74HC27	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74HC273	CTI	74HC273	
	GE/RCA	**CD74HC273**	**(2631)**
	Hitachi	HD74HC273	
	Motorola	MC74HC273	
	SGS	M74HC273	
	Signetics	**74HC273**	**(3003)**
SN74HC280	**GE/RCA**	**CD74HC280**	**(2632)**
	Hitachi	HD74HC280	
	Motorola	MC74HC280	
	National	MM74HC280	
	SGS	M74HC280	
	Signetics	**74HC280**	**(3003)**
SN74HC298	Hitachi	HD74HC298	
	SGS	M74HC298	
SN74HC299	Hitachi	HD74HC299	
SN74HC30	**GE/RCA**	**CD74HC30**	**(2631)**
	Hitachi	HD74HC30	
	Motorola	MC74HC30	
	National	MM74HC30	
	SGS	M74HC30	
	Signetics	**74HC30**	**(3003)**
SN74HC32	**GE/RCA**	**CD74HC32**	**(2631)**
	Hitachi	HD74HC32	
	Motorola	MC74HC32	
	National	MM74HC32	
	SGS	M74HC32	
	Signetics	**74HC32**	**(3003)**
	Toshiba	TC40H032	
SN74HC354	**GE/RCA**	**CD74HC354**	**(2632)**
	Hitachi	HD74HC354	
	Motorola	MC74HC354	
	National	MM74HC354	
	SGS	M74HC354	
	Signetics	**74HC354**	**(3003)**
SN74HC356	**GE/RCA**	**CD74HC356**	**(2632)**
	Hitachi	HD74HC356	
	Motorola	MC74HC356	
	National	MM74HC356	
	SGS	M74HC356	
	Signetics	**74HC356**	**(3003)**
SN74HC365	**GE/RCA**	**CD74HC365**	**(2631)**
	Hitachi	HD74HC365	
	Motorola	MC74HC365	
	National	MM74HC365	
	SGS	M74HC365	
SN74HC366	**GE/RCA**	**CD74HC366**	**(2631)**
	Hitachi	HD74HC366	
	Motorola	MC74HC366	
	National	MM74HC366	
	SGS	M74HC366	
	Signetics	**74HC366**	**(3003)**
SN74HC367	**GE/RCA**	**CD74HC367**	**(2631)**
	Hitachi	HD74HC367	
	Motorola	MC74HC367	
	National	MM74HC367	
	SGS	M74HC367	
	Signetics	**74HC367**	**(3003)**
SN74HC368	**GE/RCA**	**CD74HC368**	**(2631)**
	Hitachi	HD74HC368	
	Motorola	MC74HC368	
	National	MM74HC368	
	SGS	M74HC368	
	Signetics	**74HC368**	**(3003)**
SN74HC373	**GE/RCA**	**CD74HC373**	**(2632)**
	Hitachi	HD74HC373	
	Mitel	MD74HC373	
	Motorola	MC74HC373	
	National	MM74HC373	
	SGS	M74HC373	
	Signetics	**74HC373**	**(3003)**
	Sprague	SS74HC373	
	Supertex	SI74HC373	
SN74HC374	**GE/RCA**	**CD74HC374**	**(2631)**
	Hitachi	HD74HC374	
	Mitel	MD74HC374	
	Motorola	MC74HC374	
	National	MM74HC374	
	SGS	M74HC374	
	Signetics	**74HC374**	**(3003)**
	Sprague	SS74HC374	
SN74HC375	Hitachi	HD74HC375	
	SGS	M74HC375	
	Toshiba	**TC74HC375**	**(3307)**
SN74HC377	**GE/RCA**	**CD74HC377**	**(2631)**
	Hitachi	HD74HC377	
	Motorola	MC74HC377	
	SGS	M74HC377	
	Signetics	**74HC377**	**(3003)**
SN74HC386	Motorola	MC74HC386	
	SGS	M74HC386	
	Toshiba	**TC74HC386**	**(3307)**
SN74HC390	**GE/RCA**	**CD74HC390**	**(2632)**
	Hitachi	HD74HC390	
	Motorola	MC74HC390	
	National	MM74HC390	
	SGS	M74HC390	
	Signetics	**74HC390**	**(3003)**
SN74HC393	**GE/RCA**	**CD74HC393**	**(2632)**
	Hitachi	HD74HC393	
	Motorola	MC74HC393	
	National	MM74HC393	
	SGS	M74HC393	
	Signetics	**74HC393**	**(3003)**
SN74HC4002	**GE/RCA**	**CD74HC4002**	**(2631)**
	Motorola	MC74HC4002	
	National	MM74HC4002	
	SGS	M74HC4002	
	Signetics	**74HC4002**	**(3003)**
SN74HC4017	**GE/RCA**	**CD74HC4017**	**(2632)**
	Motorola	MC74HC4017	
	National	MM74HC4017	
	SGS	M74HC4017	
	Signetics	**74HC4017**	**(3003)**
SN74HC4020	**GE/RCA**	**CD74HC4020**	**(2632)**
	Hitachi	HD74HC4020	
	Motorola	MC74HC4020	
	National	MM74HC4020	
	SGS	M74HC4020	
	Signetics	**74HC4020**	**(3003)**
SN74HC4024	**GE/RCA**	**CD74HC4024**	**(2632)**
	Hitachi	HD74HC4024	
	Motorola	MC74HC4024	
	SGS	M74HC4024	
	Signetics	**74HC4024**	**(3003)**
SN74HC4040	**GE/RCA**	**CD74HC4040**	**(2632)**
	Hitachi	HD74HC4040	
	Motorola	MC74HC4040	
	National	MM74HC4040	
	SGS	M74HC4040	
	Signetics	**74HC4040**	**(3003)**
SN74HC4049	**GE/RCA**	**CD74HC4049**	**(2631)**
	Motorola	MC74HC4049	
	National	MM74HC4049	
	SGS	M74HC4049	
	Signetics	**74HC4049**	**(3003)**
SN74HC4051	**GE/RCA**	**CD74HC4051**	**(2632)**
	Motorola	MC74HC4051	
	SGS	M74HC4051	
	Signetics	**74HC4051**	**(3003)**
SN74HC4052	**GE/RCA**	**CD74HC4052**	**(2632)**
	Motorola	MC74HC4052	
	SGS	M74HC4052	
	Signetics	**74HC4052**	**(3003)**
SN74HC4053	**GE/RCA**	**CD74HC4053**	**(2632)**
	Motorola	MC74HC4053	
	SGS	M74HC4053	
	Signetics	**74HC4053**	**(3003)**
SN74HC4060	**GE/RCA**	**CD74HC4060**	**(2632)**
	Motorola	MC74HC4060	
	National	MM74HC4060	
	SGS	M74HC4060	
	Signetics	**74HC4060**	**(3003)**
SN74HC4075	**GE/RCA**	**CD74HC4075**	**(2631)**
	Motorola	MC74HC4075	
	National	MM74HC4075	
	Signetics	74HC4075	
	Toshiba	**TC74HC4075**	**(3307)**
SN74HC4078A			
	Motorola	MC74HC4078	
	National	MM74HC4078	
	SGS	M74HC4078	
	Toshiba	**TC74HC4078**	**(3307)**
SN74HC42	**GE/RCA**	**CD74HC42**	**(2632)**
	Hitachi	HD74HC42	
	Motorola	MC74HC42	
	National	MM74HC42	
	SGS	M74HC42	
	Signetics	**74HC42**	**(3003)**
SN74HC423	Hitachi	HD74HC423	
	Toshiba	**TC74HC423**	**(3307)**
SN74HC4514	**GE/RCA**	**CD74HC4514**	**(2632)**
	Hitachi	HD74HC4514	
	Motorola	MC74HC4514	
	National	MM74HC4514	
	SGS	M74HC4514	
	Signetics	**74HC4514**	**(3003)**
SN74HC4515	**Toshiba**	**TC74HC4515**	**(3307)**
SN74HC490	Hitachi	HD74HC490	
SN74HC51	Hitachi	HD74HC51	
	Motorola	MC74HC51	
	National	MM74HC51	
	Toshiba	**TC74HC51**	**(3307)**
SN74HC533	**GE/RCA**	**CD74HC533**	**(2632)**
	Hitachi	HD74HC533	
	Motorola	MC74HC533	
	National	MM74HC533	
	SGS	M74HC533	
	Signetics	**74HC533**	**(3003)**
	Sprague	SS74HC533	
SN74HC534	**GE/RCA**	**CD74HC534**	**(2631)**
	Hitachi	HD74HC534	
	Motorola	MC74HC534	
	National	MM74HC534	
	SGS	M74HC534	
	Signetics	**74HC534**	**(3003)**
	Sprague	SS74HC534	
SN74HC540	**GE/RCA**	**CD74HC540**	**(2631)**
	Hitachi	HD74HC540	
	Motorola	MC74HC540	
	SGS	M74HC540	
	Signetics	**74HC540**	**(3003)**
	Sprague	SS74HC540	
	Toshiba	**TC74HC540**	**(3307)**
SN74HC541	**GE/RCA**	**CD74HC541**	**(2631)**
	Hitachi	HD74HC541	
	Motorola	MC74HC541	
	SGS	M74HC541	
	Signetics	**74HC541**	**(3003)**
	Sprague	SS74HC541	
SN74HC563	**GE/RCA**	**CD74HC563**	**(2632)**
	Hitachi	HD74HC563	
	Motorola	MC74HC563	
	National	MM74HC563	
	SGS	M74HC563	
	Signetics	**74HC563**	**(3003)**
	Sprague	SS74HC563	
SN74HC564	**GE/RCA**	**CD74HC564**	**(2631)**
	Hitachi	HD74HC564	
	Motorola	MC74HC564	
	National	MM74HC564	
	SGS	M74HC564	
	Signetics	**74HC564**	**(3003)**
	Sprague	SS74HC564	
SN74HC573	**GE/RCA**	**CD74HC573**	**(2632)**
	Hitachi	HD74HC573	
	Motorola	MC74HC573	
	National	MM74HC573	
	SGS	M74HC573	
	Signetics	**74HC573**	**(3003)**
	Sprague	SS74HC573	
	Toshiba	**TC74HC573**	**(3307)**
SN74HC574	**GE/RCA**	**CD74HC574**	**(2631)**
	Hitachi	HD74HC574	
	Motorola	MC74HC574	
	National	MM74HC574	
	SGS	M74HC574	
	Signetics	**74HC574**	**(3003)**
	Sprague	SS74HC574	
SN74HC58	Motorola	MC74HC58	
	National	MM74HC58	
SN74HC589	Motorola	MC74HC589	
SN74HC590	Hitachi	HD74HC590	
	SGS	M74HC590	
SN74HC592	Hitachi	HD74HC592	
SN74HC593	Hitachi	HD74HC593	
SN74HC595	**Cypress**	**CY7C164**	**(2562)**
	Hitachi	HD74HC595	
	Inmos	**IMS1620**	**(2787)**
	Motorola	MC74HC595	
		MCM6288	
		MCM62L88	
	Performance	P4C188	
	SGS	M74HC595	
	TI	SMJ64C64	
	Toshiba	TC55416	
	Vitelic	V61C62	
	VLSI Tech	CT64KS4	
SN74HC620	Hitachi	HD74HC620	
	Motorola	MC74HC620	
	National	MM74HC620	
	Toshiba	**TC74HC620**	**(3307)**
SN74HC623	Hitachi	HD74HC623	
	Motorola	MC74HC623	
	National	MM74HC623	
	Toshiba	**TC74HC623**	**(3307)**
SN74HC640	**GE/RCA**	**CD74HC640**	**(2631)**
	Hitachi	HD74HC640	
	Motorola	MC74HC640	
	National	MM74HC640	
	Signetics	**74HC640**	**(3003)**
	Sprague	SS74HC640	
SN74HC643	**GE/RCA**	**CD74HC643**	**(2631)**
	Hitachi	HD74HC643	
	Motorola	MC74HC643	
	National	MM74HC643	
	SGS	M74HC643	
	Signetics	**74HC643**	**(3003)**
	Sprague	SS74HC643	
SN74HC645	National	MM74HC645	
	Sprague	SS74HC645	
SN74HC646	**GE/RCA**	**CD74HC646**	**(2631)**
	Hitachi	HD74HC646	
	Motorola	MC74HC646	
	National	MM74HC646	
	SGS	M74HC646	
	Signetics	**74HC646**	**(3003)**
SN74HC648	**GE/RCA**	**CD74HC648**	**(2631)**
	Hitachi	HD74HC648	
	Motorola	MC74HC648	
	National	MM74HC648	
	Signetics	**74HC648**	**(3003)**
SN74HC651	Hitachi	HD74HC651	
	Motorola	MC74HC651	
	Toshiba	**TC74HC651**	**(3307)**
SN74HC652	Hitachi	HD74HC652	
	Motorola	MC74HC652	
	Toshiba	**TC74HC652**	**(3307)**
SN74HC670	**GE/RCA**	**CD74HC670**	**(2631)**
	SGS	M74HC670	
	Signetics	**74HC670**	**(3003)**
SN74HC688	**GE/RCA**	**CD74HC688**	**(2632)**
	Motorola	MC74HC688	
	National	MM74HC688	
	SGS	M74HC688	
	Signetics	**74HC688**	**(3003)**
	Toshiba	**TC74HC688**	**(3307)**
SN74HC7266	**GE/RCA**	**CD74HC7266**	**(2631)**
	Motorola	MC74HC7266	
	National	MM74HC7266	
	Signetics	PC74HC7266	
	Toshiba	**TC74HC7266**	**(3307)**
SN74HC73	**GE/RCA**	**CD74HC73**	**(2631)**
	Hitachi	HD74HC73	
	Motorola	MC74HC73	
	National	MM74HC73	
	SGS	M74HC73	
	Signetics	**74HC73**	**(3003)**
	Toshiba	**TC74HC73**	**(3307)**
SN74HC74	**GE/RCA**	**CD74HC74**	**(2631)**
	Hitachi	HD74HC74	
	Motorola	MC74HC74	
	National	MM74HC74	
	SGS	M74HC74	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74HC74			(Cont'd)
	Signetics	**74HC74**	**(3003)**
	Toshiba	TC40H074	
SN74HC75	**GE/RCA**	**CD74HC75**	**(2632)**
	Hitachi	HD74HC75	
	Motorola	MC74HC75	
	National	MM74HC75	
	SGS	M74HC75	
	Signetics	**74HC75**	**(3003)**
	Toshiba	**TC74HC75**	**(3307)**
SN74HC76	Hitachi	HD74HC76	
	Motorola	MC74HC76	
	National	MM74HC76	
	SGS	M74HC76	
	Toshiba	TC40H076	
SN74HC77	Hitachi	HD74HC77	
	National	MM74HC77	
	Toshiba	**TC74HC77**	**(3307)**
SN74HC78	Hitachi	HD74HC78	
SN74HC85	**GE/RCA**	**CD74HC85**	**(2632)**
	Motorola	MC74HC85	
	National	MM74HC85	
	SGS	M74HC85	
	Signetics	**74HC85**	**(3003)**
SN74HC86	**GE/RCA**	**CD74HC86**	**(2631)**
	Hitachi	HD74HC86	
	Motorola	MC74HC86	
	National	MM74HC86	
	SGS	M74HC86	
	Signetics	**74HC86**	**(3003)**
SN74HCT125	**GE/RCA**	**CD74HCT125**	**(2631)**
	Hitachi	HD74HCT125	
SN74HCT126	**GE/RCA**	**CD74HCT126**	**(2631)**
	Hitachi	HD74HCT126	
SN74HCT137	CTI	74HCT137	
	GE/RCA	**CD74HCT137**	**(2632)**
	Plessey	MV74HCT137	
	SGS	M74HCT137	
	Supertex	74HCT137	
	Toshiba	TC74HCT137	
SN74HCT138	CTI	74HCT138	
	GE/RCA	**CD74HCT138**	**(2632)**
	Hitachi	HD74HCT138	
	Mitel	MD74HCT138	
	National	MM74HCT138	
	Plessey	MV74HCT138	
	SGS	M74HCT138	
	Signetics	**74HCT138**	**(3003)**
	Sprague	SS74HCT138	
	Toshiba	TC74HCT138	
SN74HCT237	**GE/RCA**	**CD74HCT237**	**(2632)**
	Plessey	MV74HCT237	
	Supertex	74HCT237	
SN74HCT238	CTI	74HCT238	
	GE/RCA	**CD74HCT238**	**(2632)**
	Plessey	MV74HCT238	
	Signetics	**74HCT238**	**(3003)**
	Sprague	SS74HCT238	
SN74HCT240	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	Toshiba	TC74HCT240	
SN74HCT241	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Sprague	SS74HCT241	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74HCT241			(Cont'd)
	Supertex	SI74HCT241	
	Toshiba	TC74HCT241	
SN74HCT242	**GE/RCA**	**CD74HCT242**	**(2631)**
	Hitachi	HD74HCT242	
	Micrel	MIC74HCT242	
	Signetics	**74HCT242**	**(3003)**
SN74HCT243	**GE/RCA**	**CD74HCT243**	**(2631)**
	Hitachi	HD74HCT243	
	Micrel	MIC74HCT243	
	Signetics	**74HCT243**	**(3003)**
SN74HCT244	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	Toshiba	TC74HCT244	
SN74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	Toshiba	TC74HCT245	
SN74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	Toshiba	TC74HCT373	
SN74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	Toshiba	TC74HCT374	
SN74HCT533	CTI	74HCT533	
	GE/RCA	**CD74HCT533**	**(2632)**
	Hitachi	HD74HCT533	
	Micrel	MIC74HCT533	
	Motorola	MC74HCT533	
	Plessey	MV74HCT533	
	Signetics	**74HCT533**	**(3003)**
	Sprague	SS74HCT533	
SN74HCT534	CTI	74HCT534	
	GE/RCA	**CD74HCT534**	**(2631)**
	Hitachi	HD74HCT534	
	Micrel	MIC74HCT534	
	Motorola	MC74HCT534	
	Plessey	MV74HCT534	
	Signetics	**74HCT534**	**(3003)**
	Sprague	SS74HCT534	

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74HCT540	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	Toshiba	TC74HCT540	
SN74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	Toshiba	TC74HCT541	
SN74HCT563	CTI	74HCT563	
	GE/RCA	**CD74HCT563**	**(2632)**
	Hitachi	HD74HCT563	
	Micrel	MIC74HCT563	
	Plessey	MV74HCT563	
	SGS	M74HCT563	
	Signetics	**74HCT563**	**(3003)**
	Sprague	SS74HCT563	
	Toshiba	TC74HCT563	
SN74HCT564	CTI	74HCT564	
	GE/RCA	**CD74HCT564**	**(2631)**
	Hitachi	HD74HCT564	
	Micrel	MIC74HCT564	
	Plessey	MV74HCT564	
		MV74HCT573	
	SGS	M74HCT564	
	Signetics	**74HCT564**	**(3003)**
	Sprague	SS74HCT564	
SN74HCT573	CTI	74HCT573	
	GE/RCA	**CD74HCT573**	**(2632)**
	Hitachi	HD74HCT573	
	Micrel	MIC74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Signetics	**74HCT573**	**(3003)**
	Sprague	SS74HCT573	
	Supertex	74HCT573	
	Toshiba	TC74HCT573	
SN74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	Toshiba	TC74HCT574	
SN74HCT620	Hitachi	HD74HCT620	
	Motorola	MC74HC597	
		MC74HCT620	
	SGS	M74HCT620	
SN74HCT623	Hitachi	HD74HCT623	
	Motorola	MC74HCT623	
SN74HCT640	**GE/RCA**	**CD74HCT640**	**(2631)**
	Hitachi	HD74HCT640	
	Motorola	MC74HCT640	
	SGS	M74HCT640	
	Signetics	**74HCT640**	**(3003)**
	Sprague	SS74HCT640	
	Toshiba	TC74HCT640	
SN74HCT643	**GE/RCA**	**CD74HCT643**	**(2631)**
	Hitachi	HD74HCT643	
	Motorola	MC74HCT643	
	SGS	M74HCT643	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74HCT643			(Cont'd)
	Signetics	**74HCT643**	**(3003)**
	Toshiba	TC74HCT643	
SN74HCT645	Signetics	75HCT645	
	Sprague	SS74HCT645	
SN74HCT646	**GE/RCA**	**CD74HCT646**	**(2631)**
	Hitachi	HD74HCT646	
	Signetics	**74HCT646**	**(3003)**
	Toshiba	TC74HCT646	
SN74HCT648	**GE/RCA**	**CD74HCT648**	**(2631)**
	Hitachi	HD74HCT648	
	Signetics	**74HCT648**	**(3003)**
	Toshiba	TC74HCT648	
SN74HCT651	Hitachi	HD74HCT651	
	Toshiba	TC74HCT651	
SN74HCT652	Hitachi	HD74HCT652	
	Toshiba	TC74HCT652	
SN74HCT9510			
	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
SN74LS00	Fairchild	74LS00	
	Hitachi	HD74LS00	
	Motorola	SN74LS00	
	National	DM74LS00	
	Panasonic	DN74LS00	
	SGS	T74LS00	
	Signetics	**74LS00**	**(3003)**
SN74LS01	Fairchild	74LS01	
	Hitachi	HD74LS01	
	Motorola	SN74LS01	
	National	DM74LS01	
	Panasonic	DN74LS01	
	Signetics	**74LS01**	**(3003)**
SN74LS02	Fairchild	74LS02	
	Hitachi	HD74LS02	
	Motorola	SN74LS02	
	National	DM74LS02	
	Panasonic	DN74LS02	
	SGS	T74LS02	
	Signetics	**74LS02**	**(3003)**
SN74LS03	Fairchild	74LS03	
	Hitachi	HD74LS03	
	Motorola	SN74LS03	
	National	DM74LS03	
	Panasonic	DN74LS03	
	SGS	T74LS03	
SN74LS04	Fairchild	74LS04	
	Hitachi	HD74LS04	
	Motorola	SN74LS04	
	National	DM74LS04	
	Panasonic	DN74LS04	
	SGS	T74LS04	
	Signetics	**74LS04**	**(3003)**
SN74LS05	Fairchild	74LS05	
	Hitachi	HD74LS05	
	Motorola	SN74LS05	
	National	DM74LS05	
	Panasonic	DN74LS05	
	SGS	T74LS05	
	Signetics	**74LS05**	**(3003)**
SN74LS08	Fairchild	74LS08	
	Hitachi	HD74LS08	
	Motorola	SN74LS08	
	National	DM74LS08	
	Panasonic	DN74LS08	
	SGS	T74LS08	
	Signetics	**74LS08**	**(3003)**
SN74LS09	Fairchild	74LS09	
	Hitachi	HD74LS09	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS09			(Cont'd)
	Motorola	SN74LS09	
	National	DM74LS09	
	Panasonic	DN74LS09	
	SGS	T74LS09	
SN74LS10	Fairchild	74LS10	
	Hitachi	HD74LS10	
	Motorola	SN74LS10	
	National	DM74LS10	
	Panasonic	DN74LS10	
	SGS	T74LS10	
	Signetics	**74LS10**	**(3003)**
SN74LS109A	Fairchild	74LS109	
	Hitachi	HD74LS109	
	Motorola	SN74LS109	
	National	DM74LS109	
	Panasonic	DN74LS109	
	SGS	T74LS109	
	Signetics	**74LS109**	**(3003)**
SN74LS11	Fairchild	74LS11	
	Hitachi	HD74LS11	
	Motorola	SN74LS11	
	National	DM74LS11	
	Panasonic	DN74LS11	
	SGS	T74LS11	
	Signetics	**74LS11**	**(3003)**
SN74LS112A	Fairchild	74LS112	
	Hitachi	HD74LS112	
	Motorola	SN74LS112A	
	National	DM74LS112	
	Panasonic	DN74LS112	
	SGS	T74LS112	
	Signetics	**74LS112**	**(3003)**
SN74LS113A	Hitachi	HD74LS113	
	Motorola	SN74LS113A	
	National	DM74LS113	
	Panasonic	DN74LS113	
	SGS	T74LS113	
	Signetics	**74LS113**	**(3003)**
SN74LS114A	Hitachi	HD74LS114	
	Motorola	SN74LS114A	
	National	DM74LS114	
	Panasonic	DN74LS114	
	SGS	T74LS114	
SN74LS12	Hitachi	HD74LS12	
	Motorola	SN74LS12	
	National	DM74LS12	
	Panasonic	DN74LS12	
	Signetics	74LS12	
SN74LS122	Motorola	SN74LS122	
	National	DM74LS122	
SN74LS123	Hitachi	HD74LS123	
	Motorola	SN74LS123	
	National	DM74LS123	
	Panasonic	DN74LS123	
SN74LS125A	Fairchild	74LS125A	
	Motorola	SN74LS125A	
	National	DM74LS125	
	Panasonic	DN74LS125A	
	SGS	T74LS125	
	Signetics	**74LS125A**	**(3003)**
SN74LS126A	Fairchild	74LS126	
	Motorola	SN74LS126A	
	National	DM74LS126	
	SGS	T74LS126	
	Signetics	**74LS126A**	**(3003)**
SN74LS13	Fairchild	74LS13	
	Hitachi	HD74LS13	
	Motorola	SN74LS13	
	National	DM74LS13	
	Panasonic	DN74LS13	
	SGS	T74LS13	
	Signetics	**74LS13**	**(3003)**
SN74LS132	Fairchild	74LS132	
	Hitachi	HD74LS132	
	Motorola	SN74LS132	
	National	DM74LS132	
	Panasonic	DN74LS132	
	SGS	T74LS132	
	Signetics	**74LS132**	**(3003)**
SN74LS136	Fairchild	74LS136	
	Hitachi	HD74LS136	
	Motorola	SN74LS136	
	National	DM74LS136	
	Panasonic	DN74LS136	
	SGS	T74LS136	
	Signetics	**74LS136**	**(3003)**
SN74LS137	Motorola	SN74LS137	
SN74LS138	Fairchild	74LS138	
	Hitachi	HD74LS138	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS138			(Cont'd)
	Motorola	SN74LS138	
	National	DM74LS138	
	Panasonic	DN74LS138	
	SGS	T74LS138	
	Signetics	**74LS138**	**(3003)**
SN74LS139A	Fairchild	74LS139	
	Hitachi	HD74LS139	
	Motorola	SN74LS139	
	National	DM74LS139	
	Panasonic	DN74LS139	
	SGS	T74LS139	
	Signetics	**74LS139**	**(3003)**
SN74LS14	Fairchild	74LS14	
	Hitachi	HD74LS14	
	Motorola	SN74LS14	
	National	DM74LS14	
	Panasonic	DN74LS14	
	Signetics	**74LS14**	**(3003)**
SN74LS145	Motorola	SN74LS145	
	Panasonic	DN74LS145	
SN74LS147	Motorola	SN74LS147	
SN74LS148	Hitachi	HD74LS148	
	Motorola	SN74LS148	
SN74LS15	Fairchild	74LS15	
	Motorola	SN74LS15	
	National	DM74LS15	
	Panasonic	DN74LS15	
	SGS	T74LS15	
SN74LS151	Fairchild	74LS151	
	Hitachi	HD74LS151	
		HD74LS151A	
	Motorola	SN74LS151	
	National	DM74LS151	
	Panasonic	DN74LS151	
	SGS	T74LS151	
	Signetics	**74LS151**	**(3003)**
SN74LS152	SGS	T74LS152	
SN74LS153	Fairchild	74LS153	
	Hitachi	HD74LS153	
	Motorola	SN74LS153	
	National	DM74LS153	
	Panasonic	DN74LS153	
	SGS	T74LS153	
	Signetics	**74LS153**	**(3003)**
SN74LS155A	Fairchild	74LS155	
	Hitachi	HD74LS155	
	Motorola	SN74LS155	
	National	DM74LS155	
	Panasonic	DN74LS155	
	Signetics	**74LS155**	**(3003)**
SN74LS156	Fairchild	74LS156	
	Hitachi	HD74LS156	
	Motorola	SN74LS156	
	National	DM74LS156	
	Panasonic	DN74LS156	
	SGS	T74LS156	
	Signetics	**74LS156**	**(3003)**
SN74LS157	Fairchild	74LS157	
	Hitachi	HD74LS157	
	Motorola	SN74LS157	
	National	DM74LS157	
	Panasonic	DN74LS157	
	SGS	T74LS157	
	Signetics	**74LS157**	**(3003)**
SN74LS158	Fairchild	74LS158	
	Hitachi	HD74LS158	
	Motorola	SN74LS158	
	National	DM74LS158	
	Panasonic	DN74LS158	
	SGS	T74LS158	
	Signetics	**74LS158**	**(3003)**
SN74LS160A	Fairchild	74LS160	
	Hitachi	HD74LS160A	
	Motorola	SN74LS160A	
	National	DM74LS160	
	Panasonic	DN74LS160A	
	SGS	T74LS160	
	Signetics	**74LS160**	**(3003)**
		74LS160A	**(3003)**
SN74LS161A	Fairchild	74LS161A	
	Hitachi	HD74LS161A	
	Motorola	SN74LS161A	
	National	DM74LS161	
	Panasonic	DN74LS161A	
	SGS	T74LS161	
	Signetics	**74LS161A**	**(3003)**
SN74LS162A	Fairchild	74LS162	
	Hitachi	HD74LS162A	
	Motorola	SN74LS162A	
	National	DM74LS162	
	Panasonic	DN74LS162A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS162A			(Cont'd)
	SGS	T74LS162	
	Signetics	**74LS162A**	**(3003)**
SN74LS163A	Fairchild	74LS163	
	Hitachi	HD74LS163	
		HD74LS163A	
	Motorola	SN74LS163A	
	National	DM74LS163	
	Panasonic	DN74LS163A	
	SGS	T74LS163	
	Signetics	**74LS163A**	**(3003)**
SN74LS164	Fairchild	74LS164	
	Hitachi	HD74LS164	
	Motorola	SN74LS164A	
	National	DM74LS164	
	Panasonic	DN74LS164	
	SGS	T74LS164	
	Signetics	**74LS164**	**(3003)**
		74LS164A	**(3003)**
SN74LS165A	Fairchild	74LS165	
	Motorola	SN74LS165	
	SGS	T74LS165	
SN74LS166A	Motorola	SN74LS166	
SN74LS169	Fairchild	74LS169	
	Hitachi	HD74LS169	
	Motorola	SN74LS169	
	National	DM74LS169	
	SGS	T74LS169	
	Signetics	**74LS169A**	**(3003)**
SN74LS170	Fairchild	74LS170	
	Motorola	SN74LS170	
	National	DM74LS170	
	Panasonic	DN74LS170	
	SGS	T74LS170	
	Signetics	**74LS170**	**(3003)**
SN74LS173A	Fairchild	74LS173	
	Motorola	SN74LS173A	
	National	DM74LS173	
	Panasonic	DN74LS173	
	SGS	T74LS173	
	Signetics	**74LS173**	**(3003)**
SN74LS174	Fairchild	74LS174	
	Hitachi	HD74LS174	
	Motorola	SN74LS174	
	National	DM74LS174	
	Panasonic	DN74LS174	
	SGS	T74LS174	
	Signetics	**74LS174**	**(3003)**
SN74LS175	Fairchild	74LS175	
	Hitachi	HD74LS175	
	Motorola	SN74LS175	
	Panasonic	DN74LS175	
	SGS	T74LS175	
	Signetics	**74LS175**	**(3003)**
SN74LS181	Fairchild	74LS181	
	Hitachi	HD74LS181	
	Motorola	SN74LS181	
	SGS	T74LS181	
	Signetics	**74LS181**	**(3003)**
♦ SN74LS183	Motorola	SN74LS183	
♦ SN74LS189A	Cypress	CY74S189	
	National	DM74LS189	
SN74LS190	Fairchild	74LS190	
	Hitachi	HD74LS190	
	Motorola	SN74LS190	
	National	DM74LS190	
	Panasonic	DN74LS190	
	SGS	T74LS190	
SN74LS191	Fairchild	74LS191	
	Hitachi	HD74LS191	
	Motorola	SN74LS191	
	National	DM74LS191	
	Panasonic	DN74LS191	
	SGS	T74LS191	
	Signetics	**74LS191**	**(3003)**
SN74LS192	Fairchild	74LS192	
	Hitachi	HD74LS192	
	Motorola	SN74LS192	
	National	DM74LS192	
	Panasonic	DN74LS192	
	SGS	T74LS192	
	Signetics	**74LS192**	**(3003)**
SN74LS193	Fairchild	74LS193	
	Hitachi	HD74LS193	
	Motorola	SN74LS193	
	National	DM74LS193	
	Panasonic	DN74LS193	
	SGS	T74LS193	
	Signetics	**74LS193**	**(3003)**
SN74LS194A	Fairchild	74LS194A	
	Hitachi	HD74LS194A	
	Motorola	SN74LS194A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS194A			(Cont'd)
	National	DM74LS194	
	Panasonic	DN74LS194A	
	SGS	T74LS194A	
	Signetics	**74LS194A**	**(3003)**
SN74LS195A	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	μA7924	
	Toshiba	TA79024	
SN74LS196	Fairchild	74LS196	
	Hitachi	HD74LS196	
	Motorola	SN74LS196	
	National	DM74LS196	
	Panasonic	DN74LS196	
	SGS	T74LS196	
	Signetics	N82S80	
SN74LS197	Fairchild	74LS197	
	Hitachi	HD74LS197	
	Motorola	SN74LS197	
	National	DM74LS197	
	Panasonic	DN74LS197	
	SGS	T74LS197	
	Signetics	**74LS197**	**(3003)**
SN74LS20	Fairchild	74LS20	
	Hitachi	HD74LS20	
	Motorola	SN74LS20	
	National	DM74LS20	
	Panasonic	DN74LS20	
	SGS	T74LS20	
	Signetics	**74LS20**	**(3003)**
SN74LS21	Fairchild	74LS21	
	Hitachi	HD74LS21	
	Motorola	SN74LS21	
	National	DM74LS21	
	Panasonic	DN74LS21	
	SGS	T74LS21	
	Signetics	**74LS21**	**(3003)**
♦ SN74LS22	Hitachi	HD74LS22	
	Motorola	SN74LS22	
	National	DM74LS22	
	Panasonic	DN74LS22	
	SGS	T74LS22	
SN74LS221	Fairchild	74LS221	
	Hitachi	HD74LS221	
	Motorola	SN74LS221	
	National	DM74LS221	
SN74LS240	Fairchild	74LS240	
	Hitachi	HD74LS240	
	Motorola	SN74LS240	
	Panasonic	DN74LS240	
	SGS	T74LS240	
	Signetics	**74LS240**	**(3003)**
SN74LS241	Fairchild	74LS241	
	Hitachi	HD74LS241	
	Motorola	SN74LS241	
	Panasonic	DN74LS241	
	SGS	T74LS241	
	Signetics	**74LS241**	**(3003)**
SN74LS242	Fairchild	74LS242A	
	Motorola	SN74LS242	
	Signetics	**74LS242**	**(3003)**
SN74LS243	Fairchild	74LS243A	
	Motorola	SN74LS243	
	Signetics	**74LS243**	**(3003)**
SN74LS244	Fairchild	74LS244	
	Hitachi	HD74LS244	
	Motorola	SN74LS244	
	Panasonic	DN74LS244	
	SGS	T74LS244	
	Signetics	**74LS244**	**(3003)**
SN74LS247	Fairchild	74LS247	
	Hitachi	HD74LS247	
	Motorola	SN74LS247	
	National	DM74LS247	
♦ SN74LS248	Fairchild	74LS248	
	Hitachi	HD74LS248	
	Motorola	SN74LS248	
	National	DM74LS248	
	SGS	T74LS248	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SN74LS249	Fairchild	74LS249	
	Hitachi	HD74LS249	
	Motorola	SN74LS249	
	National	DM74LS249	
	SGS	T74LS249	
SN74LS251	Fairchild	74LS251	
	Hitachi	HD74LS251	
	Motorola	SN74LS251	
	National	DM74LS251	
	Panasonic	DN74LS251	
	SGS	T74LS251	
	Signetics	**74LS251**	**(3003)**
SN74LS253	Fairchild	74LS253	
	Hitachi	HD74LS253	
	Motorola	SN74LS253	
	National	DM74LS253	
		DM8214	
	Panasonic	DN74LS253	
	SGS	T74LS253	
	Signetics	**74LS253**	**(3003)**
SN74LS256	SGS	T74LS256	
SN74LS257B	Fairchild	74LS257A	
	Hitachi	HD74LS257	
	Motorola	SN74LS257A	
	National	DM74LS257	
	SGS	T74LS257	
	Signetics	**74LS257**	**(3003)**
		74LS257A	**(3003)**
SN74LS258B	Fairchild	74LS258A	
	Hitachi	HD74LS258	
	Motorola	SN74LS258A	
	National	DM74LS258	
	Panasonic	DN74LS258A	
	SGS	T74LS258	
	Signetics	**74LS258**	**(3003)**
SN74LS259B	Fairchild	74LS259	
	Motorola	SN74LS259	
	SGS	T74LS259	
	Signetics	**74LS259**	**(3003)**
SN74LS26	Fairchild	74LS26	
	Hitachi	HD74LS26	
	Motorola	SN74LS26	
	National	DM74LS26	
	Panasonic	DN74LS26	
	SGS	T74LS26	
	Signetics	**74LS26**	**(3003)**
SN74LS260	Panasonic	DN74LS260	
	SGS	T74LS260	
SN74LS266	Fairchild	74LS266	
	Motorola	SN74LS266	
	National	DM74LS266	
	Panasonic	DN74LS266	
	Raytheon	RC8242	
	SGS	T74LS266	
	Signetics	**74LS266**	**(3003)**
		N8242	**(3022)**
SN74LS27	Fairchild	74LS27	
	Hitachi	HD74LS27	
	Motorola	SN74LS27	
	National	DM74LS27	
	Panasonic	DN74LS27	
	SGS	T74LS27	
	Signetics	**74LS27**	**(3003)**
SN74LS273	Fairchild	74LS273	
	Motorola	SN74LS273	
	SGS	T74LS273	
	Signetics	**74LS273**	**(3003)**
SN74LS279A	Fairchild	74LS279	
	Hitachi	HD74LS279	
	Motorola	SN74LS279	
	National	DM74LS279	
	Panasonic	DN74LS279	
	SGS	T74LS279	
	Signetics	74LS279	
SN74LS28	Fairchild	74LS28	
	Motorola	SN74LS28	
	SGS	T74LS28	
SN74LS280	Hitachi	HD74LS280	
	Motorola	SN74LS280	
	Panasonic	DN74LS280	
	SGS	T74LS280	
SN74LS283	Fairchild	74LS283	
	Hitachi	HD74LS283	
		HD74LS283A	
	Motorola	SN74LS283	
	National	DM74LS283	
	Panasonic	DN74LS283	
	SGS	T74LS283	
	Signetics	**74LS283**	**(3003)**
♦ SN74LS289A	National	DM74LS289	
SN74LS290	Fairchild	74LS290	
	Hitachi	HD74LS290	
	Motorola	SN74LS290	
	National	DM74LS290	
	Panasonic	DN74LS290	
	SGS	T74LS290	
	Signetics	**74LS290**	**(3003)**
SN74LS292	SGS	T74LS292	
SN74LS293	Fairchild	74LS293	
	Hitachi	HD74LS293	
	Motorola	SN74LS293	
	National	DM74LS293	
	Panasonic	DN74LS293	
	SGS	T74LS293	
	Signetics	**74LS293**	**(3003)**
SN74LS295B	Fairchild	74LS295A	
	Motorola	SN74LS295A	
	SGS	T74LS295A	
	Signetics	**74LS295A**	**(3003)**
		74LS295B	**(3003)**
SN74LS298	Fairchild	74LS298	
	Hitachi	HD74LS298	
	Motorola	SN74LS298	
	SGS	T74LS298	
	Signetics	**74LS298**	**(3003)**
SN74LS299	AMD	SN74LS299	
	Fairchild	74LS299	
	Hitachi	HD74LS299	
	Motorola	SN74LS299	
	SGS	T74LS299	
SN74LS30	Fairchild	74LS30	
	Hitachi	HD74LS30	
	Motorola	SN74LS30	
	National	DM74LS30	
	Panasonic	DN74LS30	
	SGS	T74LS30	
	Signetics	**74LS30**	**(3003)**
SN74LS322A	Fairchild	74LS322	
	Motorola	SN74LS322	
SN74LS323	Fairchild	54LS323	
		74LS323	
	Motorola	SN74LS323	
	TI	SN54LS323	
SN74LS33	Fairchild	74LS33	
	Motorola	SN74LS33	
	Panasonic	DN74LS33	
	SGS	T74LS33	
	Signetics	**74LS33**	**(3003)**
SN74LS352	Fairchild	74LS352	
	Motorola	SN74LS352	
	National	DM74LS352	
	SGS	T74LS352	
SN74LS353	Fairchild	74LS353	
	Motorola	SN74LS353	
	National	DM74LS353	
	SGS	T74LS353	
SN74LS365A	Fairchild	74LS365A	
	Motorola	SN74LS365A	
	National	DM74LS365	
	Panasonic	DN74LS365A	
	SGS	T74LS365	
		T74LS365A	
	Signetics	**74LS365**	**(3003)**
		74LS365A	**(3003)**
SN74LS366A	Fairchild	74LS366A	
	Motorola	SN74LS366A	
	National	DM74LS366	
	Panasonic	DN74LS366A	
	SGS	T74LS366	
		T74LS366A	
	Signetics	**74LS366A**	**(3003)**
SN74LS367A	Fairchild	74LS367A	
	Hitachi	HD74LS367	
		HD74LS367A	
	Motorola	SN74LS367A	
	National	DM74LS367	
	Panasonic	DN74LS367A	
	SGS	T74LS367	
		T74LS367A	
	Signetics	**74LS367**	**(3003)**
		74LS367A	**(3003)**
SN74LS368A	Fairchild	74LS368A	
	Hitachi	HD74LS368	
	Motorola	SN74LS368A	
	National	DM74LS368	
	Panasonic	DN74LS368A	
	SGS	T74LS368	
	Signetics	**74LS368**	**(3003)**
		74LS368A	**(3003)**
SN74LS37	Fairchild	74LS37	
	Hitachi	HD74LS37	
	Motorola	SN74LS37	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS37			(Cont'd)
	National	DM74LS37	
	Panasonic	DN74LS37	
	SGS	T74LS37	
	Signetics	74LS37	
SN74LS373	Fairchild	74LS373	
	Motorola	SN74LS373	
	Panasonic	DN74LS373	
	SGS	T74LS373	
	Signetics	**74LS373**	**(3003)**
SN74LS374	Fairchild	74LS374	
	Motorola	SN74LS374	
	National	DM74LS374	
	SGS	T74LS374	
	Signetics	**74LS374**	**(3003)**
SN74LS375	Fairchild	74LS375	
	Motorola	SN74LS375	
	Signetics	**74LS375**	**(3003)**
SN74LS377	Fairchild	74LS377	
	Motorola	SN74LS377	
	SGS	T74LS377	
	Signetics	**74LS377**	**(3003)**
SN74LS378	AMD	SN74LS378	
	Fairchild	74LS378	
	Motorola	SN74LS378	
	SGS	T74LS378	
	Signetics	**74LS378**	**(3003)**
SN74LS379	Fairchild	74LS379	
	Motorola	SN74LS379	
	SGS	T74LS379	
SN74LS38	Fairchild	74LS38	
	Hitachi	HD74LS38	
	Motorola	SN74LS38	
	National	DM74LS38	
	Panasonic	DN74LS38	
	SGS	T74LS38	
	Signetics	**74LS38**	**(3003)**
SN74LS381A	AMD	SN74LS381	
♦ SN74LS385	Motorola	SN74LS385	
SN74LS386A	Hitachi	HD74LS386	
	Motorola	SN74LS386	
	National	DM74LS386	
	Panasonic	DN74LS386	
SN74LS390	Fairchild	74LS390	
	Motorola	SN74LS390	
	Panasonic	DN74LS390	
	SGS	T74LS390	
SN74LS393	Fairchild	74LS393	
	Motorola	SN74LS393	
	Panasonic	DN74LS393	
	SGS	T74LS393	
	Signetics	**74LS393**	**(3003)**
SN74LS395A	Fairchild	74LS395	
	National	DM74LS395	
	Panasonic	DN74LS395A	
	SGS	T74LS395	
	Signetics	**74LS395**	**(3003)**
SN74LS398	Motorola	SN74LS398	
SN74LS399	AMD	SN74LS399	
	Motorola	SN74LS399	
	SGS	T74LS399	
SN74LS40	Fairchild	74LS40	
	Hitachi	HD74LS40	
	Motorola	SN74LS40	
	National	DM74LS40	
	Panasonic	DN74LS40	
	SGS	T74LS40	
	Signetics	**74LS40**	**(3003)**
SN74LS42	Fairchild	74LS42	
	Hitachi	HD74LS42	
	Motorola	SN74LS42	
	National	DM74LS42	
	Panasonic	DN74LS42	
	SGS	T74LS42	
	Signetics	**74LS42**	**(3003)**
SN74LS47	Fairchild	74LS47	
	Hitachi	HD74LS47	
	Motorola	SN74LS47	
	National	DM74LS47	
	SGS	T74LS47	
♦ SN74LS48	Fairchild	74LS48	
	Hitachi	HD74LS48	
	Motorola	SN74LS48	
	National	DM74LS48	
	SGS	T74LS48	
	Signetics	74LS48	
SN74LS49	Hitachi	HD74LS49	
	Motorola	SN74LS49	
	National	DM74LS49	
	SGS	T74LS49	
♦ SN74LS490	Fairchild	74LS490	
	Motorola	SN74LS490	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ SN74LS490			(Cont'd)
	Panasonic	DN74LS490	
	SGS	T74LS490	
	Signetics	**74LS490**	**(3003)**
SN74LS51	Fairchild	74LS51	
	Hitachi	HD74LS51	
	Motorola	SN74LS51	
	National	DM74LS51	
	Panasonic	DN74LS51	
	SGS	T74LS51	
	Signetics	**74LS51**	**(3003)**
SN74LS54	Fairchild	74LS54	
	Hitachi	HD74LS54	
	Motorola	SN74LS54	
	National	DM74LS54	
	Panasonic	DN74LS54	
	SGS	T74LS54	
	Signetics	**74LS54**	**(3003)**
SN74LS540	Fairchild	74LS540	
	Motorola	SN74LS540	
	Signetics	**74LS540**	**(3003)**
SN74LS541	Motorola	SN74LS541	
	Signetics	**74LS541**	**(3003)**
SN74LS55	Fairchild	74LS55	
	Hitachi	HD74LS55	
	Motorola	SN74LS55	
	National	DM74LS55	
	Panasonic	DN74LS55	
	SGS	T74LS55	
♦ SN74LS604	Motorola	SN74LS604	
♦ SN74LS605	Motorola	SN74LS605	
♦ SN74LS606	Motorola	SN74LS606	
SN74LS607	Motorola	SN74LS607	
♦ SN74LS621	Motorola	SN74LS621	
♦ SN74LS622	Motorola	SN74LS622	
SN74LS640	Motorola	SN74LS640	
	Signetics	**74LS640**	**(3003)**
		N8T125	**(3022)**
SN74LS641	Motorola	SN74LS641	
	Signetics	**74LS641**	**(3003)**
SN74LS642	Motorola	SN74LS642	
	Signetics	**74LS642**	**(3003)**
♦ SN74LS643	Motorola	SN74LS643	
SN74LS644	Motorola	SN74LS644	
SN74LS645	Motorola	SN74LS645	
	Signetics	**74LS645**	**(3003)**
SN74LS645-1	Signetics	SN74LS645-1	
♦ SN74LS668	Motorola	SN74LS668	
SN74LS669	Motorola	SN74LS669	
SN74LS670	Fairchild	74LS670	
	Motorola	SN74LS670	
	National	DM74LS670	
	SGS	T74LS670	
	Signetics	**74LS670**	**(3003)**
♦ SN74LS673	Motorola	SN74LS673	
SN74LS674	Motorola	SN74LS674	
SN74LS688	AMD	AM25LS2521	
SN74LS73A	Hitachi	HD74LS73	
	Motorola	SN74LS73A	
	National	DM74LS73	
	Panasonic	DN74LS73	
	Signetics	**74LS73**	**(3003)**
SN74LS74A	Fairchild	74LS74	
	Hitachi	HD74LS74	
		HD74LS74A	
	Motorola	SN74LS74A	
	National	DM74LS74	
	Panasonic	DN74LS74A	
	SGS	T74LS74	
	Signetics	74LS74	
SN74LS75	Hitachi	HD74LS75	
	Motorola	SN74LS75	
	National	DM74LS75	
	Panasonic	DN74LS75	
	Signetics	**74LS75**	**(3003)**
SN74LS76A	Hitachi	HD74LS76	
	Motorola	SN74LS76A	
	National	DM74LS76	
	Panasonic	DN74LS76	
	Signetics	**74LS76**	**(3003)**
SN74LS78A	Hitachi	HD74LS78	
	Motorola	SN74LS78A	
	National	DM74LS78	
	Panasonic	DN74LS78	
SN74LS83A	Fairchild	74LS83A	
	Hitachi	HD74LS183A	
		HD74LS83A	
	Motorola	SN74LS83A	
	National	DM74LS83A	
	Panasonic	DN74LS83A	
	SGS	T74LS83	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN74LS83A			(Cont'd)
	Signetics	**74LS83**	**(3003)**
		74LS83A	**(3003)**
SN74LS85	Fairchild	74LS85	
	Hitachi	HD74LS85	
	Motorola	SN74LS85	
	National	DM74LS85	
	Panasonic	DN74LS85	
	Signetics	**74LS85**	**(3003)**
SN74LS86A	Fairchild	74LS86	
	Hitachi	HD74LS86	
	Motorola	SN74LS86	
	National	DM74LS86	
	Panasonic	DN74LS86	
	SGS	T74LS86	
	Signetics	**74LS86**	**(3003)**
SN74LS90	Fairchild	74LS90	
	Motorola	SN74LS90	
	National	DM74LS90	
	Panasonic	DN74LS90	
	SGS	T74LS90	
	Signetics	**74LS90**	**(3003)**
SN74LS91	Hitachi	HD74LS91	
	Motorola	SN74LS91	
SN74LS92	Hitachi	HD74LS92	
	Motorola	SN74LS92	
	National	DM74LS92	
	Panasonic	DN74LS92	
	SGS	T74LS92	
	Signetics	**74LS92**	**(3003)**
SN74LS93	Hitachi	HD74LS93	
	Motorola	SN74LS93	
	National	DM74LS93	
	Panasonic	DN74LS93	
	SGS	T74LS93	
	Signetics	**74LS93**	**(3003)**
SN74LS95B	Fairchild	74LS95B	
	Hitachi	HD74LS95B	
	Motorola	SN74LS95B	
	National	DM74LS95B	
	Panasonic	DN74LS95B	
	SGS	T74LS95	
		T74LS95B	
	Signetics	**74LS95B**	**(3003)**
SN74LS96	**Signetics**	**74LS96**	**(3003)**
SN74PAL16R8A			
	Cypress	CYPAL16R8	
	Harris	**HPL16RC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R8	
		PAL16R8A	
	National	DMPAL16R8	
	Sprague	SPL16RC8	
	TI	**TIBPAL16R8-15**	**(4320)**
		TIBPAL16R8-20	**(4320)**
		TIBPAL16R8-25	**(4320)**
		TIBPAL16R8-30	**(4320)**
SN74S00	Fairchild	74S00	
	National	DM74S00	
	Signetics	**74S00**	**(3003)**
SN74S02	Fairchild	74S02	
	National	DM74S02	
	Signetics	**74S02**	**(3003)**
	TI	SN74S32	
SN74S03	Fairchild	74S03	
	National	DM74S03	
	Signetics	**74S03**	**(3003)**
SN74S04	Fairchild	74S04	
	National	DM74S04	
	Signetics	**74S04**	**(3003)**
SN74S05	Fairchild	74S05	
	National	DM74S05	
	Signetics	**74S05**	**(3003)**
SN74S08	Fairchild	74S08	
	Signetics	**74S08**	**(3003)**
SN74S10	Fairchild	74S10	
	National	DM74S10	
	Signetics	**74S10**	**(3003)**
SN74S11	Fairchild	74S11	
	National	DM74S11	
	Signetics	**74S11**	**(3003)**
SN74S112	Fairchild	74S112	
	Motorola	SN74S112	
	National	DM74S112	
	Signetics	**74S112**	**(3003)**
SN74S113	National	DM74S113	
	Signetics	**74S113**	**(3003)**
SN74S114	National	DM74S114	
SN74S132	Fairchild	74S132	
SN74S133	Fairchild	74S133	
	National	DM74S133	
	Signetics	**74S133**	**(3003)**
SN74S134	National	DM74S134	
	Signetics	**74S134**	**(3003)**
SN74S135	National	DM74S135	
	Signetics	**74S135**	**(3003)**
SN74S138	AMD	SN74S138	
	Fairchild	74S138	
	National	DM74S138	
	Signetics	**74S138**	**(3003)**
SN74S140	National	DM74S140	
	Signetics	**74S140**	**(3003)**
SN74S15	National	DM74S15	
♦ SN74S168	**Signetics**	**74S168**	**(3003)**
SN74S169	**Signetics**	**74S169**	**(3003)**
SN74S182	Fairchild	74S182	
	MMI	SN74S182	
	National	DM74S182	
	Signetics	**74S182**	**(3003)**
♦ SN74S189B	AMD	AM27LS03	
		AM27S03	
		SN74S189	
♦ SN74S189B	Cypress	27LS03M	
		CY27S03	
		CY74S189	
		CY7C189	**(2562, 2564)**
♦ SN74S189B	National	DM74S189	
		DM7599	
		DM8599	
SN74S196	Signetics	74S196	
SN74S197	Signetics	74S197	
SN74S20	Fairchild	74S20	
	National	DM74S20	
	Signetics	**74S20**	**(3003)**
SN74S22	National	DM74S22	
SN74S225	MMI	74S225A	
SN74S251	AMD	SN74S251	
	National	DM74S251	
	Signetics	**74S251**	**(3003)**
SN74S280	National	DM74S280	
	Signetics	**74S280**	**(3003)**
♦ SN74S281	National	DM74S281	
♦ SN74S289B	Fairchild	7489	
	National	DM7489	
		DM74S289	
		DM8589	
		MM74S289	
♦ SN74S289B	Signetics	74S289	
		N82S25	
SN74S30	Fairchild	74S30	
	National	DM74S30	
SN74S32	Fairchild	74S02	
	National	DM74S02	
	Signetics	**74S02**	**(3003)**
	TI	SN74S02	
SN74S350	AMD	AM25S10	
SN74S37	**Signetics**	**74S37**	**(3003)**
SN74S373	**Signetics**	**74S373**	**(3003)**
SN74S374	**Signetics**	**74S374**	**(3003)**
SN74S40	Fairchild	74S40	
	National	DM74S40	
	Signetics	**74S40**	**(3003)**
SN74S428	AMD	8228	
	Intel	8228	
	National	DP8228	
		INS8228	
	NEC	μPB8228	
	TI	TIM8228	
SN74S51	Fairchild	74S51	
	National	DM74S51	
	Signetics	**74S51**	**(3003)**
SN74S65	National	DM74S65	
SN74S74	Fairchild	74S74	
	Hitachi	HD74S74	
	National	DM74S74	
	Signetics	**74S74**	**(3003)**
SN74S85	**Signetics**	**74S85**	**(3003)**
SN74S86	Fairchild	74S86	
	National	DM74S86	
	Signetics	**74S86**	**(3003)**
SN75064	IPS	IP2064	
	Mitsubishi	M54532	
	Motorola	ULN2064	
	SGS	ULN2064	
	SiliconG	SG2064	
SN75064			(Cont'd)
	TI	ULN2064	
	Toshiba	TD62064	
SN75065	IPS	IP2065	
	Motorola	ULN2065	
	SGS	ULN2065	
	SiliconG	SG2065	
	Sprague	**ULN2065**	**(3203)**
	TI	ULN2065	
	Toshiba	TD62064	
SN75066	IPS	IP2066	
	Motorola	ULN2066	
	SGS	ULN2066	
	SiliconG	SG2066	
	Sprague	ULN2066	
	TI	ULN2066	
SN75067	IPS	IP2067	
	Motorola	ULN2067	
	SGS	ULN2067	
	SiliconG	SG2067	
	Sprague	ULN2067	
	TI	ULN2067	
SN75068	IPS	IP2068	
	Motorola	**ULN2068**	**(2954)**
	SGS	ULN2068	
	SiliconG	SG2068	
	Sprague	**ULN2068**	**(3203)**
	TI	ULN2068	
SN75069	IPS	IP2069	
	Motorola	ULN2069	
	SGS	ULN2069	
	SiliconG	SG2069	
	Sprague	**ULN2069**	**(3203)**
	TI	ULN2069	
SN75070	IPS	IP2070	
	VLSI Tech	**VT20C68**	**(3349)**
SN75076	IPS	IP2076	
SN75077	IPS	IP2007	
SN75107A	Hitachi	HD75107A	
SN75108A	Hitachi	HD75108A	
SN75113	National	DS75113	
SN75114	Fairchild	96114	
	TI	SN55114	
SN75115	Fairchild	96115	
	TI	SN55115	
SN751176B	Fairchild	μA8T28	
		μA96172	
		μA96173	
		μA96174	
		μA96175	
		μA96176	
		μA96177	
		μA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75173	
		SN75174	
		SN75177B	
		SN75178	
SN75121	National	DS75121	
		N8T13	
	Signetics	**N8T13**	**(3022)**
SN75123	National	DS75122	
		DS75123	
	Signetics	**N8T23**	**(3022)**
SN75124	National	DS75124	
	Signetics	**N8T24**	**(3022)**
SN75125	**Motorola**	**MC75125**	**(2952)**
	National	DS75125	
	TI	SN75ALS125	
SN75127	**Motorola**	**MC75127**	**(2952)**
	National	DS75127	
	TI	SN75ALS127	
SN75128	**Motorola**	**MC75128**	**(2952)**
	National	DS75128	
SN75129	**Motorola**	**MC75129**	**(2952)**
	National	DS75129	
SN75130	**Motorola**	**MC3485**	**(2952)**
SN75145	Fairchild	μA8T28	
		μA96172	
		μA96173	
		μA96174	
		μA96175	
SN75145	Fairchild		(Cont'd)
		μA96176	
		μA96177	
		μA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75174	
		SN75177B	
		SN75178	
SN75150	National	DS75150	
SN75154	National	DS75154	
♦ SN75160	National	DS75160	
SN75160B	National	DS75160A	
	TI	SN75ALS160	
♦ SN75161	National	DS75161	
SN75161B	National	DS75161A	
	TI	SN75ALS161	
♦ SN75162	National	DS75162	
SN75162B	National	DS75162A	
	TI	SN75ALS162	
SN75172	Fairchild	μA8T28	
		μA96172	
		μA96173	
		μA96174	
		μA96175	
		μA96176	
		μA96177	
		μA96178	
SN75173	Fairchild	μA8T28	
		μA96172	
		μA96173	
		μA96174	
		μA96175	
		μA96176	
		μA96177	
		μA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
SN75174	Fairchild	μA8T28	
		μA96172	
		μA96173	
		μA96174	
		μA96175	
		μA96176	
		μA96177	
		μA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**

(Continued)

(Continued)

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN75174			(Cont'd)
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75177B	
		SN75178	
SN75175	Fairchild	μA9639	
	TI	μA9639	
SN75177B	Fairchild	μA8T28	
		μA96172	
		μA96173	
		μA96174	
		μA96175	
		μA96176	
		μA96177	
		μA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75178	
SN75178	Fairchild	μA8T28	
		μA96172	
		μA96173	
		μA96174	
		μA96175	
		μA96176	
		μA96177	
		μA96178	
	Motorola	**SN75172**	**(2952)**
		SN75173	**(2952)**
		SN75174	**(2952)**
		SN75175	**(2952)**
		SN75176	**(2953)**
		SN75177	**(2953)**
		SN75178	**(2953)**
	National	DS3695	
		DS8T28	
	TI	SN751176B	
		SN75145	
		SN75172	
		SN75173	
		SN75174	
		SN75177B	
SN75182	National	DS8820	
SN75183	National	DS8830	
SN75188	Exar	XR1488	
	Fairchild	MC1488	
		μA212A	
		μA750	
	GoldStar	**GD75188**	**(2694)**
	Hitachi	HD75188	
	National	DS1488	
	Signetics	MC1488	
		MC1489	
	SiliconG	SG75188	
		SG75788	
	TI	MC1488	
		MC1489	
		SN75189	
SN75189	Fairchild	μA1489	
		μA212A	
		μA750	
	Motorola	**MC1489**	**(2952, 2958)**
	Signetics	MC1489	
	SiliconG	SG1489	
		SG508	
	Sprague	UHD508	
	TI	MC1489	
		SN55189	
SN75189A	Exar	XR1489A	
	Fairchild	UA150	
		UA212A	
		μA1489A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN75189A			(Cont'd)
	Motorola	**MC1489A**	**(2952, 2958)**
	National	DS1489A	
	SGS	MC1489	
	Signetics	MC1489A	
	SiliconG	SG1489A	
♦ SN7520	Fairchild	7520	
	Motorola	MC7520	
SN75207B	National	DS75207	
♦ SN7521	Fairchild	7521	
	Motorola	MC7521	
	National	LM7521	
♦ SN75234	SiliconG	SG75234	
♦ SN75235	SiliconG	SG75235	
♦ SN7524	Motorola	MC7524	
	National	DS75S24	
	Signetics	7524	
♦ SN7525	Fairchild	7525	
	Motorola	MC7525	
	National	LM7525	
♦ SN75322	National	DS75322	
♦ SN75326	SiliconG	SG75236	
		SG75236A	
♦ SN75327	SiliconG	SG75237	
♦ SN75430	Fairchild	75430	
	SiliconG	SG75430	
♦ SN75431	Ferranti	ZN445	
	SiliconG	SG75431	
	SiliconSys	SSI6042	
♦ SN75432	Ferranti	ZN443	
	SiliconG	SG75432	
	SiliconSys	SSI6044	
♦ SN75433	Samsung	KM2864AH	
	SEEQ	DQ52B33H	
	SiliconG	SG75433	
	Xicor	**X2864H**	**(3391, 3408)**
♦ SN75434	SiliconG	SG75434	
	SiliconSys	SSI80C60	
SN75435	National	DS3668	
SN75437	**GE/RCA**	**CA3219**	**(2650)**
	Hitachi	HAI3007	
	IPS	3658	
	National	DS3658	
	SGS	L6222	
SN75440	**GE/RCA**	**CA3252**	**(2650, 2654)**
	IPS	3669	
	National	DS3669	
	SGS	L9222	
SN754410	**IPS**	**IP293**	**(2854)**
	Polycore	PL293	
	SGS	L293	
	TI	L293	
SN754411	Intech	A102	
SN75450	Fairchild	μA75450	
	SiliconG	SG75450	
♦ SN75450B	Hitachi	HD75450A	
	SiliconG	SG75450A	
SN75451	Fairchild	75451	
	National	DS75451	
	SiliconG	SG75451	
SN75451B	Hitachi	HD75451A	
	SiliconG	SG75451A	
		SG75451B	
SN75452	Fairchild	μA75452	
	SiliconG	SG75452	
SN75452B	Fairchild	75452	
	National	DS75452	
	SiliconG	SG75452A	
		SG75452B	
SN75453B	Fairchild	75453	
	Motorola	MC75453	
	National	DS75453	
		LM75453	
	SiliconG	SG75453A	
		SG75453B	
SN75454B	National	DS75454	
	SiliconG	SG75453B	
		SG75454B	
		SG7545A	
♦ SN75460	Motorola	MC75460	
	National	DS75460	
	SiliconG	SG75460	
SN75461	Fairchild	μA75461	
	Motorola	MC75401	
	National	DS75461	
	SiliconG	SG75461	
SN75462	Fairchild	μA75462	
	Motorola	MC75402	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN75462			(Cont'd)
	National	DS75462	
	SiliconG	SG75462	
SN75463	Motorola	MC75403	
	National	DS75463	
	SiliconG	SG75463	
♦ SN75464	Motorola	MC75404	
	National	DS75464	
		SG75464	
♦ SN75464	SiliconG	SG75464	
SN75465	**Sprague**	**ULN2025**	**(3203)**
SN75466	SiliconG	SG2021	
	Sprague	**ULN2021**	**(3203)**
		ULS2021	
SN75467	SiliconG	SG2002	
		SG2022	
	Sprague	**ULN2022**	**(3203)**
		ULS2022	
SN75468	Exar	XR2003	
	SiliconG	SG2023	
	Sprague	**ULN2023**	**(3203)**
		ULQ2003	
		ULS2023	
SN75469	SiliconG	SG2024	
	Sprague	**ULN2024**	**(3203)**
		ULS2024	
♦ SN75470	SiliconG	SG75470	
SN75471	National	DS3611	
		LM3611	
	SiliconG	SG75471	
	Sprague	**UDN3611**	**(3203)**
SN75472	National	DS3612	
		DS3632	
		LM3612	
	SiliconG	SG75472	
	Sprague	**UDN3612**	**(3203)**
SN75473	National	DS3613	
		LM3613	
	Sprague	**UDN3613**	**(3203)**
♦ SN75474	National	DS3614	
		LM3614	
♦ SN75474	SiliconG	SG75474	
	Sprague	**UDN3614**	**(3203)**
SN75476	**Sprague**	**UDN5711**	**(3203)**
	TI	UDN5711	
	Toshiba	TD62476	
SN75477	Sprague	UDN5722	
SN75478	**Sprague**	**UDN5713**	**(3203)**
	TI	UDN5713	
	Toshiba	TD62478	
SN75479	**Motorola**	**MC1374**	**(2947)**
	Sprague	**UDN5714**	**(3203)**
	TI	UDN5714	
	Toshiba	TD62479	
♦ SN75493	National	DS75493	
SN75494	National	DS75494	
SN75518	Gould	S4535	
	Sprague	**UCN5818**	**(3203, 3205)**
SN75551	**Intel**	**27513**	**(2863)**
		N27513	
		P27513	
	Siliconix	SI9551	
	Sprague	**UCN5851**	**(3203)**
	Supertex	HV5122	
SN75552	Fujitsu	D51C68	
	Hitachi	D51C68	
	Siliconix	SI9552	
	Sprague	**UCN5852**	**(3203)**
	Supertex	HV5222	
	TI	D51C68	
SN75553	Fujitsu	P51C68	
	Hitachi	P51C68	
	Intel	MB2168	
	Siliconix	SI9553	
	Sprague	**UCN5853**	**(3203)**
	Supertex	HV5306	
	TI	P51C68	
SN75554	Fujitsu	D51C69	
	Hitachi	D51C69	
	Intel	TMS2168	
	Siliconix	SI9554	
	Sprague	**UCN5854**	**(3203)**
	Supertex	HV5308	
	TI	D51C69	
SN75555	Fairchild	μA7815	
	GoldStar	GL7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SN75555	National		(Cont'd)
		LM340T-15	
		LM78L15	
	NEC	μPC78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	μA78L15	
	Toshiba	TA78L015	
SN75556	Siliconix	SI9556	
	Supertex	HV5408	
SN75563	Siliconix	SI9560	
	TI	SN75564	
SN75564	Siliconix	SI9560	
	TI	SN75563	
SN75605	**Sprague**	**UDN2950**	**(3203)**
SN75ALS056	National	DS3896	
SN75ALS057	National	DS3897	
SN75ALS125	**Motorola**	**MC75125**	**(2952)**
	National	DS75125	
	TI	SN75125	
SN75ALS127	**Motorola**	**MC75127**	**(2952)**
	National	DS75127	
	TI	SN75127	
SN75ALS160	National	DS75160A	
	TI	SN75160B	
SN75ALS161	National	DS75161A	
	TI	SN75161B	
SN75ALS162	National	DS75162A	
	TI	SN75162B	
SN75ALS191	Fairchild	μA9638	
		μA9679	
	TI	μA9638	
SN75ALS193	AMD	AM26LS32A	
SN75ALS194	**Motorola**	**MC3487**	**(2952, 2959)**
	National	DS3487	
	TI	MC3487	
SN75ALS195	**Motorola**	**MC3486**	**(2952, 2959)**
	National	DS3486	
	TI	MC3486	
SN75C188	National	DS14C88	
SN75C189A	National	DS14C89	
SN76001	MCE	MCE820	
	SGS	TBA820	
	Thomson	TBA820	
SN76111	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
	TI	SN76116	
SN76115	Exar	XR1310	
	National	LM1310	
	Toshiba	TA7157	
SN76116	Fairchild	μA705	
	National	LM1800	
	Sanyo	LA705	
		LA758	
	Signetics	μA758	
	Sprague	ULN3809	
		ULN3812	
	TI	SN76111	
SN76131	Exar	XR4739	
	Fairchild	μA739	
		μA749	
	National	LM1303	
	Raytheon	RC4739	
	SGS	TBA231	
	TI	SN76149	
SN76149	Exar	XR4739	
	Fairchild	μA739	
		μA749	
	National	LM1303	
	Raytheon	RC4739	
	SGS	TBA231	
	TI	SN76131	
SN76177	National	LM377	
SN76227	Motorola	TDA1327	
SN76242	GE/RCA	CA3070	
SN76243	GE/RCA	CA3071	
SN76266	National	LM3066	
SN76489	GIM	AY3-8913	
	NCR	NCR8489	
	TI	SN76489A	
SN76600	**Motorola**	**MC1350**	**(2948)**
	Thomson	ESM1350	
SN76635	National	LM1820	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Texas Instruments (Cont'd)			
SN76642	GE/RCA	CA2111A	
	National	LM2111	
		LM2113	
	Signetics	N5111	
	Sprague	ULN2111	
	TI	SN76643	
SN76643	GE/RCA	CA2111A	
	National	LM2111	
		LM2113	
	Signetics	N5111	
	Sprague	ULN2111	
	TI	SN76642	
SN76666	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	LSC1008	
		M5140	
	National	LM3064	
	NEC	μPC1382	
	Sanyo	LA1365	
	Toshiba	TA7176	
SN76675	National	LM3075	
SNJ55188	SiliconG	SG55188	
SNJ55189	SiliconG	SG55189	
SNJ55234	Ferranti	ZN440	
	SiliconG	SG55234	
	SiliconSys	SSI6040	
	TI	SN55234	
SNJ55236	SiliconG	SG55235	
		SG55236	
SNJ5524	Fairchild	MC5524	
	Motorola	MC5524	
	National	LM5524	
	Raytheon	RM5524	
SNJ55325	Motorola	MC55325	
	National	DS55325	
	SiliconG	SG55325	
	TI	SN55325	
SNJ55326	SiliconG	SG55326	
	TI	SN55326	
SNJ55450	Fairchild	μA55450	
	SiliconG	SG55450	
SNJ55451	SiliconG	SG55451	
SNJ55452	Fairchild	μA55452	
	National	DS55452	
	Signetics	55452	
	SiliconG	SG55452	
	TI	SN55452	
SNJ55453	Fairchild	55453	
	National	DS55453	
		LM55453	
	Signetics	55453	
	SiliconG	SG55453	
	TI	SN55453	
SNJ55454	SiliconG	SG55454	
SNJ55460	National	DS55460	
	SiliconG	SG55460	
SNJ55461	National	DS55461	
	SiliconG	SG55461	
	TI	SN55461	
SNJ55462	Fairchild	μA55462	
	National	DS55462	
	SiliconG	SG55462	
	TI	SN55462	
SNJ55463	National	DS55463	
	SiliconG	SG55463	
	TI	SN55463	
SNJ55464	National	DS55464	
	SiliconG	SG55464	
	TI	SN55464	
SNJ55470	GE/RCA	CD22221	
	National	DS55470	
	SiliconG	SG55470	
	SiliconSys	SSIK221	
	TI	SN55470	
SNJ55471	SiliconG	SG55471	
	TI	SN55471	
SNJ55472	SiliconG	SG55472	
	TI	SN55472	
SNJ55473	SiliconG	SG55473	
	TI	SN55473	
SNJ55474	SiliconG	SG55474	
	TI	SN55474	
SNN74HC597	**GE/RCA**	**CD74HC597**	**(2631)**
	Hitachi	HD74HC597	
	Motorola	MC74HC597	
	National	MM74HC597	
	SGS	M74HC597	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SNN74HC597			(Cont'd)
	Signetics	PC74HC597	
	Toshiba	**TC74HC597**	**(3307)**
♦ TBP18S030	AMD	27S19	
		AM27LS19	
		AM27S19	
♦ TBP18S030	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
♦ TBP18S030	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
♦ TBP18S030	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
♦ TBP18S030	TI	JBP38S030	
♦ TBP18S030M	National	DM54S288	
		DM7578	
♦ TBP18SA30	AMD	AM27S18	
	Fujitsu	MB7111	
	National	DM74S188	
	Signetics	N82S23	
	TI	28SA030-25	
♦ TBP24S10	AMD	27S21	
		AM27S21	
♦ TBP24S10	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
♦ TBP24S10	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
♦ TBP24S41	AMD	AM27S33	
	Fujitsu	MB7122	
	Hitachi	HN25045	
	MMI	5353-1	
		63S441	
♦ TBP24S41	National	74S573	
		DM74S573	
♦ TBP24S41	NEC	μPB426	
	Signetics	N82S137	
♦ TBP24S41M	MMI	53S441	
	Motorola	MCM7643M	
	National	DM54S573	
		DM54S573A	
♦ TBP24S41M	Signetics	S82S137	
♦ TBP24S81	AMD	27S185	
		AM2725S291	
		AM27S185	
♦ TBP24S81	Fujitsu	MB7128	
	Hitachi	HN25085	
	MMI	63S841	
	National	77S185	
		87S185	
		DM87S185	
♦ TBP24S81	**Raytheon**	**29651**	**(2985)**
		29651A	**(2985)**
♦ TBP24S81	Signetics	N82S185	
	TI	24S81-55	
		28S165-35	
♦ TBP24S81M	National	DM77S185	
	Raytheon	**29651AM**	**(2985)**
	Signetics	S82S185	
♦ TBP24SA10	Fujitsu	MB7113	
	National	DM74S387	
♦ TBP24SA10M	AMD	AM27S20	
	MMI	5300-1	
		53S140	
		63S140	
♦ TBP24SA10M	National	DM54S387	
	Signetics	N82S126	
		S82S126	
♦ TBP24SA10M	TI	34SA10-25	
♦ TBP24SA41M	AMD	AM27S32	
	Fairchild	93452	
	Fujitsu	MB7121	
	Hitachi	HN25044	
	MMI	5352-1	
	National	DM54S572	
♦ TBP24SA81	AMD	AM27S184	
	National	DM87S184	
♦ TBP28L22	Fujitsu	MB7118	
	Signetics	N82LS135	
	TI	28L22	
♦ TBP28L86	Signetics	S82LS181	
♦ TBP28LA22	Fujitsu	MB7117	
♦ TBP28S166	AMD	27S191	
		AM27S191	
♦ TBP28S166	**Cypress**	**CY7C291**	**(2565)**
		CY7C292	**(2565)**

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ TBP28S166	Fairchild	932511	
		93Z511	
♦ TBP28S166	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
♦ TBP28S166	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
♦ TBP28S166	Signetics	82S191	
		N82S191	
		N82S191A	
♦ TBP28S166	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
		TMS27C291	
♦ TBP28S166	**Waferscale**	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
♦ TBP28S46	AMD	AM27S31	
	MMI	63S485	
	National	74S474	
		DM74S474	
♦ TBP28S46	Signetics	N82S141	
♦ TBP28S46M	National	DM54S474	
	Signetics	S82S141	
♦ TBP28S86AM	AMD	AM27S181	
	Cypress	**CY7C282M**	**(2565)**
	Fairchild	932451	
		93Z451	
♦ TBP28S86AM	Fujitsu	MB7132	
	Hitachi	HN25089	
	MMI	6381-2	
		63S881	
♦ TBP28S86AM	Motorola	7681	
	National	77LS181	
		87S181	
		DM77S181	
		DM77S281	
		DM87S281	
♦ TBP28S86AM	**Raytheon**	**29631**	**(2985)**
		29631AM	**(2985)**
		29632	
♦ TBP28S86AM	Signetics	N82S181	
		S82S181	
♦ TBP28S86AM	TI	28586-60	
		28S86-60	
		JBP28L86A	
♦ TBP28SA166	AMD	AM27S190	
	Fujitsu	MB7137	
	Hitachi	HN25168	
	National	DM77S190	
		DM87S190	
♦ TBP28SA42	AMD	AM27S28	
	National	DM74S473	
♦ TBP28SA46	AMD	AM27S30	
	National	DM74S475	
		DM77S475	
		DM87S475	
♦ TBP28SA86A	AMD	AM27S180	
	Fujitsu	MB7131	
	National	DM87S180	
		DM87S229	
♦ TBP34L10	AMD	27S21	
		AM27S21	
♦ TBP34L10	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
♦ TBP34L10	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
♦ TBP34S10	AMD	27S21	
		AM27S21	
♦ TBP34S10	Fujitsu	MB7114	
	MMI	63S141	
		63S141A	
♦ TBP34S10	National	DM74S287	
	Signetics	N82S129A	
		S82S5129	
TBP34S162	AMD	27S41	
		AM27S41	
		AM27S41A	
	Fujitsu	MB7134	
		MB7152	
	MMI	53S1641	
		63S1641	
		63S1641A	
	National	87S195	
		DM77S195	
		DM87S195	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TBP34S162			(Cont'd)
	Signetics	82HS195	
		N82HS195	
		N82HS195A	
	TI	34S162-25	
		34S162-45	
		JBP34L162	
		JBP34S162	
♦ TBP34SA10	Fujitsu	MB7113	
	National	DM74S387	
♦ TBP38L165	AMD	AM27S191	
		AM27S291	
		AM27S291A	
♦ TBP38L165	**Cypress**	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
♦ TBP38L165	Motorola	MCM76	
	National	87S291	
		DM878291	
♦ TBP38L165	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
TBP38L166	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	932511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TMS27C291	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
♦ TBP38L22	MMI	63S281	
		63S281A	
♦ TBP38L22	Signetics	N82S135	
♦ TBP38R165	AMD	AM27S45	
		AM27S47	
♦ TBP38R165	**Cypress**	**CY7C245**	**(2565)**
	MMI	63RA1681	
	Signetics	**N82HS187**	**(3178)**
		S82HS187	
♦ TBP38S030	AMD	27S19	
		AM27LS19	
		AM27S19	
♦ TBP38S030	Fujitsu	MB7112	
	MMI	53S081	
		63081	
		63S081	
♦ TBP38S030	Motorola	MCM27S19	
	National	74S288	
		DM74S288	
		DM8578	
♦ TBP38S030	Signetics	82S123	
		N82S123	
		N82US123	
		S825123	
♦ TBP38S030	TI	JBP38S030	
♦ TBP38S165	AMD	AM27S191	
		AM27S291	
		AM27S291A	
♦ TBP38S165	**Cypress**	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
♦ TBP38S165	Motorola	MCM76	
	National	87S291	
		DM878291	
♦ TBP38S165	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ TBP38S22	MMI	63S281	
		63S281A	
♦ TBP38S22	Signetics	N82S135	
♦ TBP38SA030	AMD	AM27S18	
	Fujitsu	MB7111	
	National	DM74S188	
	Signetics	N82S23	
	TI	28SA030-25	
♦ TBP38SA22	MMI	63S280	
TBPSA030	MMI	63S080	
	National	74S188	
	Signetics	N82S23	
		N82US123	
		S82S23	
	TI	38SA030-25	
TCM2910A	Intel	2910A	
TCM2911	Harris	HC5511	
TCM2912C	CMD Micro	G8912B	
	Intel	2912	
		ID2912	
	National	TP3040	
	Plessey	MV8912	
	Thomson	ETC5040	
TCM2913	**AT&T**	**T7513**	**(2484)**
	Intel	2913	
		29C13	
	TI	2133	
		TCM29C13	
TCM2914	Intel	2914	
	TI	TCM29C14	
TCM2916	Intel	2916	
		TCM29C16	
	TI	TCM29C16	
TCM2917	Intel	2917	
	TI	TCM29C17	
TCM29C13	**AT&T**	**T7513**	**(2484)**
	Intel	2913	
		29C13	
	TI	2133	
		TCM2913	
TCM29C14	Intel	2914	
	TI	TCM2914	
TCM29C16	Intel	2916	
		TCM29C16	
	TI	TCM2916	
TCM29C17	Intel	2917	
	TI	TCM2917	
TCM4110	Harris	HC5510	
	Intel	2910	
TCM5089	Gould	S25089	
	ITT	SBA5089	
	National	TP5089	
	Samsung	MK5089	
	Sharp	LR4089	
	Stantel-STC	STC5089	
	Thomson	MK5089	
	UMC	UM5089	
TCM5094	Thomson	5094	
TCM7808	DEC	78808	
TI32016	National	NS32016	
TI32032	National	NS32032	
TI32081	National	NS32081	
TI32082	National	NS32082	
TI32201	National	NS32201	
TI32202	National	NS32202	
TIBPAL16H8	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
TIBPAL16L8	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TIBPAL16L8			(Cont'd)
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
TIBPAL16L8-15			
	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
TIBPAL16L8-20			
	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16P8	
TIBPAL16L8-30			
	AMD	AMPAL16L8A	
	Fairchild	16P8B2	
	MMI	87097	
	National	DMPAL16L8A	
		DMPAL16L8B2	
	TI	PAL16L825	
TIBPAL16P8	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
	Harris	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
	National	DMPAL16L8	
		DMPAL16R8B	
	Signetics	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
TIBPAL16R4-15			
	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TIBPAL16R4-15			(Cont'd)
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
TIBPAL16R4-20			
	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
TIBPAL16R4-25			
	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-30	**(4320)**
TIBPAL16R4-30			
	AMD	AMPAL16R4	
		AMPAL16R4L	
	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
	National	DMPAL16R4	
		PAL16R4	
	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
TIBPAL16R6-15			
	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
TIBPAL16R6-20			
	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TIBPAL16R6-20			(Cont'd)
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
TIBPAL16R6-25			
	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-30	**(4320)**
TIBPAL16R6-30			
	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
	National	DMPAL16R6	
		PAL16R6	
	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
TIBPAL16R8-15			
	Cypress	CYPAL16R8	
	Harris	**HPL16RC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R8	
		PAL16R8A	
	National	DMPAL16R8	
	Sprague	SPL16RC8	
	TI	SN74PAL16R8A	
		TIBPAL16R8-20	**(4320)**
		TIBPAL16R8-25	**(4320)**
		TIBPAL16R8-30	**(4320)**
TIBPAL16R8-20			
	Cypress	CYPAL16R8	
	Harris	**HPL16RC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R8	
		PAL16R8A	
	National	DMPAL16R8	
	Sprague	SPL16RC8	
	TI	SN74PAL16R8A	
		TIBPAL16R8-15	**(4320)**
		TIBPAL16R8-25	**(4320)**
		TIBPAL16R8-30	**(4320)**
TIBPAL16R8-25			
	Cypress	CYPAL16R8	
	Harris	**HPL16RC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R8	
		PAL16R8A	
	National	DMPAL16R8	
	Sprague	SPL16RC8	
	TI	SN74PAL16R8A	
		TIBPAL16R8-15	**(4320)**

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Texas Instruments (Cont'd)

Device	Replacement Source	Device	IC Master Page
TIBPAL16R8-25			
	TI		**(Cont'd)**
		TIBPAL16R8-20	**(4320)**
		TIBPAL16R8-30	**(4320)**
TIBPAL16R8-30			
	Cypress	CYPAL16R8	
	Harris	**HPL16RC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R8	
		PAL16R8A	
	National	DMPAL16R8	
	Sprague	SPL16RC8	
	TI	SN74PAL16R8A	
		TIBPAL16R8-15	**(4320)**
		TIBPAL16R8-20	**(4320)**
		TIBPAL16R8-25	**(4320)**
TIBPAL16RS-30			
	AMD	AMPAL16R6A	
	Fairchild	16RP6B2	
	MMI	PAL16R6B2	
	National	DMPAL16R6A	
	TI	PAL16R625	
TIBPAL20L10	Cypress	CUPLDC20G10	
		PAL20L10	
	MMI	PAL20L10	
	National	DMPAL20L10	
		PAL20L10	
	Sprague	SPL20LC10	
	TI	**TIBPAL20L10-25**	**(3217, 4320)**
TIBPAL20L10-25			
	Cypress	CUPLDC20G10	
		PAL20L10	
	MMI	PAL20L10	
	National	DMPAL20L10	
		PAL20L10	
	Sprague	SPL20LC10	
	TI	**TIBPAL20L10**	**(4320)**
TIBPAL20L8-20			
	Cypress	CUPLDC20G10	
	Fairchild	F100165	
	Hitachi	HD100165	
		HM6288	
	MMI	PAL20L8	
		PAL20L8B	
	National	PAL20L8	
	Signetics	**100165**	**(3020)**
	Sprague	SPL20LC8	
	TI	PAL20L8	
	Toshiba	TC55416	
TIBPAL20R4-20			
	Cypress	CUPLDC20G10	
	Fairchild	F100179	
	Hitachi	HD100179	
	MMI	PAL20R4	
		PAL20R4B	
	Sprague	SPL20RC4	
	TI	PAL20R4	
TIBPAL20R6-20			
	Cypress	CUPLDC20G10	
	Fairchild	F100170	
	Hitachi	HD100170	
	MMI	PAL20R6	
		PAL20R6B	
	Signetics	**100170**	**(3020)**
	Sprague	SPL20RC6	
	TI	PAL20R6	
TIBPAL20R8-20			
	Cypress	CUPLDC20G10	
	Fairchild	F100166	
	Hitachi	HD100166	
	MMI	PAL20R8	
		PAL20R8B	
	National	PAL20R8	
	Sprague	SPL20RC8	
	TI	PAL20R8	
TIBPAL20X10-25			
	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X10	
		PALC22V10	
	National	DMPAL20X10	
		PAL20X10	

(Continued)

Device	Replacement Source	Device	IC Master Page
TIBPAL20X10-25			(Cont'd)
	Sprague	SPL20XC10	
	TI	**TIBPAL22V10**	**(4320)**
TIBPAL20X4-25			
	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X4	
		PALC22V10	
	National	DMPAL20X4	
		PAL20X4	
	Sprague	SPL20XC4	
	TI	**TIBPAL22V10**	**(4320)**
TIBPAL20X8-25			
	AMD	AMPAL22V10	
	Cypress	**PALC22V10**	**(4217)**
	MMI	PAL20X8	
		PALC22V10	
	National	DMPAL20X8	
		PAL20X8	
	Sprague	SPL20XC8	
	TI	**TIBPAL22V10**	**(4320)**
TICPAL1010	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
♦ TICPAL16L8	Cypress	CYPAL16L8	
	Fairchild	16P8B	
		16RP8B	
♦ TICPAL16L8	**Harris**	**HPL16LC8**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16L8	
		PAL16L8A	
		PAL16L8B	
♦ TICPAL16L8	National	DMPAL16L8	
		DMPAL16R8B	
♦ TICPAL16L8	**Signetics**	**PLHS18P8**	**(3155, 3173)**
	Sprague	SP16LC8	
	TI	PAL16L8A	
		TIBPAL16H8	
		TIBPAL16L8	**(4320)**
		TIBPAL16L8-15	**(4320)**
		TIBPAL16L8-20	**(4320)**
		TIBPAL16P8	
♦ TICPAL16R4	AMD	AMPAL16R4	
		AMPAL16R4L	
♦ TICPAL16R4	Cypress	CYPAL16R4	
	Fairchild	16RP4B	
	Harris	**HPL16RC4**	**(2768)**
	Lattice	GAL16V8	
	MMI	PAL16R4	
		PAL16R4A	
♦ TICPAL16R4	National	DMPAL16R4	
		PAL16R4	
♦ TICPAL16R4	Sprague	SPL16RC4	
	TI	PAL16R4A	
		TIBPAL16R4-15	**(4320)**
		TIBPAL16R4-20	**(4320)**
		TIBPAL16R4-25	**(4320)**
		TIBPAL16R4-30	**(4320)**
♦ TICPAL16R6	AMD	AMPAL16R6	
	Cypress	CYPAL16R6	
	Fairchild	16RP6B	
	Harris	**HPL16RC6**	**(2768)**

(Continued)

Device	Replacement Source	Device	IC Master Page
♦ TICPAL16R6			(Cont'd)
	Lattice	GAL16V8	
	MMI	PAL16R6	
		PAL16R6A	
♦ TICPAL16R6	National	DMPAL16R6	
		PAL16R6	
♦ TICPAL16R6	Sprague	SPL16RC6	
	TI	PAL16R6A	
		TIBPAL16R6-15	**(4320)**
		TIBPAL16R6-20	**(4320)**
		TIBPAL16R6-25	**(4320)**
		TIBPAL16R6-30	**(4320)**
TIM8228	AMD	8228	
	Intel	8228	
	National	DP8228	
		INS8228	
	NEC	μPB8228	
	TI	SN74S428	
TL060	Toshiba	TA75060	
TL061	Toshiba	TA75061	
TL061M	TI	TL071M	
TL062	National	LF442	
	Thomson	TL062	
	Toshiba	TA75062	
TL062M	TI	TL072M	
TL064	Thomson	TL064	
	Toshiba	TA75064	
TL064M	TI	TL074M	
TL070	Toshiba	TA75070	
TL071	AnalogSys	MA333	
	Fairchild	μA771	
	Motorola	**MC34001**	**(2920, 2959)**
	NEC	μPC4071	
		μPC4081	
	TI	TL081C	
	Toshiba	TA75071	
TL071M	TI	TL061M	
TL072	AnalogSys	MA336	
	Fairchild	μA772	
	Motorola	**MC34002**	**(2922)**
	NEC	μPC4072	
		μPC4082	
	SGS	TL072	
	TI	TL072	
	Toshiba	TA75072	
		TA75074	
TL072M	TI	TL062M	
TL074	AnalogSys	MA374	
	Fairchild	μA774	
	Motorola	**MC33074**	**(2924)**
		MC34004	**(2923, 2959)**
		MC34004A	**(2923, 2959)**
	NEC	μPC4084	
	TI	TL084BC	
TL074M	TI	TL064M	
TL080	Hitachi	HA17080	
TL081	AD	AD544	
	Burr-Brown	**OPA156A**	**(2532)**
	Fairchild	LF156A	
	LinearTech	LF156A	
	National	LF156A	
		OPA101	
	PMI	**OP43**	**(2970)**
		PM156A	**(2971)**
TL081AC	**Motorola**	**MC34001B**	**(2920, 2959)**
TL081C	AnalogSys	MA333	
	Fairchild	μA771	
	Motorola	**MC34001**	**(2920, 2959)**
	NEC	μPC4071	
		μPC4081	
	TI	TL071	
	Toshiba	TA75071	
TL081M	**Motorola**	**MC35001B**	**(2921)**
TL082	Exar	XR082	
	GE/RCA	**CA082**	**(2645)**
	SGS	TL082	
	TI	HA17082	
	Thomson	LF353	
TL082AC	**Motorola**	**MC34002B**	**(2922)**
TL082BC	**Motorola**	**MC34002A**	**(2922)**
TL082C	AnalogSys	MA336	
	Fairchild	μA772	

(Continued)

Device	Replacement Source	Device	IC Master Page
TL082C			(Cont'd)
	Motorola	**MC34002**	**(2922)**
	NEC	μPC4072	
		μPC4082	
	SGS	TL072	
	TI	TL072	
	Toshiba	TA75072	
		TA75074	
TL082M	**Motorola**	**MC35002B**	**(2922)**
TL083	Exar	XR083	
	Hitachi	HA17083	
TL084	Exar	XR084	
	Fairchild	μAF774	
	GE/RCA	**CA084**	**(2645)**
	SGS	TL084	
TL084AC	**Motorola**	**MC34004B**	**(2923, 2959)**
TL084BC	AnalogSys	MA374	
	Fairchild	μA774	
	Motorola	**MC33074**	**(2924)**
		MC34004	**(2923, 2959)**
		MC34004A	**(2923, 2959)**
		MC34074	**(2923, 2960)**
	NEC	μPC4084	
	TI	TL074	
TL084M	**Motorola**	**MC35004**	**(2924)**
TL111	AD	AD111	
	Fairchild	μA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	Thomson	LM111	
TL117	Fairchild	μA117	
	IPS	**IP117**	**(2854)**
	LinearTech	LM117	
	MCE	MCELM117	
	Motorola	**LM117**	**(2929)**
	National	LM117	
	SiliconG	SG117	
	Thomson	LM117	
	Unitrode	**UC117**	**(3325)**
TL1525	Cherry	CS1525	
	LinearTech	LT1525	
		SG1525	
	SiliconG	SG1525	
TL1527	Cherry	CS1527	
	LinearTech	LT1527	
		SG1527	
	SiliconG	1526	
		SG1527	
	Unitrode	**UC1527**	**(3323)**
TL185	**GE/Intersil**	**DG185**	**(2680)**
		IH5045	**(2680)**
	Harris	**HI5045**	**(2707, 2737, 2747)**
	Maxim	IH5045	
	Siliconix	DG185	
		DG5045	
TL2525	Cherry	CS2525	
	SiliconG	SG2525	
	Unitrode	**UC2525**	**(3323)**
TL2527	Cherry	CS2527	
	SiliconG	SG2527	
	Unitrode	**UC2527**	**(3323)**
TL431	Fairchild	μA431	
	Motorola	**TL431**	**(2960)**
TL431M	Fairchild	μA431	
	Motorola	**TL431**	**(2960)**
TL45558	**GoldStar**	**GL4558**	**(2700)**
	Motorola	**MC4558**	**(2922, 2959)**
	NEC	μPC4558	
	Raytheon	RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	RC4558	
		RM4558	
	Thomson	MC4558	
	Toshiba	TA75558	
TL4558	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
TL4558			(Cont'd)
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
	Thomson	MC4558	
	Toshiba	TA75458	
		TA75558	
TL4810	Gould	S4534	
	Sprague	**UCN5810**	**(3203, 3205)**
	TI	UCN4810A	
TL494	Fairchild	μA494	
	Toshiba	TA76494	
TL494C	**IPS**	**IP494C**	**(2854)**
	TI	TL594C	
	Unitrode	**UC494AC**	**(3323)**
TL494I	Fujitsu	MB3759	
	TI	TL594I	
TL494M	Cherry	CS494M	
	Exar	XR494	
	IPS	**IP494A**	**(2854)**
	Motorola	**TL494**	**(2931)**
	TI	TL594M	
	Unitrode	**UC494A**	**(3323)**
TL495C	**Unitrode**	**UC495AC**	**(3323)**
TL495I	Fujitsu	MB3760	
	TI	TL595I	
♦ TL514	Motorola	MC1514	
	National	LM1514	
	TI	TL514M	
TL514M	Motorola	MC1514	
	National	LM1514	
TL5812	**Sprague**	**UCN5812**	**(3203, 3205)**
		UCN5812A	**(3203, 3205)**
TL594C	**IPS**	**IP494C**	**(2854)**
	TI	TL494C	
	Unitrode	**UC494AC**	**(3323)**
TL594I	Fujitsu	MB3759	
	TI	TL494I	
TL594M	Cherry	CS494M	
	Exar	XR494	
	IPS	**IP494A**	**(2854)**
	Motorola	**TL494**	**(2931)**
	TI	TL494M	
	Unitrode	**UC494A**	**(3323)**
TL595I	Fujitsu	MB3760	
	TI	TL495I	
TL780-05C	IPS	IP780SAC	
	Motorola	**TL780-05C**	**(2926)**
TL780-12C	**IPS**	**IP7812AC**	**(2854)**
	Motorola	**TL780-12C**	**(2926)**
TL780-15C	**IPS**	**IP7815AC**	**(2854)**
	Motorola	**TL780-15C**	**(2926)**
TLC251	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC271	
	Thomson	μA776	
TLC252	**GE/Intersil**	**ICL7621**	**(2673)**
	Maxim	ICL7621	
	PMI	**OP220**	**(2970, 2972)**
		OP221	**(2970, 2972)**
	TI	TLC272	
TLC254	**GE/Intersil**	**ICL7641**	**(2673)**
	Maxim	ICL7641	
	TI	TLC274	
TLC271	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
	Thomson	μA776	
TLC272	**GE/Intersil**	**ICL7621**	**(2673)**
	Maxim	ICL7621	
	PMI	**OP220**	**(2970, 2972)**
		OP221	**(2970, 2972)**
	TI	TLC252	
TLC274	**GE/Intersil**	**ICL7641**	**(2673)**
	Maxim	ICL7641	
	TI	TLC254	
TLC372	AdvLinear	ALD2301	
TLC530	**Motorola**	**MC14444**	**(2937)**
	National	ADC0830	
	TI	TLC531	
TLC531	**Motorola**	**MC14444**	**(2937)**
	National	ADC0830	
	TI	TLC530	
TLC532	**Motorola**	**MC14442**	**(2937)**
	National	ADC0829	
	TI	TLC533	
TLC533	**Motorola**	**MC14442**	**(2937)**
	National	ADC0829	
	TI	TLC532	
TLC540	**Motorola**	**MC145040**	**(2937)**
	National	ADC0811	
	TI	TLC541	
TLC541	**Motorola**	**MC145040**	**(2937)**
	National	ADC0811	
	TI	TLC540	
TLC552C	AdvLinear	ALD2502	
		ALD2504	
	GE/Intersil	**ICM7556**	**(2670)**
		ICM7556M	**(2670)**
	Maxim	ICM7556	
	NEC	μPD556	
	TI	TLC552M	
		TLC556C	
		TLC556M	
TLC552M	AdvLinear	ALD2502	
		ALD2504	
	GE/Intersil	**ICM7556**	**(2670)**
		ICM7556M	**(2670)**
	Maxim	ICM7556	
	NEC	μPD556	
	TI	TLC552C	
		TLC556C	
		TLC556M	
TLC555	AdvLinear	ALD1502	
		ALD1504	
		ALD555	
		ALD555-1	
	GE/Intersil	**ICM7555**	**(2670)**
		ICM7555M	**(2670)**
	Maxim	ICM7555	
	NEC	μPD555	
TLC556C	AdvLinear	ALD2502	
		ALD2504	
	GE/Intersil	**ICM7556**	**(2670)**
		ICM7556M	**(2670)**
	Maxim	ICM7556	
	NEC	μPD556	
	TI	TLC552C	
		TLC552M	
		TLC556M	
TLC556M	AdvLinear	ALD2502	
		ALD2504	
	GE/Intersil	**ICM7556**	**(2670)**
		ICM7556M	**(2670)**
	Maxim	ICM7556	
	NEC	μPD556	
	TI	TLC552C	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TLC556M	TI		(Cont'd)
		TLC552M	
		TLC556C	
TLP298	SGS	L298	
	TI	L298	
	Unitrode	**L298**	**(3326)**
TLS9SM	**Unitrode**	**UC495A**	**(3323)**
TM024EAD9	Mitsubishi	MH1M09	
TM024GAD8	Mitsubishi	TH310008	
TM4256EC4	**Dense-Pac**	**DPD44256**	**(2581)**
	Fujitsu	MB85203	
		MB85204	
	Hitachi	HB561004A	
	MicronTech	MT4259	
	NEC	MC41256A4	
TM4256EL9	Dense-Pac	DPD42569	
	Hitachi	HB561003	
		HB561009	
	MicronTech	MT9259	
	Mitsubishi	MH25609A	
	NEC	MC41256A9	
	OKI	MSC2304KS9	
		MSC2304YS9	
	TI	TM4256GU9	
TM4256FC1	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
TM4256FL8	**Dense-Pac**	**DPD42568**	**(2581)**
	Hitachi	HB561008B	
	MicronTech	MT8259	
	Mitsubishi	MH25608A	
	NEC	MC41256A8	
	OKI	MSC2304KS8	
		MSC2304YS8	
	TI	TM4256GU8	
TM4256GU8	**Dense-Pac**	**DPD42568**	**(2581)**
	Hitachi	HB561008B	
	MicronTech	MT8259	
	Mitsubishi	MH25608A	
	NEC	MC41256A8	
	OKI	MSC2304KS8	
		MSC2304YS8	
	TI	TM4256FL8	
TM4256GU9	Dense-Pac	DPD42569	
	Hitachi	HB561003	
		HB561009	
	MicronTech	MT9259	
	Mitsubishi	MH25609A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TM4256GU9			(Cont'd)
	NEC	MC41256A9	
	OKI	MSC2304KS9	
		MSC2304YS9	
	TI	TM4256EL9	
TM4256HE4	**Dense-Pac**	**DPD5124**	**(2581)**
	Fujitsu	MB5210	
		MB85211	
TM5256	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
TMC2911A	Intel	ID2911	
	National	TP3021	
TMC2912	**Harris**	**HC5512**	**(2768)**
TMS1000	Samsung	KS51000	
♦ TMS2114	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
♦ TMS2114	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
♦ TMS2114	Toshiba	TC5513	
		TC5514	
		TMM2114	
♦ TMS2114	UMC	UM6104	
♦ TMS2147	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
♦ TMS2147	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
♦ TMS2147	Intel	2147	
	Motorola	MCM6147	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ TMS2147			(Cont'd)
	National	MM2147	
		NMC2141	
♦ TMS2147	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Thomson	ET2147	
	Toshiba	TMM3150	
TMS2364	Gould	S2364	
	Hitachi	HN48364	
	NCR	NCR2364	
	OKI	MSM3864	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**
	Sharp	LH2364A	
	Signetics	2364	
	VLSI Tech	VT2364	
	Weitek	SC8164	
TMS2511	**Western**	**WD2511**	**(3385)**
TMS2732A	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		2732A	
		M2732	
	National	MM2732	
		NMC2732	
	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	Toshiba	TMM324C	
TMS2764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS27C64**	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
TMS2791	Western	WD2791	
TMS2793	Western	WD2793	
TMS2795	Western	WD2795	
TMS2797	Western	WD2797	
TMS27C128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TMS27C128			(Cont'd)
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27PC128	**(3258)**
	Toshiba	TMM27128	
		TMN24128	
TMS27C256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
TMS27C291	AMD	27S191	
		AM27S191	
	Cypress	**CY7C291**	**(2565)**
		CY7C292	**(2565)**
	Fairchild	93Z511	
		93Z511	
	Fujitsu	MB7138	
	Hitachi	HN25169	
	MMI	53S1681	
	Motorola	76161	
		MCM76101	
	National	77S191	
		87S191	
		DM87S191	
		DM87S291	
	Signetics	82S191	
		N82S191	
		N82S191A	
	TI	JBP38L165	
		JBP38S165	
		TBP38L166	
	Waferscale	**WS57C191**	**(3376)**
		WS57C291	**(3376)**
TMS27C292	**Cypress**	**CY7C292**	**(2565)**
	National	DM87S291	
	Waferscale	**WS57C291**	**(3376)**
TMS27C512	AMD	AM27512	
	Fujitsu	MBM27512	
		MBM27C512	
	GIM	27C512	
	Hitachi	HN27512	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Intel	**27512**	**(2862)**
		N27512	
		P27512	
	Mitsubishi	M27512	
		M5L27512	
	National	74S570	
	NEC	μPD27C512	
	Panatech	TMS27C512	
	Signetics	S82S130	
	Toshiba	TMM27512	
TMS27C64	AMD	AM2764	
		AM27C64	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TMS27C64			(Cont'd)
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
TMS27PC128	AMD	AM27128A	
	Fujitsu	MBM27128	
		MBM27128A	
	GIM	27C128	
	Hitachi	HM4827128	
		HN27128	
		HN27C128	
		HN4827128P	
	Intel	27128	
		27128A	
		27C128A	
		N27128A	
		P27128	
		P27128A	
	Mitsubishi	M5L27128	
		M5L27C128	
	NEC	27128C	
		μPD27128	
	SEEQ	**27128**	**(2991)**
	SGS	M27128	
	TI	**SMJ27C128**	**(3220)**
		TMS27C128	**(3257)**
	Toshiba	TMM27128	
		TMN24128	
TMS27PC256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TMS27PC256	Toshiba		(Cont'd)
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
TMS3101	NCM	NCM4231Z	
	TI	TMS3127	
TMS3127	NCM	NCM4231Z	
	TI	TMS3101	
TMS32010	GIM	DSP32010	
TMS320C10	GIM	DSP320C10	
TMS4164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
TMS4256	CTI	54HCT241	
	GE/RCA	**CD54HCT241**	**(2631)**
	Micrel	MC54HCT241	
		MIC54HCT241	
	Mitel	MD54HCT241	
	Motorola	MC54HCT241	
		MCM6256	
		MCM6256B	
		MCM6257	
	National	MM54HCT241	
	OKI	MSM37256A	
	Samsung	KM41256	
	Signetics	54HCT241	
	Sprague	SS54HCT241	
	Supertex	SI54HCT241	
	TI	SN54HCT241	
	Vitelic	V51C256	
		V51C257	
TMS4257	Fujitsu	MB81257	
	Hitachi	HM50257	
	Mitsubishi	MSM4257	
	Motorola	MCM6256	
		MCM6257	
	NEC	μPD41257	
	Samsung	KM41257	
	TI	**TMS4256**	**(3259)**
	Toshiba	TMM41257	
	Vitelic	V51C256	
		V51C257	
TMS4416	Fujitsu	MB81416	
	Hitachi	HM48416	
	Inmos	IMS2620	
	Mitsubishi	M5M4416	
	NEC	μPD41416	
TMS4461	Fujitsu	MB81461	
	Hitachi	HM53461	
		HM53462	
		HM53464	
	Mitsubishi	M5M4C264	
		MB81461	
	NEC	μPD41254	
		μPD41264	
		μPD42264	
	Samsung	KM41464	
TMS4464	Fujitsu	MB81464	
	Hitachi	HM50464	
		HM50465	
	Inmos	IMS2820	
	MicronTech	MT4064	
	Mitsubishi	M5M4464	
		MSM4464P	
	NEC	μPD41464	
	OKI	MSM41464	
	Samsung	KM41464	
	TI	SMJ4469	
	Toshiba	TMM41464	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
TMS44C256	NEC	μPD414256	
TMS44C257	**GE/Intersil**	**IH5148**	**(2679)**
	Maxim	IH5148	
	Mitsubishi	M5M44C258	
	OKI	MSM514257	
TMS4500A	VLSI Tech	VL4500A	
♦ TMS4732	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
♦ TMS4732	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
♦ TMS4732	Signetics	2332	
		2632A	
♦ TMS4732	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
♦ TMS4732	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
♦ TMS4764	Fairchild	F3568	
		F3569	
		F3570	
♦ TMS4764	GIM	RO3-9365	
		RO9864	
♦ TMS4764	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
♦ TMS4764	National	MM52264	
		NM52264	
♦ TMS4764	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
♦ TMS4764	Supertex	23SC64	
		23SC64/A	
		CM6400	
♦ TMS4764	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
	VLSI Tech	VT2365	
TMS4C1024	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TMS4C1024			(Cont'd)
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
TMS4C1025	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TMS4C1027	NEC		(Cont'd)
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
TMS7000	GIM	PIC7000	
TMS7020	GIM	PIC7020	
TMS7040	GIM	PIC7040	
TMS7041	GIM	PIC7041	
♦ TMS9650	National	9650	
	Western	WD9650	
TMS9914A	Western	WD9914A	
TX4C1024	Hitachi	HB56A19	
	NEC	MC421000	
	Toshiba	THM81000	
		THM91000	
UCN4810A	Gould	S4534	
	Sprague	**UCN5810**	**(3203, 3205)**
	TI	TL4810	
♦ UDN2841	Motorola	UDN2841	
	Sprague	UDN2841	
♦ UDN2845	Motorola	UDN2845	
UDN5711	**Sprague**	**UDN5711**	**(3203)**
	TI	SN75476	
	Toshiba	TD62476	
UDN5712	**Motorola**	**MC1472**	**(2954)**
	Sprague	**UDN5712**	**(3203)**
	Toshiba	TD62477	
UDN5713	**Sprague**	**UDN5713**	**(3203)**
	TI	SN75478	
	Toshiba	TD62478	
UDN5714	**Motorola**	**MC1374**	**(2947)**
	Sprague	**UDN5714**	**(3203)**
	TI	SN75479	
	Toshiba	TD62479	
ULN2001	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001A	
	Toshiba	TD62001	
		TD62101	
ULN2001A	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
	Toshiba	TD62001	
		TD62101	
ULN2002	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ULN2002			(Cont'd)
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002A	
	Toshiba	TD62002	
ULN2002A	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
	Toshiba	TD62002	
ULN2003	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	Toshiba	TD62003	
		TD62103	
ULN2004	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004A	
	Toshiba	TD62004	
		TD62104	
ULN2004A	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
	Toshiba	TD62004	
		TD62104	
ULN2005	Exar	XR2205	
	Sprague	**ULN2005**	**(3203)**
ULN2064	IPS	IP2064	
	Mitsubishi	M54532	
	Motorola	ULN2064	
	SGS	ULN2064	
	SiliconG	SG2064	
	TI	SN75064	
	Toshiba	TD62064	
ULN2065	IPS	IP2065	
	Motorola	ULN2065	
	SGS	ULN2065	
	SiliconG	SG2065	
	Sprague	**ULN2065**	**(3203)**
	TI	SN75065	
	Toshiba	TD62064	
ULN2066	IPS	IP2066	
	Motorola	ULN2066	
	SGS	ULN2066	
	SiliconG	SG2066	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
ULN2066			(Cont'd)
	Sprague	ULN2066	
	TI	SN75066	
ULN2067	IPS	IP2067	
	Motorola	ULN2067	
	SGS	ULN2067	
	SiliconG	SG2067	
	Sprague	ULN2067	
	TI	SN75067	
ULN2068	IPS	IP2068	
	Motorola	**ULN2068**	**(2954)**
	SGS	ULN2068	
	SiliconG	SG2068	
	Sprague	**ULN2068**	**(3203)**
	TI	SN75068	
ULN2069	IPS	IP2069	
	Motorola	ULN2069	
	SGS	ULN2069	
	SiliconG	SG2069	
	Sprague	**ULN2069**	**(3203)**
	TI	SN75069	
ULN2074	IPS	IP2074	
	Motorola	**ULN2074**	**(2954)**
	SGS	ULN2074	
	SiliconG	SG2074	
	Sprague	**ULN2074**	**(3203)**
	Toshiba	TD62074	
ULN2075	IPS	IP2075	
	Motorola	ULN2075	
	SGS	ULN2075	
	SiliconG	SG2075	
	Sprague	**ULN2075**	**(3203)**
XR4151	Exar	XR4151	
	Raytheon	RC4151	
		RM4151	
		RV4151	
µ709	Fairchild	µA709	
	Motorola	**MC1709**	**(2919)**
	National	LM1709	
		LM709	
	NEC	µPC55	
	TI	µA709	
	Toshiba	TA7502	
µA2240	Exar	XR2240	
	Fairchild	UA238	
		µA2240	
	GE/Intersil	ICL8240	
µA301	AD	AD301	
	Fairchild	µA301	
		µA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	µPC157	
		µPC301	
		µPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
	Thomson	LM301A	
	Toshiba	TA7506	
µA709	Fairchild	µA709	
	Motorola	**MC1709**	**(2919)**
	National	LM1709	
		LM709	
	NEC	µPC55	
	TI	µ709	
	Toshiba	TA7502	
µA710M	Fairchild	µA710	
µA711M	Fairchild	µA711	
µA723	Fairchild	µA723	
		µA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA723			(Cont'd)
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	µA723	
	SiliconG	SG723	
	TI	µA723M	
	Thomson	SFC2723	
		µA723	
µA723M	Fairchild	µA723	
		µA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	µA723	
	SiliconG	SG723	
	TI	µA723	
	Thomson	SFC2723	
		µA723	
µA733	Fairchild	µA733	
	GE/Intersil	µA733	
	Hitachi	HA17733	
	Motorola	**MC1733**	**(2920)**
		NE592	**(2960)**
	National	LM733	
	Signetics	µA733	
	SiliconG	SG1401	
	TI	µA733M	
µA733M	Fairchild	µA733	
	GE/Intersil	µA733	
	Hitachi	HA17733	
	Motorola	**MC1733**	**(2920)**
		NE592	**(2960)**
	National	LM733	
	Signetics	µA733	
	SiliconG	SG1401	
	TI	µA733	
µA741	AD	AD741	
	Fairchild	µA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	µPC151	
		µPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	µA741	
	SiliconG	SG741	
	TI	µA741M	
	Thomson	µA741	
	Toshiba	TA7504	
µA741M	AD	AD741	
	Fairchild	µA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	µPC151	
		µPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	µA741	
	SiliconG	SG741	
	TI	µA741	
	Thomson	µA741	
	Toshiba	TA7504	
µA747	Fairchild	µA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA747			(Cont'd)
	National	LM747	
	NEC	µPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	µA747	
	TeledyneS	747	
	TI	µA747M	
µA747M	Fairchild	µA747	
	GE/RCA	**CA747**	**(2645)**
	Hitachi	HA17747	
	MicroPwr	MPOP04	
	Motorola	**MC1747**	**(2921, 2958)**
	National	LM747	
	NEC	µPC1418	
	PMI	**OP04**	**(2972)**
		PM747	**(2972)**
	Raytheon	RC747	
		RM747	
	Signetics	µA747	
	TeledyneS	747	
	TI	µA747	
µA748	Fairchild	µA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
	National	LM748	
	SGS	LM748	
		LS148	
	SiliconG	SG201	
	TI	LM201	
		LM748	
		SN72748P	
	Thomson	LM201	
		LM748	
µA7805	Fairchild	µA7805	
	GoldStar	GL7805	
	Gould	µA7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
		LM7805	
	Samsung	MC7805	
	SiliconG	SG7805	
		SG7805A	
	Toshiba	TA78005	
		TA79005	
	Unitrode	**UC7805**	**(3325)**
µA7806	Fairchild	µA7806	
	Motorola	**MC7806**	**(2927)**
	National	LM7806	
	NEC	µPC7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806	
		SG7806A	
	Thomson	µA7806	
	Toshiba	TA78006	
µA7808	Fairchild	µA7808	
	GoldStar	GL7808	
	Gould	µA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	NEC	µPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	Thomson	µA7808	
	Toshiba	TA78008	
µA7809	Fairchild	µA7809	
	GoldStar	GL7809	
	Gould	µA7809	
	Hitachi	HA17809	
	Motorola	MC7809	
	National	LM7809	
	NEC	µPC7809	
	Toshiba	TA78009	
µA7810	Fairchild	µA7810	
	National	LM7810	
	SGS	L7810	
	Toshiba	TA78010	
µA7812	Fairchild	µA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA7812			(Cont'd)
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	µPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	Toshiba	TA78012	
	Unitrode	UC340-12	
		UC7812	**(3325)**
µA7815	Fairchild	µA78L15	
	GoldStar	GL7815	
	Gould	µA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	µPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
	Thomson	µA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
µA7818	Fairchild	µA7818	
	Motorola	**MC7818**	**(2928)**
	National	LM7818	
	Samsung	MC7818	
	SGS	L7818	
	Toshiba	TA78018	
µA7820	Fairchild	µA7820	
		µA7910	
	National	LM7820	
	SGS	L7820	
	SiliconG	SG7820	
		SG7820A	
	TI	µA7910	
	Toshiba	TA78020	
µA7824	Fairchild	µA7824	
	GoldStar	GL7824	
	Gould	µA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	µPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
	Thomson	µA7824	
	Toshiba	TA78024	
µA78L02	Fairchild	µA78L02	
µA78L02A	Fairchild	µA78L02A	
µA78L05	Fairchild	µA78L05	
	Motorola	**MC78L05**	**(2926, 2959)**
	National	LM340LA-5	
		LM78L05	
	NEC	µPC78L05	
	Thomson	µA7805	
	Toshiba	TA78L006	
µA78L05A	Fairchild	µA78L05A	
µA78L06	Fairchild	µA78L06	
	National	LM78L06	
	TI	µA87L06	
	Toshiba	TA78L012	
µA78L06A	Fairchild	µA78L06A	
µA78L08	Fairchild	µA78L08	
	Motorola	**MC78L08**	**(2959)**
	National	LM78L08	
	NEC	µPC78L08	
	Toshiba	TA78L008	
µA78L08A	Fairchild	µA78L08A	
µA78L09	Fairchild	µA78L09	
	National	LM78L09	
	Toshiba	TA78L009	
µA78L09A	Fairchild	µA78L09A	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Texas Instruments (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
μA78L10	Fairchild	μA78L10	
	National	LM78L10	
	Toshiba	TA78L010	
μA78L10A	Fairchild	μA78L10A	
μA78L12	Fairchild	μA78L12	
	Motorola	**MC78L12**	**(2927, 2959)**
	National	LM340LA-12	
		LM78L12	
	NEC	μPC78L12	
	Thomson	μA7812	
	Toshiba	TA78L012	
μA78L12A	Fairchild	μA78L12A	
μA78L15	Fairchild	μA7815	
	GoldStar	GL7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	
		LM340T-15	
		LM78L15	
	NEC	μPC78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	SN75555	
	Toshiba	TA78L015	
μA78L15A	Fairchild	μA78L15A	
μA78L18	Fairchild	μA78L18	
	Motorola	**MC78L18**	**(2928)**
	National	LM78L18	
	TI	μA78m20	
	Toshiba	TA78L018	
μA78L20	Fairchild	μA78L20	
	National	LM78L20	
	Toshiba	TA78L024	
		TA78L20	
μA78M05	Fairchild	μA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	μPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	Toshiba	TA78M05	
μA78M06	Fairchild	μA78M06	
	Motorola	**MC78M06**	**(2927)**
	National	LM78M06	
	Samsung	MC78M06	
	Sanyo	L78M06	
	SGS	L78M06	
		L78M06CV	
	Toshiba	TA78M06	
μA78M08	Fairchild	μA78M08	
	Motorola	MC78M08	
	National	LM78M08	
	NEC	μPC78M08	
	Samsung	MC78M08	
	Sanyo	L78M08	
	SGS	L78M08	
		L78M08CV	
	Toshiba	TA78M08	
μA78M09	Fairchild	μA78M09	
	National	LM78M09	
	SGS	L78M09	
	Toshiba	TA78M09	
μA78M10	Fairchild	μA78M10	
	National	LM78M10	
		LM7910	
	SGS	L78M10	
	Toshiba	TA78M10	
μA78M12	Fairchild	μA78M12	
	Motorola	**MC78M12**	**(2927, 2959)**
	National	LM341-12	
		LM342-12	
		LM78M12	
	NEC	μPC78M12	
	Samsung	MC78M12	
	Sanyo	L78M12	
	SGS	L78M12	
		L78M12CV	
	Toshiba	TA78M12	
μA78M15	Fairchild	μA78M15	
	Motorola	**MC78M15**	**(2928, 2959)**
	National	LM341-15	
		LM342-15	
		LM78M15	
	NEC	μPC78M15	
	Samsung	MC78M15	
	Sanyo	L78M15	
	SGS	L78M15	
		L78M15CV	
	Toshiba	TA78M15	
μA78M18	Fairchild	μA78M18	
	Motorola	MC78M18	
	Samsung	MC78M18	
	Sanyo	L78M18	
	SGS	L78M18	
	Toshiba	TA78M18	
μA78M20	Fairchild	μA78M20	
	Motorola	**MC78M20**	**(2928)**
	National	LM78M20	
	SGS	L78M20	
	Toshiba	TA78M20	
μA78M24	Fairchild	μA78M24	
	Motorola	**MC78M24**	**(2928)**
	Samsung	MC78M24	
	Sanyo	L78M24	
	SGS	L78M24	
		L78M24CV	
	Toshiba	TA78M24	
μA78m20	Fairchild	μA78L18	
	Motorola	**MC78L18**	**(2928)**
	National	LM78L18	
	TI	μA78L18	
	Toshiba	TA78L018	
μA7905	Fairchild	μA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	μPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	Unitrode	UC320-05	
		UC7905	**(3325)**
μA7906	Fairchild	μA7906	
	GoldStar	GL7806	
	Gould	μA7806	
	Motorola	MC7906	
	National	LM7906	
	NEC	μPC7806	
	Samsung	MC7906	
	SGS	L7906	
	Toshiba	TA78006	
μA7908	Fairchild	MC7908	
		μA7908	
		μA79M08	
	Motorola	MC7908	
	National	LM7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908	
		SG7908A	
	TI	μA79M08	
	Toshiba	TA79008	
μA7909	Fairchild	μA7909	
	GoldStar	**GL7909**	**(2701)**
	Gould	μA7909	
	National	LM7909	
	NEC	μPC7909	
	SGS	L7909	
	Toshiba	TA7900	
		TA79009	
μA7910	Fairchild	μA7820	
		μA7910	
	National	LM7820	
	SGS	L7820	
	SiliconG	SG7820	
		SG7820A	
	TI	μA7820	
	Toshiba	TA78020	
μA7912	Fairchild	μA7912	
		μA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
μA7912			(Cont'd)
	Gould	μA7824	
		μA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	μPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	Thomson	μA7912	
	Toshiba	TA78024	
		TA79012	
μA7915	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**
μA7918	Fairchild	μA7918	
	Motorola	MC7918	
	National	LM7918	
	Samsung	MC7918	
	SGS	L7918	
	SiliconG	SG7918	
		SG7918A	
	Toshiba	TA79018	
μA7920	Fairchild	μA7920	
	National	LM7920	
	SGS	L7920	
	SiliconG	SG7920	
		SG7920A	
	SiliconSys	SSI957	
	Toshiba	TA79020	
μA7924	Fairchild	74LS195A	
		μA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	μA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	μPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
	Toshiba	TA79024	
μA79M06	Fairchild	μA79M06	
μA79M08	Fairchild	MC7908	
		μA7908	
		μA79M08	
	Motorola	MC7908	
	National	LM7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908	
		SG7908A	
	TI	μA7908	
	Toshiba	TA79008	
μA79M12M	Fairchild	μA79M12M	
μA87L06	Fairchild	μA78L06	
	National	LM78L06	
	TI	μA78L06	
	Toshiba	TA78L012	
μA9636A	Fairchild	μA9636A	
μA9637A	Fairchild	μA9637A	
μA9638	Fairchild	μA9638	
		μA9679	
	TI	SN75ALS191	
μA9639	Fairchild	μA9639	
	TI	SN75175	
μAA170	Siemens	μAA170	

Thomson Components-Mostek

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ 5087	TI	TCM5087	
♦ 5089	Gould	S25089	
	ITT	SBA5089	
	National	TP5089	
	Samsung	MK5089	
	Sharp	LR4089	
	Stantel-STC	STC5089	
	TI	TCM5089	
	Thomson	MK5089	
	UMC	UM5089	
5094	TI	TCM5094	
EF6800	Fairchild	F6800A	
	Hitachi	HD6800	
		HD68A00	
		HD68B00	
	Motorola	MC6800	
EF6801	Hitachi	HD6801	
EF6802	Fairchild	F6802	
	Hitachi	HD6802	
	Motorola	**MC6802**	**(2902)**
EF6803	Hitachi	HD6803	
EF6804	Motorola	MC6804	
EF6805	Hitachi	HD6805	
	Motorola	MC6805	
♦ EF6808	Fairchild	F6808	
	Motorola	MC6808	
EF6809	Hitachi	HD6809	
		HD68B09	
	Motorola	**MC6809**	**(2902)**
♦ EF6810	Fairchild	F6810	
	Hitachi	HD6810	
		HD68A10	
♦ EF6810	Motorola	MC6810	
		MCM6810	**(2902)**
EF6821	Fairchild	F6821	
	Gould	S6821	
	Hitachi	HD6821	
		HD68A21	
		HD68B21	
	Mitel	MD68SC21	
	Motorola	**MC6821**	**(2902)**
EF6840	Fairchild	F6840	
	Hitachi	HD6840	
	Mitel	MD68SC40	
	Motorola	**MC6840**	**(2902)**
♦ EF6846	Fairchild	F6846	
	Hitachi	HD6846	
EF6850	Fairchild	F6850	
	Hitachi	HD6850	
	Motorola	**MC6850**	**(2902)**
EF6854	Fairchild	F6854	
EF7910	AMD	AM7910	
ESM1350	**Motorola**	**MC1350**	**(2948)**
	TI	SN76600	
ET2128	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Thomson Components-Mostek (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
ET2128	Mitsubishi	(Cont'd)	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
ET2147	Cypress	CY2147	
		CY7C147	**(2562, 2564)**
	Fujitsu	MBM2147	
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	HM4847	
		HM6147	
	Intel	2147	
	Motorola	MCM6147	
	National	MM2147	
		NMC2141	
	NEC	μPD2147	
	OKI	MSM5104	
	Stantel-STC	STC2147	
	Toshiba	TMM3150	
ET2148	AMD	AM2148	
		AM2149	
	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
	National	NMC2148	
	UMC	UM2148	
ET2716	**Harris**	**HM6616**	**(2768)**
	Hitachi	HN462716	
	National	MM2716	
	OKI	MSM2716	
	SGS	M2716	
ET2764	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ET2764			(Cont'd)
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
♦ ET4164	AMD	AM9064	
	Fairchild	F4164	
		F64K	
♦ ET4164	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
♦ ET4164	Hitachi	HM4864	
		HM4864A	
♦ ET4164	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
♦ ET4164	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
♦ ET4164	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	
♦ ET4164	Thomson	MK45H64	
	Toshiba	TMM4164	
		TMM4164A	
♦ ET4164	Vitelic	V51C64	
ET9410	National	COP410	
ET9411	National	COP411	
ET9420	National	COP420	
ET9421	National	COP421	
ET9422	National	COP422	
ET9444	National	COP444	
ET9445	National	COP445	
ETC5040	CMD Micro	G8912B	
	Intel	2912	
		ID2912	
	National	TP3040	
	Plessey	MV8912	
	TI	TCM2912C	
ETC5051	National	TP3051	
	Sierra	SC11305	
ETC5054	Fairchild	μA3054	
	National	TP3054	
	Sierra	SC11301	
	Sprague	ULN3054	
ETC5056	National	TP3056	
	Sierra	SC11306	
ETC5057	Fairchild	μA3057	
	Matra-Harris	HC3057	
	National	TP3057	
	Sierra	SC11302	
ETC5064	National	TP3064	
	Sierra	SC11311	
ETL2128	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	5117	
		M5M8725	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
ETL2128			(Cont'd)
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	MK6116	
	Toshiba	TC5516	
		TC5517	
		TC5517A	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	
GA1000D	Gould	GA1000D	
GA2000D	Gould	GA2000D	
GA3000D	Gould	GA3000D	
GA4000D	Gould	GA4000D	
L702B	SGS	L702B	
		L702N	
	Thomson	L702SP	
L702SP	SGS	L702B	
		L702N	
	Thomson	L702B	
LF155	AD	AD381	
		AD544	
	Burr-Brown	**OPA606**	**(2532)**
	LinearTech	LF155	
		LT1022	
		LT1055	
		LT1056	
		OP15	
	National	LF155	
		LF353	
		LF411	
	PMI	**OP15**	**(2971)**
		OP43	**(2970)**
	TI	LF353	
		LF411	
LF156	**Burr-Brown**	**OPA156A**	**(2532)**
	LinearTech	LF156	
		OP16	
	MicroPwr	MPOP16	
	National	LF156	
	PMI	**OP16**	**(2971)**
LF351	**GE/RCA**	**CA081**	**(2645)**
	PMI	**OP16**	**(2971)**
	Thomson	TL081	
LF353	Exar	XR082	
	GE/RCA	**CA082**	**(2645)**
	SGS	TL082	
	TI	HA17082	
		TL082	
LF355	LinearTech	LF355	
	Motorola	**LF355**	**(2920)**
	National	LF355	
	PMI	**OP43**	**(2970)**
		PM355	
LF356	LinearTech	LF356	
	Motorola	**LF356**	**(2920)**
	National	LF356	
	PMI	PM356	
LM101	AMD	LM101	
	AD	AD101	
	Fairchild	μA101	
	GE/Intersil	AD101	
	LinearTech	LM101	
	Motorola	LM101	
	Raytheon	LM101	
	SGS	LS101	
	SiliconG	SG101	
LM104	National	LM104	
	SiliconG	SG104	
LM105	Fairchild	μA105	
	GE/Intersil	LM105	
	National	LM105	
	SiliconG	SG105	
LM107	AD	AD741S	
	Burr-Brown	3500	
	LinearTech	LM107	
	National	LH741A	
		LM107	
	PMI	PM741	
	Raytheon	RC741	
	SiliconG	SG107	

Manufacturer Device	Replacement Source	Device	IC Master Page
LM109	Fairchild	μA109	
	IPS	**IP140-5**	**(2854)**
	Motorola	**LM109**	**(2926)**
	National	LM109	
	SiliconG	SG109	
	Thomson	SFC2109	
LM111	AD	AD111	
	Fairchild	μA111	
	LinearTech	LM111	
	Motorola	**LM111**	**(2925)**
	National	LM111	
	PMI	**PM111**	**(2975)**
	Raytheon	LM111	
	Signetics	LM111	
	SiliconG	SG111	
	TI	TL111	
LM117	Fairchild	μA117	
	IPS	**IP117**	**(2854)**
	LinearTech	LM117	
	MCE	MCELM117	
	Motorola	**LM117**	**(2929)**
	National	LM117	
	SiliconG	SG117	
	TI	TL117	
	Unitrode	**UC117**	**(3325)**
LM137	**IPS**	**IP137**	**(2854)**
	LinearTech	LM137	
		LT137	
	MCE	MCELM137	
	Motorola	**LM137**	**(2929)**
	National	LM137	
	SiliconG	SG137	
		SG137A	
	Unitrode	**UC137**	**(3325)**
LM201	Fairchild	μA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
	National	LM748	
	SGS	LM748	
		LS148	
	SiliconG	SG201	
	TI	LM201	
		LM748	
		SN72748P	
		μA748	
	Thomson	LM748	
LM204	National	LM204	
	SGS	LS204	
	SiliconG	SG204	
LM211	AD	AD211	
	Motorola	**LM211**	**(2925, 2958)**
	National	LM211	
	PMI	PM211	
	Signetics	LM211	
	SiliconG	SG211	
	TI	LM211	
LM217	**IPS**	**IP217**	**(2854)**
	MCE	MCELM217	
	Motorola	**LM217**	**(2929)**
	National	LM217	
	SGS	LM217	
	SiliconG	SG217	
		SG217A	
	Unitrode	**UC217**	**(3325)**
LM218	National	LM218	
	TI	LM218	
LM219	National	LM219	
	Signetics	LM219	
LM223	Fairchild	SH223	
		μA223	
	IPS	**IP223**	**(2854)**
	Motorola	**LM223**	**(2927)**
	National	LM223	
	SiliconG	SG223	
LM239	Fairchild	UA250	
		UA26LS31	
		UA26LS32	
		μA239	
	GE/RCA	**CA239**	**(2647)**
	Motorola	**LM239**	**(2925, 2958)**
	National	LM239	
	PMI	**CMP04**	**(2975)**
		PM239	
	Raytheon	LM239	
	Signetics	LM239	
	TI	LM239	
LM246	Exar	XR246	
	National	LM246	
LM248	National	LM248	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Thomson Components-Mostek (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM255	MicroPwr	MP255	
	National	LF255	
	PMI	PM255	
LM256	National	LF256	
LM258	**GE/RCA**	**CA258A**	**(2645)**
	Motorola	**LM258**	**(2922, 2958)**
	National	LM258A	
	PMI	**OP221**	**(2970, 2972)**
	Signetics	LM258	
	TI	LM258	
LM2901	**Cypress**	**CY7C901**	**(2569)**
	Fairchild	µA2901	
		µA3302	
	Motorola	**LM2901**	**(2925, 2958)**
		MC3302	**(2925)**
	National	LM2901	
		LM3302	
	PMI	**CMP04**	**(2975)**
	Raytheon	LM2901	
		RC3302	
	SGS	LM2901	
		MC3302	
	Signetics	LM2901	
		MC3302	
	SiliconG	SG324A	
	TI	LM2901	
		LM3302	
	Toshiba	TA75339	
	Waferscale	**WS5901**	**(3376)**
LM2902	Fairchild	µA2902	
		µA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	µPC324	
		µPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM2902	
		LM324	
	Toshiba	TA75902	
		TA79502	
LM2903	AD	AD311	
	Fairchild	µA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	µPC311	
	Raytheon	LM311	
	SGS	LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM311	
	Toshiba	TA75393	
LM2904	**GE/RCA**	**CA2904**	**(2645)**
	Motorola	**LM2904**	**(2922, 2958)**
	SGS	LM2904	
	TI	LM2904	
	Toshiba	TA75358	
LM301A	AD	AD301	
	Fairchild	µA301	
		µA301A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM301A			(Cont'd)
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	µPC157	
		µPC301	
		µPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		µA301	
	Toshiba	TA7506	
LM304	National	LM304	
	SiliconG	SG304	
LM311	AD	AD311	
	Fairchild	µA311	
	GE/RCA	CA311	
		LM311	
	LinearTech	LM311	
	Motorola	**LM2903**	**(2925, 2958)**
		LM311	**(2925, 2958)**
	National	LM2903	
		LM311	
	NEC	µPC311	
	Raytheon	LM311	
	SGS	LM2903	
		LM311	
	Signetics	LM2903	
		LM311	
	SiliconG	SG311	
	TI	LM2903	
		LM311	
	Thomson	LM2903	
	Toshiba	TA75393	
LM317	Fairchild	µA317	
	IPS	**IP317**	**(2854)**
	LinearTech	LM317	
	MCE	MCELM317	
	Motorola	**LM317**	**(2929)**
	National	LM317	
	SGS	LM317	
	SiliconG	SG317	
	TI	LM317	
	Thomson	TDB0117	
	Unitrode	**UC317**	**(3325)**
LM318	AD	AD518	
	LinearTech	LM318	
	National	LM318	
	NEC	µPC318	
	TI	LM318	
LM319	NEC	µPC319	
	Signetics	LM319	
LM323	Fairchild	SH0323	
		SH323	
		µA323	
		µA78H05	
	IPS	**IP123-5**	**(2854)**
		IP323	**(2854)**
	Lambda	LAS1405	
	LinearTech	LM323	
		LT323	
	Micropac	M78H05	
	Motorola	**LM323**	**(2927)**
	National	LM323	
	SiliconG	SG323	
LM324	Fairchild	µA324	
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17324	
	Motorola	**MC33174**	**(2924, 2959)**
	National	LM324	
	PMI	**OP421**	**(2970, 2972)**
	Samsung	LM324	
	SGS	LM324	
	SiliconG	SG324	
	Toshiba	TA79502	
LM337	**IPS**	**IP337**	**(2854)**
	LinearTech	LM337	
		LT337	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
LM337			(Cont'd)
	MCE	MCELM337	
	Motorola	**LM337**	**(2929)**
	National	LM337	
	SiliconG	SG337	
		SG337A	
	TI	LM337	
	Unitrode	**UC337**	**(3325)**
LM339	Fairchild	µA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	µPC137	
		µPC177	
		µPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Toshiba	TA75339	
LM346	National	LM346	
LM358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	µPC1251	
		µPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Toshiba	TA75358	
LM748	Fairchild	µA201	
	Motorola	**LM201**	**(2958)**
		MC1748	**(2919)**
	National	LM748	
	SGS	LM748	
		LS148	
	SiliconG	SG201	
	TI	LM201	
		LM748	
		SN72748P	
		µA748	
	Thomson	LM201	
MC4558	Exar	XR4558	
	Fairchild	µA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	µPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Toshiba	TA75458	
		TA75558	
MK0808	National	ADC0808	
	Siemens	SDA0808	
	TI	ADC0808	
♦ MK1002	AMD	AM1002	
♦ MK2716	**Harris**	**HM6616**	**(2768)**
	Hitachi	HN462716	
	National	MM2716	
	OKI	MSM2716	
	SGS	M2716	
	Thomson	ET2716	
MK2817	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MK2817			(Cont'd)
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	µPD4016	
		µPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
MK2870	Telefunken	U3870	
♦ MK36000	GIM	RO3-9364	
	Hitachi	HN48364	
	Mitsubishi	M58334	
	National	MM52164	
	NEC	µPD2364	
	Rockwell	R2364A	
	Signetics	2664	
		26S64	
MK37000	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Thomson Components-Mostek (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MK37000			(Cont'd)
	TI	TMS2364	
	UMC	UM2366	
	VLSI Tech	VT2365	
♦ MK38000	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
♦ MK38000	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
♦ MK38000	**S-MOS**	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
♦ MK38000	Signetics	23256	
		23256A	
♦ MK38000	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
♦ MK38000	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
♦ MK3850	Fairchild	3850	
♦ MK3851	Fairchild	3851	
♦ MK3852	Fairchild	3852	
♦ MK3853	Fairchild	3853	
♦ MK3854	Fairchild	3854	
♦ MK3861	Fairchild	3861	
♦ MK3870	Fairchild	F3870	
	SGS	M3870	
MK3880	**GoldStar**	**Z8400**	**(2691)**
		Z8430	**(2691)**
	NEC	μPD780	
	SGS	Z80ACPU	
		Z80ACTC	
		Z8400	
		Z84C00	
	Sharp	LH0080	
	Toshiba	**TMPZ84C00**	**(3306)**
	Zilog	**Z8400**	**(3417)**
		Z84C00	**(3417)**
♦ MK3881	**GoldStar**	**Z8420**	**(2691)**
	SGS	Z80PIO	
		Z8420	
♦ MK3881	Sharp	LH0081	
	Zilog	**Z80-PIO**	**(3418)**
		Z8420	**(3417)**
♦ MK3882	**GoldStar**	**Z8430**	**(2691)**
	SGS	Z80ACTC	
		Z80CTC	
		Z8430	
♦ MK3882	Sharp	LH0082	
	Zilog	**Z80-CTC**	**(3418)**
		Z8430	**(3417)**
♦ MK3883	SGS	Z80DMA	
		Z8410	
♦ MK3883	Sharp	LH0083	
	Zilog	**Z80-DMA**	**(3418)**
		Z8410	**(3417)**
♦ MK3884	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8441	
		Z8442	
♦ MK3884	Sharp	LH0084	
		LH0085	
		LH0086	
♦ MK3884	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
♦ MK3885	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8441	
		Z8442	
♦ MK3885	Sharp	LH0084	
		LH0085	
		LH0086	
♦ MK3885	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ MK3885	**Zilog**		**(Cont'd)**
		Z8441	**(3417)**
		Z8442	**(3417)**
MK3886	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8441	
		Z8442	
	Sharp	LH0084	
		LH0085	
		LH0086	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
♦ MK3887	**GoldStar**	**Z8440**	**(2691)**
	SGS	Z80ASIO	
		Z80SIO	
		Z8440	
		Z8441	
		Z8442	
♦ MK3887	Sharp	LH0084	
		LH0085	
		LH0086	
♦ MK3887	Thomson	MK3886	
	Zilog	**Z80-SIO**	**(3418)**
		Z8440	**(3417)**
		Z8441	**(3417)**
		Z8442	**(3417)**
♦ MK4027	Fairchild	M4027	
	Motorola	MCM4027	
	Stantel-STC	STC4027	
♦ MK4104	AMD	AM2141	
		AM9244	
♦ MK4104	**Cypress**	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
♦ MK4104	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
♦ MK4104	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
♦ MK4116	AMD	AM9016	
	Fairchild	F16K	
		F4116	
♦ MK4116	Hitachi	HM4716	
	ITT	ITT4116	
	National	MM5290	
	NEC	μPD416	
	OKI	MSM3716	
	SGS	M4116	
	Siemens	HYB4116	
	Signetics	2690	
	Stantel-STC	STC4116	
	Toshiba	TMM416	
MK4170	AMD	99C60	
		AM99CL68	
	Cypress	**CY7C170**	**(2562)**
	Motorola	MCM6270	
	Performance	P4C170	
	Thomson	MK41H78	
	Toshiba	TMM2078	
		TMM2078D	
	Vitelic	V61C68	
MK41H66	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	UMC	**UM6167**	**(3312)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MK41H66			(Cont'd)
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
MK41H67	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
MK41H68	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	UMC	**UM6168**	**(3312)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
MK41H69	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MK41H69			(Cont'd)
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
MK41H78	AMD	99C60	
		AM99CL68	
	Cypress	**CY7C170**	**(2562)**
	Motorola	MCM6270	
	Performance	P4C170	
	Thomson	MK4170	
	Toshiba	TMM2078	
		TMM2078D	
	Vitelic	V61C68	
MK41H87	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Toshiba	TC5561	
		TC5562	
♦ MK4332	Mitel	MD4332	
	Plessey	MV4332	
	Sanyo	STK4332	
MK4501	**Cypress**	**CY7C412**	**(2567)**
	IDT	**IDT7201**	**(2805, 2826)**
MK4503	**Cypress**	**CY7C416**	**(2567)**
	IDT	**IDT7203**	**(2805, 2828)**
♦ MK4516	Fairchild	F100422	
	Fujitsu	MB8118	
		MBM100422	
		MBM100422A	
♦ MK4516	Hitachi	HM100422	
	National	DM100422	
		NMC5295	
♦ MK4516	NEC	μPB100422	
MK45H56	AMD	AM90C256	
	GIM	WS57C256	
	MicronTech	MT1256	
	Motorola	MCM6256	
		MCM6257	
		MCM64256	
	TI	SMJ32010	
		SMJ4256	**(3220)**
	Vitelic	V51C256	
		V51C257	
MK45H64	AMD	AM9064	
	Fairchild	F4164	
		F64K	
	Fujitsu	MB8264A	
		MB8265	
		MB8265A	
	Hitachi	HM4864	
		HM4864A	
	Inmos	IMS2600	
	MicronTech	MT4264	
	Mitel	M5K4164	
	Motorola	MCM4164	
		MCM4164C	
		MCM6665	
	National	NMC4164	
	NEC	μPD4164	
	OKI	MSM3764	
	Samsung	KM4164A	
		KM4164B	
	Siemens	HYB4164	
	TI	SM4164	
		TMS4164	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Thomson Components-Mostek (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
MK45H64			(Cont'd)
	Toshiba	TMM4164	
		TMM4164A	
	Vitelic	V51C64	
♦ MK4701	**Xicor**	**X2001**	**(3387, 3398)**
MK48Z02	LMS	GR281	
		NVR2	
♦ MK5002	Micrel	MIC5002	
♦ MK5005	Micrel	MIC5005	
♦ MK5007	Micrel	MIC5007	
♦ MK5009	Micrel	MIC5009	
♦ MK50396	Micrel	MIC50396	
♦ MK50397	Micrel	MIC50397	
♦ MK50398	Micrel	MIC50398	
♦ MK50399	Micrel	MIC50399	
♦ MK50809	MicroLinear	ADC0809	
	National	ADC0809	
	TI	ADC0809	
♦ MK50816	Datel	DAS952	
	National	ADC0816	
♦ MK50817	National	ADC0817	
MK5089	Gould	S25089	
	ITT	SBA5089	
	National	TP5089	
	Samsung	MK5089	
	Sharp	LR4089	
	Stantel-STC	STC5089	
	TI	TCM5089	
	UMC	UM5089	
♦ MK5094	National	TP5094	
♦ MK50981	CTI	52981	
	National	TP50981	
	Samsung	KS5804	
♦ MK50982	National	TP50982	
♦ MK50992	Samsung	KS5805A	
♦ MK50993	Samsung	KS5805B	
♦ MK5116	Fairchild	5116	
	National	TP5116	
	SGS	M5116	
♦ MK5117	Fairchild	51161	
MK5151	Fairchild	5151	
MK5156	CTI	MA556	
	Fairchild	5156	
	National	TP5156	
	SGS	M5156	
MK5370	**GoldStar**	**GM5370**	**(2701)**
	MMI	M2064-70	
	Xilinx	**XC2064-70**	**(4346)**
MK5371	**GoldStar**	**GM5371**	**(2701)**
	MMI	M2018-33	
	Xicor	XC2018-33	
MK5373	**GoldStar**	**GM5373**	**(2701)**
	MMI	M2018-70	
	Xicor	XC2018-70	
MK5375	**Cypress**	**PALC16L8**	**(4217)**
	GoldStar	**GM5375**	**(2701)**
	MMI	PALC16L8Q-25	
MK5376	**Cypress**	**PALC16R8**	**(4217)**
	GoldStar	**GM5376**	**(2701)**
	MMI	PALC16R8Q-25	
♦ MK5380	**GoldStar**	**GM5380**	**(2701)**
	National	TP5380	
♦ MK5912	CMD Micro	G8912B	
	Intel	2912	
		ID2912	
♦ MK5912	National	TP3040	
	Plessey	MV8912	
	TI	TCM2912C	
	Thomson	ETC5040	
MK6027P	AMD	AM1101ADM	
	Intel	1101	
	National	MM1101	
	NCM	NCM1101Z	
MK6116	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
MK6116			(Cont'd)
	Mitel	M5M5116	
	Mitsubishi	5117	
		M5M8725	
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
	Toshiba	TC5516	
		TC5517	
		TC5517A	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	
♦ MK68010	**Motorola**	**MC68010**	**(2896)**
♦ MK68451	**Motorola**	**MC68451**	**(2897)**
MK68590	AMD	AM7990	
MK68591	AMD	AM7991	
MK68592	AMD	AM7992	
MK68901	**Motorola**	**MC68901**	**(2898)**
MK8865	CMD Micro	G8865	
	Mitel	MT8865	
	Plessey	MV8865	
♦ MK8912	CMD Micro	G8912B	
	Intel	2912	
		ID2912	
♦ MK8912	National	TP3040	
	Plessey	MV8912	
	TI	TCM2912C	
	Thomson	ETC5040	
♦ MKB2716	National	MM2716M	
MKB4564	Intel	M2164A	
NE555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	
	Signetics	NE555	
	TI	NE555	
	Toshiba	TA7555	
NE556	Mitsubishi	M5E556	
	Samsung	NE556	
	SGS	NE556	
	Signetics	NE556	
	TI	NE556	
PBD3535	Samsung	KA2413	
SFC2018	**GE/RCA**	**CA3018**	**(2648)**
	National	LM3018	
SFC2046	Fairchild	μA3046	
		μA3086	
	GE/RCA	**CA3046**	**(2648)**
		CA3146	**(2648)**
	Motorola	**MC3346**	**(2948, 2959)**
	National	LM3046	
	Plessey	SL3046	
		SL3146	
	Sanyo	LA3046	
	SGS	CA3046	
		LM3046	
		TBA331	
	SiliconG	SG3046	
		SG3146	
		SG3821	
	Sprague	ULN2046	
SFC2054	Fairchild	μA3054	
	GE/RCA	**CA3054**	**(2647, 2649)**
	Motorola	**CA3054**	**(2948)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
SFC2054			(Cont'd)
	National	LM3054	
	Sprague	ULN2054	
SFC2086	**GE/RCA**	**CA3086**	**(2648)**
	National	LM3086	
	Plessey	SL3086	
	Sanyo	LA3086	
	SiliconG	SG3086	
		SG3886	
	Sprague	ULN2086	
SFC2109	Fairchild	μA109	
	IPS	**IP140-5**	**(2854)**
	Motorola	**LM109**	**(2926)**
	National	LM109	
	SiliconG	SG109	
	Thomson	LM109	
SFC2528	Motorola	MC7528	
	Raytheon	RC7528	
♦ SFC2709	Fairchild	μA709	
	Motorola	**MC1709**	**(2919)**
	National	LM1709	
		LM709	
♦ SFC2709	NEC	μPC55	
	TI	μ709	
		μA709	
♦ SFC2709	Toshiba	TA7502	
SFC2723	Fairchild	μA723	
		μA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	μA723	
	SiliconG	SG723	
	TI	μA723	
		μA723M	
	Thomson	μA723	
♦ SFC2812	Fairchild	μA78L12	
	Motorola	**MC78L12**	**(2927, 2959)**
	National	LM340LA-12	
		LM78L12	
♦ SFC2812	NEC	μPC78L12	
	TI	μA78L12	
	Thomson	μA7812	
	Toshiba	TA78L012	
♦ SFC2903	AMD	AM2903	
TA3717	RIFA	PBL3717	
	SGS	PBL3717	
	Unitrode	**UC3717**	**(3326)**
TBA1440G	Siemens	TBA1440G	
TBA2540	Plessey	TDA2540	
	Signetics	TDA2540	
♦ TBA800	Fairchild	TBA800	
	Plessey	TBA800	
	SGS	TBA800	
	Telefunken	TDA800	
TBA820	MCE	MCE820	
	SGS	TBA820	
	TI	SN76001	
TBA830	SGS	TBA830	
TBA920	Plessey	TBA920	
♦ TCA900	SGS	TCA900	
TDA1048	Siemens	TDA1048	
♦ TDA1170	Fairchild	μA7327	
	GoldStar	**GL1170**	**(2699)**
	SGS	TDA1170	
	Sprague	ULN2270	
	Telefunken	TDA1170	
TDA2003	Fairchild	TDA2003	
	Sprague	ULN3703	
TDA2006	SGS	TDA2006	
TDA2030	MicroLinear	ML510	
	SGS	TDA2030	
	Telefunken	TDA2030	
TDA2541	Plessey	TDA2541	
	Signetics	TDA2541	
TDA2593	National	TDA2593	
	Plessey	TDA2593	
	Signetics	TDA2593	
	Telefunken	TDA2593	
TDB0117	Fairchild	μA317	
	IPS	**IP317**	**(2854)**
	LinearTech	LM317	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TDB0117			(Cont'd)
	MCE	MCELM317	
	Motorola	**LM317**	**(2929)**
	National	LM317	
	SGS	LM317	
	SiliconG	SG317	
	TI	LM317	
	Thomson	LM317	
	Unitrode	**UC317**	**(3325)**
♦ TDB2905	**IPS**	**IP120-5**	**(2854)**
	Motorola	MC7952	
	National	LM320-5	
	SGS	L7952	
	SiliconG	SG320-5	
TL062	National	LF442	
	TI	TL062	
	Toshiba	TA75062	
TL064	TI	TL064	
	Toshiba	TA75064	
TL081	**GE/RCA**	**CA081**	**(2645)**
	PMI	**OP16**	**(2971)**
	Thomson	LF351	
TP3067	National	ETC5067	
TS27C256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		RO9256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
TS27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
	Toshiba	TMB2464	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Thomson Components-Mostek (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
TS27C64	Toshiba	(Cont'd)	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
	Waferscale	**WS27C64**	**(3376)**
TS2901	Fairchild	F2901A	
	National	IDM2901A	
	Waferscale	**WS5901**	**(3376)**
TS2909	**Cypress**	**CY7C909**	**(2569)**
	National	IDM2909	
TS2910	Fairchild	29F10	
	Motorola	MC2910	
	Waferscale	**WS5910**	**(3376)**
TS2914	AMD	AM2914	
TS2915	**IDT**	**IDT39C02**	**(2801)**
TS2917	AMD	AM2917	
TS2919	AMD	AM2919	
TS68000	Hitachi	HD68000	
	Motorola	**MC68000**	**(2896)**
	Rockwell	**R68000**	**(2987, 2989)**
	Signetics	SCN68000	
TS68008	**Motorola**	**MC68008**	**(2896)**
TS71191	National	DM77S191A	
µ78515	SGS	L78515	
µ78S05	GoldStar	GL7805	
	Gould	µA7805	
	SGS	L7805	
	SiliconG	SG7805	
	Toshiba	TA78005	
µ78S09	SGS	L78S09	
µ78S12	SGS	L78S12	
µA1458	Fairchild	UA1458HC	
	GE/RCA	**CA1458**	**(2645)**
	Harris	HA21458	
		HA5102	**(2706, 2737, 2747)**
	MicroPwr	MPOP14	
	Motorola	**MC1458**	**(2921, 2958)**
	National	LF412	
	NEC	µPC1458	
		µPC251	
	Samsung	MC1458	
		MC4558	
	SGS	MC1458	
	Signetics	SA1458	
	TI	LF412	
		TL4558	
	Toshiba	TA75458	
		TA75558	
µA723	Fairchild	µA723	
		µA723M	
	GE/Intersil	LM723	
	GE/RCA	**CA723**	**(2650)**
		LM723	**(2650)**
	Hitachi	HA17723	
	Motorola	**MC1723**	**(2929, 2958)**
	National	LM723	
	Raytheon	RC723	
		RM723	
	Samsung	LM723	
	SGS	L123	
		LM723	
	Signetics	µA723	
	SiliconG	SG723	
	TI	µA723	
		µA723M	
	Thomson	SFC2723	
µA741	AD	AD741	
	Fairchild	µA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	µPC151	
		µPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	µA741	
	SiliconG	SG741	
	TI	µA741	
		µA741M	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
µA741			(Cont'd)
	Toshiba	TA7504	
µA776	**GE/Intersil**	**ICL7611**	**(2673)**
		ICL8021	**(2673)**
		LM4250	
	Harris	**HA2720**	**(2737, 2747)**
	Maxim	ICL7611	
	Motorola	**MC1776**	**(2921, 2958)**
	National	LF441	
		LM4250	
	PMI	**OP20**	**(2970)**
		OP22	**(2970)**
	SGS	MC1776	
	Solitron	UC4250	
	TI	TL061	
		TLC251	
		TLC271	
µA7805	Fairchild	µA78L05	
	Motorola	**MC78L05**	**(2926, 2959)**
	National	LM340LA-5	
		LM78L05	
	NEC	µPC78L05	
	TI	µA78L05	
	Toshiba	TA78L006	
µA7806	Fairchild	µA7806	
	Motorola	**MC7806**	**(2927)**
	National	LM7806	
	NEC	µPC7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806	
		SG7806A	
	TI	µA7806	
	Toshiba	TA78006	
µA7808	Fairchild	µA7808	
	GoldStar	GL7808	
	Gould	µA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	NEC	µPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	µA7808	
	Toshiba	TA78008	
µA7812	Fairchild	µA78L12	
	Motorola	**MC78L12**	**(2927, 2959)**
	National	LM340LA-12	
		LM78L12	
	NEC	µPC78L12	
	TI	µA78L12	
	Toshiba	TA78L012	
µA7815	Fairchild	µA78L15	
	GoldStar	GL7815	
	Gould	µA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	µPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		µA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
		UC7815	**(3325)**
µA7818	National	LM340-18	
	NEC	µPC7818	
	SiliconG	SG340-18	
		SG7818	
		SG7818A	
	TI	LM340-18	

Manufacturer Device	Replacement Source	Device	IC Master Page
µA7824	Fairchild	µA7824	
	GoldStar	GL7824	
	Gould	µA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	µPC7824	
	Samsung	MC7824	
	SGS	L7824	
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
		µA7824	
	Toshiba	TA78024	
µA7912	Fairchild	µA7912	
		µA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	µA7824	
		µA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	µPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	µA7912	
	Toshiba	TA78024	
		TA79012	
µA7915	Fairchild	µA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	µA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	µPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	µA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
		UC7915	**(3325)**

Toshiba America

Manufacturer Device	Replacement Source	Device	IC Master Page
27256-15	GIM	27256-15	
	Intel	27256-15	
27256-20	AMD	AM27256-20	
	Fujitsu	MBM27256-20	
	GIM	27256-20	
	Intel	27256-20	
5101	Commodore	MP6551	
		MPS6551	
	Gould	S6551	
	Harris	**HM6551**	**(2704, 2763)**
	National	6551	
		74C920	
	Rockwell	**R6551**	**(2990)**
	Sprague	BCM5101	
		SCM5101	
5508	Fujitsu	8401	
	GE/Intersil	6508	
		IM6508-1	
	Harris	**HM6508**	**(2704, 2762)**
	National	6508	
		74C929	
		NM2102	
TA7157	Exar	XR1310	
	National	LM1310	
	TI	SN76115	
TA7176	GE/RCA	CA3065	
	GoldStar	**GL3201**	**(2699)**
	Hitachi	HA1125	
	Motorola	LSC1008	
		M5140	
	National	LM3064	
	NEC	µPC1382	
	Sanyo	LA1365	
	TI	SN76666	

Manufacturer Device	Replacement Source	Device	IC Master Page
TA7179	Exar	XR1468	
		XR4195	
	Fairchild	MC1489	
		µA212A	
		µA750	
	GoldStar	**GD75189**	**(2694)**
	Hitachi	HD75189	
	Motorola	**MC1468**	**(2931)**
	National	DS1489	
	Raytheon	RC4195	
	Signetics	MC1489	
	SiliconG	SG1468	
		SG1489	
		SG2501A	
		SG3501A	
		SG4501	
		SG75189	
	TI	MC1489	
		SN75189	
TA7360	**GoldStar**	**GL3230**	**(2699)**
TA7502	Fairchild	µA709	
	Motorola	**MC1709**	**(2919)**
	National	LM1709	
		LM709	
	NEC	µPC55	
	TI	µ709	
		µA709	
TA7504	AD	AD741	
	Fairchild	µA741M	
	Hitachi	HA17741	
	MicroPwr	MPOP02	
	Motorola	**MC1741**	**(2920, 2958)**
	National	LM741	
	NEC	µPC151	
		µPC741	
	Plessey	SL562	
	PMI	OP02	
	Raytheon	RM741	
	Samsung	LM741	
	SGS	LM741	
		LS141	
	Signetics	µA741	
	SiliconG	SG741	
	TI	µA741	
		µA741M	
	Thomson	µA741	
TA7506	AD	AD301	
	Fairchild	µA301	
		µA301A	
	GE/Intersil	AD301	
	GE/RCA	**CA301A**	**(2645)**
		LM301	**(2645)**
	LinearTech	LM301	
		LM301A	
	Motorola	**LM301**	**(2919, 2958)**
	National	LM301	
		LM301A	
	NEC	µPC157	
		µPC301	
		µPC301A	
	Raytheon	LM301	
	SGS	LM301	
		LM301A	
	SiliconG	SG301	
	TI	LM301	
		LM301A	
		µA301	
	Thomson	LM301A	
TA75060	TI	TL060	
TA75061	TI	TL061	
TA75062	National	LF442	
	TI	TL062	
	Thomson	TL062	
TA75064	TI	TL064	
	Thomson	TL064	
TA75070	TI	TL070	
TA75071	AnalogSys	MA333	
	Fairchild	µA771	
	Motorola	**MC34001**	**(2920, 2959)**
	NEC	µPC4071	
		µPC4081	
	TI	TL071	
		TL081C	
TA75072	AnalogSys	MA336	
	Fairchild	µA772	
	Motorola	**MC34002**	**(2922)**
	NEC	µPC4072	
		µPC4082	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Toshiba America (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
TA75072			(Cont'd)
	SGS	TL072	
	TI	TL072	
		TL082C	
	Toshiba	TA75074	
TA75074	NEC	μPC4074	
	SGS	TL074	
TA75339	Fairchild	μA339	
	GE/RCA	**CA339**	**(2647)**
		CA339A	**(2647)**
		LM339	
	GoldStar	**GL339**	**(2700)**
	Motorola	**LM339**	**(2925, 2958)**
	National	LM339	
	NEC	μPC137	
		μPC177	
		μPC339	
	PMI	**CMP04**	**(2975)**
		PM339A	**(2975)**
	Raytheon	LM339	
	SGS	LM339	
	TI	LM339	
	Thomson	LM339	
TA75358	**GE/RCA**	**CA358A**	**(2645)**
		LM358	**(2645)**
	GoldStar	**GL358**	**(2700)**
	Hitachi	HA17358	
	Motorola	**LM358**	**(2921, 2958)**
	National	LM358	
		LM358A	
	NEC	μPC1251	
		μPC358	
	PMI	**OP221**	**(2970, 2972)**
	Sanyo	LA6358	
	SGS	LM358	
	Signetics	LM358	
		NE532	
	TI	LM348	
		LM358	
	Thomson	LM358	
TA75393	**GoldStar**	**GL393**	**(2700)**
	Hitachi	HA17393	
	Motorola	**LM393**	**(2925, 2958)**
	National	LM393	
	NEC	μPC277	
		μPC393	
	SGS	LM393	
	TI	LM393	
TA75458	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
TA7555	Exar	XR555	
	Fairchild	μA555	
	GE/Intersil	NE555	
	GE/RCA	CA555	
	GoldStar	**GLC555**	**(2700)**
	Hitachi	HA17555	
	Mitsubishi	M51841	
		M51848	
		M5251	
		M5E555	
	Motorola	**MC1455**	**(2958)**
	National	LM555	
	NEC	μPC1555	
		μPC617	
	Raytheon	RC555	
	Samsung	NE555	
	Sanyo	LB8555	
	SGS	NE555	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TA7555			(Cont'd)
	Signetics	NE555	
	TI	NE555	
	Thomson	NE555	
TA75558	Exar	XR4558	
	Fairchild	μA4558	
	GoldStar	**GL4558**	**(2700)**
	Hitachi	HA17458	
		HA17558	
	Motorola	**MC4558**	**(2922, 2959)**
	National	LM1458	
	NEC	μPC1458	
	PMI	**OP14**	**(2972)**
	Raytheon	RC4558	
		RM4558	
	SGS	LS4558	
	Signetics	SE4558	
	TI	MC1458	
		RC4558	
		RM4558	
		TL4558	
	Thomson	MC4558	
	Toshiba	TA75458	
TA75902	Fairchild	μA2902	
		μA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	μPC324	
		μPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA79502	
TA7613	Sprague	ULN2204	
	Telefunken	TDA1083	
		U417B	
TA76494	Fairchild	μA494	
	TI	TL494	
TA76524	Cherry	CS3524	
	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	SG3524	
		UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
	TI	SG3524	
	Unitrode	**UC3524A**	**(3323)**
TA7717	**GoldStar**	**GL3812**	**(2699)**
TA7778	**GoldStar**	**GL3920**	**(2699)**
TA78005	Fairchild	μA7805	
	GoldStar	GL7805	
	Gould	μA7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
		LM7805	
	Samsung	MC7805	
	SiliconG	SG7805	
		SG7805A	
	TI	μA7805	
	Toshiba	TA79005	
	Unitrode	**UC7805**	**(3325)**
TA78006	Fairchild	μA7806	
	Motorola	**MC7806**	**(2927)**
	National	LM7806	
	NEC	μPC7806	
	Samsung	MC7806	
	SGS	L7806	
	SiliconG	SG340-6	
		SG7806	
		SG7806A	
	TI	μA7806	
	Thomson	μA7806	

Manufacturer Device	Replacement Source	Device	IC Master Page
TA78008	Fairchild	μA7808	
	GoldStar	GL7808	
	Gould	μA7808	
	Hitachi	HA17808	
	Motorola	MC08	
		MC7808	**(2927)**
	National	LM7808	
	NEC	μPC7808	
	Samsung	MC7808	
	SGS	L7808	
	SiliconG	SG340-8	
		SG7808	
		SG7808A	
	TI	μA7808	
	Thomson	μA7808	
TA78009	Fairchild	μA7809	
	GoldStar	GL7809	
	Gould	μA7809	
	Hitachi	HA17809	
	Motorola	MC7809	
	National	LM7809	
	NEC	μPC7809	
	TI	μA7809	
TA78010	Fairchild	μA7810	
	National	LM7810	
	SGS	L7810	
	TI	μA7810	
TA78012	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	μA7812	
	Unitrode	UC340-12	
		UC7812	**(3325)**
TA78015	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Unitrode	UC340-15	
		UC7815	**(3325)**
TA78018	Fairchild	μA7818	
	Motorola	**MC7818**	**(2928)**
	National	LM7818	
	Samsung	MC7818	
	SGS	L7818	
	TI	μA7818	
TA78020	Fairchild	μA7820	
		μA7910	
	National	LM7820	
	SGS	L7820	
	SiliconG	SG7820	
		SG7820A	
	TI	μA7820	
		μA7910	
TA78024	Fairchild	μA7824	
	GoldStar	GL7824	
	Gould	μA7824	
	Motorola	**MC7824**	**(2928)**
	National	LM7824	
	NEC	μPC7824	
	Samsung	MC7824	
	SGS	L7824	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TA78024			(Cont'd)
	SiliconG	SG7824	
		SG7824A	
	TI	LM340-24	
		μA7824	
	Thomson	μA7824	
TA78L006	Fairchild	μA78L05	
	Motorola	**MC78L05**	**(2926, 2959)**
	National	LM340LA-5	
		LM78L05	
	NEC	μPC78L05	
	TI	μA78L05	
	Thomson	μA7805	
TA78L008	Fairchild	μA78L08	
	Motorola	**MC78L08**	**(2959)**
	National	LM78L08	
	NEC	μPC78L08	
	TI	μA78L08	
TA78L009	Fairchild	μA78L09	
	National	LM78L09	
	TI	μA78L09	
TA78L010	Fairchild	μA78L10	
	National	LM78L10	
	TI	μA78L10	
TA78L012	Fairchild	μA78L12	
	Motorola	**MC78L12**	**(2927, 2959)**
	National	LM340LA-12	
		LM78L12	
	NEC	μPC78L12	
	TI	μA78L12	
	Thomson	μA7812	
TA78L015	Fairchild	μA7815	
	GoldStar	GL7815	
	Lambda	LMC7815	
	Motorola	**MC78L15**	**(2928, 2959)**
	National	LM340LA-15	
		LM340T-15	
		LM78L15	
	NEC	μPC78L15	
	Siliconix	SI9555	
	Supertex	HV5406	
	TI	SN75555	
		μA78L15	
TA78L018	Fairchild	μA78L18	
	Motorola	**MC78L18**	**(2928)**
	National	LM78L18	
	TI	μA78L18	
		μA78m20	
TA78L024	Fairchild	μA78L20	
	National	LM78L20	
	TI	μA78L20	
	Toshiba	TA78L20	
TA78L20	Fairchild	μA78L20	
	National	LM78L20	
	TI	μA78L20	
	Toshiba	TA78L024	
TA78M05	Fairchild	μA78M05	
	Motorola	**MC78M05**	**(2926, 2959)**
	National	LM341-5	
		LM342-05	
		LM78M05	
	NEC	μPC78M05	
	Samsung	MC78M05	
	Sanyo	L78M05	
	SGS	L78M05	
		L78M05CV	
	SiliconG	SG14005	
		SG14012	
		SG7805AT	
		SG7812AT	
	TI	μA78M05	
TA78M06	Fairchild	μA78M06	
	Motorola	**MC78M06**	**(2927)**
	National	LM78M06	
	Samsung	MC78M06	
	Sanyo	L78M06	
	SGS	L78M06	
		L78M06CV	
	TI	μA78M06	
TA78M08	Fairchild	μA78M08	
	Motorola	MC78M08	
	National	LM78M08	
	NEC	μPC78M08	
	Samsung	MC78M08	
	Sanyo	L78M08	
	SGS	L78M08	
		L78M08CV	
	TI	μA78M08	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Toshiba America			**(Cont'd)**
TA78M09	Fairchild	µA78M09	
	National	LM78M09	
	SGS	L78M09	
	TI	µA78M09	
TA78M10	Fairchild	µA78M10	
	National	LM78M10	
		LM7910	
	SGS	L78M10	
	TI	µA78M10	
TA78M12	Fairchild	µA78M12	
	Motorola	**MC78M12**	**(2927, 2959)**
	National	LM341-12	
		LM342-12	
		LM78M12	
	NEC	µPC78M12	
	Samsung	MC78M12	
	Sanyo	L78M12	
	SGS	L78M12	
		L78M12CV	
	TI	µA78M12	
TA78M15	Fairchild	µA78M15	
	Motorola	**MC78M15**	**(2928, 2959)**
	National	LM341-15	
		LM342-15	
		LM78M15	
	NEC	µPC78M15	
	Samsung	MC78M15	
	Sanyo	L78M15	
	SGS	L78M15	
		L78M15CV	
	TI	µA78M15	
TA78M18	Fairchild	µA78M18	
	Motorola	MC78M18	
	Samsung	MC78M18	
	Sanyo	L78M18	
	SGS	L78M18	
	TI	µA78M18	
TA78M20	Fairchild	µA78M20	
	Motorola	**MC78M20**	**(2928)**
	National	LM78M20	
	SGS	L78M20	
	TI	µA78M20	
TA78M24	Fairchild	µA78M24	
	Motorola	**MC78M24**	**(2928)**
	Samsung	MC78M24	
	Sanyo	L78M24	
	SGS	L78M24	
		L78M24CV	
	TI	µA78M24	
TA7900	Fairchild	µA7909	
	GoldStar	**GL7909**	**(2701)**
	Gould	µA7909	
	National	LM7909	
	NEC	µPC7909	
	SGS	L7909	
	TI	µA7909	
	Toshiba	TA79009	
TA79005	Fairchild	µA7805	
	GoldStar	GL7805	
	Gould	µA7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
		LM7805	
	Samsung	MC7805	
	SiliconG	SG7805	
		SG7805A	
	TI	µA7805	
	Toshiba	TA78005	
	Unitrode	**UC7805**	**(3325)**
TA79008	Fairchild	MC7908	
		µA7908	
		µA79M08	
	Motorola	MC7908	
	National	LM7908	
	Samsung	MC7908	
	SGS	L7908	
	SiliconG	SG7908	
		SG7908A	
	TI	µA7908	
		µA79M08	
TA79009	Fairchild	µA7909	
	GoldStar	**GL7909**	**(2701)**
	Gould	µA7909	
	National	LM7909	
	NEC	µPC7909	
	SGS	L7909	
	TI	µA7909	
	Toshiba	TA7900	
TA79012	Fairchild	µA7912	
		µA79M12	
	GoldStar	GL7824	
		GL7912	**(2701)**
	Gould	µA7824	
		µA7912	
	IPS	**IP320-12**	**(2854)**
		IP7912	**(2854)**
	Motorola	MC7912	
	National	LM320MP12	
		LM7912	
		LM79M12	
	NEC	µPC7912	
	Samsung	MC7912	
	SGS	L7912	
	SiliconG	SG320P-12	
		SG7912	
		SG7912A	
	TI	µA7912	
	Thomson	µA7912	
	Toshiba	TA78024	
TA79015	Fairchild	µA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	µA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	µPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	µA7915	
	Thomson	µA7915	
	Unitrode	UC320-15	
		UC7915	**(3325)**
TA79018	Fairchild	µA7918	
	Motorola	MC7918	
	National	LM7918	
	Samsung	MC7918	
	SGS	L7918	
	SiliconG	SG7918	
		SG7918A	
	TI	µA7918	
TA79020	Fairchild	µA7920	
	National	LM7920	
	SGS	L7920	
	SiliconG	SG7920	
		SG7920A	
	SiliconSys	SSI957	
	TI	µA7920	
TA79024	Fairchild	74LS195A	
		µA7924	
	GoldStar	**GL7924**	**(2701)**
	Gould	µA7924	
	Hitachi	HD74LS195A	
	Motorola	MC719924	
		MC7924	**(2928)**
		SN74LS195A	
	National	DM74LS195	
		LM7924	
	NEC	µPC7924	
	Panasonic	DN74LS195A	
	SGS	L7924	
		T74LS195A	
	Signetics	**74LS195A**	**(3003)**
	TI	SN74LS195A	
		µA7924	
TA79502	Fairchild	µA2902	
		µA324	
	GoldStar	**GL324**	**(2700)**
	Harris	**HA4741**	**(2706, 2737, 2747)**
	Hitachi	HA17902	
	Motorola	**LM2902**	**(2923, 2958)**
		LM324	**(2923, 2958)**
		MC33174	**(2924, 2959)**
	National	LM2902	
		LM324	
	NEC	µPC324	
		µPC451	
	PMI	**OP421**	**(2970, 2972)**
	Raytheon	LM2902	
	SGS	LM2902	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TA79502			(Cont'd)
	TI	LM2902	
		LM324	
	Thomson	LM2902	
	Toshiba	TA75902	
TC15G008	**GE/RCA**	**PA50800**	**(2659)**
	LSI Logic	LL5080	
TC15G014	**GE/RCA**	**PA51400**	**(2659)**
	LSI Logic	LL5140	
TC15G022	**GE/RCA**	**PA52200**	**(2659)**
	LSI Logic	LL5220	
TC15G032	**GE/RCA**	**PA53200**	**(2659)**
	LSI Logic	LL5320	
TC15G042	**GE/RCA**	**PA54200**	**(2659)**
	LSI Logic	LL5420	
TC15G060	**GE/RCA**	**PA56000**	**(2659)**
	LSI Logic	LL5600	
TC17G005	LSI Logic	LL7050	
	Raytheon	RL7050	
TC17G008	LSI Logic	LL7080	
	Raytheon	RL7080	
TC17G014	LSI Logic	LL7140	
	Raytheon	**RL7140**	**(4297)**
TC17G022	LSI Logic	LL7220	
	Raytheon	**RL7220**	**(4297)**
TC17G032	LSI Logic	LL7320	
	Raytheon	**RL7320**	**(4297)**
TC17G042	LSI Logic	LL7420	
	Raytheon	**RL7420**	**(4297)**
TC17G060	LSI Logic	LL7600	
	Raytheon	**RL7600**	**(4297)**
TC17G100	LSI Logic	LL71000	
	Raytheon	**RL71000**	**(4297)**
TC4001	Fairchild	F4001	
	GE/RCA	**CD4001**	**(2633)**
	Motorola	MC14001	
	National	CD4001	
		MM74C02	
	OKI	MSM4001	
	Sanyo	LC4001B	
	SGS	HCC/HCF4001	
	Signetics	HEF4001	
	Solitron	CM4001	
	Sprague	SCL4001	
TC4002	Fairchild	F4002	
	GE/RCA	**CD4002**	**(2633)**
	Motorola	MC14002	
	National	CD4002	
	SGS	HCC/HCF4002	
	Signetics	HEF4002	
	Solitron	CM4002	
	Sprague	SCL4002	
TC4006	Fairchild	F4006	
	GE/RCA	**CD4006**	**(2634)**
	National	CD4006	
	SGS	HCC/HCF4006	
	Signetics	HEF4006	
	Solitron	CM4006	
	Sprague	SCL4006	
TC4007	Fairchild	F4007	
	GE/RCA	**CD4007**	**(2633)**
	Motorola	MC14007	
	National	CD4007	
	SGS	HCC/HCF4007	
	Signetics	HEF4007	
	Solitron	CM4007	
	Sprague	SCL4007	
TC4008	Fairchild	F4008	
	GE/RCA	**CD4008**	**(2636)**
	Motorola	MC14008	
	National	CD4008	
		MM74C83	
	SGS	HCC/HCF4008	
	Signetics	HEF4008	
	Solitron	CM4008	
	Sprague	SCL4008	
TC4009	**GE/RCA**	**CD4009**	**(2633)**
	Motorola	MC14009	
	National	CD4009	
	SGS	HCC/HCF4009	
	Solitron	CM4009	
	Sprague	SCL4009	
TC4010	**GE/RCA**	**CD4010**	**(2633)**
	Motorola	MC14010	
	National	CD4010	
	SGS	HCC/HCF4010	
	Solitron	CM4010	
	Sprague	SCL4010	
TC40107	SGS	HCC/HCF40107	
TC4011	Fairchild	F4011	
	GE/RCA	**CD4011**	**(2633)**
	Motorola	MC14011	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC4011			(Cont'd)
	National	CD4011	
		MM74C00	
	OKI	MSM4011	
	Sanyo	LC4011	
	SGS	HCC/HCF4011	
	Signetics	HEF4011	
	Solitron	CM4011	
	Sprague	SCL4011	
TC4012	Fairchild	F4012	
	GE/RCA	**CD4012**	**(2633)**
	Motorola	MC14012	
	National	CD4012	
	SGS	HCC/HCF4012	
	Signetics	HEF4012	
	Solitron	CM4012	
	Sprague	SCL4012	
TC4013	Fairchild	F4013	
	GE/RCA	**CD4013**	**(2634)**
	Motorola	MC14013	
	National	CD4013	
		MM74C74	
	OKI	MSM4013	
	Sanyo	LC4013	
	SGS	HCC/HCF4013	
	Signetics	HEF4013	
	Solitron	CM4013	
	Sprague	SCL4013	
TC4014	Fairchild	F4014	
	GE/RCA	**CD4014**	**(2634)**
	Motorola	MC14014	
	National	CD4014	
	SGS	HCC/HCF4014	
	Signetics	HEF4014	
	Solitron	CM4014	
	Sprague	SCL4014	
TC4015	Fairchild	F4015	
	GE/RCA	**CD4015**	**(2634)**
	Motorola	MC14015	
	National	CD4015	
		MM74C164	
	OKI	MSM4015	
	Sanyo	LC4015	
	SGS	HCC/HCF4015	
	Signetics	HEF4015	
	Solitron	CM4015	
	Sprague	SCL4015	
TC4016	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4066**	**(3308)**
TC4017	Fairchild	F4017	
	GE/RCA	**CD4017**	**(2635)**
	Motorola	MC14017	
	National	CD4017	
	SGS	HCC/HCF4017	
	Signetics	HEF4017	
	Solitron	CM4017	
	Sprague	SCL4017	
TC40175	Fairchild	F40175	
	Motorola	MC14175	
	National	CD40175	
		MM54C175	
		MM74C175	
	Signetics	HEF40175	
TC4018	Fairchild	F4018	
	GE/RCA	**CD4018**	**(2635)**
	Motorola	MC14018	
	National	CD4018	
	SGS	HCC/HCF4018	
	Signetics	HEF4018	
	Solitron	CM4018	
	Sprague	SCL4018	
TC4019	Fairchild	F4019	
	GE/RCA	**CD4019**	**(2633, 2635)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Toshiba America (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC4019			(Cont'd)
	National	CD4019	
	OKI	MSM4019	
	Sanyo	LC4019	
	SGS	HCC/HCF4019	
	Signetics	HEF4019	
	Solitron	CM4019	
	Sprague	SCL4019	
TC40192	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC4029**	**(3308)**
TC40193	Fairchild	F40193	
	GE/RCA	**CD40193**	**(2635)**
	National	CD40193	
		MM54C193	
		MM74C193	
	SGS	HCC/HCF40193	
	Signetics	HEF40193	
	Sprague	SCL4193	
TC4020	Fairchild	F4020	
	GE/RCA	**CD4020**	**(2634)**
	Motorola	MC14020	
	National	CD4020	
	SGS	HCC/HCF4020	
	Signetics	HEF4020	
	Solitron	CM4020	
	Sprague	SCL4020	
TC4021	Fairchild	F4021	
	GE/RCA	**CD4021**	**(2634)**
	Motorola	MC14021	
	National	CD4021	
	SGS	HCC/HCF4021	
	Signetics	HEF4021	
	Sprague	SCL4021	
TC4022	Fairchild	F4022	
	GE/RCA	**CD4022**	**(2635)**
	Motorola	MC14022	
	National	CD4022	
	SGS	HCC/HCF4022	
	Signetics	HEF4022	
	Solitron	CM4022	
	Sprague	SCL4022	
TC4023	Fairchild	F4023	
	GE/RCA	**CD4023**	**(2633)**
	Motorola	MC14023	
	National	CD4023	
		MM74C10	
	SGS	HCC/HCF4023	
	Signetics	HEF4023	
	Solitron	CM4023	
	Sprague	SCL4023	
TC4024	Fairchild	F4024	
	GE/RCA	**CD4024**	**(2634)**
	Motorola	MC14024	
	National	CD4024	
	SGS	HCC/HCF4024	
	Signetics	HEF4024	
	Solitron	CM4024	
	Sprague	SCL4024	
TC4025	Fairchild	F4025	
	GE/RCA	**CD4025**	**(2633)**
	Motorola	MC14025	
	National	CD4025	
	SGS	HCC/HCF4025	
	Signetics	HEF4025	
	Solitron	CM4025	
	Sprague	SCL4025	
TC4028	Fairchild	F4028	
	GE/RCA	**CD4028**	**(2633)**
	Motorola	MC14028	
	National	CD4028	
		MM74C42	
	OKI	MSM4028	
	Sanyo	LC4028	
	SGS	HCC/HCF4028	
	Signetics	HEF4028	
	Solitron	CM4028	
	Sprague	SCL4028	
TC4029	Fairchild	F4029	
	GE/RCA	**CD40192**	**(2635)**
		CD4029	**(2635)**
	Motorola	MC14029	
	National	CD40192	
		CD4029	
	SGS	HCC/HCF40192	
		HCC/HCF4029	
	Signetics	HEF40192	
	Solitron	CM4029	
	Sprague	SCL4029	
		SCL4192	
	Toshiba	**TC40192**	**(3308)**
TC4030	Fairchild	F4030	
	GE/RCA	**CD4030**	**(2633, 2636)**
	National	CD4030	
	SGS	HCC/HCF4030	
	Signetics	HEF4030	
	Solitron	CM4030	
	Sprague	SCL4030	
TC4032	**GE/RCA**	**CD4032**	**(2636)**
	Motorola	MC14032	
	SGS	HCC/HCF4032	
	Solitron	CM4032	
TC4034	Fairchild	F4034	
	GE/RCA	**CD4034**	**(2634, 2636)**
	Motorola	MC14034	
	National	CD4034	
	SGS	HCC/HCF4034	
	Solitron	CM4034	
	Sprague	SCL4034	
TC4035	Fairchild	F4035	
	GE/RCA	**CD4035**	**(2634)**
	Motorola	MC14035	
	SGS	HCC/HCF4035	
	Signetics	HEF4035	
	Solitron	CM4035	
TC4036	Solitron	CM4036	
TC4038	**GE/RCA**	**CD4038**	**(2636)**
	Motorola	MC14038	
	SGS	HCC/HCF4038	
	Solitron	CM4038	
TC4039	GE/RCA	CD4039	
	Solitron	CM4039	
TC4040	Fairchild	F4040	
	GE/RCA	**CD4040**	**(2634)**
	Motorola	MC14040	
	National	CD4040	
	SGS	HCC/HCF4040	
	Signetics	HEF4040	
	Solitron	CM4040	
	Sprague	SCL4040	
TC4042	Fairchild	F4042	
	GE/RCA	**CD4042**	**(2634)**
	Motorola	MC14042	
	National	CD4042	
	SGS	HCC/HCF4042	
	Signetics	HEF4042	
	Solitron	CM4042	
	Sprague	SCL4042	
TC4043	**GE/RCA**	**CD4043**	**(2634)**
	Motorola	MC14043	
	National	CD4043	
	SGS	HCC/HCF4043	
	Signetics	HEF4043	
	Solitron	CM4043	
	Sprague	SCL4043	
TC4044	Fairchild	F4044	
	GE/RCA	**CD4044**	**(2634)**
	Motorola	MC14044	
	National	CD4044	
	SGS	HCC/HCF4044	
	Signetics	HEF4044	
	Solitron	CM4044	
TC4047	Fairchild	F4047	
	GE/RCA	**CD4047**	**(2634)**
	National	CD4047	
	SGS	HCC/HCF4047	
	Signetics	HEF4047	
	Solitron	CM4047	
	Sprague	SCL4047	
TC4049	Fairchild	F4049	
	GE/RCA	**CD4049**	**(2633)**
	Motorola	MC14049	
	National	CD4049	
	OKI	MSM4049	
	Sanyo	LC4049	
	SGS	HCC/HCF4049	
	Signetics	HEF4049	
TC4049			(Cont'd)
	Solitron	CM4049	
	Sprague	SCL4049	
TC4050	Fairchild	F4050	
	GE/RCA	**CD4050**	**(2633)**
	Motorola	MC14050	
	National	CD4050	
	SGS	HCC/HCF4050	
	Signetics	HEF4050	
	Solitron	CM4050	
	Sprague	SCL4050	
TC4051	Fairchild	F4051	
	GE/RCA	**CD4051**	**(2635)**
	Motorola	MC14051	
	National	CD4051	
	SGS	HCC/HCF4051	
	Signetics	HEF4051	
	Solitron	CM4051	
	Sprague	SCL4051	
TC4052	**Harris**	**HI1828A**	**(2703, 2738, 2748)**
	National	CD4052	
	Solitron	CM4052	
	Sprague	SCL4052	
TC4053B	Fairchild	F4053	
	GE/RCA	**CD4053**	**(2635)**
	Motorola	MC14053	
	National	CD4053	
	SGS	HCC/HCF4053	
	Signetics	HEF4053	
	Solitron	CM4053	
	Sprague	SCL4053	
TC4054	**GE/RCA**	**CD4054**	**(2635)**
	SGS	HCC/HCF4054	
TC4055	**GE/RCA**	**CD4055**	**(2635)**
	SGS	HCC/HCF4055	
TC4063	**GE/RCA**	**CD4063**	**(2636)**
	SGS	HCC/HCF4063	
TC4066	Fairchild	F4016	
		F4066	
	GE/RCA	**CD4016**	**(2635)**
		CD4066	**(2635)**
	Motorola	MC14016	
		MC14066	
	National	CD4016	
		CD4066	
	Sanyo	LC4016	
		LC4066	
	SGS	HCC/HCF4016	
		HCC/HCF4066	
	Signetics	HEF4016	
		HEF4066	
	Solitron	CM4016	
		CM4066	
		HCF4016	
	Sprague	SCL4016	
		SCL4066	
	Toshiba	**TC4016**	**(3308)**
TC4068	Fairchild	F4068	
	GE/RCA	**CD4068**	**(2633)**
	Motorola	MC14068	
	SGS	HCC/HCF4068	
	Signetics	HEF4068	
	Solitron	CM4068	
	Sprague	SCL4068	
TC4069	Fairchild	F4069	
	GE/RCA	**CD4069**	**(2633)**
	Motorola	MC14069	
	National	CD4069	
		MM54C04	
		MM74C04	
	OKI	MSM4069	
	Sanyo	LC4069	
	SGS	HCC/HCF4069	
	Signetics	HEF4069	
	Solitron	CM4069	
	Sprague	SCL4069	
		SCL4449	
TC4072	Fairchild	F4072	
	GE/RCA	**CD4072**	**(2633)**
	Motorola	MC14072	
	National	CD4072	
	SGS	HCC/HCF4072	
	Signetics	HEF4072	
	Sprague	SCL4072	
TC4073	Fairchild	F4073	
	GE/RCA	**CD4073**	**(2633)**
	Motorola	MC14073	
	National	CD4073	
	SGS	HCC/HCF4073	
	Signetics	HEF4073	
TC4073			(Cont'd)
	Solitron	CM4073	
	Sprague	SCL4073	
TC4075	Fairchild	F4075	
	GE/RCA	**CD4075**	**(2633)**
	Motorola	MC14075	
	National	CD4075	
	SGS	HCC/HCF4075	
	Signetics	HEF4075	
	Solitron	CM4075	
	Sprague	SCL4075	
TC4076	Fairchild	F4076	
	GE/RCA	**CD4076**	**(2634)**
	Motorola	MC14076	
	National	CD4076	
		MM54C173	
		MM74C173	
	SGS	HCC/HCF4076	
	Signetics	HEF4076	
	Solitron	CM4076	
	Sprague	SCL4076	
TC4078	Fairchild	F4078	
	GE/RCA	**CD4078**	**(2633)**
	Motorola	MC14078	
	SGS	HCC/HCF4078	
	Signetics	HEF4078	
	Solitron	CM4078	
	Sprague	SCL4078	
TC4081	Fairchild	F4081	
	GE/RCA	**CD4081**	**(2633)**
	Motorola	MC14081	
	National	CD4081	
		MM74C08	
	OKI	MSM4081	
	Sanyo	LC4081	
	SGS	HCC/HCF4081	
	Signetics	HEF4081	
	Solitron	CM4081	
	Sprague	SCL4081	
TC4082	Fairchild	F4082	
	GE/RCA	**CD4082**	**(2633)**
	Motorola	MC14082	
	National	CD4082	
	SGS	HCC/HCF4082	
	Signetics	HEF4082	
	Sprague	SCL4082	
TC40H000	**GE/RCA**	**CD74HC00**	**(2631)**
	Hitachi	HD74HC00	
	Motorola	MC74HC00	
	National	MM74HC00	
	SGS	M74HC00	
	Signetics	**74HC00**	**(3003)**
	TI	SN74HC00	
TC40H002	**GE/RCA**	**CD74HC02**	**(2631)**
	Hitachi	HD74HC02	
	Motorola	MC74HC02	
	National	MM74HC02	
	SGS	M74HC02	
	Signetics	**74HC02**	**(3003)**
	TI	SN74HC02	
TC40H004	**GE/RCA**	**CD74HC04**	**(2631)**
	Hitachi	HD74HC04	
	Motorola	MC74HC04	
	National	MM74HC04	
	SGS	M74HC04	
	TI	SN74HC04	
TC40H010	**GE/RCA**	**CD74HC10**	**(2631)**
	Hitachi	HD74HC10	
	Motorola	MC74HC10	
	National	MM74HC10	
	SGS	M74HC10	
	Signetics	**74HC10**	**(3003)**
	TI	SN74HC10	
TC40H011	**GE/RCA**	**CD74HC11**	**(2631)**
	Hitachi	HD74HC11	
	Motorola	MC74HC11	
	National	MM74HC11	
	SGS	M74HC11	
	Signetics	**74HC11**	**(3003)**
	TI	SN74HC11	
TC40H020	**GE/RCA**	**CD74HC20**	**(2631)**
	Hitachi	HD74HC20	
	Motorola	MC74HC20	
	National	MM74HC20	
	SGS	M74HC20	
	Signetics	**74HC20**	**(3003)**
	TI	SN74HC20	
TC40H027	**GE/RCA**	**CD74HC27**	**(2631)**
	Hitachi	HD74HC27	
	Motorola	MC74HC27	
	National	MM74HC27	
	SGS	M74HC27	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Toshiba America			**(Cont'd)**
TC40H027			(Cont'd)
	Signetics	**74HC27**	**(3003)**
	TI	SN74HC27	
	Universal	US74HC27	
TC40H032	**GE/RCA**	**CD74HC32**	**(2631)**
	Hitachi	HD74HC32	
	Motorola	MC74HC32	
	National	MM74HC32	
	SGS	M74HC32	
	Signetics	**74HC32**	**(3003)**
	TI	SN74HC32	
TC40H074	**GE/RCA**	**CD74HC74**	**(2631)**
	Hitachi	HD74HC74	
	Motorola	MC74HC74	
	National	MM74HC74	
	SGS	M74HC74	
	Signetics	**74HC74**	**(3003)**
	TI	SN74HC74	
TC40H076	Hitachi	HD74HC76	
	Motorola	MC74HC76	
	National	MM74HC76	
	SGS	M74HC76	
	TI	SN74HC76	
TC40H107	**GE/RCA**	**CD74HC107**	**(2631)**
	Hitachi	HD74HC107	
	Motorola	MC74HC107	
	National	MM74HC107	
	SGS	M74HC107	
	Signetics	**74HC107**	**(3003)**
	TI	SN74HC107	
TC40H139	**GE/RCA**	**CD74HC139**	**(2632)**
	Hitachi	HD74HC139	
	National	MM74HC139	
	SGS	M74HC139	
	Signetics	**74HC139**	**(3003)**
	Sprague	SS74HC139	
	TI	SN74HC139	
TC40H153	**GE/RCA**	**CD74HC153**	**(2632)**
	Hitachi	HD74HC153	
	Motorola	MC74HC153	
	National	MM74HC153	
	SGS	M74HC153	
	Signetics	**74HC153**	**(3003)**
	TI	SN74HC153	
TC40H157	**GE/RCA**	**CD74HC157**	**(2632)**
	Hitachi	HD74HC157	
	Motorola	MC74HC157	
	National	MM74HC157	
	SGS	M74HC157	
	Signetics	**74HC157**	**(3003)**
	TI	SN74HC157	
TC40H158	**GE/RCA**	**CD74HC158**	**(2632)**
	Hitachi	HD74HC158	
	Motorola	MC74HC158	
	National	MM74HC158	
	SGS	M74HC158	
	Signetics	**74HC158**	**(3003)**
	TI	SN74HC158	
TC40H174	**GE/RCA**	**CD74HC174**	**(2631)**
	Hitachi	HD74HC174	
	Motorola	MC74HC174	
	National	MM74HC174	
	SGS	M74HC174	
	Signetics	**74HC174**	**(3003)**
	TI	SN74HC174	
TC40H175	**GE/RCA**	**CD74HC175**	**(2631)**
	Hitachi	HD74HC175	
	Motorola	MC74HC175	
	National	MM74HC175	
	SGS	M74HC175	
	Signetics	**74HC175**	**(3003)**
	TI	SN74HC175	
TC40H192	**GE/RCA**	**CD74HC192**	**(2632)**
	Hitachi	HD74HC192	
	Motorola	MC74HC192	
	National	MM74HC192	
	SGS	M74HC192	
	Signetics	**74HC192**	**(3003)**
	TI	SN74HC192	
TC40H193	**GE/RCA**	**CD74HC193**	**(2632)**
	Hitachi	HD74HC193	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC40H193			(Cont'd)
	Motorola	MC74HC193	
	National	MM74HC193	
	SGS	M74HC193	
	Signetics	**74HC193**	**(3003)**
	TI	SN74HC193	
TC40H240	**GE/RCA**	**CD74HC240**	**(2631)**
	Hitachi	HD74HC240	
	Mitel	MD74HC240	
	Motorola	MC74HC240	
	National	MM74HC240	
	SGS	M74HC240	
	Signetics	**74HC240**	**(3003)**
	Sprague	SS74HC240	
	Supertex	SI74HC240	
	TI	SN74HC240	
TC4503	Fairchild	F40097B	
	GE/RCA	**CD4503**	**(2633)**
	Motorola	MC14503	
	National	CD4503	
	SGS	HCF4503	
TC4508	**GE/RCA**	**CD4508**	**(2634)**
	Motorola	MC14508	
	National	DM74147	
	SGS	HCC/HCF4508	
	Signetics	**74147**	**(3003)**
		HEF4508	
		N82147	
	Sprague	SCL4508	
	TI	SN74147	
TC4510	Fairchild	F4510	
	GE/RCA	**CD4510**	**(2635)**
	Motorola	MC14510	
	National	CD4510	
	SGS	HCC/HCF4510	
	Signetics	HEF4510	
	Solitron	CM4510	
	Sprague	SCL4510	
TC4511	Fairchild	F4511	
	GE/RCA	**CD4511**	**(2635)**
	Motorola	MC14511	
	National	CD4511	
	NEC	μPD4511	
	SGS	HCC/HCF4511	
	Signetics	HEF4511	
	Solitron	CM4511	
	Sprague	SCL4511	
TC4512	Fairchild	F4512	
	GE/RCA	**CD4512**	**(2635)**
	Motorola	MC14512	
	National	CD4512	
	SGS	HCC/HCF4512	
	Sprague	SCL4512	
TC4514	Fairchild	F4514	
	GE/RCA	**CD4514**	**(2633)**
	Motorola	MC14514	
	National	CD4514	
	SGS	HCC/HCF4514	
	Signetics	HEF4514	
	Solitron	CM4514	
	Sprague	SCL4514	
TC4515	Fairchild	F4515	
	GE/RCA	**CD4515**	**(2633)**
	Motorola	MC14515	
	National	CD4515	
	SGS	HCC/HCF4515	
	Signetics	HEF4515	
	Solitron	CM4515	
	Sprague	SCL4515	
TC4516	Fairchild	F4516	
	GE/RCA	**CD4516**	**(2635)**
	Motorola	MC14516	
	National	CD4516	
	SGS	HCC/HCF4516	
	Signetics	HEF4516	
	Solitron	CM4516	
	Sprague	SCL4516	
TC4518	Fairchild	F4518	
	GE/RCA	**CD4518**	**(2635)**
	Motorola	MC14518	
	National	CD4518	
	SGS	HCC/HCF4518	
	Signetics	HEF4518	
	Solitron	CM4518	
	Sprague	SCL4518	
TC4520	Fairchild	F4520	
	GE/RCA	**CD4520**	**(2635)**
	Motorola	MC14520	
	National	CD4520	
	OKI	MSM4520	
	Sanyo	LC4520	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC4520			(Cont'd)
	SGS	HCC/HCF4520	
	Signetics	HEF4520	
	Solitron	CM4520	
	Sprague	SCL4520	
TC4521	Fairchild	F4521	
	Motorola	MC14521	
	SGS	HCC/HCF4045	
	Signetics	HEF4521	
	Solitron	CM4045	
	Sprague	SCL4445	
TC4526	Fairchild	F4526	
	Motorola	MC14526	
	National	CD4526	
	Signetics	HEF4526	
	Sprague	SCL4526	
TC4527	Fairchild	F4527	
	GE/RCA	**CD4527**	**(2636)**
	Motorola	MC14527	
	National	CD4527	
	SGS	HCC/HCF4527	
	Signetics	HEF4527	
	Sprague	SCL4527	
TC4528	Fairchild	F4528	
	Motorola	MC14528	
	National	CD4528	
		MM74C221	
	SGS	HCC/HCF4098	
	Signetics	HEF4528	
TC4531	Fairchild	F4531	
	Motorola	MC14531	
	SGS	HCC/HCF40101	
	Signetics	HEF4531	
	Sprague	SCL4531	
TC4532	Fairchild	F4532	
	GE/RCA	CD4532	
	Motorola	MC14532	
	SGS	HCC/HCF4532	
	Signetics	HEF4532	
	Sprague	SCL4532	
TC4543	Fairchild	F4543	
	GE/RCA	**CD4543**	**(2635)**
	Motorola	MC14543	
		MC14543B	
	National	CD4543	
	Signetics	HEF4543	
TC4555	Fairchild	F4555	
	GE/RCA	**CD4555**	**(2633, 2635)**
	Motorola	MC14555	
	SGS	HCC/HCF4555	
	Signetics	HEF4555	
	Sprague	SCL4555	
TC4556	Fairchild	F4556	
	GE/RCA	**CD4556**	**(2633, 2635)**
	Motorola	MC14556	
	SGS	HCC/HCF4556	
	Signetics	HEF4556	
	Sprague	SCL4556	
TC4560	Motorola	MC14560	
TC4561	Motorola	MC14561	
TC4572	Motorola	MC14572	
TC4583	Fairchild	F4583	
	Motorola	MC14583	
TC4585	Fairchild	F40085	
	GE/RCA	**CD4585**	**(2636)**
	Motorola	MC14585	
	National	MM74C85	
	SGS	HCC/HCF4585	
	Signetics	HEF4585	
	Sprague	SCL4585	
TC511000	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC511000	Hitachi		(Cont'd)
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000C**	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
TC511000C	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511001C	
		TC511002	
		TMM411001C	
TC511001C	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Toshiba America (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC511001C	Hitachi	(Cont'd)	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511002	
		TMM411001C	
TC511002	**Dense-Pac**	**DPD411M**	**(2581)**
	EDI	DH411M	
		EDH411M-C4	
	Fujitsu	MB5208	
		MB811000	
		MB811001	
		MB81C1000	**(2621)**
		MB81C1001	
		MB81C1002	
		MB85201	
		MB85214	
		MB85227	
		TH22568	
	GoldStar	**GM7C1024**	**(2692)**
	Hitachi	HM511000	
		HM511001	
		HM511002	
		HM51101	
		HM51102	
		HM561002	
		HM561003	
	Mitel	M5M41000	
	Mitsubishi	M5M410000	
		M5M41000S	
		MH25608	
		MH25609	
	NEC	MC411000	
		MC411000A1	
		MC41256	
		TMX4C1024	
		μPD411000	
		μPD411000C	
		μPD411001	
		μPD421000	
		μPD421001	
		μPD421002	
	Panasonic	MN411000	
	TI	**TM4256FC1**	**(3260)**
		TM5256	
		TMS4C1024	**(3259)**
		TMS4C1025	**(3259)**
		TMS4C1027	**(3259)**
	Toshiba	**TC511000**	**(3302)**
		TC511000C	**(3302)**
		TC511001C	
		TMM411001C	
TC514258	Sharp	LH64256	
	Vitelic	V51C105	
TC51832	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	GoldStar	GM76C256	
	Hitachi	HM62256P	
		HM65256	
	IDT	**IDT71256**	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC51832			(Cont'd)
	Lattice	256K8	
	Mitel	M5M5256	
	NEC	μPD42832	
	Toshiba	TMM41832	
TC53100	**Cypress**	**PALC16R4**	**(4217)**
	GoldStar	**GM231024**	**(2692)**
	Hitachi	HM62301	
	Mitel	M5M231000	
	MMI	PALC16R4Q-25	
	NEC	μPD231000	
TC531000	Fujitsu	MB831000	
		MB831124	
	GIM	RO91000	
	Hitachi	HN62301	
	NEC	μPD23C1000	
	VLSI Tech	VT23C1024	
TC532000	NEC	μPD232000	
TC53257	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
TC54256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		RO9256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
TC5501	AMD	AM2101	
		AM9101	
		AM91L01	
	Harris	**HM6551**	**(2704, 2763)**
	Intel	5101	
	Mitsubishi	5ML5101	
	Motorola	MCM145101	
		MCMS1L01	
	National	MM74C920	
	NEC	μPD5101	
	Panasonic	MNS101	
	Sharp	**LH5101**	**(2993)**
	Sprague	BCM5101	
		SCM5101	
♦ TC5504	AMD	AM2141	
		AM9244	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ TC5504	**Cypress**	**CY7C147**	**(2562, 2564)**
	Harris	**HM6504**	**(2704, 2762, 2768)**
	Hitachi	4315	
		6147	
♦ TC5504	Intel	5104	
	Matra-Harris	HM6504	
	Mitsubishi	58981	
	Motorola	6504	
	National	NM2147	
		NMC6504	
♦ TC5504	OKI	5104	
	Rockwell	R6504	
	Toshiba	TMM315	
TC5513	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5514	
		TMM2114	
	UMC	UM6104	
TC5514	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TMM2114A	
		TMM314A	
	UMC	UM6114	
TC5516	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
TC5516A	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Toshiba America (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC5516A	Sprague		(Cont'd)
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
TC5517	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	
		V62C16	
TC5517A	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC5517A			(Cont'd)
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	5117	
		M5M8725	
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
		MK6116	
	Toshiba	TC5516	
		TC5517	
		TC5517B	
	UMC	UM6116	
	Vitelic	V61C16	
		V62C16	
TC5518	Fujitsu	MB8418	
		MBM8418	
	Hitachi	HM6117	
	NEC	μPD449	
	S-MOS	**SRM2018**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
	Toshiba	TC5518B	
TC5518B	Fujitsu	MB8418	
		MBM8418	
	Hitachi	HM6117	
	NEC	μPD449	
	S-MOS	**SRM2018**	**(3201)**
	Sprague	SCM20C16	
		SCM21C16	
	Toshiba	TC5518	
TC55257	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257P**	**(3303)**
	Vitelic	V62C256	
TC55257P	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC55257P			(Cont'd)
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
	Vitelic	V62C256	
TC55416	Cypress	CUPLDC20G10	
	Fairchild	F100165	
	Hitachi	HD100165	
		HM6288	
	MMI	PAL20L8	
		PAL20L8B	
	National	PAL20L8	
	Signetics	**100165**	**(3020)**
	Sprague	SPL20LC8	
	TI	PAL20L8	
		TIBPAL20L8-20	**(3217, 4320)**
TC55417	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	54LS152	
	Hitachi	HM6789	
	Inmos	**IMS1624**	**(2788)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR64E4	
	Motorola	MCM6290	
	NEC	μPD4363	
	SGS	T54LS152	
	Vitelic	V61C62	
TC5561	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5562	
TC5562	**Cypress**	**CY7C187**	**(2562)**
	Fairchild	F1600	
		F1602	
	Fujitsu	MB81C71	
	GE/RCA	**CD74HC4515**	**(2632)**
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
		HM6787	
	Inmos	**IMS1600**	**(2785)**
		IMS1601	**(2786)**
	IDT	**IDT7187**	**(2802)**
	Lattice	SR64K1	
	Motorola	MCM6287	
		MCM62L87	
	NEC	μPD4361	
	Performance	P4C187	
	S-MOS	SRM2261	
	SGS	M74HC4515	
	Signetics	PC74HC4515	
	TI	SMJ61CD64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
TC5563	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC5563			(Cont'd)
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
TC5564	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Toshiba America (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC5564			(Cont'd)
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
TC5565	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
TC5585	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC5585			(Cont'd)
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
TC571000	**Fujitsu**	**MBM27C1001**	**(2620)**
	Hitachi	HN27C1016	
	Mitsubishi	M5M27C100K	
	NEC	μPD27C1001	
TC571001	AMD	AM27C1024	
	Fujitsu	MBM27C1000	
		MBM27C1024	
	Hitachi	HN27C301G	
	Mitsubishi	M5M27C101K	
	NEC	μPD27C1000	
		μPD27C1024	
TC57256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC57256	**TI**		**(Cont'd)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TMM27256	
		TMN24256	
		TMN27256	
	Waferscale	**WS57C256**	**(3376)**
TC7400	Fairchild	7400	
	National	DM7400	
	Signetics	**7400**	**(3003)**
	TI	SN7400	
TC7404	Fairchild	7404	
	National	DM7404	
	Signetics	**7404**	**(3003)**
	TI	SN7404	
TC7410	Fairchild	7410	
	National	DM7410	
	Signetics	**7410**	**(3003)**
	TI	SN7410	
TC7420	Fairchild	7420	
		9004	
	National	DM7420	
		DM9004C	
	Signetics	**7420**	**(3003)**
	TI	SN7420	
TC74HC03	**GE/RCA**	**CD74HC03**	**(2631)**
	Motorola	MC74HC03	
	National	MM74HC03	
	SGS	M74HC03	
	TI	SN74HC03	
TC74HC109	**GE/RCA**	**CD74HC109**	**(2631)**
	Hitachi	HD74HC109	
	Motorola	MC74HC109	
	National	MM74HC109	
	SGS	M74HC109	
	Signetics	**74HC109**	**(3003)**
	TI	SN74HC109	
TC74HC125	**GE/RCA**	**CD74HC125**	**(2631)**
	Hitachi	HD74HC125	
	Motorola	MC74HC125	
	National	MM74HC125	
	SGS	M74HC125	
	TI	SN74HC125	
TC74HC126	**GE/RCA**	**CD74HC126**	**(2631)**
	Hitachi	HD74HC126	
	Motorola	MC74HC126	
	National	MM74HC126	
	SGS	M74HC126	
TC74HC137	Hitachi	HD74HC137	
	Motorola	MC74HC137	
	National	MM74HC137	
	SGS	M74HC137	
TC74HC148	Hitachi	HD74HC148	
	SGS	M74HC148	
	TI	SN74HC148	
TC74HC190	**GE/RCA**	**CD74HC190**	**(2632)**
	Hitachi	HD74HC190	
	Motorola	MC74HC190	
	SGS	M74HC190	
	Signetics	**74HC190**	**(3003)**
		PC74HC190	
		PCF74HC190	
	TI	SN74HC190	
TC74HC21	Hitachi	HD74HC21	
	Motorola	MC74HC21	
	SGS	M74HC21	
	TI	SN74HC21	
TC74HC237	Motorola	MC74HC237	
	SGS	M74HC237	
	TI	SN74HC237	
TC74HC258	**GE/RCA**	**CD74HC258**	**(2632)**
	Hitachi	HD74HC258	
	TI	SN74HC258	
TC74HC375	Hitachi	HD74HC375	
	SGS	M74HC375	
	TI	SN74HC375	
TC74HC386	Motorola	MC74HC386	
	SGS	M74HC386	
	TI	SN74HC386	
TC74HC4022	SGS	M74HC4022	
TC74HC4050	**GE/RCA**	**CD74HC4050**	**(2631)**
	Motorola	MC74HC4050	
		MC84HC4050	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC74HC4050			(Cont'd)
	SGS	M74HC4050	
	Signetics	PC74HC4050	
TC74HC4075	**GE/RCA**	**CD74HC4075**	**(2631)**
	Motorola	MC74HC4075	
	National	MM74HC4075	
	Signetics	74HC4075	
	TI	SN74HC4075	
TC74HC4078	Motorola	MC74HC4078	
	National	MM74HC4078	
	SGS	M74HC4078	
	TI	SN74HC4078A	
TC74HC423	Hitachi	HD74HC423	
	TI	SN74HC423	
TC74HC4515	TI	SN74HC4515	
TC74HC4543	**Cypress**	**CY7C172**	**(2562, 2564)**
	GE/RCA	**CD74HC4543**	**(2632)**
	IDT	**IDT71682**	**(2802)**
	Motorola	MC74HC4543	
	National	MM74HC4543	
	Performance	P4C1682	
	SGS	M74HC4543	
	Signetics	PC74HC4543	
TC74HC51	Hitachi	HD74HC51	
	Motorola	MC74HC51	
	National	MM74HC51	
	TI	SN74HC51	
TC74HC540	**GE/RCA**	**CD74HC540**	**(2631)**
	Hitachi	HD74HC540	
	Motorola	MC74HC540	
	SGS	M74HC540	
	Signetics	**74HC540**	**(3003)**
	Sprague	SS74HC540	
	TI	SN74HC540	
TC74HC573	**GE/RCA**	**CD74HC573**	**(2632)**
	Hitachi	HD74HC573	
	Motorola	MC74HC573	
	National	MM74HC573	
	SGS	M74HC573	
	Signetics	**74HC573**	**(3003)**
	Sprague	SS74HC573	
	TI	SN74HC573	
TC74HC597	**GE/RCA**	**CD74HC597**	**(2631)**
	Hitachi	HD74HC597	
	Motorola	MC74HC597	
	National	MM74HC597	
	SGS	M74HC597	
	Signetics	PC74HC597	
	TI	SNN74HC597	
TC74HC620	Hitachi	HD74HC620	
	Motorola	MC74HC620	
	National	MM74HC620	
	TI	SN74HC620	
TC74HC623	Hitachi	HD74HC623	
	Motorola	MC74HC623	
	National	MM74HC623	
	TI	SN74HC623	
TC74HC651	Hitachi	HD74HC651	
	Motorola	MC74HC651	
	TI	SN74HC651	
TC74HC652	Hitachi	HD74HC652	
	Motorola	MC74HC652	
	TI	SN74HC652	
TC74HC688	**GE/RCA**	**CD74HC688**	**(2632)**
	Motorola	MC74HC688	
	National	MM74HC688	
	SGS	M74HC688	
	Signetics	**74HC688**	**(3003)**
	TI	SN74HC688	
TC74HC7266	**GE/RCA**	**CD74HC7266**	**(2631)**
	Motorola	MC74HC7266	
	National	MM74HC7266	
	Signetics	PC74HC7266	
	TI	SN74HC7266	
TC74HC73	**GE/RCA**	**CD74HC73**	**(2631)**
	Hitachi	HD74HC73	
	Motorola	MC74HC73	
	National	MM74HC73	
	SGS	M74HC73	
	Signetics	**74HC73**	**(3003)**
	TI	SN74HC73	
TC74HC75	**GE/RCA**	**CD74HC75**	**(2632)**
	Hitachi	HD74HC75	
	Motorola	MC74HC75	
	National	MM74HC75	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

Manufacturer Device	Replacement Source	Device	IC Master Page
Toshiba America			**(Cont'd)**
TC74HC75			(Cont'd)
	SGS	M74HC75	
	Signetics	**74HC75**	**(3003)**
	TI	SN74HC75	
TC74HC77	Hitachi	HD74HC77	
	National	MM74HC77	
	TI	SN74HC77	
TC74HCT137	CTI	74HCT137	
	GE/RCA	**CD74HCT137**	**(2632)**
	Plessey	MV74HCT137	
	SGS	M74HCT137	
	Supertex	74HCT137	
	TI	SN74HCT137	
TC74HCT138	CTI	74HCT138	
	GE/RCA	**CD74HCT138**	**(2632)**
	Hitachi	HD74HCT138	
	Mitel	MD74HCT138	
	National	MM74HCT138	
	Plessey	MV74HCT138	
	SGS	M74HCT138	
	Signetics	**74HCT138**	**(3003)**
	Sprague	SS74HCT138	
	TI	SN74HCT138	
TC74HCT240	CTI	74HCT240	
	GE/RCA	**CD74HCT240**	**(2631)**
	Hitachi	HD74HCT240	
	Micrel	MIC74HCT240	
	Motorola	MC74HCT240	
	National	MM74HCT240	
	Plessey	MV74HCT240	
	Samsung	74HCT240	
	SGS	M74HCT240	
	Signetics	**74HCT240**	**(3003)**
	Sprague	SS74HCT240	
	Supertex	SI74HCT240	
	TI	SN74HCT240	
TC74HCT241	CTI	74HCT241	
	GE/RCA	**CD74HCT241**	**(2631)**
	Hitachi	HD74HCT241	
	Micrel	MIC74HCT241	
	Motorola	MC74HCT241	
	National	MM74HCT241	
	Plessey	MV74HCT241	
	Samsung	74HCT241	
	SGS	M74HCT241	
	Signetics	**74HCT241**	**(3003)**
	Sprague	SS74HCT241	
	Supertex	SI74HCT241	
	TI	SN74HCT241	
TC74HCT244	CTI	74HCT244	
	GE/RCA	**CD74HCT244**	**(2631)**
	Hitachi	HD74HCT244	
	Micrel	MIC74HCT244	
	Motorola	MC74HCT244	
	National	MM74HCT244	
	Plessey	MV74HCT244	
	Samsung	74HCT244	
	SGS	M74HCT244	
	Signetics	**74HCT244**	**(3003)**
	Sprague	SS74HCT244	
	Supertex	SI74HCT244	
	TI	SN74HCT244	
TC74HCT245	CTI	74HCT245	
	CMD Micro	G74SC245	
	GE/RCA	**CD74HCT245**	**(2631)**
	Hitachi	HD74HCT245	
	Micrel	MIC74HCT245	
	Mitel	MD74HCT245	
	Motorola	MC74HCT245	
	National	MM74HCT245	
	Plessey	MV74HCT245	
		MV74SC245	
	SGS	M74HCT245	
	Signetics	**74HCT245**	**(3003)**
	Sprague	SS74HCT245	
	Supertex	74HCT245	
	TI	SN74HCT245	
TC74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC74HCT373			(Cont'd)
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
TC74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
TC74HCT540	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
TC74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
TC74HCT563	CTI	74HCT563	
	GE/RCA	**CD74HCT563**	**(2632)**
	Hitachi	HD74HCT563	
	Micrel	MIC74HCT563	
	Plessey	MV74HCT563	
	SGS	M74HCT563	
	Signetics	**74HCT563**	**(3003)**
	Sprague	SS74HCT563	
	TI	SN74HCT563	
TC74HCT573	CTI	74HCT573	
	GE/RCA	**CD74HCT573**	**(2632)**
	Hitachi	HD74HCT573	
	Micrel	MIC74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Signetics	**74HCT573**	**(3003)**
	Sprague	SS74HCT573	
	Supertex	74HCT573	
	TI	SN74HCT573	
TC74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
TC74HCT640	**GE/RCA**	**CD74HCT640**	**(2631)**
	Hitachi	HD74HCT640	
	Motorola	MC74HCT640	
	SGS	M74HCT640	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TC74HCT640			(Cont'd)
	Signetics	**74HCT640**	**(3003)**
	Sprague	SS74HCT640	
	TI	SN74HCT640	
TC74HCT643	**GE/RCA**	**CD74HCT643**	**(2631)**
	Hitachi	HD74HCT643	
	Motorola	MC74HCT643	
	SGS	M74HCT643	
	Signetics	**74HCT643**	**(3003)**
	TI	SN74HCT643	
TC74HCT646	**GE/RCA**	**CD74HCT646**	**(2631)**
	Hitachi	HD74HCT646	
	Signetics	**74HCT646**	**(3003)**
	TI	SN74HCT646	
TC74HCT648	**GE/RCA**	**CD74HCT648**	**(2631)**
	Hitachi	HD74HCT648	
	Signetics	**74HCT648**	**(3003)**
	TI	SN74HCT648	
TC74HCT651	Hitachi	HD74HCT651	
	TI	SN74HCT651	
TC74HCT652	Hitachi	HD74HCT652	
	TI	SN74HCT652	
TCC55417	AMD	AM91C65	
	Fujitsu	MB81C74	
		MB81C75	
	Lattice	SR4K4	
		SR64KX4	
	Toshiba	TC55417	
	Vitelic	V61C62	
TD62001	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62101	
TD62002	Exar	XR2002C	
		XR2202	
	Fairchild	MC1412	
		μA9666	
	Mitsubishi	M54525	
	Motorola	**MC1412**	**(2954)**
		ULN2002	
	NEC	μPA2002	
	Sanyo	LB1232	
	SGS	L202	
		ULN2002	
	SiliconG	SG2002	
	Sprague	**ULN2002**	**(3203)**
		ULS2002	
	TI	ULN2002	
		ULN2002A	
TD62003	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62103	
TD62004	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TD62004			(Cont'd)
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62104	
TD62006	Sanyo	LB1274	
TD62064	IPS	IP2064	
	Mitsubishi	M54532	
	Motorola	ULN2064	
	SGS	ULN2064	
	SiliconG	SG2064	
	TI	SN75064	
		ULN2064	
TD62081	**Motorola**	**ULN2801**	**(2954)**
	SGS	ULN2801	
	SiliconG	SG2801	
	Sprague	ULS2801	
TD62082	Hitachi	HM27128	
	Mitel	M5L27128	
	SGS	ULN2802	
	SiliconG	SG2802	
	Sprague	**ULN2802**	**(3203)**
		ULS2802	
	Toshiba	TMN27128	
TD62083	SGS	ULN2803	
	SiliconG	SG2803	
		SG2813	
	Sprague	**ULN2803**	**(3203)**
		ULS2803	
TD62084	**Motorola**	**ULN2804**	**(2954)**
	SGS	ULN2804	
	SiliconG	SG2804	
	Sprague	**ULN2804**	**(3203)**
		ULS2804	
TD62101	Exar	XR2001	
		XR2001C	
		XR2201	
	Fairchild	μA9665	
	Mitsubishi	M54524	
	Motorola	**MC1411**	**(2954)**
		ULN2001	
	Sanyo	LB1231	
	SGS	L201	
		ULN2001	
	SiliconG	SG2001	
		SG2021	
	Sprague	**ULN2001**	**(3203)**
		ULQ2001	
		ULS2001	
	TI	ULN2001	
		ULN2001A	
	Toshiba	TD62001	
TD62103	Exar	XR2003C	
		XR2203	
	Fairchild	MC1413	
		μA9667	
	Mitsubishi	M52523	
		M54523	
	Motorola	**MC1413**	**(2954, 2958)**
		ULN2003	
	Sanyo	LB1233	
	SGS	L203	
		ULN2003	
	Signetics	ULN2003	
	SiliconG	SG2003	
	Sprague	**ULN2003**	**(3203)**
		ULS2003	
	Telefunken	TDA2003	
	TI	ULN2003	
	Toshiba	TD62003	
TD62104	Exar	XR2204	
	Mitsubishi	M54526	
	Motorola	**MC1416**	**(2954)**
		ULN2004	
	Sanyo	LB1234	
	SGS	L204	
		ULN2004	
	Signetics	ULN2004	
	SiliconG	SG2004	
		SG2024	
	Sprague	**ULN2004**	**(3203)**
		ULS2004	
	TI	ULN2004	
		ULN2004A	
	Toshiba	TD62004	
TD62105	Mitsubishi	M54517	
	Sanyo	LB1275	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Toshiba America (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
TMP8255			(Cont'd)
	Harris	**82C55**	**(2732, 2768, 4249)**
		82C55A	**(2732, 2768, 4249)**
	Intel	8255	
		82C55	
		82C55A	
		P8255	
	NEC	μPD71055	
		μPD8255	
		μPD8255A	
	OKI	82C55	
		MSM82C55	
		MSM82C55A	
	S-MOS	SMC82C55AC	
	Toshiba	**TMP82C55**	**(3306)**
TMP8259	AMD	8259	
	Calmos	**CA82C59**	**(2553)**
	Fujitsu	MBL8259	
	Harris	**82C59**	**(2732, 2768, 4249)**
		82C59A	**(2732, 2768, 4249)**
	Intel	8259	
		82C59A	
	National	INS8259	
	NEC	μPD8259	
		μPD8259A	
	OKI	MSM82C59	
		MSM82C59A	
	S-MOS	SMC82C59AC	
TMP8355	Intel	8355	
♦ TMP8755	Intel	8755A	
	NEC	μPD8755A	
TMPZ84C00	**GoldStar**	**Z8400**	**(2691)**
		Z8430	**(2691)**
	NEC	μPD780	
	SGS	Z80ACPU	
		Z80ACTC	
		Z8400	
		Z84C00	
	Sharp	LH0080	
	Thomson	MK3880	
	Zilog	**Z8400**	**(3417)**
		Z84C00	**(3417)**
TMPZ84C10	SGS	Z84C10	
	Zilog	**Z8410**	**(3417)**
		Z84C10	**(3417)**
TMPZ84C20	SGS	Z84C20	
	Zilog	**Z84C20**	**(3417)**
TMPZ84C30	SGS	Z84C30	
	Zilog	**Z84C30**	**(3417)**
TMPZ84C40	SGS	Z84C40	
	Zilog	**Z8440**	**(3417)**
		Z84C40	**(3417)**
TMPZ84C41	SGS	Z84C41	
	Zilog	**Z84C41**	**(3417)**
TMPZ84C42	SGS	Z84C42	
	Zilog	**Z84C42**	**(3417)**
VT27C512-20	Fujitsu	MBM27512-20	
	GIM	27512-20	
	Intel	**27512-20**	**(2862)**
	Mitsubishi	M27512-20	
VT27C512-25	AMD	AM27512-25	
	Fujitsu	MBM27512-25	
	GIM	27512-25	
	Hitachi	HN27512-25	
	Intel	**27512-25**	**(2862)**
	Mitsubishi	M27512-25	

TRW LSI Products

Manufacturer Device	Replacement Source	Device	IC Master Page
MPY008H	**GoldStar**	**GL6801**	**(2701)**
	RIFA	PBL3535	
	TRW-LSI	MPY08H	
		TMC208K	
♦ MPY0121H	AD	ADSP1012	
	IDT	IDT7112	
		IDT7212	**(2806)**
♦ MPY0121H	IMI	MPY12IMI	
	LogicDev	LMU12	
	TRW-LSI	MPY012H	
MPY012H	AD	ADSP1012	
	IDT	IDT7112	
		IDT7212	**(2806)**
	IMI	MPY12IMI	
	LogicDev	LMU12	
♦ MPY016	**IDT**	**IDT7216**	**(2806, 2832)**
	LogicDev	LMU216	
	LSI Logic	L64015	
	MMI	67C7016	
	TRW-LSI	TMC216H	
		TMC216K	
MPY016H	AMD	AM29516	
		AM29C516	
	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LogicDev	LMU16	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TI	SN741616	
	TRW-LSI	MPY016K	
		TMC216H	
		TMC216K	
	Weitek	WTL1016	
		WTL1516	
		WTL2516	
MPY016K	**CTI**	**CT1487DI**	**(2554)**
	ILC-DDC	BUS63135	
MPY08H	**GoldStar**	**GL6801**	**(2701)**
	RIFA	PBL3535	
	TRW-LSI	MPY008H	
		TMC208K	
MPY08HU	AMD	AM25S557	
	AD	ADSP1080	
	IMI	H91102	
	LogicDev	LMU08	
	TRW-LSI	TMC28KU	
♦ MPY112	LogicDev	LMU112	
MPY112K	AD	ADS1012	
	LogicDev	LMU08	
♦ MPY8UH	AD	ADSP1081	
	LogicDev	LMU8U	
TDC-1018	**IDT**	**IDT75C18**	**(2807, 2834)**
TDC-1318	Brooktree	BTLOG	
	IDT	IDT7MB5038	
TDC1008	AD	ADSP1008	
TDC1009	AMD	AM29C509	
	AD	ADSP1009	
	IDT	**IDT7209**	**(2806)**
	LogicDev	LMA1009	
	TRW-LSI	TMC2009	
TDC1010	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TMC2210	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
TDC1023	LogicDev	L10C23	
TDC1030	**Cypress**	**CY7C409**	**(2567)**
TDC1043	**IDT**	**IDT7243**	**(2806)**
	LogicDev	LMA1043	
TDC1048	Brooktree	BT248	
	IDT	**IDT75C48**	**(2807, 2836)**
♦ TDC2010	AMD	AM29510	
		AMD29510	
		AMD29L510	
♦ TDC2010	AD	ADSP1010	
		ADSP1010A	**(2450)**
♦ TDC2010	**Cypress**	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
♦ TDC2010	**LSI Logic**	**L64010**	**(2868)**
		L64012	**(2868)**
♦ TDC2010	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
♦ TDC2010	TRW-LSI	TDC1010	
		TMC2210	
♦ TDC2010	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
♦ TDC2010	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
TMC2009	AMD	AM29C509	
	AD	ADSP1009	
	IDT	**IDT7209**	**(2806)**
	LogicDev	LMA1009	
	TRW-LSI	TDC1009	
♦ TMC2010	AMD	AM29510	
		AMD29510	
		AMD29L510	
♦ TMC2010	AD	ADSP1010	
		ADSP1010A	**(2450)**
♦ TMC2010	**Cypress**	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
♦ TMC2010	**LSI Logic**	**L64010**	**(2868)**
		L64012	**(2868)**
♦ TMC2010	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
♦ TMC2010	TRW-LSI	TDC1010	
		TMC2210	
♦ TMC2010	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
♦ TMC2010	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
TMC208K	**GoldStar**	**GL6801**	**(2701)**
	RIFA	PBL3535	
	TRW-LSI	MPY008H	
		MPY08H	
TMC216H	AMD	AM29516	
		AM29C516	
	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LogicDev	LMU16	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TI	SN741616	
	TRW-LSI	MPY016H	
		MPY016K	
		TMC216K	
	Weitek	WTL1016	
		WTL1516	
		WTL2516	
TMC216K	AMD	AM29516	
		AM29C516	
	AD	ADSP1016	
	Cypress	**CY7C516**	**(2569)**
	IDT	**IDT7216**	**(2806, 2832)**
	IMI	MPY16IMI	
	LogicDev	LMU16	
	LSI Logic	L64015	
	Matra-Harris	MS2516	
	TI	SN741616	
	TRW-LSI	MPY016H	
		MPY016K	
		TMC216H	
	Weitek	WTL1016	
		WTL1516	
		WTL2516	
TMC2210	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
TMC2210			(Cont'd)
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
	VLSI Tech	VL2010	
	Waferscale	**WS59510**	**(3376)**
		WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
TMC28KU	AMD	AM25S557	
	AD	ADSP1080	
	IMI	H91102	
	LogicDev	LMU08	
	TRW-LSI	MPY08HU	

United Microelectronics (UMC)

Manufacturer Device	Replacement Source	Device	IC Master Page
23C256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	VLSI Tech	23257	
		VT23256	
		VT23257	
♦ UM2128	AMD	AM9128	
		AM9218	
♦ UM2128	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ UM2128	Fujitsu	MB8128	
		MB8416	
♦ UM2128	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ UM2128	Hitachi	HM6116	
		HM6166	
♦ UM2128	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ UM2128	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ UM2128	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ UM2128	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ UM2128	National	MMC2116	
	NEC	μPD4016	
		μPD446	
♦ UM2128	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ UM2128	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ UM2128	Sprague	883C21C16	
		BCM20C16	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

United Microelectronics (UMC) (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ UM2128	Sprague	(Cont'd)	
		BCM21C16	
		SCM21C16	
♦ UM2128	Stantel-STC	STC6116	
		STC6166	
♦ UM2128	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ UM2128	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ UM2128	Vitelic	V61C16	
		V62C16	
UM2148	AMD	AM2148	
		AM2149	
	Cypress	CY2148	
		CY2149	
		CY7C148	**(2562, 2564)**
		CY7C149	**(2564)**
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2148H	
		2149H	
	National	NMC2148	
	Thomson	ET2148	
UM23128	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
UM2333	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	VLSI Tech	VT2332	
UM2366	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
UM2366			(Cont'd)
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	VLSI Tech	VT2365	
UM5089	Gould	S25089	
	ITT	SBA5089	
	National	TP5089	
	Samsung	MK5089	
	Sharp	LR4089	
	Stantel-STC	STC5089	
	TI	TCM5089	
	Thomson	MK5089	
UM6104	AMD	AM9124	
	CMD Micro	G2114	
	Fujitsu	MB8114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Hitachi	6148	
	Intel	5114	
	Matra-Harris	HM6514	
	Mitsubishi	58981	
	Motorola	6514	
	National	NM2148	
	OKI	5114	
		MSM2114	
	Rockwell	R6514	
	S-MOS	**SRM2114**	**(3201)**
	Sanyo	LC3514	
	Signetics	5114	
	Sprague	BCM21C14	
		SCM5114	
	Toshiba	TC5513	
		TC5514	
		TMM2114	
UM6114	AMD	AM9114	
		AM9124	
	Fairchild	F2114	
	Harris	**HM6514**	**(2704, 2762, 2768)**
	Intel	2114A	
	Mitel	MD21SC14	
	Mitsubishi	M5L2114	
	Motorola	M5L2114	
		MCM2114	
		MCM21L14	
	National	NMC2114A	
	NEC	μPD2114	
		μPD6514	
	OKI	MSM2114	
		MSM5114	
	S-MOS	**SRM2114**	**(3201)**
	Sharp	**LH2114**	**(2993)**
	Sprague	BCM2114	
		BCM21C14	
		SCM2114A	
		SCM21C14	
	Toshiba	TC5514	
		TMM2114A	
		TMM314A	
UM6116	Fujitsu	MB8416	
	GE/RCA	**CDM6116**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hyundai	**HY6116**	**(2770)**
		HY61C16	**(2770)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65163	
	Mitel	M5M5116	
	Mitsubishi	5117	
		M5M8725	
	Motorola	MCM2016	
		MCM6116	
	National	6116	
	OKI	MSM2128	
		MSM5128	
	S-MOS	**SRM2016**	**(3201)**
	Sharp	**LH5115**	**(2993)**
	Sprague	BCM21C16	
		SCM2116	
	Stantel-STC	STC6166	
	TI	SMJ68CE16	
	Thomson	ETL2128	
		MK6116	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
UM6116			(Cont'd)
	Toshiba	TC5516	
		TC5517	
		TC5517A	
		TC5517B	
	Vitelic	V61C16	
		V62C16	
UM6167	Cypress	AM2167	
		CY7C167	**(2562)**
	Fujitsu	MB8164A	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Hitachi	HM6167H	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
	Intel	51C66	
		51C67	
	Matra-Harris	HM65262	
		HM65263	
	Motorola	MCM2167	
	NEC	μPD2167	
		μPD4311	
	Sharp	**LH5167**	**(2993)**
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
	Vitelic	V61C67	
	VLSI Tech	**VT20C68**	**(3349)**
UM6168	AMD	AM2168	
		AM99C68	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
	Fujitsu	MB8168	
		MB81C68	
	Inmos	IMS1420	
		IMS1421	
		IMS1423	**(2783)**
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6168	**(2802)**
	Intel	51C68	
	Matra-Harris	HM65681	
		HM65682	
	Mitsubishi	M5M2168	
		M5M21C68	
	Motorola	MCM1423	
		MCM61L64	
		MCM6268	
	NEC	μPD4134	
		μPD4314	
	Panatech	PS6168	
	Performance	P4C188	
	S-MOS	**SRM2268**	**(3201)**
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
		SMJ64C64	
	Thomson	**MK41H68**	**(3265)**
	Vitelic	V61C68	
	VLSI Tech	CT64KS4	
		VT20C19	**(3347)**
UM9216	SMC	FDC9216	
		FDC92C36	
	Western	FD9216	
		FD92C32	

Unitrode

L295	SGS	L295	
L296	SGS	L296	
L298	SGS	L298	
	TI	L298	
		TLP298	
PIC600	SiliconG	SM600	
	Unitrode	PIC7501	
		PIC7519	
PIC601	SiliconG	SM601	
	Unitrode	PIC7502	
		PIC7520	
PIC602	SiliconG	SM602	
	Unitrode	PIC7503	
PIC610	SiliconG	SM610	
	Unitrode	PIC7504	
		PIC7522	
PIC611	SiliconG	SM611	
	Unitrode	PIC7505	
		PIC7523	
PIC612	SiliconG	SM612	
	Unitrode	PIC7506	
		PIC7524	
PIC625	SiliconG	SM625	
	Unitrode	PIC7507	
		PIC7525	
PIC626	SiliconG	SM626	
	Unitrode	PIC7508	
		PIC7526	
PIC627	SiliconG	SM627	
	Unitrode	PIC7509	
		PIC7527	
PIC635	SiliconG	SM635	
	SiliconSys	SSI980	
	Teltone	M957	
	Unitrode	PIC7510	
		PIC7528	
PIC636	SiliconG	SM636	
	SiliconSys	SSI981	
	Teltone	M980	
		M981	
	Unitrode	PIC7511	
		PIC7529	
PIC637	SiliconG	SM637	
	Unitrode	PIC7512	
		PIC7530	
PIC645	SiliconG	SM645	
	Unitrode	PIC7513	
		PIC7531	
PIC646	SiliconG	SM646	
	Unitrode	PIC7514	
		PIC7532	
PIC647	SiliconG	SM647	
	Unitrode	PIC7515	
		PIC7533	
PIC655	SiliconG	SM655	
	Unitrode	PIC7516	
		PIC7534	
PIC656	IMI	MPY012	
	SiliconG	SM656	
	Unitrode	PIC7517	
		PIC7535	
PIC657	SiliconG	SM657	
	Unitrode	PIC7518	
PIC7501	SiliconG	SM600	
	Unitrode	PIC600	
		PIC7519	
PIC7502	SiliconG	SM601	
	Unitrode	PIC601	
		PIC7520	
PIC7503	SiliconG	SM602	
	Unitrode	PIC602	
PIC7504	SiliconG	SM610	
	Unitrode	PIC610	
		PIC7522	
PIC7505	SiliconG	SM611	
	Unitrode	PIC611	
		PIC7523	
PIC7506	SiliconG	SM612	
	Unitrode	PIC612	
		PIC7524	
PIC7507	SiliconG	SM625	
	Unitrode	PIC625	
		PIC7525	
PIC7508	SiliconG	SM626	
	Unitrode	PIC626	
		PIC7526	
PIC7509	SiliconG	SM627	
	Unitrode	PIC627	
		PIC7527	
PIC7510	SiliconG	SM635	
	SiliconSys	SSI980	
	Teltone	M957	
	Unitrode	PIC635	
		PIC7528	
PIC7511	SiliconG	SM636	
	SiliconSys	SSI981	
	Teltone	M980	
		M981	
	Unitrode	PIC636	
		PIC7529	
PIC7512	SiliconG	SM637	
	Unitrode	PIC637	
		PIC7530	
PIC7513	SiliconG	SM645	
	Unitrode	PIC645	
		PIC7531	
PIC7514	SiliconG	SM646	
	Unitrode	PIC646	
		PIC7532	
PIC7515	SiliconG	SM647	
	Unitrode	PIC647	
		PIC7533	

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
Unitrode			**(Cont'd)**
PIC7516	SiliconG	SM655	
	Unitrode	PIC655	
		PIC7534	
PIC7517	IMI	MPY012	
	SiliconG	SM656	
	Unitrode	PIC656	
		PIC7535	
PIC7518	SiliconG	SM657	
	Unitrode	PIC657	
PIC7519	SiliconG	SM600	
	Unitrode	PIC600	
		PIC7501	
PIC7520	SiliconG	SM601	
	Unitrode	PIC601	
		PIC7502	
PIC7522	SiliconG	SM610	
	Unitrode	PIC610	
		PIC7504	
PIC7523	SiliconG	SM611	
	Unitrode	PIC611	
		PIC7505	
PIC7524	SiliconG	SM612	
	Unitrode	PIC612	
		PIC7506	
PIC7525	SiliconG	SM625	
	Unitrode	PIC625	
		PIC7507	
PIC7526	SiliconG	SM626	
	Unitrode	PIC626	
		PIC7508	
PIC7527	SiliconG	SM627	
	Unitrode	PIC627	
		PIC7509	
PIC7528	SiliconG	SM635	
	SiliconSys	SSI980	
	Teltone	M957	
	Unitrode	PIC635	
		PIC7510	
PIC7529	SiliconG	SM636	
	SiliconSys	SSI981	
	Teltone	M980	
		M981	
	Unitrode	PIC636	
		PIC7511	
PIC7530	SiliconG	SM637	
	Unitrode	PIC637	
		PIC7512	
PIC7531	SiliconG	SM645	
	Unitrode	PIC645	
		PIC7513	
PIC7532	SiliconG	SM646	
	Unitrode	PIC646	
		PIC7514	
PIC7533	SiliconG	SM647	
	Unitrode	PIC647	
		PIC7515	
PIC7534	SiliconG	SM655	
	Unitrode	PIC655	
		PIC7516	
PIC7535	IMI	MPY012	
	SiliconG	SM656	
	Unitrode	PIC656	
		PIC7517	
UC117	Fairchild	µA117	
	IPS	**IP117**	**(2854)**
	LinearTech	LM117	
	MCE	MCELM117	
	Motorola	**LM117**	**(2929)**
	National	LM117	
	SiliconG	SG117	
	TI	TL117	
	Thomson	LM117	
UC120-05	SiliconG	SG120-05	
UC120-12	**IPS**	**IP120-12**	**(2854)**
	National	LM120-12	
	SiliconG	SG120-12	
UC120-15	**IPS**	**IP120-15**	**(2854)**
	National	LM120-15	
	SiliconG	SG120-15	
UC137	**IPS**	**IP137**	**(2854)**
	LinearTech	LM137	
		LT137	
	MCE	MCELM137	
	Motorola	**LM137**	**(2929)**
	National	LM137	
	SiliconG	SG137	
		SG137A	
	Thomson	LM137	
UC140-05	National	LM140-05	
	SiliconG	SG140-05	

Manufacturer Device	Replacement Source	Device	IC Master Page
UC140-12	**IPS**	**IP140-12**	**(2854)**
	Motorola	**LM140-12**	**(2926, 2928)**
	National	LM140-12	
	SiliconG	SG140-12	
UC140-15	**IPS**	**IP140-15**	**(2854)**
	Motorola	**LM140-15**	**(2926, 2928)**
	National	LM140-15	
	SiliconG	SG140-15	
UC150	**IPS**	**IP150**	**(2854)**
	LinearTech	LM150	
		LT150	
	Motorola	**LM150**	**(2929)**
	National	LM150	
	SiliconG	SG150	
UC1524	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	µA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	
	National	LM1524	
	SGS	SG1524	
		UC1524A	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524A**	**(3323)**
UC1524A	Cherry	CS1524	
	Exar	XR1524	
	Fairchild	µA1524	
	IPS	**IP1524**	**(2854)**
	LinearTech	LT1524	
		SG1524	
	National	LM1524	
	SGS	SG1524	
		UC1524A	
	SiliconG	SG1524	
		SG1524B	
	Unitrode	**UC1524**	**(3323)**
UC1525	Cherry	CS1525A	
	Exar	**XR1525A**	**(2607)**
	IPS	**IP1525A**	**(2854)**
	LinearTech	LT1525A	
	Motorola	**SG1525A**	**(2931)**
	SGS	SG1524A	
	SiliconG	SG1525A	
	Siliconix	PWM125	
	Unitrode	**UC1525A**	**(3323)**
UC1525A	Cherry	CS1525A	
	Exar	**XR1525A**	**(2607)**
	IPS	**IP1525A**	**(2854)**
	LinearTech	LT1525A	
	Motorola	**SG1525A**	**(2931)**
	SGS	SG1524A	
	SiliconG	SG1525A	
	Siliconix	PWM125	
	Unitrode	**UC1525**	**(3323)**
UC1526	Cherry	CH1526	
	IPS	**IP1526**	**(2854, 2856)**
	LinearTech	LT1526	
	Motorola	**SG1526**	**(2931)**
		SG3526	**(2931)**
	SiliconG	SG1526	
		SG3525	
		SG3526	
UC1527	Cherry	CS1527	
	LinearTech	LT1527	
		SG1527	
	SiliconG	1526	
		SG1527	
	TI	TL1527	
UC1527A	Cherry	CS1527A	
	IPS	**IP1527A**	**(2854)**
	LinearTech	LT1527A	
	Motorola	**SG1527A**	**(2931)**
	SGS	SG1527A	
	SiliconG	SG1527A	
	Siliconix	PWM27	
UC1532	SiliconG	SG1532	
		SG1544	
		SG2532	
	Unitrode	**UC1544**	**(3324)**
UC1543	Exar	XR1543	
	IPS	IP1543	
	SiliconG	SG1543	
UC1544	SiliconG	SG1532	
		SG1544	
		SG2532	
	Unitrode	UC1532	

Manufacturer Device	Replacement Source	Device	IC Master Page
UC1840	SGS	UC1840	
	SiliconG	SG1840	
UC1842	Cherry	CS1842	
	IPS	**IP1842**	**(2854, 2856)**
	LinearTech	LT1842	
	SiliconG	SG1842	
UC1843	Cherry	CS1843	
	IPS	**IP1843**	**(2854)**
	LinearTech	LT1843	
	SiliconG	SG1843	
UC1844-45	IPS	1844-45	
	SGS	UC1844-45	
UC1846	LinearTech	UC1846	
	National	DM54ALS468	
		DM54AS1034	
	SiliconG	SG1846	
	TI	SN54AS1034A	
UC1847	LinearTech	UC1847	
	National	DM54ALS521	
		DM54AS04	
	SiliconG	SG1847	
	TI	SN54ALS688	
		SN54AS04	
UC217	**IPS**	**IP217**	**(2854)**
	MCE	MCELM217	
	Motorola	**LM217**	**(2929)**
	National	LM217	
	SGS	LM217	
	SiliconG	SG217	
		SG217A	
	Thomson	LM217	
UC237	**IPS**	**IP237**	**(2854)**
	MCE	MCELM237	
	Motorola	**LM237**	**(2929)**
	National	LM237	
	SiliconG	SG237	
		SG237A	
UC250	**IPS**	**IP250**	**(2854)**
	Motorola	**LM250**	**(2929)**
	National	LM250	
	SiliconG	SG250	
UC2524	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	µA2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524A**	**(3323)**
UC2524A	Cherry	CS2524	
	Exar	XR2524	
	Fairchild	µA2524	
	IPS	IP2524	
	LinearTech	LT2524	
		SG2524	
	National	LM2524	
	SGS	SG2524	
		UC2524A	
	SiliconG	SG2524	
		SG2524B	
	TI	SG2524	
	Unitrode	**UC2524**	**(3323)**
UC2525	Cherry	CS2525	
	SiliconG	SG2525	
	TI	TL2525	
UC2525A	Cherry	CS2525A	
	Exar	**XR2525A**	**(2607)**
	IPS	IP2525A	
	LinearTech	LT2525A	
	Motorola	**SG2525A**	**(2931)**
	SiliconG	SG2525A	
	Siliconix	PWM25B	
	TI	SG2525A	
UC2526	Cherry	CS2526	
	IPS	**IP2526**	**(2856)**
	LinearTech	LT2526	
	Motorola	**SG2526**	**(2931)**
	SiliconG	SG2526	
		SG2527	
UC2527	Cherry	CS2527	
	SiliconG	SG2527	
	TI	TL2527	
UC2527A	Cherry	CS2527A	
	Exar	**XR2527A**	**(2607)**
	IPS	IP2527A	
	LinearTech	LT2527A	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
UC2527A			(Cont'd)
	Motorola	**SG2527A**	**(2931)**
	SiliconG	SG2527A	
	TI	SG2527A	
UC2540	SiliconG	SG2540	
UC2543	Exar	XR2543	
	IPS	IP2543	
	SiliconG	SG2543	
UC2544	IPS	IP2544	
	SiliconG	SG2544	
UC2840	SGS	UC2840	
	SiliconG	SG2840	
UC2842	Cherry	CS2842A	
		CS3842A	
	SiliconG	SG2842	
UC2843	**IPS**	**IP2843**	**(2856)**
	SiliconG	SG2843	
UC2846	National	DM54ALS519	
		DM54AS1036	
	SiliconG	SG2846	
	TI	SN54AS1036A	
UC2847	National	DM54ALS522	
		DM54AS32	
	SiliconG	SG2847	
	TI	SN54ALS522	
		SN54AS32	
UC317	Fairchild	µA317	
	IPS	**IP317**	**(2854)**
	LinearTech	LM317	
	MCE	MCELM317	
	Motorola	**LM317**	**(2929)**
	National	LM317	
	SGS	LM317	
	SiliconG	SG317	
	TI	LM317	
	Thomson	LM317	
		TDB0117	
UC320-05	Fairchild	µA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	µA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	µPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	µA7905	
	Unitrode	**UC7905**	**(3325)**
UC320-12	National	LM320-12	
	SiliconG	SG320-12	
UC320-15	Fairchild	µA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	µA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	µPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	µA7915	
	Thomson	µA7915	
	Toshiba	TA79015	
	Unitrode	**UC7915**	**(3325)**
UC337	**IPS**	**IP337**	**(2854)**
	LinearTech	LM337	
		LT337	
	MCE	MCELM337	
	Motorola	**LM337**	**(2929)**
	National	LM337	
	SiliconG	SG337	
		SG337A	
	TI	LM337	
	Thomson	LM337	
UC340-05	Ferranti	ZN503	
	Motorola	**LM340-05**	**(2926, 2928)**
	National	LM340-5	
	SiliconG	SG340-05	
	SiliconSys	SSI6072M	

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Unitrode (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
UC340-12	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	**UC7812**	**(3325)**
UC340-15	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	**UC7815**	**(3325)**
UC350	Fairchild	μA350	
		μA78HGA	
	IPS	**IP350**	**(2854)**
	LinearTech	LM350	
		LT350	
	Motorola	**LM350**	**(2929)**
	National	LM350	
	SiliconG	SG350	
	TI	LM350	
UC3524	Fairchild	μA3524	
	LinearTech	SG3524	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
		SG3525A	
	TI	SG3525	
	Unitrode	**UC3524A**	**(3323)**
UC3524A	Cherry	CS3524	
	Exar	XR3524	
	GE/RCA	**CA3524**	**(2650)**
	IPS	**IP3524**	**(2854)**
		IP3524B	**(2854)**
	LinearTech	LT3524	
	National	LM3524	
	SGS	SG3524	
		UC3524A	
	Signetics	SG3524	
	SiliconG	SG3524	
		SG3524B	
	TI	SG3524	
	Toshiba	TA76524	
UC3525	LinearTech	LT3525	
		SG3525	
	SiliconG	SG3525	
UC3525A	Cherry	CS3525A	
	Exar	**XR3525A**	**(2607)**
	IPS	**IP3525A**	**(2854)**
	LinearTech	LT3525A	
	Motorola	**SG3525A**	**(2931)**
	RIFA	RL3525A	
	SGS	SG3525A	
	SiliconG	SG3525A	
	Siliconix	PWM25	
	TI	SG3525A	
UC3526	**IPS**	**IP3526**	**(2854, 2856)**
	LinearTech	LT3526	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
UC3526			(Cont'd)
	SiliconG	SG3526	
	Unitrode	UC3626	
UC3527A	LinearTech	LT3527	
		SG3527	
	SiliconG	SG3527	
		SG3527A	
	TI	SG3527	
UC3543	Exar	XR3543	
	IPS	IP3543	
	SiliconG	SG3543	
UC3544	IPS	IP3544	
	SiliconG	SG3544	
UC3626	**IPS**	**IP3526**	**(2854, 2856)**
	LinearTech	LT3526	
	SiliconG	SG3526	
	Unitrode	**UC3526**	**(3323)**
UC3717	RIFA	PBL3717	
	SGS	PBL3717	
	Thomson	TA3717	
UC3770	RIFA	PBL3770	
UC3840	SGS	UC3840	
UC3842	SGS	UC3842	
	SiliconG	SG3842	
UC3843	**IPS**	**IP3843**	**(2854, 2856)**
	SiliconG	SG3843	
UC3846	LinearTech	UC3846	
	RIFA	RL3846	
	SiliconG	SG3846	
UC3847	LinearTech	UC3847	
	SiliconG	SG3847	
UC493A	Motorola	TL493	
UC494A	Cherry	CS494M	
	Exar	XR494	
	IPS	**IP494A**	**(2854)**
	Motorola	**TL494**	**(2931)**
	TI	TL494M	
		TL594M	
UC494AC	**IPS**	**IP494C**	**(2854)**
	TI	TL494C	
		TL594C	
UC495A	TI	TLS9SM	
UC495AC	TI	TL495C	
UC526	**IPS**	**IP1526**	**(2854, 2856)**
	SiliconG	SG1526	
UC7805	Fairchild	μA7805	
	GoldStar	GL7805	
	Gould	μA7805	
	IPS	**IP7805**	**(2854)**
	National	LM340-5	
		LM7805	
	Samsung	MC7805	
	SiliconG	SG7805	
		SG7805A	
	TI	μA7805	
	Toshiba	TA78005	
		TA79005	
UC7812	Fairchild	μA7812	
	GoldStar	GL7812	
	IPS	**IP140-12**	**(2854)**
		IP340-12	**(2854)**
		IP7812	**(2854)**
	Motorola	**LM340-12**	**(2926, 2928)**
		MC7812	**(2927)**
	National	LM340-12	
		LM7812	
	NEC	μPC7812	
	Samsung	MC7812	
	SGS	L7812	
	SiliconG	SG340-12	
		SG7812	
		SG7812A	
	TI	μA7812	
	Toshiba	TA78012	
	Unitrode	UC340-12	
UC7815	Fairchild	μA78L15	
	GoldStar	GL7815	
	Gould	μA7815	
	Hitachi	HA17185	
	IPS	**IP140-15**	**(2854)**
		IP340-15	**(2854)**
		IP7815	**(2854)**
	Lambda	LAS1515	
	Motorola	**LM340-15**	**(2926, 2928)**
		MC7815	**(2928)**
	National	LM340-15	
		LM7815	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
UC7815			(Cont'd)
	NEC	μPC7815	
	Samsung	MC7815	
	SGS	L7815	
	SiliconG	SG340-15	
		SG7815	
		SG7815A	
	TI	LM340-15	
		μA7815	
	Thomson	μA7815	
	Toshiba	TA78015	
	Unitrode	UC340-15	
UC7905	Fairchild	μA79M05	
	GoldStar	**GL7905**	**(2701)**
	Gould	μA7905	
	IPS	**IP120-5**	**(2854)**
		IP320-5	**(2854)**
		IP7905	**(2854)**
	National	LM120	
		LM320-05	
		LM7905	
		LM79M05	
	NEC	μPC7905	
	SiliconG	SG120-5	
		SG320-05	
		SG7905	
		SH12005	
	TI	μA7905	
	Unitrode	UC320-05	
UC7915	Fairchild	μA7915	
	GoldStar	**GL7915**	**(2701)**
	Gould	μA7915	
	IPS	**IP320-15**	**(2854)**
		IP7915	**(2854)**
	Motorola	**MC7915**	**(2928)**
	National	LM320-15	
		LM320T15	
		LM7915	
	NEC	μPC7915	
	Samsung	MC7915	
	SGS	L7915	
	SiliconG	SG320-15	
		SG7915	
		SG7915A	
	TI	μA7915	
	Thomson	μA7915	
	Toshiba	TA79015	
	Unitrode	UC320-15	
μC5170	Signetics	NE5170	

Universal Semiconductor, Inc.

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ UM2332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
♦ UM2332	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
♦ UM2332	Signetics	2332	
		2632A	
♦ UM2332	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
♦ UM2332	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
	VLSI Tech	VT2332	
♦ UM2333	Amperex	AM9233	
	Commodore	MPS2333	
	Fairchild	F3533	
	GIM	RO3-9333	
	Gould	S2333	
	Signetics	2332	
	Supertex	23C32	
♦ UM2333-30	Amperex	AM9233	
	Commodore	MPS2333	
	Fairchild	F3533	
	GIM	RO3-9333	
	Gould	S2333	
	Signetics	2332	
	Supertex	23C32	
♦ UM2532	Hitachi	HN462532	
	National	MM2532	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ UM2532	National		(Cont'd)
		NMC2532	
		TDA2530	
		TDA2532	
♦ UM2532	Plessey	TDA2530	
♦ UM2732	AMD	AM2732	
	Hitachi	HN462732	
	Intel	2732	
		2732A	
		M2732	
♦ UM2732	National	MM2732	
		NMC2732	
♦ UM2732	NEC	μPD2732	
	OKI	MSM2732	
	SGS	M2732A	
	TI	**TMS2732A**	**(3257)**
	Toshiba	TMM324C	
♦ US574HC133	AMD	AM9128	
		AM9218	
♦ US574HC133	**Cypress**	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
♦ US574HC133	Fujitsu	MB8128	
		MB8416	
♦ US574HC133	**GE/RCA**	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
♦ US574HC133	Hitachi	HM6116	
		HM6166	
♦ US574HC133	**Hyundai**	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
♦ US574HC133	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
♦ US574HC133	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
♦ US574HC133	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
♦ US574HC133	National	MMC2116	
	NEC	μPD4016	
		μPD446	
♦ US574HC133	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
♦ US574HC133	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
♦ US574HC133	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
♦ US574HC133	Stantel-STC	STC6116	
		STC6166	
♦ US574HC133	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
♦ US574HC133	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
♦ US574HC133	Vitelic	V61C16	
		V62C16	
♦ US74HC00	**GE/RCA**	**CD74HC00**	**(2631)**
	Hitachi	HD74HC00	
	Motorola	MC74HC00	
	National	MM74HC00	
	SGS	M74HC00	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Universal Semiconductor, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ US74HC00			(Cont'd)
	Signetics	**74HC00**	**(3003)**
	TI	SN74HC00	
	Toshiba	TC40H000	
♦ US74HC02	**GE/RCA**	**CD74HC02**	**(2631)**
	Hitachi	HD74HC02	
	Motorola	MC74HC02	
	National	MM74HC02	
	SGS	M74HC02	
	Signetics	**74HC02**	**(3003)**
	TI	SN74HC02	
	Toshiba	TC40H002	
♦ US74HC03	**GE/RCA**	**CD74HC03**	**(2631)**
	Motorola	MC74HC03	
	National	MM74HC03	
	SGS	M74HC03	
	TI	SN74HC03	
	Toshiba	**TC74HC03**	**(3307)**
♦ US74HC08	**GE/RCA**	**CD74HC08**	**(2631)**
	Hitachi	HD74HC08	
	Motorola	MC74HC08	
	National	MM74HC08	
	SGS	M74HC08	
	Signetics	**74HC08**	**(3003)**
	TI	SN74HC08	
♦ US74HC10	**GE/RCA**	**CD74HC10**	**(2631)**
	Hitachi	HD74HC10	
	Motorola	MC74HC10	
	National	MM74HC10	
	SGS	M74HC10	
	Signetics	**74HC10**	**(3003)**
	TI	SN74HC10	
	Toshiba	TC40H010	
♦ US74HC107	**GE/RCA**	**CD74HC107**	**(2631)**
	Hitachi	HD74HC107	
	Motorola	MC74HC107	
	National	MM74HC107	
	SGS	M74HC107	
	Signetics	**74HC107**	**(3003)**
	TI	SN74HC107	
	Toshiba	TC40H107	
♦ US74HC109	**GE/RCA**	**CD74HC109**	**(2631)**
	Hitachi	HD74HC109	
	Motorola	MC74HC109	
	National	MM74HC109	
	SGS	M74HC109	
	Signetics	**74HC109**	**(3003)**
	TI	SN74HC109	
	Toshiba	**TC74HC109**	**(3307)**
♦ US74HC11	**GE/RCA**	**CD74HC11**	**(2631)**
	Hitachi	HD74HC11	
	Motorola	MC74HC11	
	National	MM74HC11	
	SGS	M74HC11	
	Signetics	**74HC11**	**(3003)**
	TI	SN74HC11	
	Toshiba	TC40H011	
♦ US74HC112	**GE/RCA**	**CD74HC112**	**(2631)**
	Hitachi	HD74HC112	
	Motorola	MC74HC112	
	National	MM74HC112	
	SGS	M74HC112	
	Signetics	**74HC112**	**(3003)**
	TI	SN74HC112	
♦ US74HC113	Hitachi	HD74HC113	
	Motorola	MC74HC113	
	National	MM74HC113	
	SGS	M74HC113	
	TI	SN74HC113	
♦ US74HC123	Hitachi	HD74HC123	
	Motorola	MC74HC123A	
	National	MM74HC123	
	SGS	M74HC123	
	Signetics	**74HC123**	**(3003)**
	TI	SN74HC123	
♦ US74HC125	**GE/RCA**	**CD74HC125**	**(2631)**
	Hitachi	HD74HC125	
	Motorola	MC74HC125	
	National	MM74HC125	
	SGS	M74HC125	
	TI	SN74HC125	
	Toshiba	**TC74HC125**	**(3307)**
♦ US74HC126	**GE/RCA**	**CD74HC126**	**(2631)**
	Hitachi	HD74HC126	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ US74HC126			(Cont'd)
	Motorola	MC74HC126	
	National	MM74HC126	
	SGS	M74HC126	
	Toshiba	**TC74HC126**	**(3307)**
♦ US74HC132	**GE/RCA**	**CD74HC132**	**(2631)**
	Hitachi	HD74HC132	
	Motorola	MC74HC132	
	National	MM74HC132	
	SGS	M74HC132	
	Signetics	**74HC132**	**(3003)**
	TI	SN74HC132	
♦ US74HC133	Motorola	MC74HC133	
	National	MM74HC133	
	SGS	M74HC133	
	TI	SN74HC133	
♦ US74HC137	Hitachi	HD74HC137	
	Motorola	MC74HC137	
	National	MM74HC137	
	SGS	M74HC137	
	Toshiba	**TC74HC137**	**(3307)**
♦ US74HC138	**GE/RCA**	**CD74HC138**	**(2632)**
	Hitachi	HD74HC138	
	Motorola	MC74HC138	
	National	MM74HC138	
	SGS	M74HC138	
	Signetics	**74HC138**	**(3003)**
	Sprague	SS74HC138	
	TI	SN74HC138	
♦ US74HC139	**GE/RCA**	**CD74HC139**	**(2632)**
	Hitachi	HD74HC139	
	National	MM74HC139	
	SGS	M74HC139	
	Signetics	**74HC139**	**(3003)**
	Sprague	SS74HC139	
	TI	SN74HC139	
	Toshiba	TC40H139	
♦ US74HC14	**GE/RCA**	**CD74HC14**	**(2631)**
	Hitachi	HD74HC14	
	Motorola	MC74HC14	
	National	MM74HC14	
	SGS	M74HC14	
	Signetics	**74HC14**	**(3003)**
	TI	SN74HC14	
♦ US74HC147	**GE/RCA**	**CD74HC147**	**(2632)**
	Hitachi	HD74HC147	
	Motorola	MC74HC147	
	National	MM74HC147	
	SGS	M74HC147	
	Signetics	**74HC147**	**(3003)**
	TI	SN74HC147	
US74HC151	**GE/RCA**	**CD74HC151**	**(2632)**
	Hitachi	HD74HC151	
	Motorola	MC74HC151	
	National	MM74HC151	
	SGS	M74HC151	
	Signetics	**74HC151**	**(3003)**
	TI	SN74HC151	
♦ US74HC153	**GE/RCA**	**CD74HC153**	**(2632)**
	Hitachi	HD74HC153	
	Motorola	MC74HC153	
	National	MM74HC153	
	SGS	M74HC153	
	Signetics	**74HC153**	**(3003)**
	TI	SN74HC153	
	Toshiba	TC40H153	
♦ US74HC154	**GE/RCA**	**CD74HC154**	**(2632)**
	Hitachi	HD74HC154	
	Motorola	MC74HC154	
	National	MM74HC154	
	SGS	M74HC154	
	Signetics	**74HC154**	**(3003)**
	TI	SN74HC154	
♦ US74HC157	**GE/RCA**	**CD74HC157**	**(2632)**
	Hitachi	HD74HC157	
	Motorola	MC74HC157	
	National	MM74HC157	
	SGS	M74HC157	
	Signetics	**74HC157**	**(3003)**
	TI	SN74HC157	
	Toshiba	TC40H157	
♦ US74HC158	**GE/RCA**	**CD74HC158**	**(2632)**
	Hitachi	HD74HC158	
	Motorola	MC74HC158	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ US74HC158			(Cont'd)
	National	MM74HC158	
	SGS	M74HC158	
	Signetics	**74HC158**	**(3003)**
	TI	SN74HC158	
	Toshiba	TC40H158	
♦ US74HC160	**GE/RCA**	**CD74HC160**	**(2632)**
	Motorola	MC74HC160	
	National	MM74HC160	
	SGS	M74HC160	
	Signetics	**74HC160**	**(3003)**
	TI	SN74HC160	
♦ US74HC161	**GE/RCA**	**CD74HC161**	**(2632)**
	Hitachi	HD74HC161	
	Motorola	MC74HC161	
	National	MM74HC161	
	SGS	M74HC161	
	Signetics	**74HC161**	**(3003)**
	TI	SN74HC161	
♦ US74HC162	**GE/RCA**	**CD74HC162**	**(2632)**
	Hitachi	HD74HC162	
	Motorola	MC74HC162	
	National	MM74HC162	
	SGS	M74HC162	
	Signetics	**74HC162**	**(3003)**
	TI	SN74HC162	
♦ US74HC163	**GE/RCA**	**CD74HC163**	**(2632)**
	Hitachi	HD74HC163	
	Motorola	MC74HC163	
	National	MM74HC163	
	SGS	M74HC163	
	Signetics	**74HC163**	**(3003)**
	TI	SN74HC163	
♦ US74HC164	**GE/RCA**	**CD74HC164**	**(2631)**
	Hitachi	HD74HC164	
	Motorola	MC74HC164	
	National	MM74HC164	
	SGS	M74HC164	
	Signetics	**74HC164**	**(3003)**
	TI	SN74HC164	
♦ US74HC165	**GE/RCA**	**CD74HC165**	**(2631)**
	Hitachi	HD74HC165	
	Motorola	MC74HC165	
	National	MM74HC165	
	SGS	M74HC165	
	Signetics	**74HC165**	**(3003)**
	TI	SN74HC165	
♦ US74HC166	**GE/RCA**	**CD74HC166**	**(2631)**
	SGS	M74HC166	
	Signetics	**74HC166**	**(3003)**
	TI	SN74HC166	
♦ US74HC173	**GE/RCA**	**CD74HC173**	**(2631)**
	Hitachi	HD74HC173	
	Motorola	MC74HC173	
	National	MM74HC173	
	SGS	M74HC173	
	Signetics	**74HC173**	**(3003)**
	TI	SN74HC173	
♦ US74HC174	**GE/RCA**	**CD74HC174**	**(2631)**
	Hitachi	HD74HC174	
	Motorola	MC74HC174	
	National	MM74HC174	
	SGS	M74HC174	
	Signetics	**74HC174**	**(3003)**
	TI	SN74HC174	
	Toshiba	TC40H174	
♦ US74HC175	**GE/RCA**	**CD74HC175**	**(2631)**
	Hitachi	HD74HC175	
	Motorola	MC74HC175	
	National	MM74HC175	
	SGS	M74HC175	
	Signetics	**74HC175**	**(3003)**
	TI	SN74HC175	
	Toshiba	TC40H175	
♦ US74HC190	**GE/RCA**	**CD74HC190**	**(2632)**
	Hitachi	HD74HC190	
	Motorola	MC74HC190	
	SGS	M74HC190	
	Signetics	**74HC190**	**(3003)**
		PC74HC190	
		PCF74HC190	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ US74HC190	TI	SN74HC190	
	Toshiba	**TC74HC190**	**(3307)**
♦ US74HC191	**GE/RCA**	**CD74HC191**	**(2632)**
	Hitachi	HD74HC191	
	Motorola	MC74HC191	
	SGS	M74HC191	
	Signetics	**74HC191**	**(3003)**
	TI	SN74HC191	
♦ US74HC192	**GE/RCA**	**CD74HC192**	**(2632)**
	Hitachi	HD74HC192	
	Motorola	MC74HC192	
	National	MM74HC192	
	SGS	M74HC192	
	Signetics	**74HC192**	**(3003)**
	TI	SN74HC192	
	Toshiba	TC40H192	
♦ US74HC193	**GE/RCA**	**CD74HC193**	**(2632)**
	Hitachi	HD74HC193	
	Motorola	MC74HC193	
	National	MM74HC193	
	SGS	M74HC193	
	Signetics	**74HC193**	**(3003)**
	TI	SN74HC193	
	Toshiba	TC40H193	
♦ US74HC194	**GE/RCA**	**CD74HC194**	**(2631)**
	Hitachi	HD74HC194	
	Motorola	MC74HC194	
	National	MM74HC194	
	SGS	M74HC194	
	Signetics	**74HC194**	**(3003)**
	TI	SN74HC194	
♦ US74HC195	**GE/RCA**	**CD74HC195**	**(2631)**
	Hitachi	HD74HC195	
	Motorola	MC74HC195	
	National	MM74HC195	
	SGS	M74HC195	
	Signetics	**74HC195**	**(3003)**
	TI	SN74HC195	
♦ US74HC20	**GE/RCA**	**CD74HC20**	**(2631)**
	Hitachi	HD74HC20	
	Motorola	MC74HC20	
	National	MM74HC20	
	SGS	M74HC20	
	Signetics	**74HC20**	**(3003)**
	TI	SN74HC20	
	Toshiba	TC40H020	
♦ US74HC21	Hitachi	HD74HC21	
	Motorola	MC74HC21	
	SGS	M74HC21	
	TI	SN74HC21	
	Toshiba	**TC74HC21**	**(3307)**
♦ US74HC221	**GE/RCA**	**CD74HC221**	**(2632)**
	Motorola	MC74HC221A	
	National	MM74HC221	
	SGS	M74HC221	
	Signetics	**74HC221**	**(3003)**
♦ US74HC237	Motorola	MC74HC237	
	SGS	M74HC237	
	TI	SN74HC237	
	Toshiba	**TC74HC237**	**(3307)**
♦ US74HC242	**GE/RCA**	**CD74HC242**	**(2631)**
	Hitachi	HD74HC242	
	Motorola	MC74HC242	
	National	MM74HC242	
	SGS	M74HC242	
	Signetics	**74HC242**	**(3003)**
	TI	SN74HC242	
♦ US74HC243	**GE/RCA**	**CD74HC243**	**(2631)**
	Hitachi	HD74HC243	
	Motorola	MC74HC243	
	National	MM74HC243	
	SGS	M74HC243	
		M74HC245	
♦ US74HC243	**Signetics**	**74HC243**	**(3003)**
	TI	SN74HC243	
♦ US74HC244	**GE/RCA**	**CD74HC244**	**(2631)**
	Hitachi	HD74HC244	
	Mitel	MD74HC244	
	Motorola	MC74HC244	
	National	MM74HC244	
	SGS	M74HC244	
	Signetics	**74HC244**	**(3003)**
	Sprague	SS74HC244	

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Universal Semiconductor, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ US74HC244			(Cont'd)
	Supertex	SI74HC244	
	TI	SN74HC244	
♦ US74HC245	**GE/RCA**	**CD74HC245**	**(2631)**
	Hitachi	HD74HC245	
	Motorola	MC74HC245	
	National	MM74HC245	
	Signetics	**74HC245**	**(3003)**
	Sprague	SS74HC245	
	TI	SN74HC245	
♦ US74HC251	**GE/RCA**	**CD74HC251**	**(2632)**
	Hitachi	HD74HC251	
	Motorola	MC74HC251	
	National	MM74HC251	
	SGS	M74HC251	
	Signetics	**74HC251**	**(3003)**
	TI	SN74HC251	
♦ US74HC253	**GE/RCA**	**CD74HC253**	**(2632)**
	Hitachi	HD74HC253	
	Motorola	MC74HC253	
	National	MM74HC253	
	SGS	M74HC253	
	Signetics	**74HC253**	**(3003)**
	TI	SN74HC253	
♦ US74HC257	**GE/RCA**	**CD74HC257**	**(2632)**
	Hitachi	HD74HC257	
	Motorola	MC74HC257	
	National	MM74HC257	
	SGS	M74HC257	
	Signetics	**74HC257**	**(3003)**
	TI	SN74HC257	
♦ US74HC258	**GE/RCA**	**CD74HC258**	**(2632)**
	Hitachi	HD74HC258	
	TI	SN74HC258	
	Toshiba	**TC74HC258**	**(3307)**
♦ US74HC259	**GE/RCA**	**CD74HC259**	**(2632)**
	Hitachi	HD74HC259	
	Motorola	MC74HC259	
	National	MM74HC259	
	Signetics	**74HC259**	**(3003)**
	TI	SN74HC259	
♦ US74HC266	Hitachi	HD74HC266	
	Motorola	MC74HC266	
	National	MM74HC266	
	SGS	M74HC266	
	Signetics	74HC266	
	TI	SN74HC266	
US74HC27	**GE/RCA**	**CD74HC27**	**(2631)**
	Hitachi	HD74HC27	
	Motorola	MC74HC27	
	National	MM74HC27	
	SGS	M74HC27	
	Signetics	**74HC27**	**(3003)**
	TI	SN74HC27	
	Toshiba	TC40H027	
♦ US74HC273	CTI	74HC273	
	GE/RCA	**CD74HC273**	**(2631)**
	Hitachi	HD74HC273	
	Motorola	MC74HC273	
	SGS	M74HC273	
	Signetics	**74HC273**	**(3003)**
	TI	SN74HC273	
♦ US74HC283	**GE/RCA**	**CD74HC283**	**(2632)**
	Motorola	MC74HC283	
	SGS	M74HC283	
♦ US74HC298	Hitachi	HD74HC298	
	SGS	M74HC298	
	TI	SN74HC298	
♦ US74HC299	**GE/RCA**	**CD74HC299**	**(2631)**
	Motorola	MC74HC299	
	National	MM74HC299	
	SGS	M74HC299	
	Signetics	**74HC299**	**(3003)**
♦ US74HC30	**GE/RCA**	**CD74HC30**	**(2631)**
	Hitachi	HD74HC30	
	Motorola	MC74HC30	
	National	MM74HC30	
	SGS	M74HC30	
	Signetics	**74HC30**	**(3003)**
	TI	SN74HC30	

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ US74HC32	**GE/RCA**	**CD74HC32**	**(2631)**
	Hitachi	HD74HC32	
	Motorola	MC74HC32	
	National	MM74HC32	
	SGS	M74HC32	
	Signetics	**74HC32**	**(3003)**
	TI	SN74HC32	
	Toshiba	TC40H032	
♦ US74HC354	**GE/RCA**	**CD74HC354**	**(2632)**
	Hitachi	HD74HC354	
	Motorola	MC74HC354	
	National	MM74HC354	
	SGS	M74HC354	
	Signetics	**74HC354**	**(3003)**
	TI	SN74HC354	
♦ US74HC356	**GE/RCA**	**CD74HC356**	**(2632)**
	Hitachi	HD74HC356	
	Motorola	MC74HC356	
	National	MM74HC356	
	SGS	M74HC356	
	Signetics	**74HC356**	**(3003)**
	TI	SN74HC356	
♦ US74HC365	**GE/RCA**	**CD74HC365**	**(2631)**
	Hitachi	HD74HC365	
	Motorola	MC74HC365	
	National	MM74HC365	
	SGS	M74HC365	
	TI	SN74HC365	
♦ US74HC366	**GE/RCA**	**CD74HC366**	**(2631)**
	Hitachi	HD74HC366	
	Motorola	MC74HC366	
	National	MM74HC366	
	SGS	M74HC366	
	Signetics	**74HC366**	**(3003)**
	TI	SN74HC366	
♦ US74HC367	**GE/RCA**	**CD74HC367**	**(2631)**
	Hitachi	HD74HC367	
	Motorola	MC74HC367	
	National	MM74HC367	
	SGS	M74HC367	
	Signetics	**74HC367**	**(3003)**
	TI	SN74HC367	
♦ US74HC368	**GE/RCA**	**CD74HC368**	**(2631)**
	Hitachi	HD74HC368	
	Motorola	MC74HC368	
	National	MM74HC368	
	SGS	M74HC368	
	Signetics	**74HC368**	**(3003)**
	TI	SN74HC368	
♦ US74HC373	**GE/RCA**	**CD74HC373**	**(2632)**
	Hitachi	HD74HC373	
	Mitel	MD74HC373	
	Motorola	MC74HC373	
	National	MM74HC373	
	SGS	M74HC373	
	Signetics	**74HC373**	**(3003)**
	Sprague	SS74HC373	
	Supertex	SI74HC373	
	TI	SN74HC373	
♦ US74HC374	**GE/RCA**	**CD74HC374**	**(2631)**
	Hitachi	HD74HC374	
	Mitel	MD74HC374	
	Motorola	MC74HC374	
	National	MM74HC374	
	SGS	M74HC374	
	Signetics	**74HC374**	**(3003)**
	Sprague	SS74HC374	
	TI	SN74HC374	
♦ US74HC375	Hitachi	HD74HC375	
	SGS	M74HC375	
	TI	SN74HC375	
	Toshiba	**TC74HC375**	**(3307)**
♦ US74HC377	**GE/RCA**	**CD74HC377**	**(2631)**
	Hitachi	HD74HC377	
	Motorola	MC74HC377	
	SGS	M74HC377	
	Signetics	**74HC377**	**(3003)**
	TI	SN74HC377	
♦ US74HC390	**GE/RCA**	**CD74HC390**	**(2632)**
	Hitachi	HD74HC390	
	Motorola	MC74HC390	
	National	MM74HC390	
	SGS	M74HC390	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ US74HC390			(Cont'd)
	Signetics	**74HC390**	**(3003)**
	TI	SN74HC390	
♦ US74HC393	**GE/RCA**	**CD74HC393**	**(2632)**
	Hitachi	HD74HC393	
	Motorola	MC74HC393	
	National	MM74HC393	
	SGS	M74HC393	
	Signetics	**74HC393**	**(3003)**
	TI	SN74HC393	
♦ US74HC4002	**GE/RCA**	**CD74HC4002**	**(2631)**
	Motorola	MC74HC4002	
	National	MM74HC4002	
	SGS	M74HC4002	
	Signetics	**74HC4002**	**(3003)**
	TI	SN74HC4002	
♦ US74HC4016	GE/RCA	CD74HC4016	
	Motorola	MC74HC4016	
♦ US74HC4017	**GE/RCA**	**CD74HC4017**	**(2632)**
	Motorola	MC74HC4017	
	National	MM74HC4017	
	SGS	M74HC4017	
	Signetics	**74HC4017**	**(3003)**
	TI	SN74HC4017	
♦ US74HC4020	**GE/RCA**	**CD74HC4020**	**(2632)**
	Hitachi	HD74HC4020	
	Motorola	MC74HC4020	
	National	MM74HC4020	
	SGS	M74HC4020	
	Signetics	**74HC4020**	**(3003)**
	TI	SN74HC4020	
♦ US74HC4024	**GE/RCA**	**CD74HC4024**	**(2632)**
	Hitachi	HD74HC4024	
	Motorola	MC74HC4024	
	SGS	M74HC4024	
	Signetics	**74HC4024**	**(3003)**
	TI	SN74HC4024	
♦ US74HC4040	**GE/RCA**	**CD74HC4040**	**(2632)**
	Hitachi	HD74HC4040	
	Motorola	MC74HC4040	
	National	MM74HC4040	
	SGS	M74HC4040	
	Signetics	**74HC4040**	**(3003)**
	TI	SN74HC4040	
♦ US74HC4049	**GE/RCA**	**CD74HC4049**	**(2631)**
	Motorola	MC74HC4049	
	National	MM74HC4049	
	SGS	M74HC4049	
	Signetics	**74HC4049**	**(3003)**
	TI	SN74HC4049	
♦ US74HC4050	**GE/RCA**	**CD74HC4050**	**(2631)**
	Motorola	MC74HC4050	
		MC84HC4050	
♦ US74HC4050	SGS	M74HC4050	
	Signetics	PC74HC4050	
	Toshiba	**TC74HC4050**	**(3307)**
♦ US74HC4051	**GE/RCA**	**CD74HC4051**	**(2632)**
	Motorola	MC74HC4051	
	SGS	M74HC4051	
	Signetics	**74HC4051**	**(3003)**
	TI	SN74HC4051	
♦ US74HC4052	**GE/RCA**	**CD74HC4052**	**(2632)**
	Motorola	MC74HC4052	
	SGS	M74HC4052	
	Signetics	**74HC4052**	**(3003)**
	TI	SN74HC4052	
♦ US74HC4053	**GE/RCA**	**CD74HC4053**	**(2632)**
	Motorola	MC74HC4053	
	SGS	M74HC4053	
	Signetics	**74HC4053**	**(3003)**
	TI	SN74HC4053	
♦ US74HC4060	**GE/RCA**	**CD74HC4060**	**(2632)**
	Motorola	MC74HC4060	
	National	MM74HC4060	
	SGS	M74HC4060	
	Signetics	**74HC4060**	**(3003)**
	TI	SN74HC4060	
♦ US74HC4066	Motorola	MC74HC4066	
	SGS	M74HC4066	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ US74HC4066			(Cont'd)
	Signetics	PC74HC4066	
	TI	SN74HC4075	
♦ US74HC4075	**GE/RCA**	**CD74HC4075**	**(2631)**
	Motorola	MC74HC4075	
	National	MM74HC4075	
	Signetics	74HC4075	
	TI	SN74HC4075	
	Toshiba	**TC74HC4075**	**(3307)**
♦ US74HC4078	Motorola	MC74HC4078	
	National	MM74HC4078	
	SGS	M74HC4078	
	TI	SN74HC4078A	
	Toshiba	**TC74HC4078**	**(3307)**
♦ US74HC42	**GE/RCA**	**CD74HC42**	**(2632)**
	Hitachi	HD74HC42	
	Motorola	MC74HC42	
	National	MM74HC42	
	SGS	M74HC42	
	Signetics	**74HC42**	**(3003)**
	TI	SN74HC42	
♦ US74HC423	Hitachi	HD74HC423	
	TI	SN74HC423	
	Toshiba	**TC74HC423**	**(3307)**
♦ US74HC4511	TI	SN74HC4511	
♦ US74HC4514	**GE/RCA**	**CD74HC4514**	**(2632)**
	Hitachi	HD74HC4514	
	Motorola	MC74HC4514	
	National	MM74HC4514	
	SGS	M74HC4514	
	Signetics	**74HC4514**	**(3003)**
	TI	SN74HC4514	
♦ US74HC4538	**GE/RCA**	**CD74HC4538**	**(2632)**
	Motorola	MC74HC4538	
	National	MM74HC4538	
	SGS	M74HC4538	
	Signetics	**74HC4538**	**(3003)**
♦ US74HC4543	**Cypress**	**CY7C172**	**(2562, 2564)**
	GE/RCA	**CD74HC4543**	**(2632)**
	IDT	**IDT71682**	**(2802)**
	Motorola	MC74HC4543	
	National	MM74HC4543	
	Performance	P4C1682	
	SGS	M74HC4543	
	Signetics	PC74HC4543	
	Toshiba	**TC74HC4543**	**(3307)**
♦ US74HC51	Hitachi	HD74HC51	
	Motorola	MC74HC51	
	National	MM74HC51	
	TI	SN74HC51	
	Toshiba	**TC74HC51**	**(3307)**
♦ US74HC533	**GE/RCA**	**CD74HC533**	**(2632)**
	Hitachi	HD74HC533	
	Motorola	MC74HC533	
	National	MM74HC533	
	SGS	M74HC533	
	Signetics	**74HC533**	**(3003)**
	Sprague	SS74HC533	
	TI	SN74HC533	
♦ US74HC534	**GE/RCA**	**CD74HC534**	**(2631)**
	Hitachi	HD74HC534	
	Motorola	MC74HC534	
	National	MM74HC534	
	SGS	M74HC534	
	Signetics	**74HC534**	**(3003)**
	Sprague	SS74HC534	
	TI	SN74HC534	
♦ US74HC540	**GE/RCA**	**CD74HC540**	**(2631)**
	Hitachi	HD74HC540	
	Motorola	MC74HC540	
	SGS	M74HC540	
	Signetics	**74HC540**	**(3003)**
	Sprague	SS74HC540	
	TI	SN74HC540	
	Toshiba	**TC74HC540**	**(3307)**
♦ US74HC541	**GE/RCA**	**CD74HC541**	**(2631)**
	Hitachi	HD74HC541	
	Motorola	MC74HC541	
	SGS	M74HC541	
	Signetics	**74HC541**	**(3003)**

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

Universal Semiconductor, Inc. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
♦ US74HCT245			(Cont'd)
	Supertex	74HCT245	
	TI	SN74HCT245	
	Toshiba	TC74HCT245	
♦ US74HCT251	**GE/RCA**	**CD74HCT251**	**(2632)**
	Signetics	**74HCT251**	**(3003)**
♦ US74HCT253	**GE/RCA**	**CD74HCT253**	**(2632)**
	Signetics	**74HCT253**	**(3003)**
♦ US74HCT257	**GE/RCA**	**CD74HCT257**	**(2632)**
	Signetics	**74HCT257**	**(3003)**
♦ US74HCT259	**GE/RCA**	**CD74HCT259**	**(2632)**
	Signetics	**74HCT259**	**(3003)**
♦ US74HCT27	**GE/RCA**	**CD74HCT27**	**(2631)**
	Signetics	**74HCT27**	**(3003)**
♦ US74HCT273	CTI	74HCT139	
	GE/RCA	**CD74HCT139**	**(2632)**
		CD74HCT273	**(2631)**
♦ US74HCT273	**Signetics**	**74HCT273**	**(3003)**
	Sprague	SS74HCT139	
♦ US74HCT299	**GE/RCA**	**CD74HCT299**	**(2631)**
	Signetics	**74HCT299**	**(3003)**
♦ US74HCT30	**GE/RCA**	**CD74HCT30**	**(2631)**
	Signetics	**74HCT30**	**(3003)**
♦ US74HCT32	**GE/RCA**	**CD74HCT32**	**(2631)**
	Signetics	**74HCT32**	**(3003)**
♦ US74HCT354	**GE/RCA**	**CD74HCT354**	**(2632)**
	Signetics	**74HCT354**	**(3003)**
♦ US74HCT356	**GE/RCA**	**CD74HCT356**	**(2632)**
	Signetics	**74HCT356**	**(3003)**
♦ US74HCT365	**GE/RCA**	**CD74HCT365**	**(2631)**
	Signetics	**74HCT365**	**(3003)**
♦ US74HCT366	**GE/RCA**	**CD74HCT366**	**(2631)**
	Signetics	**74HCT366**	**(3003)**
♦ US74HCT367	**GE/RCA**	**CD74HCT367**	**(2631)**
	Signetics	**74HCT367**	**(3003)**
♦ US74HCT368	**GE/RCA**	**CD74HCT368**	**(2631)**
	Signetics	**74HCT368**	**(3003)**
♦ US74HCT373	CTI	74HCT373	
	CMD Micro	G74SC373	
	GE/RCA	**CD74HCT373**	**(2632)**
	Hitachi	HD74HCT373	
	Micrel	MIC74HCT373	
	Motorola	MC74HCT373	
	National	MM74HCT373	
	Plessey	MV74HCT373	
		MV74SC373	
♦ US74HCT373	SGS	M74HCT373	
	Signetics	**74HCT373**	**(3003)**
	Sprague	SS74HCT373	
	Supertex	SI74HCT373	
	TI	SN74HCT373	
	Toshiba	TC74HCT373	
♦ US74HCT374	CTI	74HCT374	
	CMD Micro	G74SC374	
	GE/RCA	**CD74HCT374**	**(2631)**
	Hitachi	HD74HCT374	
	Micrel	MIC74HCT374	
	Motorola	MC74HCT374	
	National	MM74HCT374	
	Plessey	MV74HCT374	
		MV74SC374	
♦ US74HCT374	SGS	M74HCT374	
	Signetics	**74HCT374**	**(3003)**
	Sprague	SS74HCT374	
	Supertex	SI74HCT374	
	TI	SN74HCT374	
	Toshiba	TC74HCT374	
♦ US74HCT377	**GE/RCA**	**CD74HCT377**	**(2631)**
	Signetics	**74HCT377**	**(3003)**
♦ US74HCT390	**GE/RCA**	**CD74HCT390**	**(2632)**
	Signetics	**74HCT390**	**(3003)**
♦ US74HCT393	**GE/RCA**	**CD74HCT393**	**(2632)**
	Signetics	PCF74HCT393	
♦ US74HCT4002	**GE/RCA**	**CD74HCT4002**	**(2631)**
	Signetics	**74HCT4002**	**(3003)**
♦ US74HCT4017	**GE/RCA**	**CD74HCT4017**	**(2632)**
	Signetics	**74HCT4017**	**(3003)**
♦ US74HCT4020	**GE/RCA**	**CD74HCT4020**	**(2632)**
	Signetics	**74HCT4020**	**(3003)**
♦ US74HCT4024	**GE/RCA**	**CD74HCT4024**	**(2632)**
	Signetics	**74HCT4024**	**(3003)**
♦ US74HCT4040	**GE/RCA**	**CD74HCT4040**	**(2632)**
	Signetics	**74HCT4040**	**(3003)**
♦ US74HCT4049	GE/RCA	CD74HCT4049	
	Signetics	**74HCT4049**	**(3003)**
♦ US74HCT4050	GE/RCA	CD74HCT4050	
	Signetics	**74HCT4050**	**(3003)**
♦ US74HCT4051	**GE/RCA**	**CD74HCT4051**	**(2632)**
	Signetics	**74HCT4051**	**(3003)**
♦ US74HCT4052	**GE/RCA**	**CD74HCT4052**	**(2632)**
	Signetics	**74HCT4052**	**(3003)**
♦ US74HCT4053	**GE/RCA**	**CD74HCT4053**	**(2632)**
	Signetics	**74HCT4053**	**(3003)**
♦ US74HCT4060	**GE/RCA**	**CD74HCT4060**	**(2632)**
	Signetics	**74HCT4060**	**(3003)**
♦ US74HCT42	**GE/RCA**	**CD74HCT42**	**(2632)**
	Signetics	**74HCT42**	**(3003)**
♦ US74HCT423	**GE/RCA**	**CD74HCT423**	**(2632)**
	Signetics	**74HCT423**	**(3003)**
♦ US74HCT4511	**GE/RCA**	**CD74HCT4511**	**(2632)**
	Signetics	**74HCT4511**	**(3003)**
♦ US74HCT4514	**GE/RCA**	**CD74HCT4514**	**(2632)**
	Signetics	**74HCT4514**	**(3003)**
♦ US74HCT4538	**GE/RCA**	**CD74HCT4538**	**(2632)**
	Signetics	**74HCT4538**	**(3003)**
♦ US74HCT4543	**GE/RCA**	**CD74HCT4543**	**(2632)**
	Signetics	**74HCT4543**	**(3003)**
♦ US74HCT533	CTI	74HCT533	
	GE/RCA	**CD74HCT533**	**(2632)**
	Hitachi	HD74HCT533	
	Micrel	MIC74HCT533	
	Motorola	MC74HCT533	
	Plessey	MV74HCT533	
	Signetics	**74HCT533**	**(3003)**
	Sprague	SS74HCT533	
	TI	SN74HCT533	
♦ US74HCT534	CTI	74HCT534	
	GE/RCA	**CD74HCT534**	**(2631)**
	Hitachi	HD74HCT534	
	Micrel	MIC74HCT534	
	Motorola	MC74HCT534	
	Plessey	MV74HCT534	
	Signetics	**74HCT534**	**(3003)**
	Sprague	SS74HCT534	
	TI	SN74HCT534	
♦ US74HCT540	CTI	74HCT540	
	GE/RCA	**CD74HCT540**	**(2631)**
	Hitachi	HD74HCT540	
	Micrel	MIC74HCT540	
	Mitel	MD74HCT540	
	Motorola	MC74HCT540	
	National	MM74HCT540	
♦ US74HCT540			(Cont'd)
	Plessey	MV74HCT540	
	SGS	M74HCT540	
	Signetics	**74HCT540**	**(3003)**
	Sprague	SS74HCT540	
	Supertex	74HCT240	
	TI	SN74HCT540	
	Toshiba	TC74HCT540	
♦ US74HCT541	CTI	74HCT541	
	GE/RCA	**CD74HCT541**	**(2631)**
	Hitachi	HD74HCT541	
	Micrel	MIC74HCT541	
	Mitel	MD74HCT541	
	Motorola	MC74HCT541	
	National	MM74HCT541	
	Plessey	MV74HCT541	
	SGS	M74HCT541	
	Signetics	**74HCT541**	**(3003)**
	Sprague	SS74HCT541	
	Supertex	74HCT541	
	TI	SN74HCT541	
	Toshiba	TC74HCT541	
♦ US74HCT563	CTI	74HCT563	
	GE/RCA	**CD74HCT563**	**(2632)**
	Hitachi	HD74HCT563	
	Micrel	MIC74HCT563	
	Plessey	MV74HCT563	
	SGS	M74HCT563	
	Signetics	**74HCT563**	**(3003)**
	Sprague	SS74HCT563	
	TI	SN74HCT563	
	Toshiba	TC74HCT563	
♦ US74HCT564	CTI	74HCT564	
	GE/RCA	**CD74HCT564**	**(2631)**
	Hitachi	HD74HCT564	
	Micrel	MIC74HCT564	
	Plessey	MV74HCT564	
		MV74HCT573	
♦ US74HCT564	SGS	M74HCT564	
	Signetics	**74HCT564**	**(3003)**
	Sprague	SS74HCT564	
	TI	SN74HCT564	
♦ US74HCT573	CTI	74HCT573	
	GE/RCA	**CD74HCT573**	**(2632)**
	Hitachi	HD74HCT573	
	Micrel	MIC74HCT573	
	Mitel	MD74HCT573	
	Plessey	MV74HCT573	
	SGS	M74HCT573	
	Signetics	**74HCT573**	**(3003)**
	Sprague	SS74HCT573	
	Supertex	74HCT573	
	TI	SN74HCT573	
	Toshiba	TC74HCT573	
♦ US74HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
♦ US74HCT640	**GE/RCA**	**CD74HCT640**	**(2631)**
	Hitachi	HD74HCT640	
	Motorola	MC74HCT640	
	SGS	M74HCT640	
	Signetics	**74HCT640**	**(3003)**
	Sprague	SS74HCT640	
	TI	SN74HCT640	
	Toshiba	TC74HCT640	
♦ US74HCT643	**GE/RCA**	**CD74HCT643**	**(2631)**
	Hitachi	HD74HCT643	
	Motorola	MC74HCT643	
	SGS	M74HCT643	
	Signetics	**74HCT643**	**(3003)**
	TI	SN74HCT643	
	Toshiba	TC74HCT643	
♦ US74HCT646	**GE/RCA**	**CD74HCT646**	**(2631)**
	Hitachi	HD74HCT646	
	Signetics	**74HCT646**	**(3003)**
♦ US74HCT646			(Cont'd)
	TI	SN74HCT646	
	Toshiba	TC74HCT646	
♦ US74HCT648	**GE/RCA**	**CD74HCT648**	**(2631)**
	Hitachi	HD74HCT648	
	Signetics	**74HCT648**	**(3003)**
	TI	SN74HCT648	
	Toshiba	TC74HCT648	
♦ US74HCT688	**GE/RCA**	**CD74HCT688**	**(2632)**
	Signetics	**74HCT688**	**(3003)**
♦ US74HCT74	**GE/RCA**	**CD74HCT74**	**(2631)**
	Signetics	**74HCT74**	**(3003)**
♦ US74HCT75	**GE/RCA**	**CD74HCT75**	**(2632)**
	Signetics	**74HCT75**	**(3003)**
♦ US74HCT76	Signetics	74HCT76	
	TI	SN74HC76	
♦ US74HCT85	**GE/RCA**	**CD74HCT85**	**(2632)**
	Signetics	**74HCT85**	**(3003)**
♦ US74HCT86	**GE/RCA**	**CD74HCT86**	**(2631)**
	Signetics	**74HCT86**	**(3003)**
♦ US75HCT574	CTI	74HCT574	
	GE/RCA	**CD74HCT574**	**(2631)**
	Hitachi	HD74HCT574	
	Micrel	74HCT574	
	Mitel	MD74HCT574	
	National	MM74HCT574	
	Plessey	MV74HCT574	
	SGS	M74HCT574	
	Signetics	**74HCT574**	**(3003)**
	Sprague	SS74HCT574	
	Supertex	74HCT574	
	TI	SN74HCT574	
	Toshiba	TC74HCT574	
♦ USHCT4543	**GE/RCA**	**CD74HCT4543**	**(2632)**
	Signetics	**74HCT4543**	**(3003)**

Vitelic Corp.

V51C105	Sharp	LH64256	
	Toshiba	TC514258	
V51C256	Inmos	IMS2800	
		IMS2801	
	Motorola	MCM6256	
		MCM6257	
	TI	**TMS4256**	**(3259)**
	Vitelic	V51C257	
V51C257	Inmos	IMS2800	
		IMS2801	
	Motorola	MCM6256	
		MCM6257	
	TI	**TMS4256**	**(3259)**
	Vitelic	V51C256	
V51C64	Motorola	MCM6665	
V61C16	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	

(Continued)

(Continued)

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Vitelic Corp. (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
V61C16			(Cont'd)
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V62C16	
V61C62	**Cypress**	**CY7C166**	**(2562)**
	Fairchild	54LS152	
	Hitachi	HM6789	
	Inmos	**IMS1624**	**(2788)**
	IDT	**IDT6198**	**(2802)**
	Lattice	SR64E4	
	Motorola	MCM6290	
	NEC	μPD4363	
	SGS	T54LS152	
	Toshiba	TC55417	
V61C67	AMD	AM2167	
	Cypress	**CY7C167**	**(2562)**
	Fujitsu	MB8167	
		MB8167A	
		MB81C67	
	GE/RCA	CDM5167	
	GoldStar	GM7616	
	Harris	**HM65262**	**(2704, 2761, 2768)**
	Hitachi	HM6167	
		HM6167H	
		HM6267	
	Hyundai	**HY61C67**	**(2770)**
	Inmos	IMS1400	
		IMS1403	**(2782)**
	IDT	**IDT6167**	**(2802)**
	Intel	51C67	
	Matra-Harris	HM65262	
		HM65263	
	Mitsubishi	M5M2167	
		M5M21C67	
	NEC	μPD4311	
	S-MOS	SRM2267	
		SRM2367	**(3201)**
	Sharp	**LH5167**	**(2993)**
	Sprague	BCM6167	
		SCM6167	
	Stantel-STC	STC2167	
		STC6167	
	TI	SMJ61CD16	
	Thomson	**MK41H66**	**(3264)**
		MK41H67	**(3264)**
	UMC	**UM6167**	**(3312)**
V61C68	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
V61C68			(Cont'd)
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V62C64	
	VLSI Tech	**VT20C19**	**(3347)**
		VT20C98	**(3352)**
V62C16	AMD	AM9128	
		AM9218	
	Cypress	**CY6116**	**(2564)**
		CY7C128	**(2561, 2564)**
	Fujitsu	MB8128	
		MB8416	
	GE/RCA	**CDM6116A**	**(2643)**
	GoldStar	**GM76C28**	**(2692)**
	Harris	**HM6516**	**(2704, 2761, 2768)**
		HM65162	**(2704, 2761, 2768)**
	Hitachi	HM6116	
		HM6166	
	Hyundai	**HY6116**	**(2770)**
	Inmos	**IMS1433**	**(2784)**
	IDT	**IDT6116**	**(2802)**
		IDT6166	
	Intel	81C28	
	Lattice	SR16K8	
	Matra-Harris	HM6166	
		HM65161	
		HM65162	
		HM65163	
		HN65728	
	Mitel	M5M5116	
	Mitsubishi	M58275	
		M58725	
		M5M116	
		M5M5116	
		M5M5117	
		M5M5118	
		MS8725	
	Motorola	MCM2016	
		MCM2016H	
		MCM6116	
	National	MMC2116	
	NEC	μPD4016	
		μPD446	
	OKI	MSM2128	
		MSM5126	
		MSM5127	
		MSM5128	
		MSM5129	
	Performance	P4C116	
	S-MOS	6116	
	Sharp	**LH5115**	**(2993)**
		LH5116	**(2993)**
	Sprague	883C21C16	
		BCM20C16	
		BCM21C16	
		SCM21C16	
	Stantel-STC	STC6116	
		STC6166	
	TI	SMJ68CE16	
	Thomson	ET2128	
		MK2817	
	Toshiba	TC5516	
		TC5516A	
		TC5517	
		TC5518	
		TMM2015	
		TMM2015A	
		TMM2016	
		TMM2016A	
		TMM2016B	
		TMM2018	
	Vitelic	V61C16	

Manufacturer Device	Replacement Source	Device	IC Master Page
V62C256	AMD	AM99C328	
	Cypress	CY7C198	
	Dense-Pac	DPS412S88	
	Fujitsu	**MB84256**	**(2623)**
	GE/RCA	CDM62256	
	GoldStar	GM76C256	
	Hitachi	HM62256	
		HM62256P	
		HM64456	
	Hyundai	HY62C256	
	Inmos	**IMS1830**	**(2779)**
	IDT	**IDT71256**	**(2802, 2818)**
		IDT71256S	**(2802, 2818)**
		IDT7M856S	**(2803)**
		IDT8M824	**(2803, 2848)**
	Lattice	256K8	
	Mitel	M5M5256	
	Mitsubishi	M5M5256	
	NEC	μPD42356	
	S-MOS	**SRM20256**	**(3201)**
		SRM20256C	**(3201)**
	Sharp	**LH52256**	**(2993, 2995)**
	Sony	CXK58256	
	Toshiba	**TC55257**	**(3303)**
		TC55257P	**(3303)**
V62C64	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
	VLSI Tech	**VT20C98**	**(3352)**

VLSI Design Associates

Manufacturer Device	Replacement Source	Device	IC Master Page
V3829	Hitachi	HA17818	
	National	μA7818	
	SMC	FDC9229	
	VLSI Tech	V86	
V8580	NCR	NCR53C80	

VLSI Technology (San Jose)

Manufacturer Device	Replacement Source	Device	IC Master Page
23131	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	VT23128	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
23257	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	VT23256	
		VT23257	
CT64KS4	**Cypress**	**CY7C164**	**(2562)**
	Fairchild	F100181	
	Hitachi	HD100181	
	IDT	**IDT7188**	**(2802)**
	Signetics	**100181**	**(3020)**
	TI	SMJ64C64	
	Vitelic	V61C62	
FGC0500	Fairchild	FGC0500	
FGC3200	Fairchild	FGC3200	
	VLSI Tech	**VGC3200**	**(4665)**
V86	Hitachi	HA17818	
	National	μA7818	
	SMC	FDC9229	
	VDA	V3829	
VGC1200	Fairchild	FGC1200	
VGC1900	Fairchild	FGC1900	
VGC2400	Fairchild	FGC2400	
VGC6000	Fairchild	FGC6000	
VGC8000	AMD	AM6072	
VL2044	**IDT**	**IDT7243**	**(2806)**
	National	LM240-20	
	SiliconG	SG240-20	
VL4500A	**TI**	**TMS4500A**	**(3227)**
VL65C22	WDC	W65C22	
VL65C816	**CMD Micro**	**G65SC802**	**(2549)**
		G65SC816	**(2549)**
	WDC	W65C802	
		W65C816	
VT0900	Fairchild	FGC0900	
VT20C19	AMD	AM2169	
		AM99CL68	
	Cypress	**CY7C168**	**(2562)**
		CY7C169	**(2562)**
	Fujitsu	MB81C68A	
		MB81C69A	
	Hitachi	HM6168	
		HM6268	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Intel	51C69	
	Matra-Harris	HM62641	
		HM65682	
		HM65768	

(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

VLSI Technology (San Jose) (Cont'd)

Manufacturer Device	Replacement Source	Device	IC Master Page
VT20C19			(Cont'd)
	Motorola	MCM6164	
		MCM6168	
		MCM6269	
	NEC	μPD4314	
	Performance	P4C168	
		P4C169	
	Sprague	SCM6168	
	Stantel-STC	STC6264	
	TI	SMJ64C16	
		SMJ68CE64	
	Thomson	**MK41H68**	**(3265)**
		MK41H69	**(3265)**
	Toshiba	TMM2068	
		TMM2069	
		TMM2078	
	Vitelic	V61C68	
		V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
VT20C68	AMD	AM2167	
	Fujitsu	MB8167A	
	Hitachi	HM6167	
	IDT	**IDT6167**	**(2802)**
	Matra-Harris	HM65263	
	TI	SMJ61CD16	
	UMC	**UM6167**	**(3312)**
	Vitelic	V61C67	
VT20C69	AMD	AM2168	
		AM9968	
		AM99CL68	
	Fairchild	F1620	
	Fujitsu	MB8168	
		MB81C69	
	GoldStar	**GM76C164**	**(2692)**
	Hitachi	HM6168	
		HM6268	
	Inmos	IMS1420	
		IMS1421	
		IMS1424	
	IDT	**IDT6120**	**(2802)**
		IDT6169	**(2802)**
	Matra-Harris	HM65682	
		HMI65769	
	Motorola	MCM1423	
		MCM6168	
		MCM6288	
	NEC	μPD4314	
	S-MOS	SRM2274	
	Sprague	SCM6168	
	Stantel-STC	STC2168	
	TI	SMJ64C16	
	Thomson	**MK41H68**	**(3265)**
	Toshiba	TMM2068	
	Vitelic	V61C62	
		V61C68	
	VLSI Tech	**VT20C19**	**(3347)**
VT20C98	AMD	99C88	
		AM9988	
		AM9988C	
		AM99C88	
	Cypress	**CY7C185**	**(2562)**
		CY7C186	**(2562)**
	Fujitsu	MB81C78	
		MB81C78A	
		MB8464	
		MB8464A	
		MB8B464	
	GE/RCA	**CDM6264**	**(2643)**
	GoldStar	**GM76C88**	**(2692)**
	Hitachi	HM6264	
		HM6464	
		MB6264	
	Hyundai	HY6264	
		HY62C64	**(2770)**
	Inmos	**IMS1630**	**(2789)**
	IDT	**IDT7188**	**(2802)**
	Lattice	SR64K8	
	Matra-Harris	HM2064	
		HM56162	
		HM62641	
		HM65641	
	Mitel	M5M5165	
	Mitsubishi	AM99C88	
		M5M165	
		M5M5164	
		M5M5165	
	Motorola	MCM6164	
		MCM6164C	
		MCM61L64	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
VT20C98	Motorola		(Cont'd)
		MCM6288	
		MCM62L88	
	National	NMC6164	
	NEC	μPD4364	
		μPD4464	
	OKI	MSM5164	
		MSM5165	
		MSM5188	
	Performance	P4C164	
		P4C188	
	S-MOS	**SRM2064**	**(3201)**
		SRM2264	**(3201)**
	Samsung	KM6264	
	Sharp	LH5164	
	Sony	CVK5864	
	Stantel-STC	STC6264	
	TI	SMJ68CE64	
	Toshiba	TC5563	
		TC5564	
		TC5565	
		TC5585	
		TMM2063	
		TMM2064	
		TMM2088	
	Vitelic	V61C62	
		V62C64	
VT2130	AMD	AM2130	
	IDT	**IDT7130**	**(2804)**
VT23128	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23129	
		VT23129A	
		VT23130	
		VT23138	
VT23129	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129A	
		VT23130	
		VT23138	
VT23129A	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23130	
		VT23138	
VT23130	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
VT23130			(Cont'd)
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23138	
VT23138	AMD	AM92128	
	GIM	RO9128	
	Gould	S23128	
	Hitachi	HN613128	
		HN613128P	
	Mitsubishi	M5M23128	
	NCR	NCR23128	
	NEC	μPD23128E	
		μPD23C128E	
	Signetics	23128	
	Supertex	CM1310	
	UMC	UM23128	
	VLSI Tech	23131	
		VT23128	
		VT23129	
		VT23129A	
		VT23130	
VT23256	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23257	
VT23257	GIM	RO9256	
	Gould	S23256	
	Hitachi	HN613256	
	Mitsubishi	M5M23256	
	NCR	NCR23256	
		NCR23257	
	NEC	μPD23C256E	
	OKI	MSM38256	
	Panasonic	MN23256	
		MN23257	
	S-MOS	**SMM2326**	**(3201)**
		SMM6325	**(3201)**
		SMM6326	
	Signetics	23256	
		23256A	
	Supertex	CM2560	
	Toshiba	TC53257	
		TMM23256	
	UMC	23C256	
	VLSI Tech	23257	
		VT23256	
VT2332	Commodore	MPS2332	
	Fairchild	F3532	
	Fujitsu	P51C69	
	GIM	RO3-9332	
	Gould	S2333	
	Hitachi	HN46332	
		P51C69	
	Intel	UM2168	
	Mitsubishi	M58333	
	National	NM52132	
	NCR	NCR2332	
	Panasonic	MN2332	
	Sharp	**LH2332**	**(2994)**
	Siemens	SA88332	
		SAB8332	
	Signetics	2332	
		2632A	
	SiliconG	SG3532	
	Supertex	23SC32	
		CM3200	
	TI	P51C69	
	Toshiba	TMM333P	
	UMC	UM2333	
VT23512	NCR	NCR23C512	
	NEC	μPD23C512	
VT2364	Gould	S2364	
	Hitachi	HN48364	

(Continued)

Manufacturer Device	Replacement Source	Device	IC Master Page
VT2364			(Cont'd)
	NCR	NCR2364	
	OKI	MSM3864	
	Plessey	SL2364C	
	S-MOS	**SMM2364**	**(3201)**
	Sharp	LH2364A	
	Signetics	2364	
	TI	TMS2364	
	Weitek	SC8164	
VT2365	Fairchild	F3568	
		F3569	
		F3570	
	GIM	RO3-9365	
		RO9864	
	Gould	S2364	
	Hitachi	HN61364	
	Mitsubishi	M5M2364	
		M5M2365	
		M5M23C64	
	National	MM52264	
		NM52264	
	OKI	MSM3864	
	Panasonic	MN2364	
		MN4864	
	Supertex	23SC64	
		23SC64/A	
		CM6400	
	TI	TMS2364	
	Thomson	MK37000	
	UMC	UM2366	
VT2366	National	NMC2564	
VT23C1024	Fujitsu	MB831000	
		MB831124	
	GIM	RO91000	
	Hitachi	HN62301	
	NEC	μPD23C1000	
	Toshiba	**TC531000**	**(3305)**
VT27C128	AMD	AM27128	
	Intel	M27128	
		M27C128	
	SEEQ	M27128	
	TI	**SMJ27C128**	**(3220)**
	Waferscale	**WS27C128**	**(3376)**
VT27C256	AMD	AM27256	
		AM27C256	
	Intel	27256	
		27C256	**(2861)**
		M27256	
		M27C256	
	National	NMC27C256	
	SEEQ	**27C256**	**(2991)**
	SGS	M27256	
	TI	**SMJ27C256**	**(3220)**
	Waferscale	**WS27C256**	**(3376)**
VT27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	Waferscale	**WS27C64**	**(3376)**

♦ Discontinued

The manufacturers report their devices can be used as direct replacements.
Performance details often differ, so compare the specifications considering your requirements.

© IC MASTER 1988

Manufacturer Device	Replacement Source	Device	IC Master Page
VLSI Technology (San Jose) (Cont'd)			
VT64KD1	Fairchild	F1600	
		F1602	
	Fujitsu	MB8171	
	GoldStar	**GM76C64**	**(2692)**
	Hitachi	HM6287	
	Inmos	**IMS1600**	**(2785)**
	Lattice	SR64K1	
	Matra-Harris	HM62641	
	Motorola	MCM6164	
		MCM62L87	
	Stantel-STC	STC6264	
	TI	SMJ61CD64	
		SMJ68CE64	
	Thomson	**MK41H87**	**(3266)**
	Toshiba	TC5561	
	Vitelic	V62C64	
	VLSI Tech	**VT20C98**	**(3352)**
VT7132	**Cypress**	**CY7C132**	**(2562, 2564)**
	IDT	**IDT7132**	**(2804)**
VT7142	**Cypress**	**CY7C142**	**(2564)**
	IDT	**IDT7142**	**(2804)**
VTC			
V54FCT240A	**IDT**	**IDT54FCT240A**	**(2808)**
	Performance	P54PCT240A	
V54FCT244A	**IDT**	**IDT54FCT244A**	**(2808)**
	Performance	P54PCT244A	
V54FCT245A	**IDT**	**IDT54FCT245A**	**(2808)**
	Performance	P54PCT245A	
V54FCT273	**IDT**	**IDT54FCT273**	**(2808)**
V54FCT373A	**IDT**	**IDT54FCT373A**	**(2808)**
	Performance	P54PCT373A	
V54FCT374A	**IDT**	**IDT54FCT374A**	**(2808)**
	Performance	P54PCT374A	
V54FCT521	**IDT**	**IDT54FCT521**	**(2808, 2810)**
V54FCT533A	**IDT**	**IDT54FCT533A**	**(2808, 2810)**
	Performance	P54PCT533A	
V54FCT534A	**IDT**	**IDT54FCT534A**	**(2808, 2810)**
V54FCT573	**IDT**	**IDT54FCT573**	**(2808, 2810)**
V54FCT574	**IDT**	**IDT54FCT574**	**(2808, 2810)**
V54FCT640A	**IDT**	**IDT54FCT640A**	**(2809)**
	Performance	P54PCT640A	
V54FCT645A	**IDT**	**IDT54FCT645A**	**(2809)**
	Performance	P54PCT645A	
V54FCT821A	**IDT**	**IDT54FCT821A**	**(2809)**
V54FCT822A	**IDT**	**IDT54FCT822A**	**(2809)**
V54FCT823A	**IDT**	**IDT54FCT823A**	**(2809)**
V54FCT824A	**IDT**	**IDT54FCT824A**	**(2809)**
V54FCT825A	**IDT**	**IDT54FCT825A**	**(2809)**
V54FCT826A	**IDT**	**IDT54FCT826A**	**(2809)**
V54FCT827A	**IDT**	**IDT54FCT827A**	**(2809)**
V54FCT828A	**IDT**	**IDT54FCT828A**	**(2809)**
	VTC	**V54FCT864A**	**(3370)**
V54FCT841A	**IDT**	**IDT54FCT841A**	**(2809)**
V54FCT842A	**IDT**	**IDT54FCT842A**	**(2809)**
V54FCT843A	**IDT**	**IDT54FCT843A**	**(2809)**
V54FCT844A	**IDT**	**IDT54FCT844A**	**(2809)**
V54FCT845A	**IDT**	**IDT54FCT845A**	**(2809)**
V54FCT846A	**IDT**	**IDT54FCT846A**	**(2809)**
V54FCT861A	IDT	I61A	
		IDT54FCT861A	**(2809)**
V54FCT862A	**IDT**	**IDT54FCT862A**	**(2809)**
V54FCT863A	**IDT**	**IDT54FCT863A**	**(2809)**
V54FCT864A	**IDT**	**IDT54FCT828A**	**(2809)**
	VTC	**V54FCT828A**	**(3370)**
V74FCT240	**IDT**	**IDT74FCT240**	**(2808)**
	Performance	P74PCT240	
V74FCT244	**IDT**	**IDT74FCT244**	**(2808)**
	Performance	P74PCT244	
V74FCT245	**IDT**	**IDT74FCT245**	**(2808)**
V74FCT273	**IDT**	**IDT74FCT273**	**(2808)**
V74FCT374	**IDT**	**IDT74FCT374**	**(2808)**
	Performance	P74PCT374	
V74FCT521	**IDT**	**IDT74FCT521**	**(2808, 2810)**
V74FCT533	**IDT**	**IDT74FCT533**	**(2808, 2810)**
	Performance	P74PCT533	
V74FCT534	**IDT**	**IDT74FCT534**	**(2808, 2810)**
	Performance	P74PCT534	
V74FCT573	**IDT**	**IDT74FCT573**	**(2808, 2810)**
V74FCT574	**IDT**	**IDT74FCT574**	**(2808, 2810)**
V74FCT640	**IDT**	**IDT74FCT640**	**(2809)**
	Performance	P74PCT640	
V74FCT645	**IDT**	**IDT74FCT645**	**(2809)**
	Performance	P74PCT645	
V74FCT821A	**IDT**	**IDT74FCT821A**	**(2809)**
V74FCT822A	**IDT**	**IDT74FCT822A**	**(2809)**
V74FCT823A	**IDT**	**IDT74FCT823A**	**(2809)**
V74FCT824A	**IDT**	**IDT74FCT824A**	**(2809)**
V74FCT825A	**IDT**	**IDT74FCT825A**	**(2809)**
V74FCT826A	**IDT**	**IDT74FCT826A**	**(2809)**
V74FCT827A	**IDT**	**IDT74FCT827A**	**(2809)**
V74FCT828A	**IDT**	**IDT74FCT828A**	**(2809)**
V74FCT841A	**IDT**	**IDT74FCT841A**	**(2809)**
V74FCT842A	**IDT**	**IDT74FCT842A**	**(2809)**
V74FCT843A	**IDT**	**IDT74FCT843A**	**(2809)**
V74FCT844A	**IDT**	**IDT74FCT844A**	**(2809)**
V74FCT845A	**IDT**	**IDT74FCT845A**	**(2809)**
V74FCT846A	**IDT**	**IDT74FCT846A**	**(2809)**
V74FCT861A	**IDT**	**IDT74FCT861A**	**(2810)**
V74FCT862A	**IDT**	**IDT74FCT862A**	**(2810)**
V74FCT863A	**IDT**	**IDT74FCT863A**	**(2810)**
V74FCT864A	**IDT**	**IDT74FCT864A**	**(2810)**
VM117	**Elantec**	**ELH0002**	**(2592)**
	Exar	**XR117**	**(2606)**
	Harris	**HA5002**	**(2706, 2738, 2748)**
	MicroLinear	ML117	
	SiliconSys	SSI117	
Waferscale Integration Inc.			
57C291	Cypress	7C291	
	EXEL	46C16	
	SEEQ	**36C16**	**(2991)**
	TI	27C292	
WS27C128	AMD	AM27128	
	Intel	M27128	
		M27C128	
WS27C128			(Cont'd)
	SEEQ	M27128	
	TI	**SMJ27C128**	**(3220)**
	VLSI Tech	VT27C128	
WS27C256	AMD	AM27256	
		AM27C256	
	Intel	27256	
		27C256	**(2861)**
		M27256	
		M27C256	
	National	NMC27C256	
	SEEQ	**27C256**	**(2991)**
	SGS	M27256	
	TI	**SMJ27C256**	**(3220)**
	VLSI Tech	VT27C256	
WS27C64	AMD	AM2764	
		AM27C64	
	Fairchild	2764	
	Fujitsu	MBM2764	
		MBM27C64	
	GIM	27C64	
	Hitachi	HM482764	
		HN2764	
		HN27C64	
		HN482764	
	Hyundai	**HY27C64**	**(2770)**
	Intel	2764	
		2764A	
		27C64	
		87C64	
		M2764	
		M27C64	
	ICT	27C64	
	Mitsubishi	M5L2764	
	NEC	μPD27C64	
	OKI	MSM2764	
		MSM2764A	
		MSM27C64	
	Rockwell	R27C64	
	S-MOS	SPM27C64	
	SEEQ	**2764**	**(2991)**
		5133	
	SGS	M2764	
	Signetics	27C64	
	TI	**TMS2764**	**(3257)**
		TMS27C64	**(3257)**
	Thomson	ET2764	
		TS27C64	
	Toshiba	TMB2464	
		TMM2764	
		TMN2764	
	VLSI Tech	VT27C64	
WS57C191	AMD	AM27S191	
		AM27S291	
		AM27S291A	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
	Motorola	MCM76	
	National	87S291	
		DM878291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C291**	**(3376)**
WS57C256	Fujitsu	MBM27256	
		MBM27C256	**(2619)**
		MBM27C256A	**(2619)**
	GIM	27256	
		27C256	
		27C256-R09256	
		R09256	
	Hitachi	HM4827256	
		HN27256	
		HN27C256	
	Mitel	M27256	
		M27C256	
		M5L27256	
	Mitsubishi	M5L27256	
		MSL27256	
	NEC	μPD27256	
		μPD27C256	
		μPD27C256A	
	OKI	MSM27C256	
	SEEQ	27256	
	Signetics	27C256	
WS57C256			(Cont'd)
	Sprague	SCM27C256	
	TI	**SMJ27C256**	**(3220)**
		TMS27C256	**(3257)**
		TMS27PC256	**(3258)**
	Thomson	TS27C256	
	Toshiba	TC54256	
		TC57256	
		TMM27256	
		TMN24256	
		TMN27256	
WS57C291	AMD	AM27S191	
		AM27S291	
		AM27S291A	
	Cypress	**CY7C291**	**(2565)**
	Fairchild	932511	
	Fujitsu	MB7138H	
	MMI	63S1681	
		63S1681A	
	Motorola	MCM76	
	National	87S291	
		DM878291	
	NEC	μPB429	
	Raytheon	**29683A**	**(2985)**
	Signetics	N82S191	
	TI	38S165-35	
	Waferscale	**WS57C191**	**(3376)**
WS57C43	AMD	27S43	
		AM27S43	
	Fujitsu	MB7142	
	MMI	53S3281	
		63S3281	
	National	77S321	
		87S321	
		DM87S321	
	Raytheon	**29671**	**(2985)**
WS57C49	Atmel	27HC641	
		AT27HC641	
	Cypress	**CY7C261**	**(2565)**
		CY7C263	**(2565)**
		CY7C264	**(2565)**
	Fairchild	93Z667	
	GE/RCA	**CD22203**	**(2636)**
	GIM	27HC641	
	ICT	27CX642	
	Sharp	**LH5749**	**(2994)**
		LH5762	**(2994)**
	SiliconSys	SSI203	
WS57C64	Atmel	27HC64	
		AT27HC64	
	GIM	27HC64	
	GoldStar	**GL3620**	**(2699)**
		GM27HC64	**(2692)**
	ICT	27CX641	
	Sanyo	LA7620	
	Sharp	**LH5763**	**(2994)**
WS5910	AMD	AM2910	
	IDT	**IDT39C10**	**(2801)**
WS59510	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**
	Intel	IM29C510	
	LogicDev	LMA1010	
		LMA2010	
	LSI Logic	**L64010**	**(2868)**
		L64012	**(2868)**
	Matra-Harris	MS2010	
	TI	SN74HCT9510	
		TICPAL1010	
	TRW-LSI	TDC1010	
		TMC2210	
	VLSI Tech	VL2010	
	Waferscale	WS59610	
	Weitek	WTL1010	
		WTL2010	
		WTL2044	
		WTL2245	
WS59520	LogicDev	L29C520	
WS59521	AMD	AM29521	
	LogicDev	L29C521	
WS59610	AMD	AM29510	
		AMD29510	
		AMD29L510	
	AD	ADSP1010	
		ADSP1010A	**(2450)**
	Cypress	**CY7C510**	**(2569)**
	IDT	**IDT7210**	**(2806)**

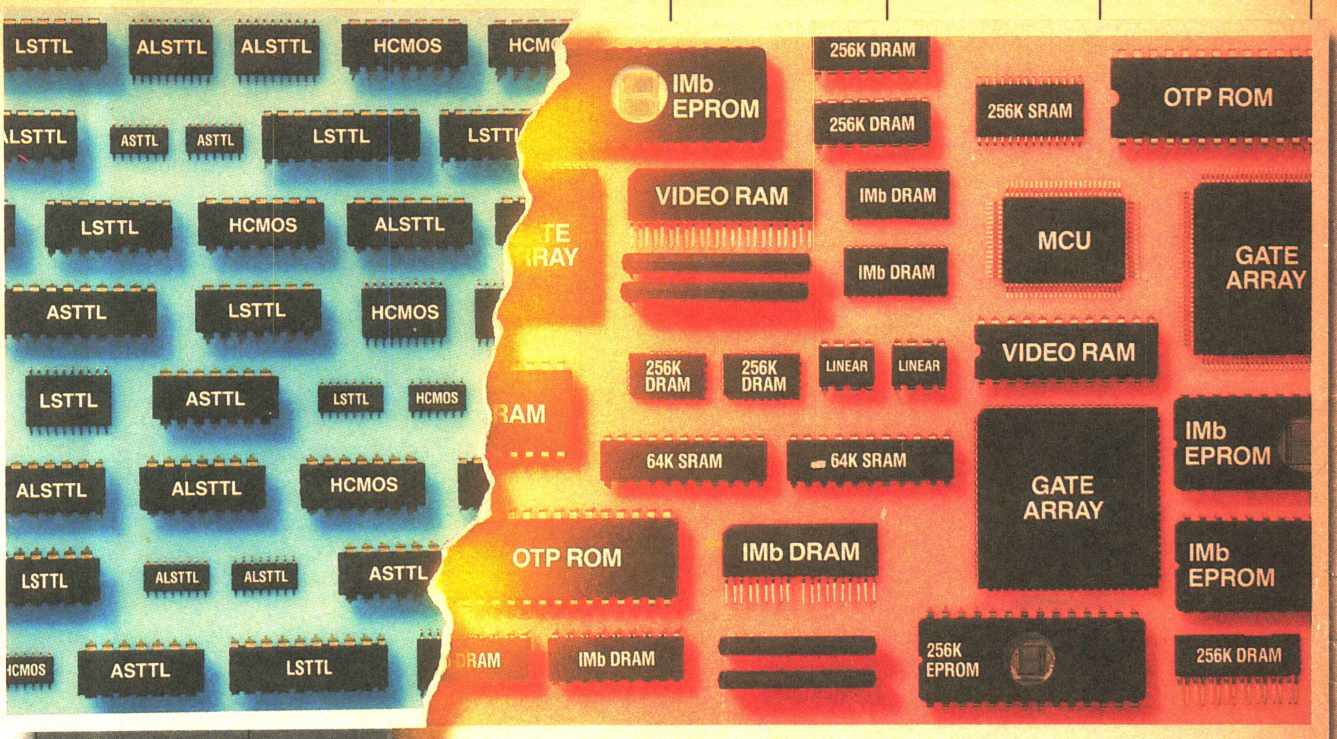
(Continued)

♦ Discontinued

Bold face device numbers indicate manufacturers data is provided in the IC Master on the Pages noted.

© IC MASTER 1988

The One Source for Value-Added Logic System Design.



Mitsubishi Brings Two Great Pictures Together.

LOGIC

Standard logic isn't standard any more. Now, there's Value-Added Logic system design. From Mitsubishi.

Mitsubishi combines two great pictures: over 500 industry-compatible LSTTL, ALSTTL, ASTTL, and HCMOS devices, plus a full array of DRAMs, SRAMs, EPROMs, EAROMs, MCUs, CPUs, ASIC devices, and linear ICs. Total board device selection, all from one quality source. That's value-added system design.

Highly automated production and stringent test procedures ensure that Mitsubishi logic devices meet or exceed the best quality levels available in the industry.

Value-added design includes traditional as well as surface mount packaging options. Across the board, LSTTL, ALSTTL, ASTTL, or HCMOS, Mitsubishi logic devices are available in standard plastic DIP, and many in SOP (small outline package) for surface mount applications.

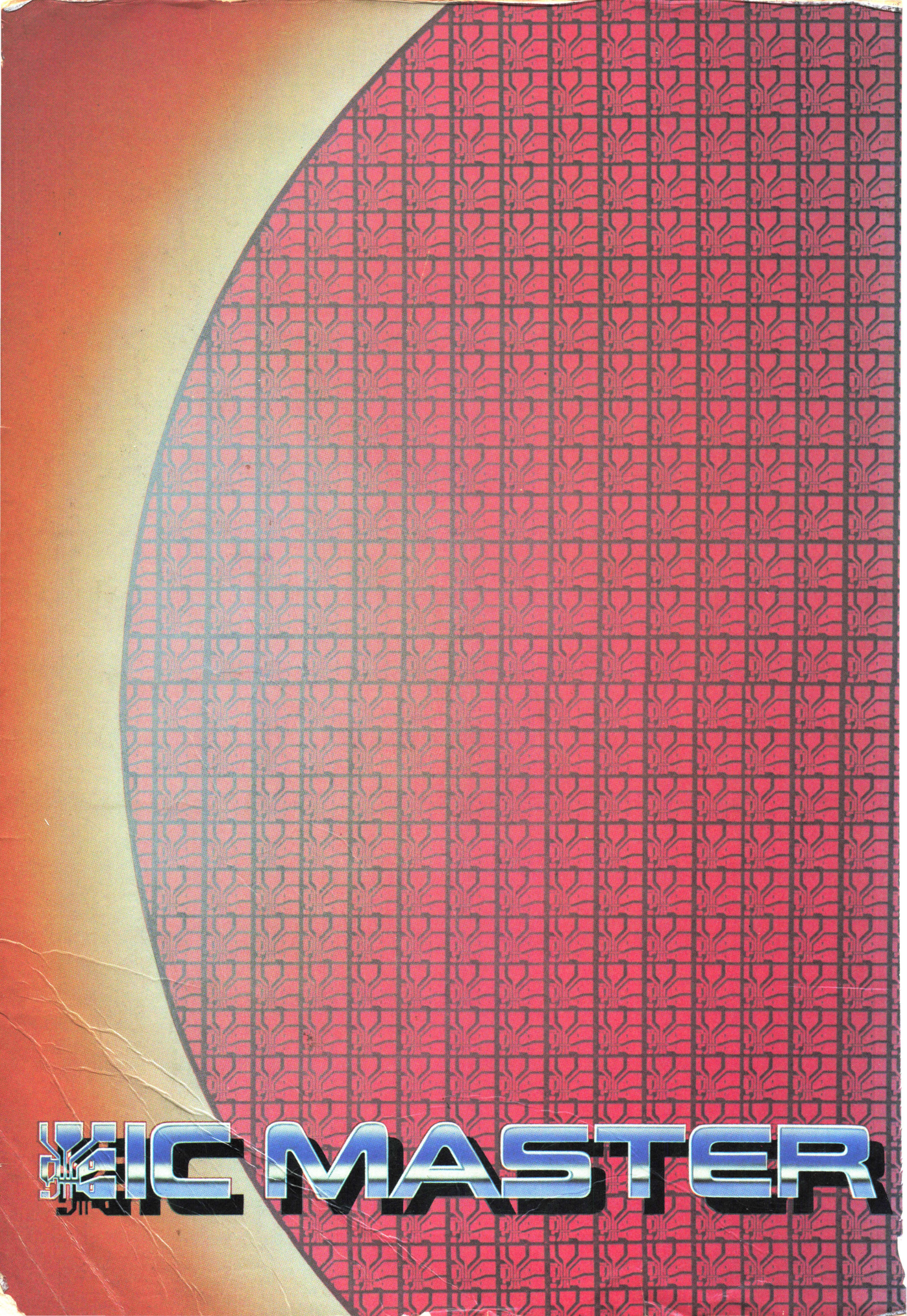
Mitsubishi logic answers all the questions Just-In-Time. Because of our reputation for quality, there's no better answer for today's JIT direction. From our test line to your production line. Another value added.

For a more complete picture on Value-Added Logic system design, call or write Mitsubishi Electronics America, Inc., Semiconductor Division, 1050 East Arques Avenue, Sunnyvale, CA 94086. (408) 730-5900, ext. 2315.

Functions	Number of Functions			
	LS	ALS	AS	HC
Gates and Inverters	29	18	12	27
Buffers	5	17		
Flip-Flops	13	19	12	16
Latches	7	13	8	10
Shift Registers	14	2		9
Bus Drivers	11	13	18	14
Bus Transceivers	16	31	5	3
Bus Trans and Registers		6	4	2
Counters	20	14	2	16
Decoders	11	3	1	12
Multiplexers	11	10	6	15
Other	18		2	13
Total	155	146	70	139

Quality Through Commitment

MITSUBISHI ELECTRONICS


IC MASTER